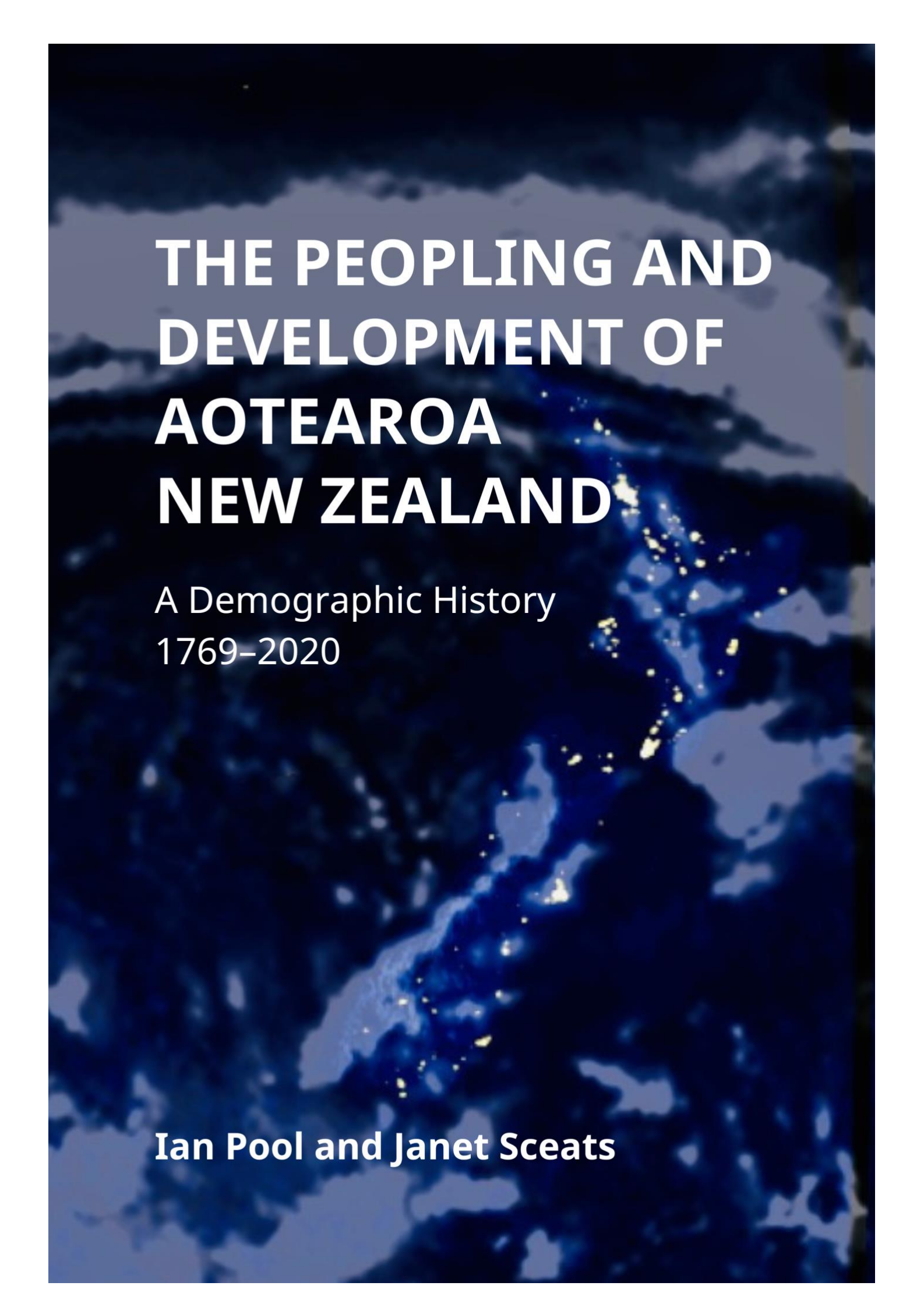


A satellite night-time photograph of New Zealand, showing the islands of the North and South Islands. The landmasses are dark, while the surrounding waters are a deep blue. Numerous bright yellow and white lights from cities and towns are visible, particularly concentrated along the coasts and in the central regions of both islands. The overall image has a grainy, high-contrast quality typical of satellite photography at night.

THE PEOPLING AND DEVELOPMENT OF AOTEAROA NEW ZEALAND

A Demographic History
1769–2020

Ian Pool and Janet Sceats

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Ian Pool

and

Janet Sceats

February 2021

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Foreword

Professor Ian Pool, our husband and father, worked on this manuscript for many years. As he states in his preface, he wanted to draw together many elements from his long academic career to show how 21st century Aotearoa/New Zealand has been shaped by demographic processes over the past 250 years. Early in the development of the work he was advised to structure it as semi-autonomous chapters. On completion of an initial draft in 2020/21, it was clear that the project was far longer and more complex than he had envisaged, requiring extensive revision and reorganization. Unfortunately, his health failed, and he died in April 2022, before this was accomplished.

This manuscript is a draft from 2020/21, which we feel is the version that most comprehensively embodies Ian's original ideas in his own words. It is a broadly and deeply researched body of work, supported by extensive references. It builds on his previous publications and contains significant new analysis. We are proud to bring this into the public domain but wish to highlight a few considerations. The document is in PDF format, and there has not been a formal proofreading or editing process; typographic and cross-referencing errors may have been missed. There is no index, and few references include live links. While the book traces a clear narrative arc, the semi-autonomous chapter structure allows readers to focus on specific time periods or areas of interest. However, providing necessary context for each chapter makes the work very long overall, and means some content is repeated. Ian continued to write actively into 2020 but there have been many changes in Aotearoa/New Zealand and around the world since then. Some material is no longer current, and some terms, notably 'settler' as in 'settler society' and 'colony', as in 'colonization' have acquired connotations that were not intended at the time of writing.

We owe an enormous debt to Ian's longtime colleague and collaborator, Professor Natalie Jackson. She supported Ian while he was actively writing the book, then after 2021, she generously offered her considerable knowledge and expertise to help revise and condense the manuscript. This year, together with Natalie, we decided to prioritize bringing the original draft into the public domain, and she helped us restore this version of Ian's words and ideas. As a family we are hugely grateful to her. We would also like to thank Martin Taylor for his help in optimizing the presentation and accessibility of this digital version of the manuscript.

Ian dearly wished for this work to be as widely available as possible to scholars, researchers, and others with an interest in Aotearoa/New Zealand, its past, present and future. We sincerely hope that we are helping to bring his wish to fruition.

Dr Janet Sceats Pool, Felicity Pool, Jonathan Pool.

Preface

This book has been the most difficult to write of any that I have undertaken. Its scope has proven to be formidable once I had accepted that it was to be something more than a summary.

But, far more importantly, I am writing about a settler-society about which I have written books, monographs and papers, above all three major books on Māori demography. In these, especially the most recent, I have been critical of the way that Māori, like other Indigenous Peoples in developed countries, have been displaced by European-origin colonists, typically by brutal or mendacious means. Māori are major actors in the present book, but much of its content must cover the settler-society, the majority population since the 1860s, the ethnicity to which I belong. I greatly admire what many Pākehā (European-origin) New Zealanders have contributed to the development of this country, often in collaboration with Māori New Zealanders, but less frequently than is desirable. They have built not just to its material well-being but its societal ethos and its innovative social policies, sometimes in advance of those of the rest of the world. I am also proud of the way that this has been translated, imperfectly, into the reception of recent migrant waves, who have greatly diversified Aotearoa's cultural base and thereby enriched it.

That said, I have to acknowledge that, ultimately, these achievements have been possible only because of the net transfer of assets from Māori to Pākehā. We cannot rerun history, but we can mitigate its worst effects, and I acknowledge that through the Waitangi Tribunal and other agencies this is being done, perhaps not as quickly or fully as is desirable, but it is actually being addressed. In this, for better and for worse, the demographic and political hegemony of Pākehā has meant that they have essentially driven much of the development since about 1880, sometimes consulting with Māori, but perhaps more often, by accident or design, acting in ways that are inimical to Māori needs in a bi-cultural society. What is desirable for the majority often cuts across Māori aspirations and best interests. I suppose, these issues of values and norms, and the ontological gaps between Māori and Pākehā are what make a multi-cultural society vibrant and interesting, but certainly challenging.

Acknowledgements

Natalie Jackson, former Professor of Demography and Director of the National Institute for Demographic and Economic Analysis, greatly facilitated the completion of the text of this book by generously performing a role as Development Editor over many months. In this role she read, re-read and critically analysed every part of the book. She contributed significantly to major social demographic paradigms and in the process formulated a number that are innovative and stimulating. I draw on several here, in this book.

I have received assistance from numerous colleagues and have footnoted my appreciation as they have arisen later in the text. But, I must thank Brian Easton whom I have consulted with often. Most importantly, he made available to me a pre-publication, online copy of his book *Not in Narrow Seas: The Economic History of New Zealand*. I quote numerous times from this long book and draw heavily on some of his valuable conceptual analyses. His exegesis of Rogernomics provides a compelling and authoritative account of that critical era in modern New Zealand history. His distinction between economics as development (a broader view) and economics as growth (a narrower GDP-focused approach) has become an essential guideline for my own work, which is oriented very much towards tracing peopling and development over time: the GDP approach is not ignored but the overriding orientation is development. Phil Briggs has published a very useful summary of New Zealand's economic history, including a series of simple powerful graphs on issues such as commodities exported. I have made constant reference to these data, but, beyond this, Briggs has given me helpful advice over a number of points, such as on the export trade from different ports in the 1860s. I want to thank Francis Collins, Director of NIDEA for his encouragement and support. I appreciate the work done by Lesley Wilson, who edited the manuscript locally, and Max Oulton who prepared several of the graphics. We all owe a special gratitude to Richard Bedford who, while Director of NIDEA established a process to facilitate the publication of books, papers and other public documents.

THE PEOPLING AND DEVELOPMENT OF AOTEAROA NEW ZEALAND

A Demographic History, 1769–2020

Epigraph

‘As a young man, fresh from his first colonial war, Winston Churchill asked a good question:

“‘What enterprise that an enlightened community may attempt is more noble and more profitable than the reclamation from barbarism of fertile regions and large populations?’”...

‘[*Ferguson concludes*] In short, what the British Empire proved is that empire is a form of international government that can work – and not just for the benefit of the ruling power.’

*Niall Ferguson (2007) **Empire: How Britain made the Modern World**, London, Penguin: xxvii, 371*

‘The massive growth of settler and mega-cities both led and symbolized a wider Anglo-American explosion.

‘...In addition, Britain had grown fresh clones of itself in Australasia and South Africa. In all, the Anglo-world grew, from the 1780s to the 1920s, from about half the size of the Spanish World to over twice the size, overtaking the “Russian world” as well... [I]t was the remarkable explosion of the nineteenth century that put the Anglophones on top of the world....

‘We can never, of course, ignore the other meaning of colonization – the displacement of precursor peoples.’

*James Belich (2009) **Replenishing the Earth: The Settler Revolution and the Rise of the Anglo-World, 1783-1939**, Oxford, OUP: 3-4, 180*

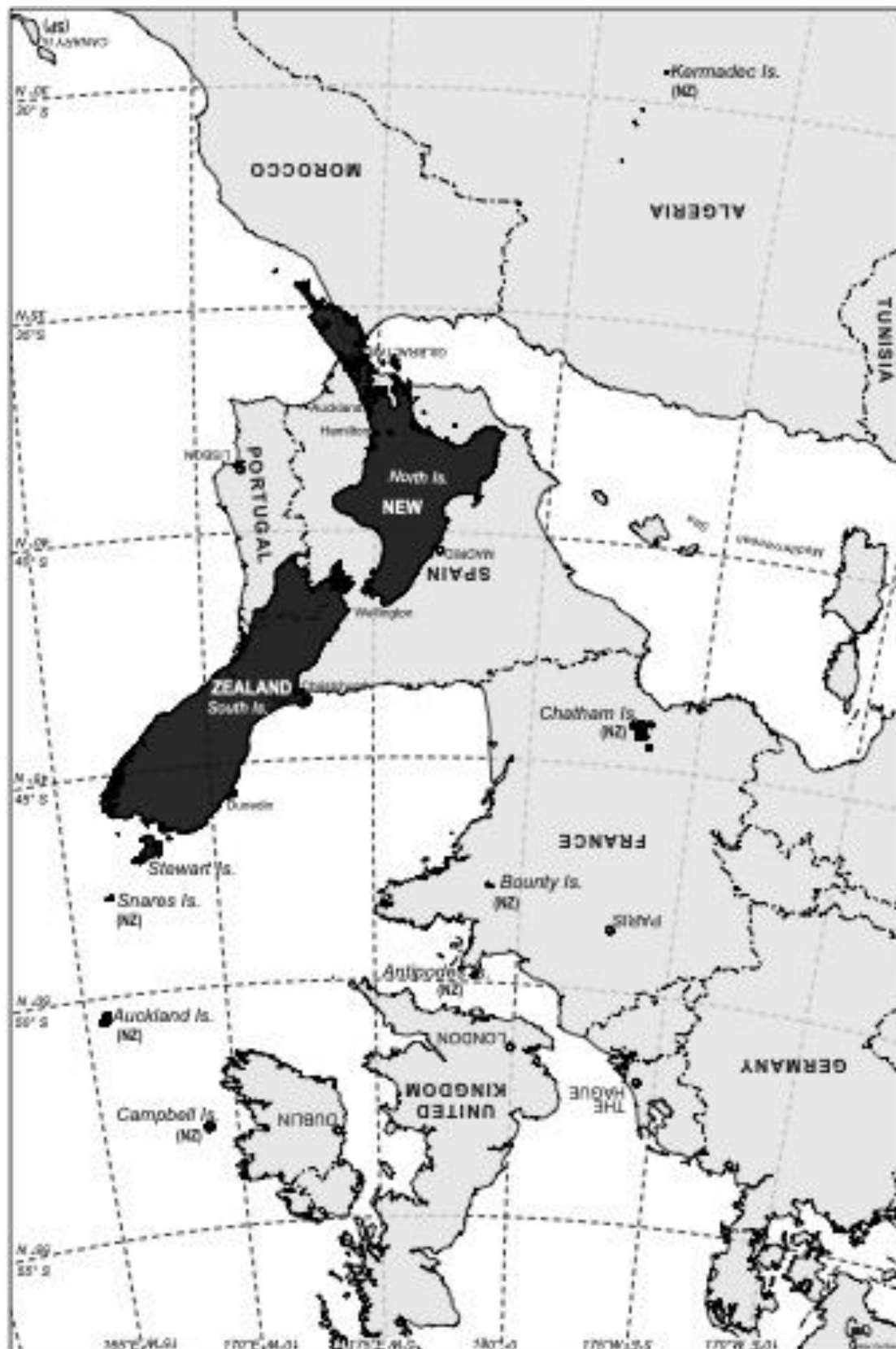
‘Time has long worked against indigenous peoples. The English-speaking epochs of the past 200 years – the Pax Britannica and American century – share the same dramatic opening scene: a global coup displacing millions of people and thousands of societies, from the Mi’kmaq in Newfoundland to the Māori in New Zealand.

‘Property, sovereignty and even history itself are said to originate with these Anglo-Saxon triumphs. History and time are appropriated solely as the possessions of the white men who inherited the earth. For the ruling class, their passage marks the advance of civilisation, modernity and progress. Rapturous booms and tumultuous busts are punctuated by bloody wars recast as heroic conquests. Throughout the land alabaster monuments memorialise these triumphs and tragedies.

‘For indigenous peoples, those same dates and statues mark massacres, epidemics and expulsions.’

*Julian Brave NoiseCat (2017) ‘Now the First Nation peoples across the globe are asserting their sovereignty to defend their lands, we could be seeing the dawning of the indigenous century’, **The Guardian Weekly**, 9-15 June: 48*

Introductory Maps

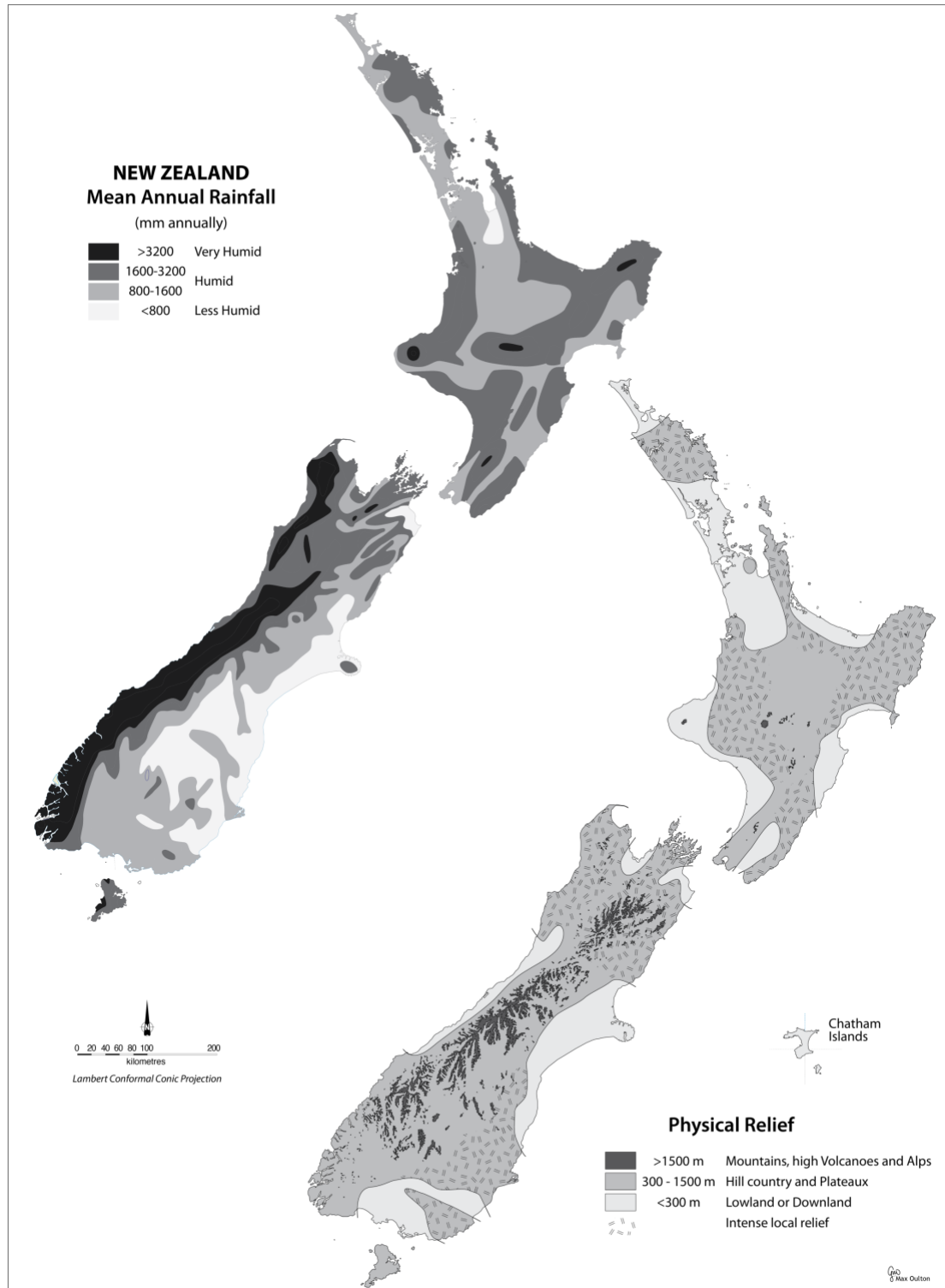


Introductory Map 1: New Zealand and its Antipodes*

In its 'regular' sense defined by *OED*.



Introductory Map 2: Locations



Introductory Map 3: Aotearoa: Rainfall and Physical Relief

PART ONE:
Settler-Colony, Settler-State,
Settler Society

Chapter One – Peopling and Developing

Peopling – ‘to people ... to fill [a place] with inhabitants’¹

Imperial Expansion and the ‘Greatest Reallocation’²

There is no escaping geopolitical reality: the Anglo-world outside Britain, owes its origins and the vast riches enjoyed by some of its member-countries to ***imperialism and colonialism*** – and Britain itself gained its wealth and power this way. This is not to denigrate the major contributions made by European-descent colonists to the peopling and development of the Anglo settler societies over which they gained hegemony, but simply to recognise that the ‘greatest reallocation in history’ was what made these achievements possible, in the Anglo-world and elsewhere. According to John Weaver (2006)³, because of imperial expansion, whatever form it took, with this ‘reallocation’ control over vast tracts of the earth’s surface changed hands – from Indigenous peoples to European settlers. The most significant reallocation, the expansion of Anglo imperialism, was a trend commencing for Ireland in the 12th century, accelerating in the 1600s and becoming a truly mega-phenomenon in the 18th century. Britain, some other nations in Western Europe and Czarist Russia, intruded as colonialists into almost every corner of the world, only to see imperialism wither and nearly die in the 20th century as former colonies became independent. If anything, this later retraction of imperialism, in the main over a few brief years after World War II, was even more dramatic than its emergence had been.

Imperial expansion and retraction, and this ‘great reallocation’, generated new sets of relationships across the globe between Indigenous populations and those colonising them. This manifested itself in diverse political and constitutional structures. One constitutional variant among the many sorts of colonial models were ***settler-societies***. They emerged because of three events: (1) by the displacement of the native peoples from their resources and the vesting of most of these with the colonists; (2) by the settlers becoming the demographic majority and being the instrumental actors in determining development strategies; and (3) by the settlers assuming hegemonic political status. New Zealand is a representative example of this model.

The population, economic, political and social story of New Zealand, which went through the three events just noted – and that of its settler-society comparators that also followed the same general trajectories – is seen here from a perspective that is fashioned by the perspectives of demography⁴, the spotlight of which is directed at the people and their role in determining and achieving development. The technical and theoretical underpinnings of both peopling and development will be elaborated in later chapters (especially Chapter 4). Suffice to say here that ‘Peopling’ is population

change, both the dynamics or flows, coming from fertility, mortality and migration, and the structures or stocks of people and their attributes (eg age, gender, geographic distribution, and composition of the labour force and family). My other focus, ‘development’, is a far more complex and diffused phenomenon that is, however, distinct from the narrower, core concerns of economics, which centre on ‘growth’. It will be essential to my story to refer from time to time to growth, which is an important element of national development, such as by citing its conventional time-series statistics, but, unlike much of economic history, growth is not a primary interest for me.

Brian Easton (2020: 45) ⁵ defines the difference between development and growth. Growth is conventionally measured by changes in Gross Domestic Product (GDP), and similar indices, that attempt to aggregate all the factors of economic performance⁶. But ‘Currently, GDP does not measure development and is only loosely tied to it. Modernisation⁷ is about responding to...change, adopting the way the economy and society operate...So, while modernisation does not accelerate the economic growth rate, it enables economic progress and for the economy to develop’. Development thus encompasses not just factors of production and exchange, particularly their more monetised manifestations – the focus of much of the analysis of economic growth – but also the society and its changes. Peopling is an inherent factor of societal change.

The major advantage in taking a development, versus growth, approach is that it puts the spotlight on both societal and economic dimensions of major transformations. A case in point is that it is virtually impossible to study New Zealand’s economic growth in any formal sense prior to about 1860, yet major development trends were occurring in which Māori played a major role; wool and gold were late entrants into development. To take another example, Vogel’s policies in the 1870s arguably had a negative effect on growth as the country was thrown into debt, but no serious observer can question how his policies laid down development for decades to come. A more specific example is the way that David Greasley and Lex Oxley (2005, 2009) have documented the growth dimensions of pastoral intensification in the late 19th and early 20th centuries but have also shown how this had an immutable impact on wider development, not just in the rural sector but even the towns. And to take one other case, no one has been able to document the growth impacts of the post-war Māori rural exodus except for a few factors – incomes, jobs, housing and health – for which there are quantitative data. But the wider development implications of this massive redistribution for both Māori and Pākehā are more allusive and best described sociologically as Ngapare Hopa (1996) has done.

The story starts with the Indigenous Māori being first exposed to continuous contact with Europeans (1769), then follows New Zealand through British *colonisation* of the territory (assuming control by formal annexation; 1840), until it

becomes a prototypical settler-society, from about the 1880s until the 1970s. Finally, it takes on a new form as a very different entity – an ethnically diversified nation-state, yet one in which the long-standing dichotomy between settlers and Indigenous people still persisted.

Settler-Colonies to Settler-Societies

Twenty-first century New Zealand is a rather small country – 5 million people but living on a land area greater than the United Kingdom. It is dependent on exporting meat, dairy products and other primary produce. It was spawned by ‘Mother England’ and her Celtic fringes, is a member of the ‘Five-Eyes’, ‘Anglo’, intelligence-sharing grouping⁸ and is distant from Europe but is not Britain’s antipode (Introductory Map 1). Foreign observers may be surprised at how multi-cultural it is – in 2013, more Asian and foreign-born than Britain, or the United States – and they may not know that it has two official languages (Te Reo; English), two official names (Aotearoa; New Zealand), which I use interchangeably, and in popular parlance the term Pākehā is used as a colour-free name for the majority population that is of European-descent. I adopt this usage (see Chapter 5). Moreover, Aotearoa has a significant Indigenous minority, Māori, who are major actors in this book. They are ‘Tahitic’ Polynesians, as are the closely related Moriori of the Chatham Islands, 700 km to the east of New Zealand (Introductory Map 2). Māori voyaged from the Society Islands (now French Polynesia) and settled about 1250 AD; the Moriori date of settlement and route taken (via New Zealand or directly) is less clear (Anderson 2014: 36, *passim*). Since 1960, renewed waves of migration have come from Tropical Oceania, mainly from Polynesia but also elsewhere.

None of the ‘Five-Eyes’ countries had their present political-constitutional form when Captain James Cook ‘rediscovered’ Aotearoa (1769). As imperial expansion through colonialism accelerated, contact with ‘precursor peoples’ (Belich 2009: 180) increased in both Anglo-America and Australasia. They became settler-colonies – eventually independent in the case of the American colonists, who then moved westwards displacing Native Americans. In their turn, Canada, New Zealand and Australia similarly subjugated their Indigenous peoples and became ‘Anglo settler-societies’. Ultimately, all these societies were enriched by new cultural waves arriving in the late 20th century to build their ethnically diversified societies of the 21st century. The stories of the United States, in its own way, and New Zealand, Australia and Canada in theirs, comprise far more than their political evolution, but span all the factors of peopling and development and share many commonalities. Through peopling, the Anglo settler-societies exploded demographically becoming many times larger than they had been in 1760: Aotearoa’s population today is 50 times larger than when Cook arrived. They also expanded their economic and social spheres –

exponentially – to become a bloc that is among the most powerful players in the world.

It is impossible to over-state how much capital Indigenous peoples in all settler-colonies lost to settlers as a result of colonialism and colonisation. For New Zealand, for example, there was a huge disparity between what Māori and the British each bequeathed when Aotearoa was colonised (Treaty of Waitangi, 6 Feb 1840). Māori gifted 100% of the lands and other resources, 98% of the human capital, a vibrant society complexly organised, a thriving business sector and much of the country's subsistence and market production. It is far less certain what tangibles Whitehall offered – Queen Victoria's goodwill, plus, to British eyes, the privilege that Aotearoa could join their Empire. Whitehall wanted to exclude powers such as the French and American, and to control some private settlement schemes organised by British entrepreneurs, notably the Wakefield family. The first Wakefield colonists arrived weeks before the Treaty was signed, while the French had been in Akaroa (South Island) for 5 years, and 'formal French colonisation' occurred, abortively, weeks after Waitangi (Belich 1996: 179-80). According to the Treaty historian Claudia Orange, Waitangi was promulgated on three grounds: 'the legal status of the country, humanitarian concern for Māori welfare [among evangelicals and Low Church Anglicans], and the need to convince the Māori population that further British intrusion should be accepted'. The last was ambiguous but became the most instrumental in the long run. Moreover, as Michael King notes, Māori interests were soon relegated a lower priority (Orange, 1987: 32, 138, 185; King 2003: Chapt 11). Ned Fletcher's recent tome, *The English Text of The Treaty of Waitangi* (2022) brings scholars up to date with these debates.

Although they see themselves as rather special, as a part of a Western Developed Country (WDC) bloc⁹, the Anglo-American and Australasian settler-societies, are no less the products of colonialism than are Jamaica, Ghana or Hong Kong. This truism needs to be underlined. There is a tendency to view the emergence of settler-societies as unique, as something totally separate from the process which produced India and Pakistan, or the Bahamas, or the Gilbert and Ellis Islands (now Kiribati and Tuvalu), or Nigeria. In settler-societies the colonists achieved a hegemonic status and thus have been able to write the 'victor's account' of history, producing a bias in the narrative – an issue that I will need to address in later chapters. Their descendants often see their role as just, and the history of settler-societies as more benign than those of ex-colonies that do not have a colonist majority and political control.

This reallocation of land- and natural resource-based wealth occurred in all colonies, but particularly so in settler-colonies; in most other colonies the colonial power simply plundered the resources without trying to settle their lands with European colonists. In the post-colonial era, many of their capital assets may still be

controlled or even owned by external agencies, but their foreign managers and officials are merely sojourners, not settlers.

The settler-colonies were distinct in one other major regard: their *raison d'être* was far from covert but explicitly stated by many prominent settlers. From Andrew Jackson (United States 1830s) to Henry Sewell (New Zealand, 1870), to Cecil Rhodes, they called for natives to be dispossessed of their land and resources, violently if necessary (Sewell was slightly more nuanced in justifying the 1865 *Native Land Act*), and for those territories to pass across to European ownership. Whether Indigenous peoples were compliant or coerced, they would provide a reserve army of workers, often augmented by slaves or by indentured labour coming from the metropole's underclasses.

The concern here is with that Anglo segment of the earth's surface that was lost forever to its Indigenous owners and then became the vested property of settlers. In every former Anglo settler-colony, and in their non-British counterparts in Latin America, south and central Africa, and Siberia, colonialism was accompanied by a transfer – a massive land grab. In every Anglo settler-society the Indigenous peoples lost most of their territories and resources, except for marginal vestiges, often in the least fertile or productive regions. Once New Zealand was annexed by the United Kingdom, the Crown gained pre-emptive rights over the land through the Treaty of Waitangi. Regardless of what Māori signatories thought the Treaty meant¹⁰, its upshot was to allow the colonists to take most Māori land and resources. As Douglass North (1956) pointed out, labour and capital were scarce in pioneer Anglo settler-societies, but there was 'seemingly endless land and resources'. It is so central to my entire argument that, in later chapters I adopt Piketty's definition of land as capital. This differs from North's usage back in 1956 (a factor of production), that is used in classical economics. In short, I argue that, in settler-societies, there was a transfer of most of a colony's capital from natives to Europeans. Where slavery was not prevalent, peopling by colonists, first settler immigration and then reproduction, solved the labour issues. In North America and Australasia, the native peoples never really became the 'reserve army of labour', not even as domestics, that some Anglo-colonists envisaged for an ethnically stratified society¹¹. Instead, as cattle hands on Australian runs or shearers in New Zealand, they supplied the casual or seasonal workforce.

Except for Ireland, (colonised 1169-75) and Newfoundland (1583), England, and its successor Britain, started its empire rather late, but very quickly made up lost ground. In terms of per cent of the globe they controlled by 1920, it greatly surpassed the other imperial powers (Belich 2009: 3-4). By World War II, when, apparently, 'the sun never set over the British Empire', Britain ruled a vast range of very different territories: from coaling stations and their like to colonies where a few officials, soldiers and merchants, who never intended to stay, ruled over many natives – in this

category India was the vast ‘Jewel in the Crown’. Then there were lands in mid-latitude locations or at higher altitudes in the tropics deemed ‘suitable for white settlement’¹², to which Europeans ‘went forth’ and once there ‘multiplied’, profusely as their fertility rates were well above those in the ‘motherland’. Some of these colonies, such as South Africa, where the colonists always remained a demographic minority, were wrested back from settler control by the majority Indigenous peoples after violent unrest. There were others, however, the Anglo settler societies such as New Zealand, the core concern of this book, where Europeans became both the political hegemon and the major population.

Core Concepts of Peopling and Development

The evolution of settler-societies at base has essentially been a function of the way peopling and development occurred and the very strong synergies between these two factors. In fact, these linkages are almost ‘taken for granted’ at major congresses on development or the environment, and in the discourses of civil society, yet a major problem is that they are not delineated satisfactorily in the development literature. It may seem paradoxical, therefore, that in the ‘development decades’ of the 1960s/70s and almost until very last years of the 20th century, population was a factor referred to tangentially, almost as if it were exogenous to national and global development (Chapter 4)¹³.

The underlying causes of this disjunction are many, but, as a net result, economics and demography have marched along different, albeit parallel, tracks. There has also been a significant methodological block to integrating peopling and development. Through the development decades this was normally attempted by simply correlating crude population growth with changes in Gross Domestic Product (GDP), producing weak correlations except at extremes – self-evidently, very high population growth required huge investments just to meet existing needs in social sectors, let alone to increase production. Population structures, notably age-composition, became the poor cousins in the development literature. Demographic trends were seen as demand-side factors, placing burdens on fiscal systems and families. Their supply side role was ignored except for overall growth, and, as a nod to age-structures, entries into and exits from the workforce.

This book starts with the proposition that population trends are core factors of all development, and very often are its drivers. This statement is not intended as ‘demographic determinism’ but does give demographic change a more front-stage role. It will show that, in New Zealand, development has been very much a function of patterns and trends in population – dynamics and structures driven by ordinary people *en masse* – and not just the ‘principal actors’ who staff much of conventional history.

This, then, is the story of Aotearoa's ordinary people (Māori, Pākehā and recent migrants) – or those of other Anglo settler-societies – who, acting collectively, although perhaps not always in unison or harmony, made New Zealand and these other the nations what they are in the 2010s. They provided the human capital, formulated its policies, and, in between, reproduced, consumed, produced and traded offshore the goods on which Aotearoa's economy depended, the others, with larger internal markets, relatively less so. All these factors have top billing in my narrative. Simultaneously, these same people contributed, of course, to each country's cultural and political life, which are detailed already in many histories, and thus are given less prominence here.

My approach sits well with what is a major theme for economics, especially economic history – the role of institutions. I am however refining that idea modestly to place the emphasis not on the structures but on the people who formulate them and then ensure that they operate – hopefully in an instrumental way – in development. The doyen of institutional economics, Douglass North (1991: Abstract) sees development as a function of the 'innovative' capacity of 'Institutions [implementing] humanly devised constraints that structure political, economic and social interactions... Throughout history, institutions have been devised by human beings to create order and reduce uncertainties in exchanges'. Elsewhere, North (1993) makes an important distinction: 'Institutions are the rules of the game and organizations are the players... [playing a] role as initiators of institutional change'. I will often refer to institutions and organisations, but far more frequently to the human drivers of both. The presence and numerical strength of people *en masse* are the pre-requisites of the creation and operation of both. To go a step further, by focusing on people, this book thus deals with the most highly 'visible' and measurable 'hands' of Adam Smith's market forces. But it takes this even further by emphasising not just the population as a whole but, in keeping with newly emerging paradigms (see below), it highlights the role of demographic structures and, especially, age-gender-composition, which significantly modify development as a whole, institutions, organisations and even Adam Smith's 'hands' – visible or not.

For much of human history a demographic factor had played a major role in fashioning Smith's hands – this was population size and growth in numbers, as they determine consumption and productivity, and social processes. In turn, until the late Victorian era, for any population numbers and structures were essentially driven by mortality. In 'normal years', fertility rates were 'high, and fluctuated to a limited degree, but mortality levels were very high and often exceeded births as the 'horsemen of the apocalypse' raged across the land. Consequently, population growth was slow. Population analyses prior to Malthus revolved around population size and growth (Charbit 2009; 2010). Then from the 19th century, a major transformation occurred in trends: fertility became the driver of population size and structural

changes occurred, particularly age-structural, first in the more privileged developed countries then extending out to encompass more and more societies. Except for the aberrant Baby Boom, to which I devote three later chapters, in the 20th century fertility rates have declined or have been low in WDCs, and more recently across much of the world. Indeed, in the WDCs and elsewhere, replacement or sub-replacement fertility rates (2.00, or fewer, births per woman) have now become the norm. Large-scale migration flows severely perturb the demographic system, but the key determinant of slow or negative change is fertility.

In the main, this book deals with societies at a macro-level – as collectivities. By contrast, the theoretical frameworks formulated to explain human reproduction are very much directed at a micro-level – how fertility decision are made by women and couples, and the normative, family and other contexts that have an impact on reproductive choice. Yet, this merely explains part of the process. Micro-level actions translate into macro-level behaviours, while macro-trends are also very much a part of demographic change. Let me take an example to which I will return later. In the early 1970s, what can only be called a ‘mega-level, macro- trend’ occurred – the Western Developed Countries (WDCs) very suddenly and over a very short duration (early 1970s over 3-6 years) went through a transition from a Baby Boom to a Baby Bust¹⁴ (Pool 2007: Table 2). At a macro-level, this collectivity encompassed millions of women and couples, each, at a micro-level making reproductive decisions that would mould their lives. Thus, the most intimate of personal behaviours simultaneously generated a trend subscribed to, by 1,000s upon 1,000s of individuals in numerous countries. The amazing point is that this quantum change occurred almost at the same moment.

Relationships between the micro- and macro- have been explored, but not with the same intensity as micro-level theory building. Susan Watkins (1990) has described the micro-macro linkages involved in how collectivities were affected by micro-level norms in Western Europe’s fertility transition, and how the collectivity fashioned the norms and values of couples. John Knodel *et al* (1978) have described the same linkages in Thailand, benefitting from field multi-level surveys¹⁵. More recently, John Caldwell and Thomas Schindlmayr (2003) have charted replacement and sub-replacement fertility across a great deal of the globe and identified commonalities between the demographic patterns of the societies concerned. Their work has gone the furthest in studying macro-level patterns.

The resulting age-structures are important, because rates of reproduction, production and consumption all vary significantly between age-groups over the life-cycle. Consequently, both market forces and public policy¹⁶ are affected very significantly by age- structures, as modified by the distribution by gender, and by variations in the proportions at key ages and by the flows of cohorts through these

life-cycle stages¹⁷. Therefore, more attention than normal will be accorded here to age-gender-composition.

Wider recognition of the seminal role age- structures can play in development only emerged late in the 20th century, as in research by Mathew Higgins and Jeffrey Williamson (1997) that is so fundamental to later arguments in this book that I will briefly summarise it¹⁸. They analysed the relationship between age-composition and development in Asia in the 1970s. By then, fertility declines were often underway. This shifted Asian age-structures from being very youthful (high proportions aged 0-14 years) to having increased per cents at young working ages, when the large birth cohorts born previously moved into adult ages, a reweighting by age-group due to ‘momentum effects’, yet they also had relatively few people at older ages. Consequently, some Asian economies boomed. With fewer children and more working adults, investments shifted from social sectors, such as education and paediatric health to productive.

The population drivers of this are called ‘demographic dividends’ (sometimes ‘bonus’ or ‘gift’). A ‘window of opportunity’ for a dividend can, however, be turned into a dividend only if it is exploited by efficient management of public and private resources (Bloom *et al* 2003). To add to this, a successfully managed dividend, with investment in institutions and infrastructure, along with increased household savings, can produce a ‘Second Dividend’ as ageing appears (Pool 2007).

Demographic dividends were subsequently joined by a newer methodology, National Transfer Accounts (NTAs)¹⁹, referred to in Chapter 4 and their policy and market effects noted frequently in later chapters. Data based on these two methodologies are not available for New Zealand, but we can show, with a degree of certainty, that over time it has experienced a series of ‘windows of opportunity’, some successfully exploited, but others of which have been squandered.

New Zealand as a Case Study

The effects of contact and most importantly annexation in New Zealand are central to my story. It is possible to study its general history over time because it has primary and secondary data of varying quality stretching back to first continuous contact in 1769. From this has been built an extensive historiography covering much of the country’s social, political and constitutional story, some of which studies, especially the more authoritative and some that are highly focused by topic and are monographic, are drawn on heavily here. This is reinforced by a rich knowledge base about Aotearoa’s prehistory in oral tradition, archaeology and a plethora of sciences. Consequently, continuities between pre- and post-contact Aotearoa can be posited with some amount of certainty²⁰.

New Zealand’s otherwise comprehensive literature on political, general and social history has a major lacuna: it brushes rather lightly over its demographic and

economic transitions, and, more importantly, their interactions. There are, of course, a number of standard economic histories written over many decades, and some have passed into New Zealand historiography as classical accounts of the nation's economic development, but since Phil Briggs' (2003) empirical monograph an authoritative overview of economic history has been lacking²¹. This has recently been rectified by the publication of a long, very comprehensive economic history, encompassing both prehistory and history, written by the economist and political-economic commentator Brian Easton (2020:1), referred to already, who stresses that his work comes from 'an economist's use of particular lens...'.

Thus, the more conventional histories and economic histories have documented New Zealand's economic and general story. But, inter-linkages between peopling and development have not been systematically analysed; a knowledge gap that also occurs in the other Anglo settler-societies. This is the core research agenda of my book: how peopling – population dynamics and structures – and development, loosely defined to cover social, cultural and economic factors, interacted to build a settler-society; in sum how the mono-cultural Māori world of 1769 became 21st century Aotearoa New Zealand's multi-cultural society.

Moreover, the existing historiographical knowledge base on Aotearoa is primarily focused on New Zealand itself with limited use of cross-comparisons, which in macro-social science studies as in my book are a sort of rough analogy to replicating tests in the micro-level social sciences such as experimental psychology. I will make numerous cross-references, especially with the other Anglo settler-societies which share a lot in common with New Zealand. Aotearoa is a useful case study of how such settler-societies emerged, so it adds to a growing international literature, but conversely these cross-comparisons enrich the power of my analysis. In a surprising range of situations New Zealand has a commonality with the other Anglo settler-societies, especially Canada and Australia. For the post-contact era, in terms of available data New Zealand makes an ideal case study because from 1840, save for a brief experiment with Provincial government, it has virtually been a single state until today, always with one statistical system.

Having said this, however, New Zealand's governing system does set it apart to a degree from the other Anglo settler-societies. Where they all have three main tiers of government (central, state/province, local) New Zealand has only two (central and local). This does affect the analysis here: 'Modern New Zealand is politically centralised. The line between direction by the market and the state...has played a central role in the economy' (Easton 2020: Introduction). Its electoral system – Mixed member proportional similar to Germany's – is another difference. Finally, its central government is unicameral – its upper house, or Legislative Council, established in 1841, was abolished in 1951.

While I pick up Aotearoa's story only in 1769, this is somewhat arbitrary, and thus occasionally I must reach back into antiquity in order to explain some post-contact phenomenon. Captain Cook's arrival was ground-breaking in the longer run, his cartographic skills remarkable, but in the immediate term he landed at a limited number of places and never went inland further than a few kilometres. Aotearoa's antiquity may seem exogenous to my narrative, but it plays an important function here, reminding us that Māori history had already lasted 500 years before the first Europeans came ashore.

On arriving in Aotearoa, Europeans encountered a maze of sovereign polities, something also seen in Europe. Think of 18th and 19th century Germany with its maze of self-important princedoms, large and small, connected by dynastic alliances, as also occurred in Māori society. Aotearoa had one language²² and patterns of social organisation, emphasising kinship linkages through cognatic descent, that was hierarchical but not very inegalitarian, in which gender-biases occurred but were limited and complex. The patterns of social organisation benefited a complex economy with technologies (both material and intellectual) that were new to Europeans, and often in advance of those in Europe.

The demographic, economic and social traits of 'pre-historic Māori' passed across into post-contact New Zealand, so that factors of antiquity did not suddenly disappear on contact, nor indeed with formal annexation (1840), despite attempts by missionaries and officials to suppress the beneficial aspects of Māori society. Nor, had these traits inherited from antiquity disappeared when their very survival was at stake (*circa* 1900), nor 180 years later when this book was being written, but have some impact on Māori and national life today. They are thus a core element of New Zealand's national story.

'Anglo' Settler-Colonies and Settler-Societies: Commonalities

Settler-colonies and the countries succeeding them shared many common characteristics beyond a baseline of colonialism and colonisation and the 'great reallocation'. Obviously, European settlement was achieved by colonists migrating to distant lands²³. Once there, immigrants and their families displaced the native inhabitants, who became impoverished and suffered underdevelopment. In settler-societies marked inequalities still exist between the Indigenous people(s) and the European-descent populations. Australasia and Canada were dichotomous settler-Indigenous societies until after World War II, but in recent decades, with massive non-European migrant inflows, this has given way to multi-culturalism. The United States has a different ethnic mix from the other Anglo settler-societies, with its large African American slave-origin minority and long-resident Hispanic communities, plus the recent immigrants and a small Native American population²⁴.

This displacement of Indigenous peoples is still a defining commonality of ‘settlement empire’s’ (Curtin 1998; see Chapter 2) post-colonial states and societies. Essentially, colonisation legitimised dispossession, such as by vesting ultimate ownership in the colonial government, and thus the mandate to allot property rights – leasehold or freehold – to ‘white settlers’, who eventually controlled much of the land and other natural resources. The displacement mechanisms included treaties, conquest, expansionary creep into ‘native reserves’, and legal pre-emption and leasing or sale, all of which varied greatly in ingenuity and mode; in New Zealand by a mix of all of these. Of singular importance to the commonalities is that ‘strikingly common’ wording appears in many such Agreements (Fletcher 2022: 7). Fletcher records that in an 1825 agreement between Britain and Sherbo and Ya Comba (now Sierra Leone) sovereignty was ceded in exchange for ‘British protection, “the rights and privileges of British subjects”, and a guarantee of “the full, free and undisturbed possession and enjoyment of the lands they now hold and occupy”’²⁵. This is wording many New Zealanders know by heart as foundational of the 1840 Treaty of Waitangi.

In settler-colonies, to justify dispossession, the domains natives owned and exploited economically were often deemed to be ‘empty’, or misused, a fiction seemingly entitling Europeans to implement a land grab. Virtually ignored was the fact that these territories were already inhabited by vibrant societies with complex patterns of social organisation, and land-use technologies and modes of economic production that were well suited to the ecosystems they were using²⁶. Such an entitlement was most powerfully expressed in the doctrine *Terra Nullius*, ‘nobody’s land’, prevalent among some jurists (from what date seems unsure), made possible by impugning the intellects and social morality of natives – deemed inferior to those of Europeans. It appears to have been formally promulgated only in Australia, as if Aboriginals had had no territorial rights to their own lands, and it endured there as a legal instrument until 1992. Variants of it were invoked in other settler-societies, including in New Zealand. It was argued, even in jurisprudential settings, that Indigenous people(s) were incapable of understanding treaties and had ‘communistic’ attitudes to property and social organisation (really communitarian)²⁷. Common law precepts about property eventually became legal norms in settler-colonies, but a resultant ‘conflict of laws’, which still perpetuates itself in settler-societies, dates back to very first contact. The accounts of 18th century voyagers in the Pacific are replete, for example, with stories of Polynesians taking nails and other iron objects from ships, sometimes provoking extremely punitive responses. The natives were typically described in demeaning or negative terms as ‘curious’, ‘childlike’ or ‘nefarious’. There seems to have been far less concern about the widespread tendency of ships’ crews to steal large volumes of perishables from the natives²⁸, and of Europeans ignoring customs deemed sacred to Indigenous people(s).

Dispossession had ideational as well as material impacts. The ontologies of Indigenous people valorise prior habitation before contact, constituting a powerful reality context for their modern daily lives. Yet, this is seldom recognised in public discourse in settler-societies except in constitutional-legal inquiries that refer to native rights²⁹. In New Zealand, contemporary Māori culture recites waiata (prayers and songs) that make constant reference to the features of the land and to ancestral roots, identifying major geomorphological features with distinct names and personalities, an emotional attachment rarely acknowledged by Europeans (but see Whanganui River, Chapter 5; Te Urewera Chapter 18). Thus, landscape was, and is, more than a material asset (Keenan 2019)³⁰.

Different concepts of property, along with other ontological chasms, played extremely important dysfunctional roles in the interactions between Indigenous peoples and the settler newcomers. This manifested itself most tragically in the bitter armed conflicts between Europeans and natives an example of which, the New Zealand Wars, will be detailed later. These campaigns were far from trivial: ‘It was easier to take parts of Asia than to take the Great Plains from the Sioux, the Eastern Cape from the Xhosa and the North Island of New Zealand from the Māori’ (Belich 2009: 7).

In both settler-societies and former settler-states, displacement has left a residual bitterness, which is difficult to resolve materially or emotionally. In Anglo settler-societies, this makes many liberals uncomfortable, while conservatives often dismiss or trivialise the fact of dispossession, arguing that it is no longer a valid issue. Others promote ‘one-nationism’, which superficially seems a desirable goal, but is really assimilationist, by default favouring the European political and demographic hegemony with virtually no instrumental role for other cultural strands (see Chapter 18). Today’s extremists often see discussion of Indigenous or other minority rights as an attack on ‘beleaguered white civilization [the term they use]’. There is, however, some progress: the Australian, Canadian and New Zealand governments and judicial systems are now formally addressing compensation and other forms of redress. For the United States the question is far more problematic because other tensions, coming from the long-standing Black-White-Hispanic trichotomous discourse, reinforced by recent diverse migratory flows, often overshadow relations with Native Americans.

At first the Anglo settler economies were pre-industrial (eg mining, sealing, ranching, plantations dependent on manual work), but, to their credit, many colonists very effectively exploited the resources they had alienated to make Anglo settler-societies members of the ‘rich countries’ club’. In New Zealand, for example, they developed efficient farming systems underpinned by science. Gross Domestic Product (GDP) and GDP/capita are still at high levels in each of the Anglo settler-societies. This is indisputable and benefits these countries at a macro-level, but it has a downside. Gaps in wealth, income and wellbeing between settlers and Indigenous

people have existed since colonisation and persist even where proactive policies have made attempts to reduce them.

There is another dimension to inequality explored later. Anglo settler-societies have also seen the long-term cyclical fluctuations in inequalities of wealth and income documented by Thomas Piketty (2014) for the WDCs of which the Anglo-world is an important component. For those countries for which he had data, inequalities were marked in the 19th century, decreased in the 20th especially in the post-World War II period, but have opened up again very significantly; New Zealand follows the same pattern as I will show.

The genesis and evolution of modern Anglo settler societies spans a quarter of a millennium, longer for North America. This was not just a settler story from the outset, despite what the written record might imply; nor was the ‘reallocation’ immediate. In New Zealand, for example, from the date of continuous contact with Pākehā (1769) until the 1850s, a Māori majority controlled the land and its economy – *this amounts to almost one-third of this book’s entire span* (80 of the 250 years 1769-2020). I must stress this point, because much of New Zealand’s historiography and self-identity – and the same is true in other Anglo settler-societies – is oriented towards the settlers even for the years immediately following contact. In Aotearoa, for example, the conventional historical records, even those documenting the period prior to annexation focus disproportionately on Europeans³¹ – how they arrived from about 1790, entering extractive industries or as traders and, from 1814, as missionaries. They document how the British formally colonised New Zealand in 1840, and then how the pioneers set about doggedly developing it. Māori are there, especially the more powerful or colourful personalities, but, too often, relative to population numbers at that time and to the Māori role in managing the economy until the 1850s, they are still allocated roles as bit players – their seminal role in development is virtually ignored. Instead, the imperial narrative about natives has highlighted the warriors who fought the British – such as Aotearoa’s Hone Heke (Heke Pokai), and the ‘Flagstaff War’ in the Bay of Islands, the Zulu king Cetshwayo or the Odawa chief Pontiac – rightly or wrongly, rating battles with them as ‘British Victories’. But the same story forgets the everyday things these Indigenous peoples, Māori and others, were achieving, exactly what people do at a quotidian level in most societies. Despite marginalisation Māori and other Indigenous people survived, fed, clothed and housed themselves. Dispossessed of their capital Māori, nevertheless, subsisted and survived before proactively undertaking an urban-ward migration after World War II.

The Emergence of the ‘Anglo-World’ & Anglo Settler-societies

A very good starting point for my book comes from James Belich’s (2009) book on the evolution of Anglo settler-societies. He synthesises comprehensively ‘*what*’

happened between 1783 and 1939 – the events that produced the world’s most dominant geopolitical bloc. Its subtitle pinpoints its key theme: ‘*The Settler Revolution...[and] the Rise of the Anglo-World 1783-1939*’. Beyond Anglo-America, Australasia, and southern and other parts of Africa, he also included the United Kingdom in the Anglo-world; Ireland is also often seen as a part. Most of its citizens, and many of the world’s other peoples, now speak English, as a first or second language. In elaborating ‘*what*’ happened, Belich also proposes ‘*why*’ the Anglo-world emerged in this way, so rapidly and powerfully.

My book is different from Belich’s. I lead off from his ‘*what*’ and ‘*why*’ and focus instead on ‘*how*’ Anglo settler-societies took the form they did – ‘*how*’ they were peopled and developed, processes driven to a significant degree by *peopling*. In assessing the role of demography in building societies there is a tendency to focus on growth in numbers, the rates of natural increase (births minus deaths) and net migration (arrivals minus departures). But the transmission between these rates, and the motors that drive policy and development, mainly come from sex- and age-structural changes, of which the ratio between the working ages (15-64 years) and dependent age-groups (0-14 years; 65+ years) is most critically important³². Thus, the ‘*hows*’ of peopling will be analysed here at two levels: at a first-order will be the rates of growth, and the second-order will identify their impacts on sex- and age-structures. Furthermore, the age- and sex-structural transitions are affected by, or co-vary with, other aspects of demographic change – eg population geography, family, workforce, ethnicity and culture. The pivotal role of age-structures also allows me to address a major theme: the role of the ‘widening’ and ‘deepening’ of human capital in economic and social change (Chapter 4)³³, when peopling interacts with development.

I am not proposing some over-arching form of causality but simply acknowledging the sequentiality of the ‘*hows*’. Peopling, through immigration and reproduction, set the sequences off, by allowing colonists to challenge the suzerainty of the Indigenous peoples. Having displaced the native peoples, then taking their resources, the Anglo settler-societies successfully developed to become economic powerhouses. But this was driven by development strategies formulated by Europeans, in which Indigenous minorities were given little or no say. The impetus for these development trends came because of the rapid demographic growth in colonist numbers. More qualitatively, human capital – Indigenous and colonist, often separate or sometimes together – and the aspirations of their peoples developed these societies and drove their economic and political-constitutional paths.

These factors are all so diffused and interpenetrating in both time and function, that attempting to assign causality would infer simple relations when in fact they are very complex. My argument here is not dissimilar to that spelt out by Paul Morland (2019: 9-10) in his wide sweep of modern human demographic history. In my case, because my analysis is focused on the chronologies of peopling and

development in a small number of societies, and one in particular, some relatively more precise sequences can be identified. This analysis is qualitative, but I posit that the associations produced by sequentiality are sufficiently strong to invoke the idea of ‘temporal causality’³⁴.

The Rest of this Book – Outline

The last Anglo settler-society to be colonised was New Zealand (1840.) Nevertheless, broad aspects of its trajectory also fit, to a degree, the paths followed by Australia and Canada, and, less so, by the United States. Aotearoa’s history even has some resonance when analysing Latin America’s Luso-Hispanic southern cone ³⁵. The early part of the book (Part One) introduces the New Zealand case study in the comparative context of these Anglo settler-societies as a grouping. But for much of this book, I concentrate on interweaving two domestic New Zealand stories – that of the Indigenous Māori and that of the settlers. I add in a third stream when Māori and Pākehā are joined by recent migrant arrivals³⁶.

Chapter 2 defines cardinal features and the implications of imperialism, colonialism, and colonisation as a context for the peopling and development of Anglo settler-societies. Chapter 3 looks at peopling and development, *per se*, comparing New Zealand with the other Anglo settler-societies. It also addresses a widespread misunderstanding: ‘peopling’ is seen popularly as migration, but after initial surges, these nations grew instead by natural increase. Chapter 4 reviews how peopling and development might be studied, briefly introducing methodologies and frameworks.

Part Two of the book begins with Chapter 5 and shifts the focus to New Zealand³⁷ by scanning its overall history since 1769; this allows me to identify three major eras of peopling and development. In the initial 200 years, first came a ***Turbulent*** period (1769-1880s), but from the 1880s, Aotearoa became a more comfortable and smug acolyte of England, an era Belich (2009) calls ‘***Re-colonization***’. A ***Neo-turbulent*** era suddenly emerged in the 1970s. Prior to 1980, almost all New Zealanders were Māori or Pākehā. By contrast, post-1980, New Zealand has emerged as a diverse, culturally rich society comprised of some 200 ethnicities and 160 languages; similar transitions have occurred across the Anglo-world.

There is no perfect fit between these eras and the cultural demography of Aotearoa, particularly at the end of the first Turbulent era when Māori population dominance and suzerainty were ceding place to Pākehā. Chapter 6 thus deals with a question that underlies all of peopling and development: how Aotearoa’s cultural demography evolved through different waves of peopling. It then identifies the contribution of the largest sub-set of the Pākehā, and Total, population – the ‘Anglo-Celtic’ colonists. Even with a scattering of Māori leaders playing roles on the national stage in each decade, and a post-1980 diversification incorporating recent migrants,

Anglo-Celts have still been Aotearoa's demographic hegemon and, *de facto*, its most powerful political actors.

Part Three of the book is an empirical analysis of the New Zealand case study *per se*, covering the different eras identified in Chapter 5, and making cross-comparisons where appropriate. It consists of five chapters. Chapter 7 gives an overview of major themes in the period from 1769 until the 1880s, each of which are turned to in greater detail in the following chapters. Chapter 8 'backtracks' to deal with the period prior to colonisation. Chapters 9-12 cover the period until British suzerainty was virtually assured, devoting Chapters 9 and 10 to Māori domination (until the 1850s) and the transfer to Pākehā control until the 1880s – the means employed and their impacts on Māori. Colonial annexation *per se* (1840) provided the political-constitutional instrument by which New Zealand's potential as a 'land suitable for Europeans' could be realised. Chapters 11 and 12 are mainly devoted to the nascent Pākehā colonial society, notable for its rapid growth and distorted age-sex-structures³⁸ and to its economy, which was staunchly pre-industrial. Wool was king until the 1880s and underwrote highly unequal social structures. Despite their rapid numerical growth, the settler hegemony did not occur immediately after cession. Pākehā demographic dominance was evident by the end of the 1860s, and political and population suzerainty certain after the 1880s.

Then, in the late Victorian era, starting about 1880, New Zealand (and other Anglo settler-societies) went through a radical demographic, economic and social transformation – 'recolonisation' as termed by Belich above. Chapter 13, the first chapter of Part Four, presents an overview of key themes in the era, each developed further in the following six chapters. The late Victorian Anglo settler-states and -societies also urbanised and industrialised, while simultaneously intensifying and mechanising their farming sector – agro-industrialisation (Greasley and Oxley 2005, 2009). But, its first indicators in Aotearoa were demographic: declining immigration and marked decreases in family sizes³⁹ that laid down new peopling and development structures. (Fast forward 100 years and the end of recolonisation in the 1970s was also signalled by radical shifts in both migration trends and patterns of fertility). Recolonisation is then divided into three constituent periods. First, are the decades, until 1921, in which it unfolded (Chapter 14). Its 'belle epoque', despite the Great Depression and War, is the content of Chapter 15. Chapters 16-18 cover the short-lasting, aberrant (30 years in 120 of low or declining fertility), but uniquely Pākehā Baby Boom. It had close parallels in other WDCs, but not for Māori whose rates of increase were already very high and who also urbanised rapidly. The Baby Boom presents the analyst with conundrum after conundrum, from phenomenological dimensions to its empirical realities.

Part Five turns to the period since 1970-80, wherein New Zealand, along with the other Anglo settler-societies, has experienced a series of revolutions for all factors

of peopling and development (Chapters 19-22). The settler-Indigenous ethnic dichotomy in Australia, Canada and New Zealand – and America’s four-way divide – has shifted into cultural polytomy and diversity, through the immigration of people from every corner of the World. Birth rates dropped, producing structural ageing (per cent aged 65+ years), and other demographic factors, changed, including their population geographies, and the composition of their workforces, by gender, industry, patterns of labour market participation and spatial distribution (Chapters 19-20). The financial and related sectors grew in metropoli and manufacturing withered. There was a radical multi-dimensional transformation, socially and in every aspect of technology.

These transitions occurred just as the same settler-societies were questioning and eroding the welfare state measures that had lowered inequalities after World War II. A dominant economic paradigm, neo-liberalism (Chapters 21-22), produced distortions in the distribution of wealth and the financial means by which it was generated. Its policy focus on the financial and fiscal systems had a negative effect on development, which will have consequences for decades to come. There was a failure to capitalise on a potential ‘demographic dividend’ (defined above) coming from Baby Boom birth cohorts reaching adult ages.

The last chapter of the book, comprising Part Six, is a synthesis. Six Appendices elaborate substantive questions raised in the text.

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Chapter Two – The ‘Anglo-World’ and the Empire

The ‘Anglo-World’ and the Modern Imperialist Era

Along the Ghanaian coast, the early European-built slave castles are a striking element of the beachscape. Their architecture belies the sinister truth of their origins as monuments to the sheer horror of slavery. The early castles were not English but carried the flags of would-be imperial Europe of the fifteenth and sixteenth centuries. In 1482, the Portuguese built the most stereotypical – Elmina, Sao Jorge da Mina, dedicated to both gold and slavery. When looking at such relics of colonialism, we need to remember that the British became the principal actors in the Gulf of Guinea somewhat later, ultimately dominating the slave-trade and gold production. We also forget that real sustainability came from Ghanaians themselves who initiated cacao farming. A new generation of historians have looked more granularly at the record showing how it had – as it did elsewhere – uncritically glorified Britain⁴⁰.

In Elizabeth I’s reign, English colonial expansion was still rather modest – Ireland, long an English colony, was joined in 1583 by Newfoundland. The ‘British’, as they had more or less become under James I, moved into mainland North America. But, in the seventeenth century at the start of the modern imperial era, the huge overseas European empires that ruled significant parts of the globe were still Portuguese, Spanish, Russian, and – not to forget – the Dutch in the East and West Indies, and at the Cape⁴¹.

The ‘Anglos’ then quickly caught up. The original seventeenth century Anglo settlements along the eastern seaboard of North America expanded gradually into thirteen colonies, the southern members of which were heavily dependent on the slave trade, as were Britain’s sugar-producing Caribbean colonies. In 1759, the French were conquered in Quebec by the British, facilitated by the seminal tactical contribution of that same navigator James Cook, who later mapped Aotearoa, other parts of Oceania and the north-western Pacific coast of North America. The battles along the St Lawrence occurred simultaneously with faraway wars with the French in India but were sideshows to the Seven Years War in Europe. Both ended in 1763 with a Treaty that ceded Britain the North American east coast that became Anglo America, but with a French-speaking enclave in Quebec. This long littoral comprised the thirteen British colonies, plus eastern and Maritime Canada⁴². In 1776, the thirteen colonies rebelled and became independent, while Canada remained British. Significant numbers of ‘Empire Loyalists’, moved to Canada (Belich 2009: 79- 81). In 1791, the Provinces of Upper and Lower Canada were proclaimed alongside Nova Scotia and New Brunswick, confederating later (1867), and being joined in 1949 by Newfoundland. The Dutch had ‘discovered’ Australia and New Zealand in 1642, while James Cook ‘rediscovered’ them in 1769, claiming them for King George III by

simply planting a flag. In 1789, Australia formally became a penal settlement that then split into several colonies, federating later in 1901. Most distant from Whitehall, New Zealand formally joined the club as a colony in 1840.

Historian James Belich takes 1920 as a reference point to show how ‘explosive’ was the growth of Anglo America (2009). In 1783, it had had one-fifth of the population of Spanish America, which also grew rapidly. By 1920, however, Anglo America far surpassed Spanish America, with twice its numbers. New Zealand’s colonists contributed to this explosion – modest numerically but spectacularly in relative terms. Between the Treaty of Waitangi, when New Zealand became a British colony (1840), and 1921 (using a date close to Belich’s reference point) the European settler population alone increased astronomically. Nevertheless, even from when settler numbers equalled those of Māori (1857/8)⁴³, the European population had increased through natural increase (births minus deaths) and net migration (arrivals minus departures) by almost 20-fold by 1921. By contrast, Māori were not only subjugated politically but their numbers shrank due to an increase in mortality: in 1921, their population was still only 63 percent of what their total had been at the time of Cook.

The colonies, later Dominions, of Australia, Canada and New Zealand⁴⁴ were merely one group among many different sorts of territories, acquired in various ways and with different political frameworks. It is true that when their troops paraded alongside detachments from the rest of Empire, who wore everything from multi-coloured turbans and spectacular uniforms to drab blue, and as carriages full of subject ‘Kings, Queens, Sultans, Emirs, Maharajahs, and others of their ilk’⁴⁵, traversed through London, at Queen Victoria’s Jubilee, the Empire seemed to be a unified, concrete entity, from its tiniest specks to its vast domains. This largely remained so at the crowning of Elizabeth II, following which every territory, colony and Dominion issued postage stamps with her head on them. This was ‘The Empire’ as the metropole’s most loyal imperialists would have wanted it, but, hidden from sight was what was really happening ‘out there’ as insurgency after insurgency, or other forms of civil strife, erupted in colony after colony. At Elizabeth II’s coronation, the cracks may have been gloriously papered over, but, in reality, the edifice was splitting in every corner, the first signs of which had appeared in 1947, not long before she became Queen. Most of colonialism’s fabric tore and disappeared in the post-World War II years. By contrast, the British settler-societies remained a part of a club with close links to the metropole. They were also joined in a British Commonwealth of Nations, which has proved a remarkably durable and adaptable institution, composed of settler-societies and other former colonies in new independent guises; the Empire ‘reformed’.

1947, A Bumper Year in Whitehall: An Empire's Demise

So, when did the real unravelling commence? It seems that the year 1947, six years before Elizabeth became Queen, was seminal for the British Parliament. A highlight of global significance was the passage on the 5th June of the *India Independence Act*. With great media fanfare and, tragically, with enormous bloodshed, the new mega-states of India and Pakistan were launched. That same year, in late November, greatly overshadowed by the glitz of Princess Elizabeth's wedding, came the final reading in the British Parliament of the *New Zealand Constitutional Amendment Act*. This allowed Whitehall to sweep away some of the untidy statutory detritus remaining after decades of ruling colonies that now had European majorities, and often seemed to be overseas clones of the 'Old Country'. The Act referred to the *Statute of Westminster*, drafted years before (1931), granting independence to self-governing Dominions, the last of which to accede was New Zealand in November 1947.

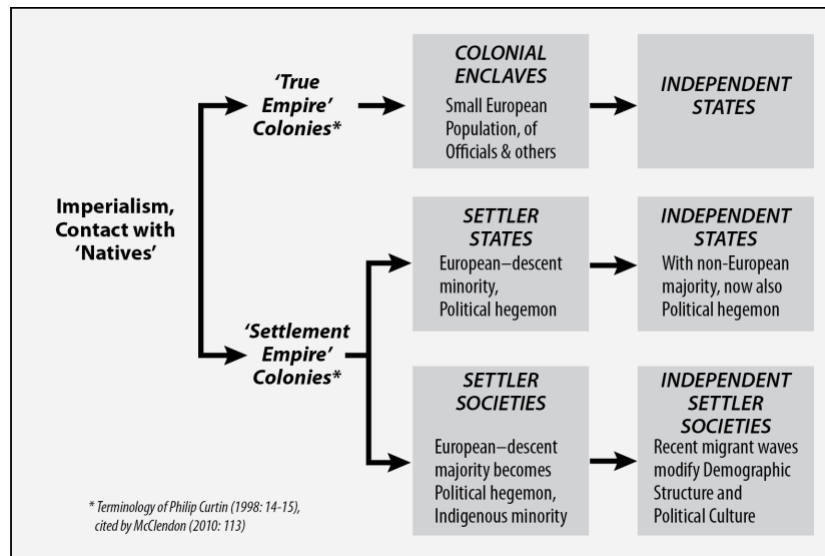
The two constitutional issues before the 'Mother of Parliaments' in 1947 could hardly have been more different in profile, global import and speed of implementation. India's immediate bloody partition into two independent states was one of the twentieth century's most extreme ruptures, as the empire's golden fleece was summarily clipped in two, destroying a great deal of tissue in the process. New Zealand's independence, by comparison, was the necessary, but humdrum, task of 'dagging' a sheep (New Zealand vernacular, *OED* 2010).

The constitutional shifts, legislated in Westminster in 1947, related, in effect, to two of three major categories of colonies gaining independence. These changes also had involved Ireland. But the focus here is with parallels in other settler-colonies outside Europe, introduced in Chapter One and now modelled below in Figure 2.1. Thomas McClendon cites Philip Curtin's distinction between 'True Empire' and 'Settlement Empire' colonies (McClendon 2010: 113; Curtin 1998: 14-15). In True Empire, which ranged from the vast realms of the Indian sub-continent to tiny atolls, 'small numbers of officials from the imperial centre attempted to rule overwhelming numbers of indigenes...'. In Settlement Empire, by contrast, 'relatively small numbers of settlers from Europe expropriated land from indigenous peoples...', intending to stay. New Zealand is a representative case of the latter territory.

The second category, Settlement Empire, needs further subdivision. In southern and eastern Africa's 'settlement empire colonies' – South Africa, the then-Rhodesias, Kenya and South-west Africa (Namibia), and even Mozambique – Europeans never became majorities: this is the group I have called 'settler-states'. By contrast, the other sub-category is those settlement empire colonies which demographically, economically, socially and culturally became 'settler-societies'. The European-descent peoples of Australia, Canada and New Zealand became majority populations and political hegemonies. In the process, these 'white' settlers, as they were often called, determined their countries' development paths. The United States also

could be included in this category, albeit with a somewhat different provenance. Some authors call all four nations ‘Anglo-settler democracies’ (Kukutai and Taylor 2016:1). I have extended their political-constitutional usage by employing instead the word ‘society’, which includes many factors of population and development – social and cultural, as well as economic and political. Together, settlers forge a ‘society’ from what is simply a polity.

Figure 2.1: Evolutionary Path: Contact, Colony, Settler-Society



In making these distinctions, I recognise that my usage differs from that of other scholars, such as Stephen Constantine (2012: Table 2.1). In an interesting summary paper on ‘English in the Empire’, he includes ‘Orange River Colony’, ‘Cape’ and ‘Natal’ in the settler-society category. In a similar vein, Lorenzo Veracini (2010) sees ‘settler-colonisation’ (termed settlement empire in Fig 2.1) as a distinct sub-set of colonisation, thereby ‘separating colonial and settler colonial phenomena’. He also distinguishes between settlers and migrants: ‘Settlers are *founders* of political orders and carry their sovereignty with them...’, and migrants are defined by him as ‘*appellants* facing a political order that is already constituted’⁴⁶. He nevertheless makes a useful point for my analysis: that ‘the settler collective is fundamentally defined by permanent residency [‘they intend to stay’] and sovereign entitlement’. Moreover, these values are shared across the ‘collective’, even by groups who are geographically distant from one another.

Thus, ‘Settler colonial formation’ was ‘coherent’ and ‘transnational’, occurring in such ‘demographically diverse’ places, as the United States, New Zealand and ‘Rhodesia’. This homogeneity apparent in the ideational underpinnings of settler colonialism was remarkable. Veracini argues that such intangibles are mega-traits that form the ethos of the ‘settler-collective’, the sub-traits of which he identifies

and elaborates in his steps towards theory-building. But, the processes of settlement, colonisation and ‘swamping’ – (in James Belich’s words, the outnumbering of precursor⁴⁷ peoples by settlers) – and thus peopling, are seen wrongly by Veracini, primarily as the result of ‘migrations’ producing ‘colonisations’, whereas, after the initial inflows, it is reproduction, reinforced by demographic momenta, that drives peopling (Veracini 2010: 2-3, 10, 12-13, 20-21, his italics: Belich 1996: 249).

The Catalysts for Colonisation

Turning now to tangibles, the long-term outcomes of settler colonies, their ‘destinies’⁴⁸, were very much determined by demography and its Siamese twin development. The remainder of this book will demonstrate the roles of peopling and development that, in combination, were major drivers of the ‘settler-colony’ and ‘settler-society’ narrative. Demography – the Europeans remaining a minority – was a key factor determining why ‘settler-colonies’ that became ‘settler-states’ eventually disappeared as settler hegemons. Some never made it this far: the tropics, and even the higher latitudes, are dotted with histories of ‘settler-colonies’ that lacked a sufficient demographic and development momentum, so failed totally, or else changed laterally into what became lucrative plantation-economies dependent on slaves and a small ‘white’ population of owners and their supervisory staff⁴⁹. But many lands successfully selected for settlement by Europeans – as against colonial territories merely ruled and exploited by a small cadre of whites – were chosen because their altitude or latitude favoured them climatically as ‘white men’s countries’. To effect this transfer, as was raised in Chapter 1, colonists then rationalised that they were ‘empty lands’, or used inefficiently by their native inhabitants, and thus that Europeans were entitled to exploit them more effectively (Veracini 2010). In turn, to achieve this required several coterminous demographic changes: (i) the displacement of the resident aboriginal populations, typically through conquest, coercion or artifice, (ii) the transfer of these lands to settlers, who (iii) would flow in as migrants. But (iv), more importantly, as I will show in this book, once in place the colonists would rapidly reproduce.

The settler development strategy also introduced a truly major shift in resource management methods, elaborated in later chapters: to turn native land, previously used for horticulture and hunter-gathering, often intensively, into settler-owned extensive holdings given over either to pastoralism or to grain farming. This objective was on a gargantuan scale, implemented in mid-latitude regions across the globe, or in higher altitude tropical areas, anywhere seemingly suitable for white farming, although sometimes supplemented by plantation crops where slave or indentured workforces could be engaged (Weaver 2006). But, even back in the metropolises, also in the name of increased efficiency, ‘natives’ such as Catholic Irish and Highland Gaels were being similarly dispossessed from their small mixed-farm holdings by the

‘clearances’ and England had its enclosures. Wherever possible in settler-societies, extractive industries, especially mining, were established, but typically they were boom-and-bust, whereas farming was more sustained.

That these developments might marginalise the Indigenes seemed at the time an irrelevancy, except among a minority of sympathetic colonists. Even then, their attempts to minimise the effects of dispossession, were often paternalistic and some seem punitive to us today: eg the use of the barren and inhospitable Bernier and Dorre Islands off Western Australia as ‘lock hospitals’ for Aborigines suspected of having been infected with STDs. A less tangible but pervasive outcome of this transfer was that settlers suppressed or rewrote the memory of the displacement of Indigenous Peoples. One strategy was to focus on the courage, work and hardship experienced by the early colonists, both shipboard and in the new land. These were real hardships, but they paper over two realities: the far greater hardships of the peoples the settlers had displaced, and that settler successes were dependent on that dispossession. The national narrative of development then revolved around the honest endeavours of the settlers themselves. Forgotten was the ready access to land, which in Europe would have been merely an impossible dream. In sum, ‘Settler colonialism obscures the conditions of its own production’ (Veracini 2010: 14).

These factors can be identified and even measured and are the raw materials for my later narrative. The Aotearoa case-study shows that, from first attempts to establish settler colonies, the forces of ‘peopling’, both the immigration and reproduction of the European settlers, and the decline in native numbers, both relative and absolute, became the key determinants of the territory’s path, driven by ‘settler-capitalism’⁵⁰. By contrast, simply ‘ruling’ the territories, rather than attempting to ‘people’ them, drove the evolution of True Empire colonies (Figure 2.1). This definitional difference becomes even more marked when one turns to the post-war decades during which the processes of ‘decolonisation’ and ‘post-colonisation’ dominated.

Before leaving this review of colonisation it is important to acknowledge that in settler-societies there are wide perceptual chasms between settlers and Indigenous Peoples over the emotional content of these events. The act of colonisation deals with one people taking control over the territory of another, and/or displacing its Indigenous inhabitants from their lands in Settlement Empire (Figure 2.1). To many settlers, this was perceived as a neutral occurrence, or as something to which they were entitled. Furthermore, many saw colonisation as an act bringing peace, technology and prosperity to the native inhabitants – even those dispossessed of their lands. For the Indigenes, by contrast, colonisation may have been accepted as a means of gaining the protection of an external power that could maintain the status of their territory (Orange, 1987: 32, 138, 185). In reality they will have lost a great amount through colonisation – not just materially, but also their mana (prestige). In Chapter 1,

I documented the koha (gift) Māori offered the British in the Treaty that allowed New Zealand's annexation (1840): 100% of the resources needed. Indigenous Peoples everywhere voluntarily (or by conquest) brought similar massive dowries to any deal. Looking back later, subsequent generations of Indigenous Peoples will typically view this as a cause for deep regret, and bitterness. As Danny Keenan (2019) argues, 'For Māori [when signing the Treaty, in the wording in their version of the document, and subsequently] land was the issue, because land and sovereignty were the same thing'⁵¹.

These perceptual chasms become even more pronounced when we turn to the subsequent periods conventionally termed – and mostly uncritically accepted in the literature as – 'decolonisation' and 'post colonisation'. Mercier (cited in Elkington et al. 2020: 41) argues that what has been widely accepted as decolonisation has been of the 'colony ups and leaves' kind, where the power wielded by a powerful minority was withdrawn and political independence was returned to the colonised population. This was the case for the settler-**states** as I have described them above. By contrast, in the settler-**societies**, the colonising power and all of its institutions remained intact. Although he uses 'societies' and 'states' slightly differently, the reasoning behind the distinction and its profound implications for Indigenous Peoples is explained below by Moana Jackson (cited in Elkington et al. 2020: 135). Jackson's footnote to his passage⁵² is so important to this story that it is also included here.

'Under the 'blue water' doctrine, the right to decolonise was restricted to Indigenous peoples whose lands were being governed from afar by colonisers back in the 'home country', separated by a stretch of ocean. The countries where the colonisers stayed, established a government, and became the majority were redefined as 'settler-colonies' and the Indigenous peoples were excluded from any possibility of decolonisation.'

'The 'blue water' doctrine, principle or thesis, also known as the 'Salt Water Thesis' or the 'Belgian Thesis', is an idea arising out of a UN resolution (637) which suggested to be eligible for decolonisation a body of water or a discrete geographical boundary of some sort was needed between the colonising country and the colony. The United States argued that it, and other countries like New Zealand, Australia and Canada, shouldn't need to give Indigenous peoples in these countries the right to self-determination as 'colonialism requires sea-based conquest' (Robbins 2015).'

Towards ‘Decolonisation’, Then ‘Post-colonisation’⁵³

With the above caveats in mind, and endeavouring here to use the terms as empirical descriptors only, the constitutional events of 1947 presaged a rapid ‘decolonisation’ soon thereafter. This abruptly brought an end to centuries of mercantilism, imperialism, annexation and the rule by various European powers of overseas territories. The demographic, economic and social morphologies of the decolonised territories depended to a high degree on the population structures produced by their colonial ‘peopling’. In turn, these determined the constitutional arrangements, and the geopolitical and trade alignments the countries forged after 1945.

The initial act of decolonisation in the Anglo-world had occurred with American independence (1776). In the remaining British colonies differing forms of legislative apparatus were introduced in the nineteenth and twentieth centuries. This went furthest towards self-government in Settlement-Empire, where control remained in the ‘safe hands’ of Europeans, either because of ‘white’ demographic dominance, or by law, or by constitutional manipulations and appointment processes. Dominion status, eventually conferred on Australia, Canada and New Zealand, bestowed virtual, but not complete, independence, as Jackson’s comments above explain. Governance remained under the Westminster system, along with all major institutional structures and arrangements.

For the Indigenous Peoples in the Anglo settler-societies the withdrawal of power entailed ‘internal colonialism’ (Hechter 1975): continuing control by state agencies over many aspects of their lives, both direct and indirect. It ranged from over-robust police interventions, to continuing resource alienation, to attempts to assimilate Indigenous or ‘mixed-blood’ children, to ‘institutional racism’, whereby key societal institutions, such as education, law, and governance, are structured in such a way that they continue to exert control even when it is unintentional. Cultural and linguistic maintenance were seen by the colonisers as particular barriers against efforts to amalgamate Indigenous Peoples into mainstream European settler-societies, which ‘needed to be done’ – coercively if necessary. Related examples were the ‘stolen generations’, Australian Aboriginal children, and their counterparts in Canada and Anglo-America, forced into residential schools that would facilitate their assimilation (e.g. South Dakota’s ‘Civilization Movement’ of 1891), but not, at least as official policy, in New Zealand. The speaking of an Indigenous tongue was often forbidden at school, including in New Zealand⁵⁴.

New Zealand never instituted a formal racial order as seen in South Africa and parts of the United States, and in a different form in Australia. Instead, the New Zealand situation paralleled more that of the Celtic Fringe of the British Isles. In Michael Hechter’s (1975) insightful study, he shows how ‘Core [London] - Periphery [Celtic Britain]’ relations disadvantaged those marginal regions (Pool 2015: 55-59). In New Zealand, as elsewhere, ‘decolonising’ both generated, and further entrenched,

already-dichotomised population and development trajectories: growth and wealth among the settler-descendant population, but the ‘development of underdevelopment’ among the indigenous peoples (Hoogvelt 1978: Chapt 4)⁵⁵.

Demography, along with political power, was a critical determinant of whether a settler-colony became a settler-state or a settler-society. When they first became Dominions, Australia, Canada and New Zealand already had European populations whose numbers exceeded, in fact greatly exceeded, the sizes of their Indigenous population(s) (Australian Bureau of Statistics 2011; Canada: Aylesworth and Trovato 2012).

By contrast, in settler-states, such as India or Nigeria, after a period of ‘white’ political control, political power went back into the hands of the native majority, as it also did in the True Empire colonies. In those settler-states, ‘whites’ continued to wield power disproportionately in some sectors (e.g. finance and export trade), and sometimes were joined by an emerging Asian-owned business sector, but, more generally, settlers were no longer a politically hegemonic power-group. Before independence, native and settler opponents of the ‘white’ minority regimes had often fled to neighbouring states or elsewhere. With independence, former settler-states saw proportionately large outflows particularly of ‘whites’, including those opposed to majority rule. A different trend occurred in True Empire colonies: once independence occurred, most of the sojourners, who had come to rule or to exploit resources, left as their contracts expired, and few stayed on after independence. They were replaced by a wide assortment of multi-national advisors, consultants and contractors, few of whom stayed long.

Space does not permit detailed comparison of these societies with India, the greatest and most stereotypical True Empire colony. Although aggrandised further by Disraeli’s proclamation of Victoria as Empress, it was still a colony. Its vast and complex societies and domains were overruled by a small cadre of British officials, accompanied by military, commercial workers, traders, planters and their ilk, living segregated in enclaves that obeyed their own rules of decorum and stratification; the ‘cantonments’ model was replicated across the tropical British empire. As in India, across the Empire a small British cadre, reaching out from the all-white cantonments, oversaw much larger public and private sector native labour forces.

India’s independence set the agenda for most colonies in the British Empire, a path also followed by non-British imperial realms – Belgian, Dutch, French, Portuguese and those Spanish territories not already independent. German colonies were reallocated as League of Nations’ mandated territories and managed by other empires, or by their semi-independent Dominions (e.g. German Samoa, New Zealand⁵⁶).

A legacy of the imperial era has been that many former True Empire and ‘white minority settlement empire’ ex-colonies became the less- and least developed

countries in the development tables of international agencies, some still to this day. Moreover, the former metropolises and the United States, through their powerful statuses in the World Bank, International Monetary Fund and other multi-lateral agencies, continue to intervene directly and indirectly in the policymaking of less developed states, mainly, but not exclusively, in economic spheres. This situation does not pertain to the same degree for the settler-society countries, which have stronger economies and thus greater leverage and resistance.

‘Decolonisation’ was thus a marker in a territory’s constitutional evolution. It could be tumultuous, or barely ruffle the populace, as was true in New Zealand, where the tomorrow to the 1947 *Act* remained much the same as it had been the day before. The country continued to grow grass, to produce dairy products, meat and wool for the ‘Mother country’, and to import her manufactures, even woollen garments made from New Zealand yarn. Decolonisation did not mean the dismantling of British institutions or ways of doing things. In a *de facto* sense – economically, culturally and socially, even demographically, through migration policies preferring British applicants – New Zealand in 1947 remained a loyal clone, albeit no longer a ‘colony’, but steadfastly linked to ‘Home’.

Anglo settler-societies may have seemed to have had rambunctious political systems, yet, unlike their Latin American counterparts, they were not wracked by coups and civil disorder led by European-descent elites⁵⁷. By contrast, in order to protect their lands and resources, the natives frequently suffered wars and other forms of settler-native violence; they were also exposed to long, drawn-out legal processes to force the dispossession of their land.

The reallocation of a territory dominated by one or more Indigenous Peoples to a settler group that overruns their domain (Weaver 2006) played out both through the national demography and the ethnic composition this transfer bequeathed. A feature of this scenario, the ‘settler - Indigenous Peoples’ dichotomy, continued well beyond World War II in all the Anglo settler-societies, including Aotearoa, and remains present today⁵⁸. Since *circa* 1970-80, however, in all Anglo settler-societies, this long-standing cultural architecture has been further confounded by a new phenomenon: population diversification, as successive migrant waves from new countries of emigration arrive – the focus of later chapters.

‘Anglo’ Settler-Societies: ‘*What*’ Happened and ‘*Why*’

As noted in Chapter 1, the history of Anglo⁵⁹ settler-societies since American independence – ‘*what*’ happened – has been described in James Belich’s (2009) seminal book covering the epoch 1783-1939. He calls their emergence and rapid rise, the creation of the globe’s most influential grouping of nation-states, as due to a ‘settler revolution’⁶⁰. It provides a plausible first-order explanation of *why* the ‘rise of the Anglo-World’ took place (Belich 2009: 9),

‘a synergy between ideological and (initially non-industrial) technological shifts. It happened ...in two stages: “explosive colonization”, which compressed time and supercharged growth, allowing huge cities like Chicago or Melbourne to sprout in a single lifetime; and “ re-colonization”, which compressed space and reintegrated settler-colony and metropolis, giving London and New York the extra hinterlands they needed to grow into mega-cities so early’

Belich then postulates a second- higher-order of explanations that is more in terms of broad generalities. Thus, he identifies more remote factors such as Fernand Braudel’s use of ‘conjuncture’, and ‘cause-effect spirals’ produced by ‘a resonant interaction between the American, French and Industrial Revolutions and an underestimated “settler revolution ” ’ (Belich 2009: 9, *passim*; his quotation marks).

Belich sites the ‘settler revolution’ alongside an urban revolution, facilitated by ‘a massive modern agro-industrial revolution ...’, requiring fewer farm workers who produced more, plus technological changes (eg electricity; petrol engines) that ‘removed fuel constraints on urban growth’ (Belich 2009: 2-3). Industrialisation is thus a seminal factor in the emergence of settler-societies: it provided the wealth and technologies for the imperial forces that unleashed settlement; but equally well, it was facilitated by the wealth generated by the settler revolution.

During the century of recolonisation (‘re-colonization’, see citation above)⁶¹ from *circa* 1880 to *circa* 1970, the glorification of the European view of the 19th century’s ‘settler revolution’ was bolstered. Moreover, around 1900, when Indigenous minorities were at their demographic nadirs, barely surviving, their fate seemed to prove the racial theories of the day, that non-Europeans were inferior to Europeans – intellectually, physiologically and morally. This worldview manifested itself in ‘white supremacist’ myths⁶² that even entered school texts. These legends have been scientifically debunked, mainly since World War II, although still persisting at a popular level. But even academia in the 20th century was not free from arguing that native peoples withered in the face of the superior technology and culture of Europeans, losing the will to procreate (Rivers 1922; Pitt-Rivers 1927). Some writers even posited a quasi-genetic explanation that intermarriage increased immunity to disease. These ideas were still circulating after World War II (Price 1950). In the 20th century, Indigenous minorities were starting to recuperate gradually, so that the most fundamental factor of their development, survival as a people, was now evident. Yet, over this period, for much of the 20th century, Indigenous groups were close to being ignored within settler-societies, and their cultural and socio-economic contributions to national development downsized. They were the dispossessed on the margins of everyday ‘mainstream’ settler-societies. The ‘settler revolution’ achieved by the

European-descent populations was, however, merely one side of the equation. It is a truism, but the term settler-society must comprise both settlers and Indigenous people. Without natives who already occupied the land and who were displaced, there could be no such polities as settler-colonies/states/societies.

As Europeans became the dominant group, through the settler revolution, their side of history became the default national narrative in the Victorian era and was reinforced and reified even more during recolonisation. The indisputable but distasteful fact of the dispossession of the assets of the natives was typically downplayed or ignored in the settler story. It also frequently expunged recognition of the adaptability of Indigenous Peoples to the course of history to which they had been exposed, unless, of course, as noted earlier, this had led to major wars in which, by their own reports, the settlers triumphed. ‘Whatever their historical success, historiographically the British won the New Zealand Wars hands down’ (Belich 1986: 311)⁶³.

Nevertheless, another history, of the colonised Indigenous Peoples, was still being forged, albeit very much in the background. That they survived at all was due to the ‘resilience and adaptability’ of ‘the native peoples of New Zealand, Australia, South Africa, Argentina, Siberia, and...Canada...[and] in the American West’. Furthermore, as long as they survived as a people, the Indigenous people were always there in one form or another, even through the recolonisation years. An extreme case was that of Tasmanian Aborigines, who were seemingly extinct except for a few exiled to perish on offshore islands (Belich 2009: 273-75); at one stage New Zealand’s Mori were also considered extinct (see Chapter 1). To Europeans in all Anglo settler-societies, native resilience was also seen in a negative light by colonists as something blocking progress. This is a core theme here, as it is inherent in the peopling and development of New Zealand. Mason Durie refers to Māori having a history of ‘endurance’. To Ranginui Walker, their story has been a ‘struggle without end’. This same story would apply to most Indigenous people across settler-societies (Belich 2009: 551; Durie 2005: viii, Table 1.1; Walker 2004).

Even in the late-19th century, vast areas of New Zealand and other Anglo settler-societies were still the domains of Indigenous Peoples. For Aotearoa, Māori will be major players in my narrative until the end of the 1850s, as they still controlled the demographic, economic and social life of the colony. This changed through the wars of the 1860s, with the confiscation of the lands of the insurgents, then with the promulgating of dubious ‘legal’ strategies to wrest from Māori the remaining areas they still controlled. At that stage the focus in my book shifts to how Māori adapted, surviving under conditions of severe marginalisation. At that stage, much of New Zealand’s story becomes a report on the European hegemon that drove the ‘settler revolution’. By 1900, Māori and other Indigenous Peoples in Anglo settler societies were just tiny minorities – Māori only 6% as late as 1945⁶⁴.

In the recolonisation era Māori were ‘out of sight and out of mind’, especially in the interwar period, as reflected by the data and archival lacunae of those decades (Chapter 15). Nevertheless, the story of Māori peopling and development is integral to the national narrative, not just because their plight was so grim when compared to the situation for Pākehā, but also because we need to understand the demographic pre-conditions that led to their rapid growth and geographic mobility after World War II. From World War II, Māori moved themselves to urban areas to respond to rural isolation and deprivation. This has allowed them to make a significant resurgence, demographically and in terms of development, late in the 20th century and into the 21st. Along with this has been a cultural renaissance, a specialist subject outside the scope of my book.

These issues also played out sub-nationally. Victorian Anglo settler-society population geographies reflected the resilience of the natives in the face of the ‘settler revolution’ despite the inexorable spread of European colonists across acquired lands. ‘Vast tracts of Australia, New Zealand, Canada, and the United States, as well as Siberia and Argentina were still dominated by Indigenous Peoples until about the 1880s, whatever the maps may tell you’ (Belich 2009: 551; also my Map 12.1). Lethal conflicts with Indigenous people, accompanied by heavy-handed policing, continued into the 1890s (Chapter 14) – well beyond then in the United States and Australia. Until Indigenous Peoples urbanised rapidly in the post-World War II decades, there was typically a marked divide in the countryside between European settlers, who held the most valuable rural resources and fertile land, and natives who occupied the marginal and geographically isolated areas. Today Indigenous minorities are preponderantly urban residents, but across Anglo settler-societies there are still more remote peripheral areas where population numbers are low, but Indigenous Peoples are heavily over-represented. These non-urban Indigenous Peoples are a minority segment within a minority, living, as New Zealand data show, in regions that often suffer deprivation for factors such as health, income and employment (Cochrane and Pool 2017)⁶⁵.

Heavy policing by the state was stimulated by the spectre of a native resurgence among Victorian Europeans in settler-societies and settler-states. It seems to have been a fear of a different ‘other’, which was widespread across the entire colonial world, both where Europeans were minorities and those where they were now majorities. This aversion seems to have festered on in the psyches of some settlers centring on the ‘salvageability’ of subject peoples, and whether or not Europe’s ‘civilising mission’ had succeeded. This dread was a quotidian fact of life in slave-colonies, where there was constant anxiety about uprisings, a fear that also continued after emancipation ⁶⁶. ‘Whites’ in the francophone Antilles, fearing displacement by ‘Mulattoes’, formalised what is now called ‘Grand Replacement Theory’ (Vaudano *et al* 2019). This perverse thesis re-emerged virulently among 21st

century ‘white supremacists’, in far right-wing literature, catalysed by French writer Renaud Camus, and in claims in the Charlottesville, Virginia rally (April 2018), that the ‘white race’ is threatened. It has also had a horrifying manifestation in New Zealand – not in relation to Māori but to Muslims – in the writings of the terrorist who murdered 50 people at Christchurch mosques (15 March 2019) (Vaudano *et al* 2019; *Washington Post*, 2019, 15 Mar).

Unfortunately, ‘replacement’ used in this virulent way risks being confused with the long-term use of the concept in demography (ie replacement / renewal of the current adult population by children). Replacement underpins biometric and mathematical theory and the science of indirect estimation of vital rates for populations with inadequate data. Thus, it is of major practical significance for probably a majority of the world’s nation-states – and for some of the demographic history being presented here – for Māori (until the 1950s) and Europeans (until the 1870s) (Chapter 4).⁶⁷.

‘Anglo’ Settler-Societies: ‘How’ Their Evolution Occurred

Chapter 1 argued that the present book is a New Zealand case study that addresses very different questions from those of James Belich. He analysed ‘*what*’ were the origins and progress of the Anglo-World and ‘*why*’ this may have occurred. I pose questions about ‘*how*’ particular peopling and development strategies operated to produce the outcomes he has identified. For some limited situations, more proximate ‘*why*’ questions emerge from the ‘*how*’. I also posited (Chapter 1) that the development of the Anglo settler-societies has been driven to a significant degree by demography. In a sense, then, I am building on Belich’s comment that the ‘settler revolution’ has been ‘underestimated’, or, in my view ‘mis-specified’. Its genesis and momentum came through ‘peopling’, while development underwrote its material success – at least for the colonists. For much of post-contact history a less triumphant parallel story played out, the ‘de-peopling, and underdevelopment’ of the dispossessed Indigenous Peoples.

The settler-revolution started with what Belich calls ‘explosive colonization’, made possible mainly because of demography: migratory inflows and, more importantly in the longer run, the settler ‘reproductive revolution’. Regardless of their British Isles region of origin or ethnicity, once in New Zealand colonist fertility levels were higher than those in the metropole, and, unlike Britain, differentials were slight. This was not, however, because settlers were somehow selected from the more fecund source populations in the metropole – in fact, they were not – but because colonisation afforded them aspirations and opportunities unavailable at home. Most settler women married when they were young: New Zealand Victorian Pākehā couples opened out almost fully the ‘nuptiality valve’ (as Dutch demographers call this phenomenon, Engelen and Kok 2003)⁶⁸. The use of such a mechanism in societies

without access to efficient contraception⁶⁹ was not just a New Zealand colonist phenomenon, but, as I will elaborate in Chapter 3, was also seen in the Australian colonies and Anglo-America. Nor was it just an anglophone phenomenon – the Quebecois settlers were notable for their hyper-marital fertility. In the last quarter of the 19th century, however, overseas Anglo settler fertility decreased as the nuptiality valve was tightened – ages at marriage increased as did proportions remaining single; this was still a period in which contraception was inefficient, and in New Zealand abortion levels seem not to have been high (Chapter 14; Sceats and Pool 1985). Once the valve tightened, in the last Victorian decades in Australia and New Zealand, differentials appeared, such as between the more established and pioneer regions (Chapter 3).

New Zealand's, Australia's and Ontario's settlers, especially their children born in the colony, were also likely to be much healthier than their peers in Britain (see Chapter 3). This was not because of the health systems, which were, to put it kindly, woeful, nor health sciences, such as immunology and bacteriology, which were still in their early infancy. Instead, New Zealand settlers in particular had chosen to migrate to an economically well-off colony, with low population densities, climatically suited to gardening year-round, with a super-abundance of meat protein foods – what else could you do with aged sheep but eat them or make tallow for candles? Māori traders sold you any pork, potatoes and flour, or housing materials you needed. To add to this, New Zealand was free of the great apocalyptic diseases such as smallpox and malaria. For the colonists, infant mortality fell and more children survived.

Having arrived and wanting to settle in order to realise their dreams, the European colonists tried to build assets, mainly farms. This could be achieved only by internal geographic mobility, and itinerancy, which allowed settler-societies 'explosively' to settle Belich's 'wests' in Anglo-America and Australia, or those major areas of New Zealand's North Island still predominantly Māori in 1870 (Belich, 2009: Chapt 3; my Map 12.1). In the process, across the settler-colonies colonists, increased the spread of 'childhood' and other diseases to Indigenous Peoples who lacked immunity to these pathogens, whereas, by previous exposure, typically at infancy, the settlers had a higher degree of resistance.

But, alongside what was happening to colonists in this era was a 'de-peopling' of Indigenous populations in all Anglo settler-societies. It accelerated as the immigration and spread of settlers exposed more and more Indigenous Peoples to introduced diseases to which they had no resistance. Because of such contrasting sets of trends, I have chosen to use a more generic term than Belich's 'settler-revolution' – the 'Turbulent Era' – here. Turbulence also was a feature of the economy that passed through the booms and busts of the extractive industries and ranching.

The next phase Belich identifies in the settler revolution is ‘re-colonization’. As I will show through a demographic lens, it started quickly just before 1880 with a totally new set of population trends. In the first parts of the demographic transition, fertility declines emerged across the settler-societies as the colonists tightened up the ‘nuptiality valve’. Slowing immigration until the mid-1880s preceded most of the social, political and economic changes that unfolded more slowly, into the second decade or so of the 20th century. By contrast, high levels of internal mobility produced new urban-rural balances, the onset of the growth of cities (larger centres in New Zealand) and the start of a restructuring of population geography within them. Recolonisation played out after World War II through a Baby Boom, an aberrant phase demographically, as I have showed above, arguably generating economic growth, yet embedded into the basic cultural, economic, political, social and spatial structures that recolonisation had laid down for the past two-thirds of a century.

As at its start, demographic transitions were major factors ending recolonisation, in this case very summarily. The ending of recolonisation opened up the period that has lasted since 1970, which I call ‘the Neo-turbulent era’. Across the WDCs, including in New Zealand and other Anglo settler-societies, there have been ‘Baby Busts’ in the 1970s, to low and sub-replacement fertility rates (replacement < 2.0 / 2.1 births per woman). The rate declines are associated with historically unprecedented shifts to delayed childbearing. The Anglo settler-societies have also seen huge migration inflows from non-traditional source countries and marked realignments in sub-national population geographies.

But, from the late 1970s a different phenomenon emerged. Neo-liberal economics and financialisation, valorised by Reagan and Thatcher, swept across the policy world, including in New Zealand and other Anglo settler-societies. In its implementation fundamental issues of human capital, notably those coming from radical age-structural changes, were swept to one side; a ‘window of opportunity for a ‘demographic dividend’ was squandered. The largest Baby Boom cohorts, born 1965-70, which could have driven significant production and consumption, entered their workforce years in a period of high unemployment. An exception to this policy lacuna is early discussion about population ageing, but concern there has over-emphasised the demand-side, the fiscal and familial burdens of an elderly population, without appreciating the supply side capacities – in this case human capital⁷⁰ – generated by age-structural changes (Pool 2010).

‘How’ Anglo Settler Societies Developed: Factors of Human Capital

In pursuing the postulate raised in Chapter 1 that demography plays a primal role for development – in both of its two major senses, dynamics and structures⁷¹ – this book adopts what some may see as an unconventional perspective on the general and economic history of settler-societies, on colonialism in general and on the post-colonial world. Explanations about the exact trajectory that emerges for any given society must always be speculative, but conventionally historiography has tended towards implicit forms of economic determinism, although constitutional developments, including imperialist agendas, are also seen as major intervening factors. There can be no doubt that economic change has flow-on effects on population numbers, geographic distribution and the labour force composition, and that constitutions (written or by convention) provide frameworks for development. Furthermore, over much of the period covered by this book (until World War II) ‘socio-economic factors’ played a major role in determining health trends and differentials; fertility trends and differentials are also related to social and economic factors⁷².

Equally well, infrastructural policies will alter a landscape, perhaps for ever, as will technology in association with agricultural and industrial policies that herald changes in economic direction. Refrigeration technology was such a game-changing case that made a transformation possible in all of Anglo-America, Australasia and the southern cone countries of Latin America: beef could go from Dodge City to sustain New York; it could be exported to Europe from Australia, Argentina and Uruguay as could sheep meat from New Zealand. Arguably, however, for New Zealand in implementing this technological breakthrough, the land, its peopling and its economic direction were altered more by the agrarian and tenurial reforms of the Liberals (1891-1911). The large estates were cut up, and ordinary settlers wanting access to land, benefited from being allotted land from this reform (or from Māori land still being taken through the operations of the Native Land Court, NLC)⁷³.

But, the other major driver of demographic change, age-structures, are not economic or technological, but a factor of demography *per se*: of initial birth cohort sizes and their subsequent survivorship by age, sometimes modified by age-specific migration. These flows are inexorable and thus, at least in a democracy, policy interventions, economic or other, can do little to alter their size or direction. The role of policy is, instead, to build management strategies that might ameliorate negative effects, or enhance positive.

As my panoramic view of New Zealand unfolded, I was surprised by the way in which, historically, population changes often preceded economic trends. The initial establishment of Aotearoa or any other Anglo settler-society, whether planned or by haphazard processes, was initiated by a demographic factor – the inflow of sojourners

and/or would be colonists. Their emigration from Europe was frequently for demographic reasons: population growth and pressures on resources in their home countries – among the reasons, incidentally, that earlier had driven Polynesians to settle in Aotearoa. Another was industrialisation and urbanisation in Europe, producing the grim scenarios reported by Thomas Malthus. Often manual labour was being replaced by machines, throwing skilled workers out of jobs. These demographic factors were intimately linked to economic factors, as Morland argues (2019: 22-23), and economic growth also fuelled expansionist imperialism. As these same colonists carried with them virulent diseases, associated with their inflows were population declines among the Indigenous Peoples in many territories, and even ‘collapses’ (eg in the small-island Pacific). Perversely, for colonists this made the dispossession and displacement of the native peoples less onerous than it would have been; settlers could even salve their consciences with the thought that the declines of native peoples would sadly lead to their disappearance, more positively they were being replaced by a ‘superior race’.

In the past, the relationships between peopling and development had revolved around crude measurement (population growth, compared with GDP) and thus yielded weak correlations. As Joop de Beer (2017: 128-29) points out, in a world moving towards, or even below, replacement fertility (~2.0-2.1 births per woman), ‘Changes to the population age-structure rather than the growth rate can be expected to have an impact on [future] economic growth’. These ideas about population and development, and the role of age-composition,⁷⁴ force rethinks about what development actually is, about what are its parameters (social as well as economic), and also about the role in societal dynamics of welfare, peopling and development’s orphan child (Appendix A).

To build an argument about the key role of peopling in development there is no need to leave New Zealand. My basic postulate relating to the importance on human capital of the effects of age-structures, and thus of the demographic dividend on development, can be elaborated by looking at the policies of Julius Vogel. His political career was extremely brief, yet one of the most seminal in New Zealand’s history, which rates him both positively and negatively: as a master manipulator borrowing finance from the City of London with which he built New Zealand, or as a profligate politician who threw the country into debt and depression. On the downside, he had scant regard for the land rights of Māori: their dispossession would open the way to the farm-based settlement of Pākehā he so much desired and saw as an objective of his migration policies. On balance, at least from the standpoint of Pākehā and of nation-building, his endeavours were very positive. This is because his largest material imprints persist in the ‘outcomes’ of his endeavours, and not its ‘outputs’ (eg debt) from their processes of implementation.

First, his policies greatly increased the number of settlers in New Zealand, a factor instrumental in developing New Zealand during the late Victorian period. Secondly, Vogel's programme laid down much of New Zealand's basic infrastructure that served the country over a number of decades, a prerequisite of which was to have sufficient colonists available to produce and reproduce, human capital imported through New Zealand's most successful population policy: the *Immigration and Public Works Act*, 1870. The migrants were mainly men and couples at young working ages, who joined the remaining gold seekers, typically young men who had come a decade earlier – plus a growing population of New Zealand-born settlers. Vogel's schemes swung the balance back to high rates of net immigration, but very briefly and for the last time for more than a century⁷⁵.

The new settlers built the infrastructure and farmed alongside rail lines that had been constructed on land until recently in Māori hands (Borrie 1994: 102-06). Without Vogel's policies, there would have been piecemeal development rather than a systematic changing of the face of New Zealand; it would have been like the Falklands, the fiefdom of rich absentee British families – a vast, feudal land of sheep ranches, with low population densities and pre-industrial modes of production⁷⁶. So, while London's financial capital provided the oil for these endeavours, it was really the settlers brought in by Vogel, and women bearing babies in the colony, who were the true instrumental agents of development – the Pākehā human capital of the colony. A less obvious effect does not fit conventional 'demographic dividends' theory. In the 1870s, New Zealand's working age migrants, Vogel scheme arrivals and residual gold seekers, increased per cents at young adult ages, counterbalancing, to a degree, the grossly distended child population numbers due to the super-fertility of the settlers (Chapters 10-12). This leads me to a substantive postulate: would late Victorian New Zealand have been as wealthy as the economic historians document if this first unusual 'demographic dividend' had not transpired? A corollary is whether or not recolonisation could have sustained the wealthy position of settler New Zealand into the interwar years without the effects of the flow-on demographic dividends? This story, as I will show later, was far more complex than this, both demographically and in other ways, but the basic question holds. And, it was not a once-ever experience in New Zealand; later in its history, there were other such effects of demographic dividends – positive and negative – to which I will refer in subsequent chapters. Moreover, such interactions were not restricted to Aotearoa as they comprise the human seeds of Belich's (2009: 9) emblematic settler revolution.

Conventional experience of demographic dividends, and thus related theory, is based on the effects of fertility declines that reduce the proportions of children at the childhood ages. By contrast, the colonial-era dividend, which I call an Imperial Dividend, was generated by the goldrushes and the Vogel schemes which saw massive inflows of working age men. This migration inflated those age-groups,

whereas the childhood ages of the colonial period were inflated by high fertility. This was a *balancing effect*, rather than an age-structural redistribution between childhood and adult ages.

The conventional focus on productive and financial sectors leads to a neglect of the positive role of the so-called ‘social sectors’ in fashioning development. Traditionally, social sectors are seen as producing fiscal (and familial) burdens. Moreover, societies have varied over time in how they approach the care of the sick and indigent, plus of course providing education, income support and housing. How to control expenditures in these areas is often viewed as the ‘cross’ which good austere ministers of finance must bear. New Zealand has not been immune from large swings in the strategies they have adopted, between parsimonious and punitive Victorian charity approaches, on the one hand, through to welfare statism, on the other, and then back to neo-liberal anti-statism and austerianism, reminiscent of their Victorian roots. But, recently, a reassessment of health and welfare has been made by eminent economists like Joseph Stiglitz (2008) and Angus Deaton (2013), who see them as essential for the deepening human capital resources and thus as factors underpinning productive sectors⁷⁷.

This reassessment raises its own conundrums. Powerful, innovative paradigms are now available to study peopling and development, but what about information bases that can be drawn on to analyse peopling and development? For all settler-societies including New Zealand, the focus must be on both the Indigenous people and the settlers dichotomy. This, however, generates a major epistemological problem for every serious historian – how to address an inherent cultural bias in data sources?

Settler-colonisation: A ‘Better, Egalitarian Future’

Too often economic growth in settler-societies, especially in the Victorian era, is viewed as a function of capital transfers from Europe, especially the ‘City of London’, to the peripheries, with individual major actors playing important roles as leaders or catalysts. In all fairness, in New Zealand’s case such a view is not universal – it is criticised by Jim McAloon (2009: 197-98, 216-18; citing as support Gary Hawke, 1985, and Belich, 1996⁷⁸). My perspective elaborates McAloon’s: that, ultimately, it was the mass of the people at the peripheries, settlers and Indigenous Peoples, who drove the development of the settler-societies. They operationalised the schemes that politicians, entrepreneurs or other prominent figures advocated, into which they drew other ordinary colonists. Investment inflows were essential oils for the mechanisms that made much of development possible; but they were not the determinants of development: the distinction between mechanism and determinant is too often forgotten in peopling and development analyses. In fact, in Australia and New Zealand they built a unique financial institution starting with locally generated capital – stock and station agents, who played a major multi-dimensional role in development

(Easton 2020: 12) as lenders (mainly to farmers), as trade agents, as local retailers for the rural community. For decades they were household names, before taking a different function and form during restructuring at the end of the 20th century. The colonists could easily become the unwitting victims of financial crises emanating gratuitously and exogenously from the failed manipulations of financiers and companies in the ‘City’. Investors in the metropole could destroy the hopes of hardworking settlers in the colonies; ‘vulture equity’ funds may seem a new phenomenon, but they are just the most recent manifestations of manipulations which have come down from history. Moreover, the fruits of colonial enterprises also went back to the metropole in dividends that fed the fortunes of shareholders.

Peopling and development is retrospectively also often cloaked in the mythologies of success stories, beginning with the Pilgrim Fathers⁷⁹. Settler-society myth building, about Indigenous Peoples, colonists and recent migrants, often overlooks the stories of those who failed along the way, or who through social class, poor decisions, bad luck and other factors faded out of sight and never achieved their full ambitions. For the majority of arrivals or their families, after trials and tribulations, some of the hopes and aspirations of their predecessors have probably been met, but for others pioneering was a grim experience. From the first arrivals of Indigenous Peoples, right through to the post-1970 waves of Third World immigrants, many immigrants and their descendants saw and pursued a dream of a better future. To this day, global iconography, tends to downplay the dark side of forced migrations – eg slaves and convicts – and to see the Anglo settler-societies as places of opportunity, where there is greater freedom to pursue ambitions, and wide-open spaces. This optic is changing as Americans now confront their slave past; Australians, having managed to rebrand their convict ancestors almost as folk heroes, now face a resurgent Aboriginal population which is challenging the conventional founding story. In New Zealand, the 250th anniversary of Cook’s arrival raised questions about colonisation. We tend to see this as more a European settler than a wider phenomenon, yet Mason Durie (2005) shows us that an ethos of ‘endurance’ was essential to Māori over their 500 years of sole residence in New Zealand, and since.

The stories of bad luck and failure among settlers are better handled in fiction than in quantitative analyses. One thinks of Doris Lessing’s early novels and short stories about white Southern Rhodesia; for Australia, the dark side of colonial culture is recorded in the Debut Fiction of Lucy Treloar (2015). But New Zealanders have no need to look overseas⁸⁰. Seminal is Eleanor Catton’s (2013) Man Booker prize book *The Luminaries*, to which I will return for its insights on South Island’s history in the mid-Victorian period.

The inverse question to that of success and failure is whether or not settler-societies really were the egalitarian domains they prided themselves on being, and on

which boosters built their promotions. Its corollary, whether or not they had/have had ingrained social class system of the sort reported for England as against merely being socially stratified societies, is an important one that has taxed North American and Australasian sociology and social history. For New Zealand, I must defer to scholars such as Melanie Nolan (2009)⁸¹ for a more definitive resolution of the issue, but it does affect my narrative in two places. First, it had direct importance for peopling and development in the later Victorian period, when a marked social hierarchy was seen in settler Aotearoa. Southern landholders were politically instrumental, wealthy, and controlled vast areas of the South and southern North Islands, usually obtained cheaply by European standards of that day (Chapter 12). This local story fits well with Thomas Piketty's (2014) historical analysis of the more global 'evolution of wealth'. The New Zealand 'run-holders' (ranchers) were, after all, contemporaries of the Australian graziers and the pampas estancia proprietors absent in Buenos Aires or Paris. Their flowering in New Zealand paralleled that of British landed aristocrats before their power was eroded (Cannadine 1990), or before they moved their capital sideways into other productive sectors such as manufacturing and infrastructure. But, in New Zealand their demise was more a result of technological and central government land reforms, which together democratised pastoral farming, than in investing in other forms of equities.

The second time marked inequality enters the New Zealand story is at the end of the 20th century. Piketty (2014) shows that there was the return of unequal control of wealth and capital, controlled by 'super-managers'. On the scale of most Western Developed Countries (WDCs), New Zealand 'rich-listers' are probably less wealthy, but the gaps between them and the rest of the society have expanded rapidly. In Piketty's analysis these 'super-managers' are striving to see these assets perpetuate the advantaged positions of the families and their heirs. In short, they comprise a new upper stratum, a trend that affects New Zealand's development path at the end of my story.

A by-product of this image of egalitarianism, and more particularly its impacts on assimilation and homogenisation, was the development of a national identity (see below). Some elements of this identity may have emerged spontaneously, but other may be driven by the dominant group, whether implicit or explicit; the school curriculum can play an instrumental role in achieving this. For New Zealand, this question is documented by Michael King (2003), who shows how New Zealand's national identity emerged. 'Identity' is a widely used concept in contemporary political sociology and is exhaustively employed by the commentariat. In his Reith Lectures (2016) British philosopher, Kwame Appiah, reviewed the word and noted that, in George Eliot's *Middlemarch*, it is used as a personal or 'micro-level' attribute. By contrast, today's usage is at a 'macro-level' – associated with 'race, sex, class, nationality, region or religion' – emerging as recently as 1957. Sex and race are

generally fairly evident, although ethnic belonging, for which race is too often taken as a proxy, is not and the word carries too much spurious scientificism to be very useful for analysts⁸². Class can be represented by material variables like income or job, citizenship documented, region denoted by data on residence (Appiah 2018: 3,5, 80)⁸³.

But real identity is far more subjective and thus does not lend itself to being described by the outward markers to which I have access from census and similar data. Qualitatively, identity is an important factor in peopling and development, notably in social integration, but remains somewhat elusive, referred to here in a more manifest form, as, for example, the Indigenous/settler dichotomy⁸⁴ or the components of different British migratory flows to New Zealand (English, Irish, Scottish, Welsh; see Chapter 6). Even the British colonists migrating to settler-societies had multi-dimensional identities: most were British Isles' Europeans, but beyond that how do we reference them – by country/region of birth, creed or language, or class⁸⁵? Then, there is always the enigma of 'Francophone' Canada many of whose people bear Irish or Scottish names stretching back to Jacobite origins. In New Zealand, those from British Isles' sources lost some of their diversity by integrating, somewhat successfully, across these various lines in the new colony (Phillips and Hearn 2008). They maintained 'identities' carried across from Britain and Ireland, but seemingly not as devoutly as the Boston Irish Catholics, or the Toronto Orangemen.

Most colonists coming to Australasia from annexation to about 1980 were from the British Isles (Chapter 6), but they were not totally Anglo-Celtic. In North America, German minorities, High and Low German speakers from Germany itself and even as far east as the Volga region, were definitely significant. They may even have been more important than we might imagine in Australia and New Zealand. Julius Vogel in the 1870s recruited German migrants for his *Immigration and Public Works* policy. They resembled Anglos in many ways, and, until German unification was achieved late in the imperial era, they had no colonies of their own to go to. Later, in two World Wars both residents and citizens were demonised and often tried to obfuscate their backgrounds (Belich 2009: esp 62-63).

Identity is a correlate of peopling, a macro-psychological 'latent structure' (the statistical term), in the background, but often difficult to demonstrate. quantitatively. An analogy could be made to a favourite explanatory variable of sociologists and anthropologists, 'norms' – we can numerate 'modal trends' and call them norms, as I will often do, but we cannot quantify norms in the sense of what people 'ought to do'. Similarly, some components of 'market forces', economists' much venerated explanatory factor, can be given substance (eg monetised values describing a national or regional economy), but its real explanatory power is elusive and intangible.

Settler-colonisation's Co-Variate: Industrialisation

While peopling was building the human capital base, colonisation and post-colonisation also manifested themselves assertively in the productive sectors. Their technological development, industrialisation, determined why imperialism expanded, but also became the story of settler-societies themselves. Explorers and settlers had come from an industrialising Europe – in 1763, Cook may have witnessed or heard about the first hesitant steps towards steam-based industrialisation, although James Watt was yet to commercialise his invention. As noted in Chapter 1, the context for the ‘settler-revolution’ that led to a European hegemonic role was the 19th century’s ‘massive modern agro-industrial revolution’ (Belich 2009: 9). In settler-colonies the linkages between these twin revolutions were achieved in three steps. First, there was the loss of land and other resources by the Indigenous People(s). Land is a form of capital and not just a factor of production. This is important for my narrative because in settler-colonies the Indigenous Peoples lost their land and thus the most significant tranche of their entire capital assets. Beyond that, as Piketty points out, until the mid-19th century even European wealth was very much vested in land, exactly the philosophy Anglo settler-society colonists would have carried with them to Aotearoa and that drove the colonial enterprise in general (Piketty 2014: 46-48, 213). Secondly, there were the immediate effects of this transfer to the people(s) displacing the Indigenous owners, the ‘how’, ‘why’ and when’ of that transfer of this capital and the way in which settler-colonies and their successor states or societies subsequently developed. Thirdly, there is the long-term peopling and development of land and other resources that had been alienated.

In all Anglo settler-societies, the land divested from Indigenous Peoples was exploited by the settlers, who forged wealthy nations. The dream of many colonists, in New Zealand and elsewhere in settler-societies, was the ownership of freehold property, impossible for most in their ‘home’ countries. The settlers developed modes of farming that efficiently exploited the land now vested in them – any study of the development of an Anglo settler-society must acknowledge the fortitude, hard work and successes of the settlers. But so too must recognition be given to the negative impact of this transfer of assets on the Indigenous Peoples, whose story is thus in tandem, and must be seen as central to the country’s peopling and development; the two stories are intimately intertwined.

All Anglo settler-societies industrialised in some way or another at a relatively early stage in the world’s economic evolution. Initially, they processed raw products prior to trading them, and industrialised, at least into more advanced forms of manufacturing, somewhat later than their metropolises. This was because of their long-time reliance on trading commodities produced by non-renewable extractive industries, or in selected regions extensive grain production, or plantation agriculture, earlier dependent on slavery. The American Civil War cemented in the United States

as a powerful manufacturing nation, while industrialisation and urbanisation were replacing the extractive industries and the export of the less perishable farm commodities such as flour or tobacco; refrigeration and improved logistics (eg the trans-continental rail in the United States) extended this to meat, salads, vegetables and other perishables previously unable to be exported in near-fresh condition. This was also a key step in their maturation as economies. In Brian Easton's words, New Zealand, for example, shifted from being a 'colony of exploitation' to a 'colony of permanence' (Easton 1997: 41-52) Once manufacturing got underway, Australia, Canada and the United States built the heavy industries and sometimes the textile mills that befitted industrialised, late Victorian economies. The United States was soon challenging Europe as a great manufacturing power. In the hinterlands of the settler-societies, including the United States, the fruits of the agricultural revolution rather than manufacturing are, however, still in evidence: the grain silos, stock yards and dairy factories that collected the raw farm produce, and carried out first-order processing, before shipping these commodities to growing urban centres, whether domestic or international. Connecting these poles became a key factor enabling industrialisation and requiring the rapid growth of transport and other infrastructure, above all the railroad.

New Zealand also industrialised, at least in the sense of adopting advanced technologies, but these were not the wool and cotton mills of 'old' England, or New England, nor the iron and other metal industries whose use of coal and smokestacks became an essential part of northern Appalachia, Wollongong in New South Wales, or the English 'Black Country'. In this sense, New Zealand, by exporting sheep meat and some beef, was more like Argentina or Uruguay, or – within the United States – Chicago in its 'beef-baron' era. Elsewhere, New Zealand's pastoralism was more like that of Wisconsin's dairy-land than the mixed farming regions of the Northeast United States, Ontario or Quebec. New Zealand's 'industrialisation' was a spinoff of the agricultural revolution, somewhat delayed until the 1880s or 1890s. It was evident in primary processing plants spread across the countryside, rather than industrial cities or, most extremely, the 'company towns' of North America. In many regions of rural New Zealand industrialisation took the form of the ubiquitous dairy factory, cooperatively owned by the dairy farmer milk/cream suppliers, with its general store and its attendant cluster of houses, or the export-oriented meat slaughtering and freezing plants. New Zealand's few larger single-industry settlements were mining communities and, after World War II, two pulp and paper centres. Because of its climate, missing in New Zealand's farm-scape were the barns for wintering stock seen across northern Europe and Anglo-America, but milking and shearing sheds were near ubiquitous. As a consequence, the material remains of post-industrial New Zealand comprise a typically dilapidated six-bail milking shed replaced by a semi- or fully-automated up-market plant; abandoned dairy factories and meat works dot the

rural-scape rather than rust-belt steel factories. In larger urban centres, there were, of course, ‘footloose’ industries, even the occasional iron or steel foundry, but essentially there to service local needs not to export.

Relative even to their metropole, the Anglo settler-societies have been well-off for many decades; sometimes since their founding dates. There are other former colonies, such as Singapore, which have become highly developed, but this achievement has been relatively recent. Being well-off is a factor of Anglo settler-societies that has transitioned into the most recent ‘industrial revolution’: the changes built around digitalisation, biotechnology and on a radical shift-share in industrial sectors, especially within the tertiary segment. Today, it is flow of financial capital – in nanoseconds – in and out of settler-societies, and it is the skilled and less skilled service sectors that have changed industrialisation as we knew it as recently as 1980. I will return to this theme late in the book.

Another tangible impact of colonisation – of the settler- and agro-industrial revolutions – is the environment in settler-societies. In Aotearoa, Māori did leave a negative imprint through burning and other activities. But in New Zealand, Australia and across North America, the real impacts of despoliation were affected by the European settlers (*Envirohistory* 2012). Seemingly limitless resources opened up, nowhere more than across America’s grassy Great Plains epitomised by deep humus-rich chernozems soils; the expanding Czarist empire exploited the same bounteous environment on their southern and eastern steppe boundaries, as did the Argentinians on the pampas. The commodity they could all produce (grain) was non-perishable, thus perfectly fitting the von Thunen (1826) theory of distance from markets. From the opening of the Erie Canal (1825), cheap grains could be shipped long distances at low cost from the lowlands of north-western New York state and Ohio to New York city and eventually even on to Europe. As the ‘dust bowl’ era reminds us, however, agro-industrial exploitation of this seemingly boundless environment was not without severe penalties.

At colonisation, New Zealand with its peculiar ecology had a more mixed future. It was distant from Europe, geologically unstable and with distinct fauna and flora – all factors that might have mitigated against colonisation. Yet, the fact that it was located in mid-temperate latitudes made it seem for European colonisation – a ‘white man’s country’, fit to be ‘taken over’. Environment in this sense thus determined the first pre-condition of its post-contact destiny and is a very important driver of the passage of New Zealand from contact to the 21st century. But, as Charles Crothers (1985) argues in a reflective paper, the perception of a boundless New Zealand promoted forms of exploitation that were to increase in impact, as pastoralism intensified, and proved to be problematic by the late 20th century.

Settler-colonisation's Co-Variates: The 'Intangibles'

Europeans considered that their civilisations and technologies were inherently superior to those of the peoples over whom they had gained suzerainty⁸⁶. Notions of superiority/inferiority are often far more nuanced than this; New Zealand's and other settler-societies' cultural landscape are cloaked in 'Brito-phile' sentiment. This entrenched the ethos that drove recolonisation, over the period from the 1880s to the 1970s. The most suppliant cravings for things British probably come through place names⁸⁷. There is also Tasman's egregious legacy in the name New Zealand.

The settler-societies over time have, however, passed through less tangible ideational revolutions in part framed by how they viewed their links to their metropole. In the 1950s the better-off members of settler-societies 'conspicuously consumed' by 'going home' to Britain. Their successors may make the same trip (by plane) but vest their feelings of individual 'belonging' in their birthplaces not the metropole. 'Belonging' is an appropriate term for the association settler-descent peoples have with their countries of birth; they are comfortable there – they know the landscape and have the right cultural cues for their interactions with other people. Yet, this does not contradict the fact that they may also sense a certain 'familiarity' with the peoples, customs and values prevalent in the European country from which their ancestors came – after all, until recently in New Zealand even the history they had learned was more likely to be British than their own countries. The apocryphal tale of the French teaching their colonial subjects in Africa and the Caribbean about '*nos ancêtres les gaulois*' (the Gauls) was not too far from the curricula advanced in British settler-states and even settler-societies⁸⁸.

'Belonging' to a country of birth, yet 'familiarity' with a root culture can co-exist comfortably in the values-systems of 21st century Americans, Australians, Canadians and New Zealanders. Kwame Appiah has demonstrated that, like all forms of 'identity', 'belonging' or links to a root culture are diffuse, subjective phenomena. Indeed, as the chapters covering the period from the 1880s to the 1970s will show, these sets of feelings had earlier generated what Veracini calls an 'inherent ambiguity': on the one hand, there is a 'mythical ... "indigenisation" process allowing for crucial settler investment in place and landscape', by 'settlers' who, at the same time, 'articulate diasporic identities via a focus on ancestral "roots"...' (Veracini 2010: 21, Fig 1.2; Appiah 2018). The word 'indigenisation' used by Veracini in the quote above is itself inherently ambiguous, suggesting the adoption of the behaviours and values of the Indigenous Peoples; this occurs when, for example, settlers attempt to learn the native language and intermarry with Indigenes. Both of these occur frequently in New Zealand, and some Māori words – *kia ora* = greetings or good luck; *mokopuna* = grandchild; *whanau* = family – or particular life-ways have passed into general usage⁸⁹.

Conclusion: The Primal Role of Demography in Settler-Colonisation

The singular factor that drove all these constitutional-political, economic, social and environmental questions reviewed in this chapter is peopling. It is a truism to say that without peopling, whether by the Indigenous populations or by settlers, or by recent migrant groups, these questions would not arise. So, *understanding the constituents of peopling* is a key to analysing the evolution of settler-colonies, of settler-states and of settler-societies, the focus of this book. Earlier in this chapter, I presented another truism: the most seminal step for a settler-society to emerge out of a settler-colony was for the settlers to become the majority. The related discourse on how this peopling occurred is, however, full of misperceptions, uppermost of which is the primacy given to migration. The next chapter attempts to correct this discourse by presenting data from across all of the Anglo settler-societies.

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¹ OED 2010: 1317

² Weaver (2006), see below.

³ In every era of history and pre-history such transfers have occurred, not just from natives to Europeans, but between the existing inhabitants and peoples in every part of the globe. But from about 1500/1600 imperialism of this sort was very much a European movement, that far superseded in scale other more local usurpations of territories or the rearrangements of countries in Europe itself.

⁴ This discipline is grounded in a distinct scientific tradition. Following its founding (1660), the Royal Society of London launched John Graunt's *Bills of Mortality in London*, the 'first life-table', while the more philosophical writings of William Petty, his contemporary, were dubbed 'Political Arithmetick'. As I will explain (Chapt 4), demography with its standardised data collection and analytical routines is ideally suited to cross-comparative research. It uses internationally defined identical questions for the

key bio-social factors (mortality, fertility and age-structures). Contrary to popular belief, in Anglo-America and Australasia, natural increase exceeded migration in determining peopling (Chapt 3).

⁵ Brian Easton very generously made available to me a pre-publication copy that I quote, with attribution, in later chapters.

⁶ It is beyond my brief to invoke the contemporary critiques of this measure, such as its failure to quantify the costs of responding to negative phenomena such as environmental degradation. Simon Kuznets, who first developed this measure *circa* 1929, was not unaware of these shortcomings.

⁷ I have misgivings about the concept of modernisation, especially as used by Walt Rostow (see Chapter 8), and in the way that it became an ideology that justified drives to implement more assertive mass family planning programmes in the 1960s and 1970s.

⁸ Australia, Britain, Canada, New Zealand, the United States. The word Anglo frequently refers to them alone, sometimes plus Ireland, but is also used more loosely, as in the 'Anglo-world', to include some countries whose official language is English and in which a majority speak English as a first language.

⁹ Western Europe, Anglo-America, Australasia and Japan

¹⁰ Treaty historians raise questions about the constitutionally very significant differences between the Māori and English versions. Such issues are beyond the scope of my book. Māori signatories were mainly male chiefs but included a number of high-ranking women.

¹¹ This contrasts with southern Africa, where indigenous people remained the majority.

¹² For the settler-societies in general, I use the term 'Europeans' rather than 'whites'. Colour terminology is still used as a marker in the United States and elsewhere.

¹³ These observations come from my experiences, in Africa, Asia and the Pacific over 25 years, reviewing policy and research units dealing with population and development. See also Jones 2005.

¹⁴ The United States was one of the few exceptions as it went through this transition around a decade earlier than most other WDCs. Unfortunately, as I will elaborate later this deviant case became the poster child for the transition, affecting views on the Baby Boom in Aotearoa and across the WDCs. Concern about this issue is no academic quibble as it affects how policy makers view the key accompaniment of this transition – the radical decrease in the sizes of birth cohorts from one quinquennium to the next, a shift that will have major implications for policy formulation well into the mid- to late 21st century. Academics may be interested in rats, but for policy maker the number of people demanding goods and services and the sizes of the populations supplying these are of far more immediate concern.

¹⁵ I have observed their field work in progress and am impressed by the robust protocols they follow.

¹⁶ In the wider, macro-sense of those terms, as for example used by the World Bank when dealing with the growth of agglomerations (Quigley 2009). At the micro level, demand for any commodity or service also varies by age and sex.

¹⁷ For most of this book a cohort is a group of people born about the same time, whom we follow over time as birth numbers reduce through mortality and emigration but increase through immigration. All of these are highly age-specific in occurrence or 'force'.

¹⁸ It was sufficiently noteworthy to enter the more popular population and development dialogue (eg in *The Economist*). Gavin Jones (2005) shows that the idea was not new, citing earlier research by Ansley Coale and Edgar (M) Hoover (1958). Also important were mathematical demographic treatises (Nathan Keyfitz 1968; Coale 1972).

¹⁹ Which compares transfers of cash, assets and services within families with those coming from the charity and public social sectors, not just welfare but also education health, etc. eg Lee, Mason *et al* (2014), who also played a major role in early work on dividends.

²⁰ There are remarkably strong correlations between the findings from these diverse sources.

²¹ A newer generation of economic historians in more focused studies have used regression and other statistical techniques to demonstrate causal links between the economy trends and other aspects of development (eg Greasely and Oxley 2005, 2009).

²² The Tahitic language of the Moriori is different from Māori but has a common origin.

²³ Or Normans to Ireland, to be joined later by Protestant 'plantations'.

²⁴ Through the 20th century, the per cents of the total populations of Australia, Canada and the United States who were natives was very small and is still below 5%. New Zealand dropped to 5% (1911), but today Māori constitute 15%.

²⁵ Citing Clive Parry (ed.), and E. Hertslet (1967: vol 1, 31-2).

²⁶ Early visitors across Australia, for example, reported a system of controlled firing which allowed Aboriginals to manage hunting and gathering systematically, generating 'parks' with economies that

were very different from the gardening/hunter-gathering regime of the Māori or the Native American farming systems. It is argued that land management in pre-contact Australia, using carefully controlled fires created 'park estates' providing meat and vegetables as needed. See Gammage (2011), reported in *On [the] Conversation*.

²⁷ Chief Justice James Prendergast in 1877 declared the Treaty of Waitangi a 'simple nullity' because Māori were 'primitive barbarians', 'incapable of performing the duties...and of assuming the rights of civilised communities'. But, an 1891 *Commission on Native Land Laws* (William Rees, MP and cabinet minister James Carroll) were clear about the Treaty's validity and about 'violations' of its statutes.

²⁸ See Chapt 5, referring to Chief Te Pahi and New South Wales Governor, King, in 1805.

²⁹ As by Judge Thomas Berger in the 1970s Mackenzie Valley Pipeline hearings in Canada.

³⁰ This today is not restricted to Māori. It is only fair to note that many 'descendants' of pioneer settlers, who may actually have displaced the indigenous people in the first instance, have deep feelings of attachment for the land of which they see themselves as the stewards.

³¹ This is not due to prejudice on the part of historians but is very much affected by the data sources available, a problem historians struggle to overcome.

³² This has an ancillary effect on the geographic mobility of the population – especially of young people seeking work – elaborated in later chapters.

³³ 'Widening' is the expansion of the productive labour force through demographic processes, such as cohort momentum effects. 'Widening' may be less familiar than the concept of 'deepening' (health, education and training of the workforce affecting its productivity).

³⁴ My argument here is inherent in the concept of (Clive) 'Granger Temporal Causality' but is a less precise formulation of his Nobel Prize winning work, not a restatement or appeal to the authority of his theory. In complex, multi-variate and multi-factorial historical analyses the occurrence of one 'signal' (to use his term) prior to another can infer some sort of cause-and-effect relationship, without necessarily imputing that 'x(i)' definitively determines the onset of 'x(ii)', nor the nature of its properties. I thank Les Oxley, economic historian, Waikato University for these insights.

³⁵ Depending on the criteria used, those countries can comprise 3-5 settler-societies reliant on grasslands and grain farming, plus soybeans and other primary commodities.

³⁶ As Prime Minister Ardern asserted after the Christchurch mosque shootings, all peoples chose to come to Aotearoa, rightfully belong there and must be accorded the same protections under the law.

³⁷ Introductory Map 2 identifies major localities in New Zealand.

³⁸ Due to the 'hyper-reproduction' of Aotearoa's colonists, reinforced for them, but not Māori, by low rates of childhood mortality – for those times. Other settler-societies had high fertility rates (Chapter 3)

³⁹ Rapid for that day, given the primitive techniques of contraception available. As I will show, the mechanisms were changes in marriage patterns or nuptiality to give it its technical name.

⁴⁰ The slave-trade was one example of the negative impacts of colonialism. Recently, colonial history has taken a more critical view of imperialism. This holds true for much of New Zealand historiography, although right-wing neo-revisionism attempts to counter this.

⁴¹ William Dalrymple (2019: xxxi, 3, 6, 232-33) writes on the seminal gathering in 1599 which established the East India Company (EIC), when England was still a small country, riven by religious strife, isolated from their 'baffled neighbours' in Europe, who saw it as 'something of a pariah nation'. Its 'empire' and trade was minute when compared with Spain's, Portugal's and, 'gallingly', the Netherlands; the meeting was in part because the Dutch wanted to buy English ships for their East Indies Company's trade. The EIC abortively tried to compete with the Dutch in the 'Spice Islands', and then turned their attention to India with great success, achieved within a short period after their foundation, as a parastatal agency controlling vast areas of India and with its own large army. 'Too big to fail', it was bailed out by the British Government in 1773.

⁴² British now ruled francophone Quebec. The Anglophone Maritime areas were secured by Treaties with the local peoples. In 1763, George III forbade extension of colonist beyond the Appalachians, a ruling that may have covered areas north of the 13 colonies, today Quebec and Ontario. The British expelled 80% of the Atlantic Region's francophone Acadians (1755-64).

⁴³ Each were around 59,000 in 1857/8. For 1769, I use one of my more recent estimates (see Table 7.1).

⁴⁴ Or even the 13 American colonies in their pre-independence days.

⁴⁵ Among them, the very stately ruler of the Pacific Kingdom of Tonga, Queen Salote, charmed the British crowds by refusing to use her carriage's cover to shelter from the rain.

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- ⁴⁶ This is a most idiosyncratic usage, differing both from the OED and demographic conventions (Morrison *et al* 2004). Moreover, pre-historians rightly see Māori as migrants, yet there is no proof of any political order in Aotearoa prior to the Māori migrations (Anderson 2014).
- ⁴⁷ Typically the indigenous inhabitants of the land.
- ⁴⁸ Citing Marilyn Lake (2003), Veracini (2010: 10) argues to the contrary, referring to ‘the inadequacy of definitory approaches based on demography...’. How he concludes that is unclear. One would think that population ‘swamping’ of the Indigenous People was a decidedly definitive event.
- ⁴⁹ Examples were the sad tale of the Kingdom of Scotland’s Darien Scheme; or when Barbados was a settler-colony of owners and indentured ‘white’ workers and tenants, very much like Chesapeake Bay before it also became a classical slave-plantation colony.
- ⁵⁰ Veracini lists these features but does not elaborate on them (2010: 13). Elsewhere, in a chapter on ‘Population’, a factor he calls ‘Population-economy’ is defined confusingly and unconventionally, as ‘recurring settler anxieties pertaining to the need to *biopolitically* manage their respective domestic domains’ (Veracini 2010: 16; his italics).
- ⁵¹ This was reflected in the placenames, which had person-status and to which hapu (sub-tribes) had whakapapa linkages (see ‘Chapter 1’).
- ⁵² Citing Robbins (2015) ‘Blue Water: A Thesis’, *Review of International American Studies*, 8(1): 47-66.
- ⁵³ As indicated above, ‘decolonisation’ and ‘post-colonisation’ are hotly debated concepts among Indigenous scholars in Aotearoa New Zealand and across the globe. Most argue that colonised populations remain colonised through ongoing institutional arrangements such as the education, health, justice and labour market systems and practices that continue to reflect the values of the colonising population – Elkington *et al.* (2020).
- ⁵⁴ Te Reo was never legally suppressed, but there are frequent references to children being punished for speaking it.
- ⁵⁵ Drawing on Centre/Metropole-Periphery relations, as analysed by Andre Gunder Frank and other Latin American political economists in classical dependency theory. For our purposes, however, this model is elaborated more appropriately by Michael Hechter, on Celtic Britain, and within New Zealand in both David Bedggood’s sociological work and Colin Simkin’s classical economic analysis (Hechter 1975; Bedggood 1980; Simkin 1951).
- ⁵⁶ New Zealand was not a particularly competent colonial power. In 1929, it forcefully suppressed a passive independence movement, the Mau.
- ⁵⁷ Australia’s Eureka Stockade (1854) of miners against the Colony of Victoria, and Rhodesia’s Unilateral Declaration of Independence (UDI) (1960s/70s)
- ⁵⁸ The United States is more complex, polytomous rather than dichotomous. Ethnic relations are compounded by interactions between the ‘white’ majority and another non-Indigenous population composed of former slaves, African Americans. To add to this there is the long-established presence of Hispanic groups, some of whom are descended from Native Americans.
- ⁵⁹ We think of this as essentially an ‘Anglophone’ settler revolution, and certainly ‘Anglos’ dominated. But, as Belich reminds us, ‘the prominence of Germans in British settlement [across the Anglo World] is still underestimated’. This applies to Australia and, perhaps, New Zealand (Belich 2009: 62-63).
- ⁶⁰ The Anglo ‘Settler Revolution’ also encompassed the settler-states of southern Africa which are of less interest here.
- ⁶¹ I will use the term ‘Recolonisation’ frequently in this book. I have borrowed it from James Belich’s writings (2001, 2009). I will elaborate some aspects of the concept and will make my own interpretations of it, but the core idea must be attributed to Belich.
- ⁶² For New Zealand, with no archaeological or other evidence to support them are myths of a Celtic population who allegedly settled New Zealand before Māori arrived, and that the Chatham Islands’ Polynesians, the Moriori (see Chapter 1), were Melanesian. This myth was re-published in school journals over many years, demonising them, because, in racial theories of the day, Melanesians were inherently inferior to Polynesians, who, in turn, were inferior to Europeans. A Polynesian origin for Moriori has been well documented recently (eg Anderson 2014).
- ⁶³ These were campaigns waged by large numbers of well-armed, experienced imperial troops, colonial militia and Māori who supported the Crown (Kupapa), against Māori insurgents. Such asymmetry also typified the conflicts with Aborigines in Australia (Belich 2009: 273)
- ⁶⁴ The per cents Aboriginal in Australia, Native American and Native Canadian were much lower than for Māori. See Chapter 1.

⁶⁵ This issue is elaborated in detail for recent decades in Chapter 22, the only period for which data are available allowing a social-demographic analysis of this sort. Earlier chapters have thus had to focus on the more core, sub-national, demographic traits such as population distribution, growth, age-structures and urbanisation.

⁶⁶ In 1865, Governor Eyre responded to the ‘Morant Bay Rebellion’ in Jamaica, after emancipation, with extreme violence. Claims of ‘atrocities’ by rebels showed that ‘the civilizing mission had failed... a tendency which closely parallels’ reports on ‘Māori killings of civilians’ (Belich 1986: 328).

⁶⁷ Natural increase (births minus deaths) and net migration (inflows minus outflows) are factors of ‘replacement’. Natural increase is theorised in mathematical demography in ‘renewal theory’ (Tuljapurkar 2003).

⁶⁸ To reach maximal fertility rates average age at marriage would have needed to be at 19 or 20 years, as for a few populations Pool and Sceats 1981: Chapt 3). The great granddaughters of the Victorian colonist married universally, at even younger ages.

⁶⁹ Recent fertility changes in Tunisia and Iran have been achieved through late marriage in societies in which pre-marital intercourse is very infrequent.

⁷⁰ ‘Human resources’ strategies, coming from managerialism, favoured contracting – a curious form of regulation – to obviate real concerns over human capital, in the form of cohort flows. I will return to this in later chapters. But, in a supply-side world view this seems a counter-intuitive perception – ie the supply of labour was ignored, while its micro-control by employers was seen as highly desirable.

⁷¹ Population dynamics – growth, fertility, mortality and migration – cause population change, as do population structures, such as age composition.

⁷² But, in that case the links are often more diffused, and more difficult to identify theoretically or empirically.

⁷³ Mainly in the more marginal hilly areas of the North Island – Eastern Bay of Plenty and the King Country into which the NLC had moved in the late 1890s (Pool 1991: 91-100).

⁷⁴ More by way of refining my analysis – unfortunately the model has not been built for New Zealand.

⁷⁵ Normally, policy can merely manage cohort trends and not alter them. Vogel did both, albeit from a small population base – 256, 400 colonists 1871. His policies widened the human capital base by increasing numbers, by 50% (1871-75), 67% of whom were net migrants. Growth dropped to 33% (1876-80), 54% of which then came from natural increase. By importing persons at working and prime reproductive ages, some selected as semi-skilled, he also deepened human capital.

⁷⁶ Some of whom were present in New Zealand, in pastoralism and meat-processing.

⁷⁷ To an extent, they have reinvented an economics that focuses on people as agents of production, and not on dollar values. Some development economics in the 1950s and 1960s (eg Nelson 1956) had already very successfully traversed many of these paths, as I will note later.

⁷⁸ The standard histories do not ignore issues of population and development – James Belich (1996, 2001, 2009) is particularly adept at weaving them into his narrative, alongside a wide range of other factors that contributed to the establishment and evolution of settler societies. Nor, is the present book a classical economic analysis, which would, rightly, focus on the monetised sectors and their contributions to Gross Domestic Product. Briggs 2003 is a very good summary of these trends.

⁷⁹ Theirs is a salutary tale of the levels of entitlement settlers felt. Helped by the deaths of the Wampanoag tribe from plague then taking over their village and stores, the Pilgrims thanked God for having ‘swept away great multitudes of the natives’. The next Spring their survival was ensured by being fed by the same local natives, who doted them the Autumn festival of Thanksgiving, celebrated across the United States each year. In repayment, the righteous Pilgrim Fathers attacked the surrounding peoples, taking their land and supplies (Wright 2008: 71-73).

⁸⁰ The most well-known deal with aspects of pioneer adversity, but in rural non-farm situations. The Man Booker prize winning story, *The Luminaries* (Eleanor Catton, 2013), portrays the problems of getting by on a goldfield; Jane Mander’s *The Story of New Zealand River* (1920), was about sawmilling and was, reputedly, the source material for Jane Campion’s film *The Piano* (1993). See Wevers (2014).

⁸¹ In an essay built around the theme of egalitarianism, Melanie Nolan (2009; see also 2000), presents a broad, yet powerful, sweep of the parallel socio-economic history of mobility, of the effects of the major changes in work, for both its intra-sectoral patterns and its inter-sectoral composition, and how this affected the community – Māori and Pākehā, women and men. Demographers have also played a role in analysing inequalities: Natalie Jackson (1998) focuses on what will emerge as a major issue for my book, ethnic stratification. She uses ‘total social production theory’ to interrelate peopling and development.

⁸² The United States census totally confounds race, culture and ethnicity.

⁸³ '[N]ationalism is a recent invention' (Appiah 2018)

⁸⁴ Parsing Māori/Pākehā ethnic classifications is, justly, a major academic industry in New Zealand.

⁸⁵ Occupation is a commonly used proxy for class.

⁸⁶ This is perhaps clearest in reports on the New Zealand wars of the 1840s and 1860s. Most of the public record was written by Europeans, so Māori warriors were given the secondary role of being attacked by this or that regiment, who eventually, but courageously, defeated the Māori defenders in their pa (fortified construction). There is an occasional nod to the extreme asymmetric odds (weapons and numbers of soldiers) against Māori and their bravery, but it is the British who triumph against difficult odds. But recently, there have been scholarly attempts to provide a more balanced picture.

⁸⁷ In a recent book, the writer Fiona Farrell (2015) describes this tendency far more elegantly than I could ever do. She shows how first surveyors inserted British names everywhere, often of long-forgotten nonentities, and regardless of the existence of far more expressive Māori ones. William Hobson, first colonial governor, gave his Admiralty superior (George Eden, Earl of Auckland) two nods, Tamaki Makarau became Auckland, and Maungawhau became Mt Eden.

⁸⁸ My schoolboy generation will remember the British 1832 reform acts – but with little mention of New Zealand's Liberal Party Reforms (1891-2012).

⁸⁹ Following Māori custom, meetings, even those at which Non-Māori outnumber Māori, routinely start with a karakia = prayer or incantation.

Chapter Three – Peopling is Destiny

A Comparative View of Peopling and Development

Much of the rest of this book focuses on peopling and development in New Zealand, but to provide in-depth explanation of what happened there, it is important to recognise that many of its trends follow a path along which other parts of the Anglo-World were also trekking. Many aspects of Aotearoa's history have been unique, but from the years following the American revolution and from Captain Cook's voyages in 1769-70, Australasia and Anglo-America have passed through broadly similar phases of peopling and development, although at varying times and speeds. These commonalities, as well as theoretical frameworks from population and development studies (Chapter 4), allow me to build explanatory frameworks. Some similarities also are seen in the Anglo settler states that did not become settler-societies, although their finale took a different turn. This chapter will also demonstrate that, after an initial inflow of colonists from the metropole, settler-societies grew primarily because of the reproductive capacities of their residents.

A first step in the evolution of settler-colonies was contact, often a chance occurrence. Trawling on the Newfoundland Banks took brave fishermen across the Atlantic almost a century before the Pilgrim Fathers set sail; often these cod fishermen wintered along New England's shores. Squanto, the generous Wampanoag tribesman who fed the Pilgrims, spoke English, but why he was kind to them is a mystery. He had been kidnapped into slavery by British seamen, sold in Malaga, escaped, and years later got home to find his own village decimated by introduced smallpox (Wright 2008: 72-74). New Zealand's case is just marginally better. It involved the first known non-Māori visitors (Abel Tasman's boats) passing by 400 years after Māori had discovered Aotearoa. The Dutch never landed there but had a fatal encounter with Māori in what Tasman called 'Murderers' Bay'. From Tasman's reports, Māori gained a negative reputation that spread across the world of navigation and was imprinted even on charts. Then came James Cook's ship and a second group of arrivals a century later – he actually stepped ashore 500 years on from the Māori arrival, leaving both negative¹ and positive memories. The next step was for the newcomers to interact with Māori and other native peoples, and for contact to be continuous. The third and seminal step was for them to annex the territories as colonies, and to set about peopling them.

The peopling of settler-societies is conventionally viewed as a highly proactive process, primarily involving large-scale migratory transfers of settlers from the homeland to the colonies. This perception of the population dynamics involved is correct only in part. Above all, family formation (marriage and nuptial dissolutions

and separations; conception, family planning; etc; Pool and Sceats 1981), was more important than migration for the peopling of Anglo settler-societies.

The peopling that unfolded in each settler-colony patterned its ultimate destiny. Settler-colonies drew in colonists from the metropole, and, in turn, they multiplied reproductively. But, to become a settler-society, as against a settler-state, replacement by natural increase had to be sufficient to allow colonists to outnumber – that is to ‘swamp’ – the natives. Emigrating from the metropole was an initial step towards a final destiny, but its real impact came when they decided to stay and to have children. As this chapter will show, in both Australasia and Anglo-America, the settlers excelled at this task and thus the indigenous people were forced into the demographic background as displaced minorities in their own countries. As outright conquest by settlers was insufficient, and as the natives did not completely disappear, swamping was the alternative strategy, in the main through what were biologically elevated levels of fertility, reinforced by improving life expectancy. Settler numbers, along with those of their offspring, ballooned sufficiently enough for Australasia and Anglo-America to become settler-societies (Belich 1996: Chapt 11).

Along with contact and then peopling by settlers, there were other crucial transactions. Annexation was a key constitutional step that facilitated the long-term settler development of the country by allowing colonists to apply new strategies to become established, starting with displacement of the Aboriginal inhabitants. An important point to make – albeit obvious – is that the Europeans were not the first to bring social and economic development to New Zealand. Contact by Europeans did not occur in some developmental vacuum – Māori, and other indigenous peoples, had been developing Aotearoa for centuries before Tasman or Cook sailed across the horizon. Yet, some popular discourse, and some history, sees development as starting, almost by default, first in 1769, or the date of first contact elsewhere, typically inferring that it was something that was possible only after Europeans had arrived – whether they were Pilgrim fathers in New England or the arrivals in Wellington Harbour under the Wakefield scheme in 1840, or whoever. Such a perspective confuses two-way exchanges of technologies and also wrongly sees an economy as functioning only if its transactions are monetised. Māori did not use cash in 1769, yet they managed a complex economy that saw multi-directional trade operate the length and breadth of the three main islands. This was a distance equivalent to that between Rabat in Morocco and the Franco-Spanish border (Introductory Map 1).

But, with European contact came introduced strategies for development, and a European political hegemony that rapidly introduced ways of production and exchange that largely overrode Māori, Aborigine and Native American/Canadian approaches to development. The imperatives for all these European initiatives were driven by one of imperialism’s meta-themes of demographic and geopolitical thinking of that time: the attractiveness of mid-latitude colonies for permanent European

settlement. In this construct, the natives were of minor concern, but should be replaced, using whatever means necessary, by settlers, who by imperialist definition would be far more productive. To a limited degree, New Zealand's colonisation occurred when the more extreme, imperialistic dimensions of this construct had been mitigated by the Evangelicals, who had Christian beliefs about protecting aborigines, by converting them and even by assimilating them. In South Australia and elsewhere, this same ethos led to setting up 'reserves' for the residual native populations, but this never occurred in Aotearoa. This period of relatively compassionate paternalism, which governed New Zealand's earliest colonial period, was to yield later in the Victorian period – less in Aotearoa and more in some other settler-colonies – to the extreme 'white supremacist' views of people like Cecil Rhodes, who advocated driving the natives from their lands to create southern and central Africa's settler-states². Nevertheless, the differences were of degree rather than outcome. Whether by purchase or warfare, whether in settler-states, such as in Southern Rhodesia, or what was to become a settler-society such as New Zealand, the result was the same: dispossession for the indigenous people allowing a vast land grab for the settlers.

The process of displacement started purposefully through the migratory aspects of peopling, as colonists emigrated from their homeland to its newly annexed colonies. But this migration was reinforced immediately by the settlers replacing themselves 'efficiently' through their childbearing in the new colonies, and via their improving life expectancy. This happened to coincide with very high mortality among the natives in settler-colonies. Normally, increased death rates came as an unintentional by-product of colonisation, by the accidental introduction of pathogens to which the indigenous peoples had no resistance. But, more sinisterly, so it is alleged, it occurred in some countries when settlers knowingly exposed indigenous peoples to disease, such as by passing on to them blankets infected by germs like smallpox and measles. This is reported to have occurred in Australia and the United States, but there is no record of this in Aotearoa³.

More systematic intentional actions aiding displacement came from neglect and even engineered deprivation that had biomedical as well as socio-economic implications, justified by the widespread belief that the indigenous people were an impediment to progress. Lastly, and intentionally, dispossession of the wealth of indigenous people came from warfare, confiscation and removal, and by juridical processes often of dubious legality and typically unethical. What is striking is the similarity between settler-societies in the legislative and regulatory instruments they used to achieve these goals. Together the dispossession processes produced two other demographic trends: geographical displacement through forced mobility, and increased mortality for the Aboriginal inhabitants.

Nevertheless, many indigenous peoples eventually survived and often later went through rapid population growth. At the same time, the colonist populations who

dispossessed the natives from their lands thrived and became more mature settler-societies, with lifestyles and cultures that resembled those of the imperial power. Demographically, their growth patterns varied over time being very rapid at first, then slower, with a reprise during the mid-twentieth century Baby Boom, and a slowing since, despite the massive immigration levels they all have seen.

This overall approach to development carried with it other values systems that affected Māori and Pākehā, settler and native alike. For example, as Barbara Brookes documents (2016: 21, 50), imperialism imported with it the views on gender extant in Europe, or at least those informing the lives of the middle classes who would be the administrative, political and economic actors for Anglo settler colonies: 'The world of eighteenth-century middle-class women in England was gradually contracting within four walls'. The colony, and its native inhabitants, was expected to abide by '...the gendered pattern of authority...' of the metropole. An example of this is noted by Brookes: a Major Bunbury – of fact not Wildean fiction – refused to allow a Ngāti Toa woman, of high rank in that tribe, to sign the Treaty of Waitangi.

The Colonial Enterprise: The Constitutional/Political Framework

The processes of colonial expansion until the late eighteenth century brought Europeans face-to-face with indigenous peoples across the globe, regardless of the driving factor. It could be for geo-strategic reasons that were often due to major conflicts in Europe itself⁴; or because of mercantilist objectives; or to rid the metropolises of convicts and other persons who were seen as fiscal burdens; or for reasons of exploration and curiosity. Scientific observation was the *raison d'être* for Captain James Cook's voyages of exploration to New Zealand between 1769 and 1773, although, in his sealed orders, his Whitehall masters may have had more covert geopolitical ideas. The first European to 'discover' New Zealand and Australia, Cook also greatly extended western scientific knowledge by engaging in extensive exploration, mapping and scientific observation from the sub-Antarctic to the sub-Arctic, as well as much of Oceania, also planting British flags on Australasia's two shores – within a few months of each other.

After the first encounters, there was typically a period of phony calm in the lives of the inhabitants of the newly contacted or 'discovered' territories, before interactions between Europeans and natives intensified. Usually, annexation occurred after some sort of 'imperial incubation' period of varying durations, with the natives exposed to a range of experiences. For example, within a few short years of Columbus 'discovering' the Americas, Spanish conquistadors had ravaged vast areas across the two sub-continents, their passage aided by smallpox and other pathogens. The British moved somewhat more deliberately in Australasia, annexing New South Wales 20 years after Cook's voyages, establishing it mainly as a dumping ground for

convicts who could no longer be transported to North America. The spectre of the American revolution held Britain back longer from claiming New Zealand, which finally became a colony only 70 years and 3 months after Cook had declared it British.

Early voyagers to Aotearoa were a motley lot coming as ships' crews, or attracted to the extractive industries, or (a little later) to save the souls of the Aboriginal inhabitants, or to trade. But by the early nineteenth century Australia and New Zealand already had promoters, who saw the potential for European settlement in mid-latitude zones with environments not too different from Britain's. The interval between contact and colonisation comprises a population and development story in its own right, presaging the formal colonialism that followed (Pool 2015a: 172; Chapter 8 present book).

The 'Settler Revolution' drove what Belich calls 'explosive colonization' in Australasia and westward in North America. 'It was the emergence of the Anglo-world in 1783, a politically divided but culturally and economically united intercontinental system, ... that incubated and spread these changes. Like the Industrial Revolution, the Settler Revolution was by no means exclusively Anglophone... Yet both did begin with the Anglos...' (Belich 2009: 9; his capitals). The British settler-colonies later became 'Dominions' and at one period also included the Irish Free State (1922-37), plus South Africa (1910-1961), and post-war southern and central Africa's 'settlement-empire' colonies. Dominion status was meant to solve two overwhelming political issues for these territories: home-rule, and how to handle relations with indigenous peoples and other non-European peoples. Notable among these were the Indian 'coolies' spread around the Empire, from the Pacific, across Africa, to the Antilles. With quasi-independence, population problems, in whatever form they took including managing descendants of the former 'coolies', were no longer to be a burden for Whitehall, but were passed on to the new Dominions or former colonies to resolve.

Establishing home-rule and interacting with indigenous peoples had major implications for the peopling and development covered below and in later chapters of this book. Self-rule and race relations – or ethno-linguistic relations in Canada – along with diverse constitutional re-arrangements, were to transform settler-colonies into settler-states, and some of them into settler-societies. Ultimately, each was composed of peoples with distinct cultural mixes, and demographic, economic and social attributes, that existed alongside their various political lineaments. Interaction and conflict between these divergent cultures produced its own turbulence in the Victorian era, to be followed by some degree of accommodation, relative stability and sustained development over much of the twentieth century. More recently, turmoil in inter-group relations seems to have re-emerged, but not so much because of conflict between the settlers and indigenous minorities, which are a small group except in

New Zealand. Instead, there are now multi-dimensional tensions between ‘cultures’ defined in very different ways, at its worst is reflected in racism against coloured migrants.

Anglo Settler-Societies: Identifying Historical Era

Although the details and timing of their histories differ, it can be argued that, since the American Revolution, the Anglo settler-societies have passed through three roughly comparable broad phases. These will be detailed more for New Zealand in Chapter 5.

A first era, in New Zealand starting in 1769 and running through to the 1880s (and elsewhere to late in the Victorian epoch) comprised a period of ethnic turbulence. It included, in Australia, an attempt to eliminate the indigenous Tasmanians (1820-32), a campaign disputed by history revisionists, but verified by most reputable mainline historians (Attwood 2005). Also in the 1830s, Andrew Jackson committed genocide against the native Americans dwelling in the south-east and forced the Cherokee westwards in the ‘Trail of Tears’. A few years on, Aotearoa saw the First New Zealand War between the Crown and Māori. Most devastating of all settler-societies’ internal strife was the 1860s civil war in the United States, between ‘white’ slave-owning states and abolitionist states; but almost contemporaneously with it, Aotearoa suffered the more severe Second New Zealand Wars, while the first and more prolonged Metis Rebellion in Canada occurred (1869; second 1885) (see below).

Yet, paradoxically, there were also important political changes across the Anglo settler-society world in this turbulent period. The Americans had already written their constitution well before then; slavery was abolished in the British Empire (1833) and in Lincoln’s United States’ proclamation (1862); the transportation of convicts to Australia ceased in 1867, and that same year Canadians federated, building on the famous report of Lord Durham (1838-39). Shortly after Durham had presented his findings, in 1840, New Zealand was annexed for Britain. Then came the New Zealand Constitution Act of 1852 that established short-lived Provincial Assemblies, promulgated by Governor Grey but abolished by Prime Minister Vogel (1876).

Despite these important foundational steps, until the end of this turbulent period – or even after – the Anglo settler-societies were not built in quite the way we might expect today. The modern features that we associate with these countries, much of their existential architecture – geopolitical linkages, social and economic structures, and belief systems – was drawn and built, in reality, in a subsequent era. This was during the epoch of recolonisation, that saw a phase of steady development from the late nineteenth century until the late twentieth. For example, the majority of the current 50 American states gained admission to the union only after the catastrophic ‘War between the States’ (1861-65). Seven of the 11 Canadian Provinces

joined their federation only after 1867. The Australasian colonies federated – without New Zealand – to become a Commonwealth as late as 1901, but it still has territories that are not full states.

As I noted earlier, the significance of this middle era – roughly 1880s/90s – 1970s – is characterised by Belich (2009) as one in which the Anglo settler-societies, and even South Africa – at least its ‘British-whites’ and its trade flows⁵ – passed through a stage of ‘Re-colonization’, a term he had first used to describe New Zealand’s development from the 1880s to 1970s (2001). As he himself notes, this usage has been criticised, yet in his support it can be said that it provides an apposite descriptor for the period from the 1880/1890s to the 1970s, and so is used here⁶.

Despite numerous wars and two major depressions during the century from the 1880s, all Anglo settler societies laid down the institutions and life-ways which gave them their unique flavours – and still do to a degree: their economies built what was to be their core functions, and their social and cultural systems were set in place. During the era of recolonisation, the United States diversified to become the world’s largest mining, manufacturing and agricultural powerhouse: ‘Prior to the Civil War, food and raw materials (wheat and cotton) comprised about 2/3rds of exports – [whereas] manufactured goods comprised about 2/3rds of imports’ (Samuelson 2017)⁷. Australia and Canada looked like America’s little brothers, but in the latter case with fishing and forestry added into the mix. New Zealand remained somewhat more dependent on farming, but with processes that were radically different from those employed in the pre-industrial ranching of its turbulent era. Instead, they resembled the techniques associated with industrialisation elsewhere in the Anglo-world.

In all cases, even in pastorally dependent New Zealand, the development throughout this era of what was their economic base generated urbanisation earlier than in parts of Europe. This soon turned into metropolitanisation, with America’s mega-cities rivalling London. Across the Anglo neo-Europes, this was accompanied by trends in suburbanisation not seen in ‘old Europe’. There was also broad inter-generational structural social-mobility (as against individual-level father→son status mobility), so that each generation seemed better off than the last. Associated with this was a shift towards social equality in incomes and wealth (Piketty 2014), with land-based capital outrun by other forms. Even ethnic and religious inequalities declined, and these nation-states used statutory processes and welfare to diminish their effects in public sector (eg schooling) and even private domains.

Throughout recolonisation, the Anglo settler-societies tended to be ‘clubbish’ in their adoption both of social norms (eg declines in family size), and the fads and fashions of mass culture⁸. The Anglo settler-society post-war Baby Booms were coterminous, reaching fertility levels that outran those of other Western Developed Countries (WDCs), including England. In ‘old Europe’, these reproductive levels

were rivalled only by Iceland and Ireland, with the Netherlands not far below (Pool 2007: Table 2). At a popular level, what was reported to be *a la mode* in London, or increasingly in New York and Hollywood, was quickly adopted in Toronto, Sydney or in Auckland, the most distant Anglo settler-society metropolis, or among ‘white’ South Africans. Film and later TV accelerated these patterns of diffusion.

For the European-descent segments of the Anglo-world, this was their great moment in the sun – whether in settler-societies, where those of European-descent were almost totally in charge, or in settler-states where they wielded the ruling power, or back in Westminster itself as the Empire peaked and then started to erode. In the settler-societies, it was easy to forget that there were small indigenous minorities that remained largely out of sight and out of mind; in New Zealand until, during, and after, World War II, when a rapidly growing Māori population moved *en masse* into urban areas. For America, managing relations with their much larger population of African Americans through various steps in the process of desegregation, often took a violent turn. The spotlight was on the southern states, but it was in part associated with urbanisation and a mass movement to the north that was coterminous with the Māori rural exodus. But it overshadowed the less manifest story of native American development; native Americans were the people you might spot on a horse or in a shantytown as you crossed a western state. In Canada and Australia Aboriginal people were essentially hidden populations, except perhaps in their northern reaches.

This era also saw the demographically largest Anglo settler country, the United States, surpass Britain as the world’s richest and most powerful. During that period and since, America has perceived itself as morally superior to Britain and the other imperialist European countries, believing itself never to have been a colonial ruler⁹. This meant that it was largely successful in averting the sticky, toxic mess of decolonisation with which Britain had had to contend, and still does to a degree; instead, Vietnam, Afghanistan and the Middle East were to be America’s nightmares. Australia and New Zealand also had colonial adventures in the tropical Pacific: Australia still has a number of ‘External Territories’, while New Zealand and the United States have Territories in ‘Free Association’ (eg Cook Islands, whose citizens are also New Zealanders; Marshall Islands in the United States). In all these cases, the land areas are very small. In different ways all Anglo settler-societies went on to become welfare states after World War II. It could be argued that New Zealand, through its 1938 *Social Security Act* and very early universal health care was a leader.

Since the 1970s, in the period covered in the last chapters in this book, peopling and development have taken a radically different form. Demographic change (both natural increase and migration) and economic restructuring, often with revolutionary impacts, plus their social correlates, have brought turbulence back again to the Anglo settler-societies. This turbulence has threatened the provision of social benefit transfers and seen the eroding of progressive tax regimes. As a result, all

Anglo-countries, including the United Kingdom, have gone through a radical restructuring of their welfare states, and an attendant shift to managerialism and commodification. With this there has been a reification of the FIRE sector (Finance, Insurance and Real Estate). Marketisation and short-term profits, as against longer-term development, have become major ends for capitalism, rather than simply being the instruments providing the means by which productive capitalism's objectives are met over the longer term. Reaganomics, Thatcherism, and the New Zealand version of these revolutions have subsequently been transmuted into austere policies that have set the Anglo-world apart from the social or Christian democracies of western and northern Europe. The net result of restructuring is that social inequalities of wealth and income are again increasing (Piketty 2014), being most extreme for indigenous and some migrant peoples, and the descendants of the former slave populations of the United States.

The Dynamics of Peopling: Reproduction and Natural Increase

Whether settler-societies were passing through turbulent or relatively more stable eras, their transitions owed a great deal to shifts in patterns and trends of peopling, that is the growth and distribution of population. The passage from contact, to colony, to settler-colony and then to settler-society is predominantly a demographic process, involving both the indigenous peoples and the newcomers. The native majority is eventually superseded by a settler majority, requiring in the first instance, the transfer of newcomers from the metropole to the colony. But, despite its profile, migration is only one demographic pre-condition to becoming a settler-society: the new colonists not merely had to replace¹⁰ themselves reproductively (rates of 2+ births per woman), but to reach high levels of fertility, rates that outstripped those in the metropole (say 6+ births per woman in the settler-colonies, as against 4-5 in the Victorian metropole). Equally well, colonists had to challenge the reproductive capacities of the indigenous peoples to become the demographic hegemon. Following a first burst of settler inflows, in New Zealand's case 1860-65 and 1870-75, migration became a far less significant factor in population change, and in this story, until the new migrant waves started to arrive post-1970, a century later (Farmer 1985: Fig 14).

New Zealand's Pākehā population dynamics, from first records to the present are far from unique – the Australian and Anglo-American settler-societies have followed the same very broad patterns of peopling. Yet, as in New Zealand, in Australia and Anglo-America immigration and peopling are often seen as synonymous. This, for example, is very much the message, intended or not, which is insisted upon repeatedly at that most emblematic – and fascinating – of monuments, Ellis Island¹¹. In reality, stocking America, or the other settler-societies, was a function not so much of migration, but more importantly of the higher fertility and

lower mortality of migrants than had been the case in their homelands in Europe: for the United States, both those admitted at Ellis Island and the native-born already in America. The peopling of America was, therefore, not just a function of Jews escaping pogroms in Belarus, poignant as such stories are, but rather of their children, conceived, born, surviving and reared in squalid tenements in lower Manhattan, whose many descendants are today playing instrumental lives in the modern United States. The same would hold true for the other European migrant groups which flooded into America, whether they reached the prairies or the south, or wherever.

In fact, as noted above, levels of reproduction across settler-societies were high by comparison with the ‘old country’s’ fertility rates, a long-established pattern, even as far back as the seventeenth century. Thus, Hubert Charbonneau documents the same early marriage among the first Canada-born Quebec women, when masculinity rates were high, as were seen in colonial Pākehā New Zealand two centuries later. Unlike Protestant Victorian New Zealand women, Quebecois could escape matrimony by joining celibate holy orders: to many, the dangers of missionary work on the frontier were less forbidding than were some of the available men. Charbonneau comments drolly that ‘the religious market had priority over the matrimonial market’ (Charbonneau 1975: 156; my translation). We see the same pattern in Australia, such as in pioneer Queensland, around the years 1870-80. Moreover, in New Zealand, in all regions, regardless of their Protestant faith¹², settlers adopted an almost identical early and universal marriage, and a super-fertility regime, significantly above the highest in Britain (England). This I can show was true most of all for Pākehā New Zealanders, who, in the period 1850-80, achieved ‘hyper-fertility’ approaching the levels of North American Mennonites used for biometric modelling in demography: Australians, Canadians and Americans were not far below Pākehā. This similarity in patterns of family formation, incidentally, is a striking piece of evidence, supporting those historians who have argued that New Zealand’s British colonists achieved early and fairly successful levels of integration. It contrasted with the United Kingdom where there were marked fertility differentials by region, class and occupation. Then, in Australia, as in New Zealand, early first marriage rates dropped dramatically before the end of the nineteenth century in the more settled southern colonies (McDonald 1975: Tables 15, 20 and 30; Pool *et al* 2007: Figure 2.2, *passim*). Once declines occurred, differentials appeared between pioneer and more settled Pākehā areas (McDonald 1975: Tables 15, 20 and 30; Pool *et al* 2007: Figure 2.2, *passim*).

High fertility then drove elevated rates of natural increase. A paper by economic demographer Marvin McNinnis on Canada in the nineteenth century provides a particularly instructive example of the effects of high birth rates and thus natural increase. From 1811-61, 84 percent of total Canadian growth came from natural increase. This relationship was confounded after 1861 by massive emigration to the

United States, especially to New England, mainly of Canadian-born, but also foreign-born who had arrived as immigrants. In most later nineteenth century decades, emigrant numbers were twice those of immigrants. Mortality rates in settler Canada were higher than among Pākehā New Zealanders. Nevertheless, the population grew rapidly because fertility levels remained elevated and natural increase levels were high; thus, in most decades Canadian natural increase significantly exceeded gross-emigration and was much higher than net emigration. In the United States, despite the place of net international migration in the nation's self-image, natural increase was the major driver of growth in every single decade over the two centuries from 1790 to 1990; migration produced just below a third of all growth in the decades 1850-60, 1890-1910 and only reached 40 percent recently in 1970-80 (Pool *et al* 2007: 82-85; Festy 1979; McInnis 2000a: Table 9.8; Haines 2000: Table 8.3).

The fertility transitions of the different settler-states have passed through the same broad phases. At the start of the nineteenth century, 'White Americans' (Total Fertility Rate, TFR¹³, about 7.0 births per woman) had far higher fertility than the English. The American level was close to that of Pākehā in the 1830s (Chapter 8). Americans then went through the first stages of a reproductive transition by 1850, so had lower fertility than Pākehā settlers in 1870, although still higher than Britain's. This was probably because the lifestyles of many White Americans – urbanisation in densely settled cities in the northeast in particular – were closer to Europe's than were the Pākehā or 'White Australian' experience. Rates were higher in United States rural areas than in urban. From the 1870s to 1900, 'White American' Total Fertility Rates declined from 4.6 births per woman (1870) to 3.6 (1900), compared to Pākehā 6.7 (1878) to 3.4 (1901): from Pākehā having a higher level than the American to a lower. Not unexpectedly, the 'white Australian' fertility transition was relatively close to that for Pākehā: in 1876 both had high crude birth rates (Australia 36 per 1000 of population; Pākehā 42) and both dropped rather quickly by 1901, but New Zealand more so (Australia 27; Pākehā 23). Australia's decline, although less radical than New Zealand's, generated a major moral panic and a *Royal Commission on the Decline of the Birth rate in New South Wales* (1903-04). It was responsible for some very good demographic analyses by Timothy Coghlan (1903), but also recommendations to ban 'contraception'.

In Canada, from 1861 to 1891, fertility decreased significantly everywhere, including in rural Ontario, but not very much in rural Quebec, nor in the cities of Quebec and Trois Rivières that were overwhelmingly francophone – Montreal, a far more mixed anglophone-francophone Quebecois city, was closer to the Ontario cities. Fertility rates of Anglo settler-societies, other than francophone Quebec, then converged towards those of western Europe, including Britain, and eventually down to or near replacement in the interwar years. Then these countries diverged again in the post-war 'Baby Boom' (higher than most of Europe), then in the 'Baby Bust'

(1970s but started 1960s in United States) re-converged towards western and northern Europe, but not to the very low rates of Mediterranean or eastern Europe (Haines 2000: Table 8.2, 323 ff; ABS 2006; Coghlan 1903; McInnis 2000a: Table 9.6 and 2000b; Pool 2007; Pool *et al* 2007). In sum, New Zealand's settlers were similar to their counterparts in the neo-Europes, but all had higher fertility than the British. An agenda item for later chapters is why and how in the late Victorian-era Pākehā birth rates went from the highest among these populations to the lowest, in an era in which, as I will show, contraceptive technology and induced abortion played minor roles.

The achievement of very high rates of reproduction and then the subsequent declines occurred in an era in which techniques of contraception were very inefficient, although total abstention – when systematic – was clearly very effective. Abortion undoubtedly was resorted to, but later I will show that, at least in New Zealand, was probably less frequent than we might imagine. So, the 'nuptiality valve' which largely controlled age at reproduction was the key mechanism (Engelen and Kok 2003). For Pākehā 1876, it had been wide open (marriage occurred at young ages); by 1901 it was tightened down. This is not easily accepted by some recent historians (Belich 2001:182), but detailed analyses show that two-thirds of the changes were due to declines in the proportions marrying and delays in age at marriage. Between 1878 and 1901 – the crucial period of decline – the changes were due to shifts in particular at the key ages for colonial childbearing, 20-24 and 25-29 years, which also happen to be those at which fecundability¹⁴ is highest. Delaying marriage and thus risks of conception – the tightening of the nuptial valve – resulted in 90 percent of the changes at 20-24 years in this period and 66 percent at 25-29 (Sceats and Pool 1985: Table 92).

This is seen in Table 3.1 where Ireland is compared to England and Wales for late Victorian decades. From the 1880s, Irish women delayed marriage or remained celibate. As a result, Ireland had low Crude Birth Rates (CBRs) yet high Marital General Fertility Rates (MGFR = Nuptial births/Married women 15-49). English CBRs were much higher but MGFRs lower.

As I have noted earlier, the peopling of settlement-empire colonies was underpinned by another factor: relatively low death rates among the European-origin populations. From the late Victorian era in Australasia (1880s), mortality levels were low by industrialised country standards, for Pākehā New Zealand particularly so¹⁵. A Pākehā advantage probably stretched back to first colonisation but was strengthened by a significant decline in deathrates from the 1870s, as was also true for the United States and Australia. By *circa* 1876, Pākehā women were nearing 60 years life-expectation, a level they would achieve by 1901. By 1900, the United States and Australia had achieved a level of life expectation that the world as a whole would not reach until the 1960s (50+ years), while New Zealand's level for Pākehā in 1900 would not be matched by the world until the 1980s.

Table 3.1: Average Annual Crude Birth Rates and Marital General Fertility Rates; Ireland, and England and Wales, 1881-91, 1891-1901 and 1901-11

Decade	Crude Birth Rate (CBR)		Marital General Fertility Rate (MGFR)	
	Ireland	England & Wales	Ireland	England & Wales
1881-91	23	32	284	271
1891-1901	22	30	287	230
1901-11	22	26	292	230

Source: Kennedy 1973: Table 59

Notes: CBR = Births per 1,000 population; MGFR = Nuptial Births per 1,000 Married Women aged 15-49 Years

There seem to be no accessible mortality data for Canada until the 1920s when they were at the level New Zealand had been at in 1900. In the 1890s, however, the first reliable estimates can be made for infant mortality, levels, which were much higher in francophone Quebec than in anglophone Ontario that was a society more analogous to those of Australasia. It was also the province where fertility had declined, undoubtedly affecting childhood mortality, a link I will demonstrate for Pākehā in later chapters. By contrast, Quebec's higher fertility was probably associated with higher infant risks of mortality. Rates were also higher in Ontario's urban centres than in its rural areas even for counties that were poorer, a situation that held among Pākehā in the 1880s (Chapter 9). Looking at Victorian period photos of, say, Auckland's main street, it looked squalid, but New Zealand's 'cities' never had the huge densely peopled slums and tenements of Anglo-America, while Australia fell between these extremes (McInnis 2000a; Decady and Greenberg 2014; Haines 2000; ASB 2014: Table 6.1; Tiong 1988: Appendix C; Pool and Cheung 2003, 2005).

This brief comparative review shows that mortality declined from the 1870s for settler populations, which occurred about the time that a fertility decrease was also underway. This is a question on which there are New Zealand data back into the Victorian era that are relatively robust and detailed (later chapters), probably more so than for other Anglo settler-societies.

Until about World War II, even in this club of actuarially advantaged people, Pākehā had the highest longevity. New Zealand was a temperate zone land mass, free of the globe's great killers, such as malaria, plague and smallpox, away from the old world's squalid cities and with high standards of living—although somewhat higher for European than Māori. These factors of population replacement and child survivorship generated their own demographic myth making: that settler-states and

societies were great places in which to ‘have and raise children’¹⁶. This generated enduring folklore, spawning a corollary that the sickly, such as those children or adults with ‘weak’ lungs, should be sent ‘out there’ (i.e. to the colonies) to recuperate in the ‘open spaces’ of empire. Cecil Rhodes was one such teenage immigrant sent to South Africa. This idea was really an extension of Dr Farr’s ‘healthy districts’ idea in Victorian England – of grassy shires away from towns and ‘satanic mills’ (Crosby 1986: Chapt 10).

There is, as previously noted, a very dark side to this story: the fate of the indigenous peoples. Regardless of their birth rates, they had low levels of replacement because of high levels of childhood mortality. Thus, they typically suffered natural decrease (deaths > births), and, with no resource to migration, negative growth. As noted earlier, some of the natural decrease was due to the unintended introduction of germs to which indigenous peoples had not been previously exposed. But, equally well, blame can be ascribed to the deprivations that indigenous peoples faced because of dispossession of the resources and their displacement; they were the victims of underdevelopment, and, because of this, were at the mercy of the malnutrition-infection cycle, and subject to the inroads of communicable diseases.

Implicit also in these population dynamics were their differing effects on the demographic structures of the settlers and the natives, such as age-composition and gender imbalances, the diffusion and geographic distribution of the colonists and their successors, family structures, workforce patterns and wellbeing of the indigenes. Outside cities, of course, the population geography often depended on the stage reached in the displacement of the natives. In all cases, however, it is impossible to consider the resulting demographic structures to be in any way homogenous.

Indeed, demography is nothing if it is not ‘political arithmetick’, to use William Petty’s befitting term (1690). In two words he attached the most subjective of arts to a quantitative plinth, thereby acknowledging that ideological factors and moral panics are also a part of any demographic package, particularly when it enters cultural domains. Examples are the ‘White Australia’ policy, seen in a somewhat more nuanced form in New Zealand’s anti-Chinese legislation, and fears of declining birth rates in Australasia as fertility tumbled in the last Victorian decades. The fertility declines since the Baby Boom have produced further panics about the end of the family, and more dire fears about the survival of ‘society’ itself (Pool *et al* 2007 *passim*).

The Dynamics of Peopling: Net Immigration

Net migration does play a seminal role in peopling settler-colonies, initially driving it, although becoming a minor factor in the middle- to longer-term¹⁷. This highlights the point that the process of population and development, from mercantilist or geo-strategic contacts between imperial powers and native peoples through to mature

settler-society, was not simple and monotonic. The supposed liberty and opportunities settler-colonies bestowed on colonists and their successors has been an enduring belief in the settler-societies (Chapter 2). Free from the constraints of Europe, so the mantra runs, they could realise their destiny ('manifest destiny', United States). The downsides to this story, even for the migrant populations, were brushed to one side; in America's case these included indenturing, penal transport and slavery. These were totally absent in New Zealand's story, but it still had its 'progress industry' (Belich 1996) – the recruiting of settlers by promising a smooth passage to the colony, glossing over the length and duration of voyages, and the lure of land ownership at destination.

The 'empty spaces' argument is still invoked to explain a number of demographic, economic and social traits and factors of Anglo settler-societies, from higher fertility, to entrepreneurship, to GDP growth. It also generated the influential 'frontier' school of history whose architect, Frederick Jackson Turner in the early twentieth century saw that environment as a dominant explanation of the American character and progress. His theory had some traction in Canada and Australia but was never widely adopted in New Zealand. Nevertheless, the extension of policing and control by settler-society governments in Anglo-America and Australasia over indigenous people, a shift from 'false' to 'loose' to 'tight' empire (Belich 1996: 249), could be seen as a component of the taming of the frontier. By contrast, the 'Gunfight at OK Corral' type of frontier policing of settlers seems to have remained largely American, although 'bushrangers', the poem '*'Tis of a Wild Colonial Boy, Jack Doolan was his name*', and Ned Kelly's dramatic end, are minor-key Australian examples. More importantly, a critique made of the Turnerian view by some other Americans was even truer for the New Zealand experience – that Americans (and New Zealanders) were moulded less by the frontier than by imported culture (Pool *et al* 2007: 53-55, citing David Thomson 2006). Early on, this came from large immigration flows, especially into gold mining and other extractive industries, which together generated a social demographic ambience that was relatively unstable in the settler-societies. Pastoral 'ranching' in the 1850s to 1870s, although far less colourful than its American counterpart, added to this picture. Then the movement of colonists onto alienated land, whether along the Oregon Trail, or of soldier-settlers moving into the Waikato to take over their allotments of confiscated Māori land – then failing through a lack of capitalisation, bad luck or insufficient land to make a living – reinforced this aura of impermanence.

From the American Revolution until the last few decades of the twentieth century, there were spasmodic migration surges from Old World Europe to the New¹⁸, to which must be added the earlier but continuing transport of slaves from Africa, mainly to the Americas. These waves not only affected the rate of economic development but also moulded the social composition of settler-societies. Both of

Australasia's settler-colonies tended to receive their early inflows from a narrower range of sources than did Anglo-America. Australasians came from the United Kingdom, particularly Ireland, and, for Aotearoa, disproportionately from Scotland (Chapter 6); Anglo-Americans were a more varied mix, with many of German-origin, and, of course, the French. Like the Americas however, Australia and New Zealand also experienced surges of immigration. For New Zealand, the most important waves ever occurred in just two quinquennia in the Victorian era (Pool 2015b: 49). By a very large measure, they were the most significant, and in absolute terms rivalled the most important in the country's entire history, even in the twenty-first century when the population was many times larger than it had been in the 1860s and 1870s.

Data on migration are difficult to collect, especially in Anglo-America where people can, and do, move across borders. New Zealand is particularly fortunate in having a comprehensive study on migrant characteristics from 1800 to 1945, undertaken by the Government historian, Jock Phillips, and his colleague Terry Hearn, using death certificates, individual record-linked back to other sources (eg ships' passenger lists). Implicitly, they marvel that anyone tempted the voyage given the distance of New Zealand from the British Isles and cite the *Dublin University Magazine* (1845) that Aotearoa was 'the most recent, remotest, and least civilised of our colonies'. Consequently, as Phillips and Hearn stress, the campaign to attract settlers required offering incentives, of which, they show, assisted migration, especially free passage, was the most important. The availability of land was important. Military service in the colony, or as 'soldier-settlers' to protect against perceived threats of Māori attack, was another. There was also the 'promise of quick wealth, in particular the lure of gold', the many resource and extractive industry booms – timber, gold, furs, whale oil – that attracted itinerants, typically sojourners whose stay was often transitory. Finally, 'personal incentives' (eg accompanying a husband) also played a role (Phillips and Hearn 2008¹⁹; Farmer 1985). It is important also to recognise the 'push' factors of poverty and unrest in the source countries, most extremely so in Ireland but in all parts of the British Isles.

Gold rush fever made the entire Pacific basin particularly subject to surges, with prospectors leaping consecutively to California; to Victoria; to the alluvial mining of Central Otago and the West Coast of the South Island of New Zealand, whose mining town Hokitika was the subject of Eleanor Catton's *The Luminaries*; to the quartz-mining of the Coromandel, with its boom town of Thames in Aotearoa's North Island, briefly in 1868 the country's largest centre; then to Klondike and the Yukon, to say nothing of Western Australia, and so on. Gold rush migratory flows are noteworthy for their high masculinity ratios (males per 100 females), but, even among other early settler groups, overall men outnumbered women, not the least because of colonial wars and the need to station soldiers in the colonies.

Nevertheless, first as settler-colonies and even later as they became more mature settler-societies, these countries also saw inflows of single women, recruited most commonly as domestic servants, but also in the hope that they might marry and reproduce, thereby adding to the stock of Europeans. For New Zealand, Charlotte Macdonald's major study of 4,000 such 'single woman as immigrant settlers' in the nineteenth century, using a multi-level, record-linkage methodology, has documented the dynamics of this important inflow (Macdonald 1990); the mix of statistical data and personal sources (eg diaries, letters) yields a very rich picture.

Families were also important in settler migrant flows, often as assisted passage migrants (Hearn 2005). For New Zealand, the arrivals of the 1870s, householders and their wives and children, plus others, migrating because of Julius Vogel's eponymous *Immigration and Public Works Act*, 1870, stand out as they contributed significantly to a stock of settlers who were to be nation-builders. In the first instance, they did this by the women bearing numerous children in New Zealand, often also being forced to be sole- or co-breadwinners for their families. In turn, their children were to benefit from high levels of child survivorship (for that day) that produced momentum effects that are seen in the cohort life tables into the mid-twentieth century (Pool and Cheung 2003, 2005). It is necessary to reiterate the point that, along with the 1860s gold rush, numerically the Vogel migration was the largest inflow on record until the end of the twentieth century (Farmer 1985; Pool 2015b). There were later assisted passage schemes that brought in families, as for example after World War II, when the first large non-British inflow arrived, the Dutch. Both Australia and New Zealand also sponsored post-war assisted passage scheme for British (and others), whose beneficiaries gained the obloquy 'Ten Pound POMS' ('Prisoners of Mother England', as defined by urban myth). Ten Pounds was the cost of the passage; the accompanying children were free.

Finally, there were also British Child Migrant schemes that, in retrospect, were seen to have grossly abrogated the rights of children, some of whom were abused. These schemes endured a long time and continued after World War II. The aim was to implant children who were orphans or from institutions in the 'white' Dominions, in some cases avowedly to increase the 'white stock'. Australia and Canada were far more implicated, for much longer than New Zealand, which took in 593 children between 1949 and 1953. The schemes were also operating between the wars, but there seems no record of children coming to New Zealand then in large numbers (Hearn 2005).

In New Zealand the frontier phase, really a pioneering stage, was sustained for only a few decades: 1840s-80s. One of the key markers of its termination was a significant downturn in net immigration rates. Commencing in the 1880s, for almost a century, Aotearoa shifted away from seeing itself as a 'Better Britain of the South Seas' to being Mother England's loyal subject nation, a 'Little Britain'. As I will

show, this role drove most aspects of its population and development trajectory. In New Zealand's case, this era of recolonisation was also, however, a critical intermediate era between two epochs in which New Zealand's peopling and development paths were turbulent (Pool 2017, citing Belich 2001: 29-31 and 2009: 179-80).

Today the demography of Anglo settler-states has changed in another way: lower Manhattan, which had once housed poorer European migrants as they landed from Ellis Island, is now strongly Asian. This is a pattern repeated across the Anglo settler-societies as the newest large waves of non-European settlers, starting with increasing flows in the 1970s, began to remould the demographic profiles of settler-states. As seen from the 1980 round of censuses, these migrants tend to cluster in particular areas of their major cities. For Chinese, this is repeated in Vancouver, with concentrations in Richmond and the Southeast, whereas Indo-Canadians are most likely to live in Toronto. In Australasia, Chinese cluster in north Sydney, and in Aotearoa in Auckland's north- and eastern suburbs; Indo-New Zealanders live disproportionately in the south of Auckland central. By contrast, south and west Auckland house the largest Pasifika (people of tropical Polynesian descent) urban concentrations anywhere in the world, even in their tropical homelands. Pasifika were first attracted to New Zealand in significant numbers because of employment in large-scale manufacturing plants, often in the same localities in which their numbers are disproportionately represented today²⁰. Sometimes, where particular industries provide employment opportunities, clusters emerge in small towns and rural areas: the Mexican farm workers of California are iconic examples, but New Zealand has its own examples: Vanuatuan fruit pickers in Hawkes Bay, on the North Island's east coast, and Filipino dairy workers in the far south.

Building the National Story: Indigenous Peoples, Settler Incursion

After World War II, along with other western developed countries (WDCs)²¹ – but unlike most other ex-colonies – the settler-societies became foundation members of the globe's rich nations' club, the OECD. In 1947, New Zealand was still blessed with a history covering decades at the top of development league tables (eg Gross Domestic Product, the Human Development Index), although by late century it had slipped in rank.

Earlier, I argued that migration, high fertility and favourable levels of child survivorship produced rapid growth among the settler populations. The polar inverse was true among the indigenous peoples, all of whom suffered marked population decline, without the possibility of replenishment through immigration. At their nadir in the 1890s, Māori were at 40 percent of their numbers at contact (1769). Some other indigenous populations suffered more than just declines but went through 'collapses':

A display at the Smithsonian's *National Museum of the American Indian*²² (Washington DC) documents a decrease of 90 percent for California's indigenous peoples between 1848 and 1900. So, the great paradox for all settler-societies were their parallel demographic histories: the rapid growth through 'incursion' but the decline or collapse of the indigenous population. In the twentieth century, especially after World War II, most indigenous populations recuperated and often achieved growth rates that now surpassed those of the settlers. For the 'white' rulers of the South African settler-state, differences in natural increase (births minus deaths) between 'whites' and 'blacks' created such fear that they formulated and systematically imposed theories of apartheid – a very negative 'population' policy, and the prototype of an institutionalised 'racial order'.

In settler-societies, however, the descendants of the colonists not only continued to have higher growth than the populations of the metropole but became the demographically dominant group. This helped mould their self-images. Part of the enduring folklore of the settler populations is to see themselves as 'younger' and more 'virile' than the societies in the home country²³ and that population growth, a function of migration, as a key determinant of development. This is a point to which I return in later chapters.

In the national narratives of settler-societies, it is the colonists, whose seemingly 'brave' pioneer story takes the limelight, particularly their epic voyages across the oceans. Sailing ships very often entailed unbelievable hardship and real courage. But forgotten or in the background in New Zealand is the even braver migration *circa* 1250 of its founding population – Māori. The first settlement of Australia and North America is shrouded in prehistory but must have similarly involved immense courage.

Alongside that, and also forgotten or downplayed, is the sad and often sordid history of dispossession and displacement of indigenous people in the settler-societies. Sometimes displacement was given spurious legislative rationale, as in the *Removal Act, 1830* (Andrew Jackson). Often dispossession was achieved indirectly, as for example by acts individualising titles, thereby making it easier to persuade key people to sell land that customarily had been held in common; the innocuously sounding United States' *General Allotment Act of 1887*, or Aotearoa's highly significant *Native Land Acts* in the 1860s, had exactly that intention. New Zealand's 1862 *Act* individualised titles and the 1865 *Native Lands Act* established the Native Land Court as a vehicle to implement this. The 'object' for establishing the court, according to Henry Sewell, Minister of Justice in 1870 'was twofold: to bring the great bulk of the lands in the Northern Island [where most Māori lived] which belonged to the Māoris...within the reach of colonization. The other great object was the detribalization of the Māoris – to destroy, if it were possible, the principle of communism...' (reprinted *NZ Official Yearbook* 1990: 414). Above all, as a result the

indigenous people suffered demographically, most to a point of barely surviving. This is a point of fundamental significance for this entire book; as I have already said, we must remember that survival as a people is the most primal factor of development.

Among many writers of ‘Letters to the Editor’ in New Zealand papers, or revisionist historians, such as protagonists in Australia’s ‘history wars’²⁴ and North America’s ‘culture wars’, a standard excuse for this land grab is that, had it not been for European technology, the natives would never have benefitted from the development and would never have prospered in the way they did. Indigenous peoples are viewed as people who only had access to inferior technologies; in New Zealand this is sometimes expressed as Māori being stone-age savages at contact. For example, a prominent ad-man said ‘These guys [Māori] have gone from the Stone-age to the Space-age in 150 years and haven’t said thanks’ (Harman 2017: 22, his parentheses, citing John Ansell). Such commentary may have been intended to be amusing, but easily slips into the demonisation of natives, ignoring their highly complex civilisations with forms of socio-political organisation and technologies that were well developed, enough to excite the attention of some early explorers. But, more generically in Oceanic history, for example, the spectacular achievements of Polynesian navigation were downgraded into ‘accidental voyages’, yet they demanded an advanced appreciation of stellar systems and even cosmology. It also ignores the fact that the introduced economies of the colonists were often less advanced on an industrialisation scale than those of the people they were displacing. In both Australasia and Anglo-America large areas of the settler-colonies were, at first, given over to ranching, a pre-industrial form of farming, that replaced complex systems of horticulture, integrated with other modes of production – in fascinating ways in pre-historic Australia²⁵.

The massive shift-share of resources from their indigenous owners to colonists was the most singular, instrumental factor in the development of the settler-states and then of settler-societies. But tensions emanating from this transfer of resources continued for a long time, often from first contact into the twentieth century. When Ellis Island opened for business in 1892, there were still ‘Indian Conflicts’ that continued spasmodically into the twentieth century. Australia’s confrontations with Aborigines stopped only in the 1930s. New Zealand had the ‘Dog Tax Rebellion of 1898’, a grossly asymmetric show of colonial force over refusals to pay a 2s.6d fee. It was an example of a prototypical colonialist action involving heavy-handed tactics: the government sent a gunboat, 120 armed troops, maxim and field guns, and it ultimately resulted in the deaths of two Māori. By the time that the gunboat had arrived, most Māori had followed the suggestion of the local ‘pub-keeper’ to his Māori clients: go home. Then there was the ‘Maungapohatu Invasion’ of 1916, during World War I, when 57 armed police arrested a tohunga (priest) who was seen as having anti-war views.

There is a need, however, to give this use of force some historical context. Force was also used at 'Home' to support prejudicial acts. The last manifestations of the Highland Clearances occurred in the 1870s and 1880s (*Crann.Tara*, n/d), while Ireland suffered a great deal of agrarian agitation and the expulsions of tenants over the last decades of Victoria's reign. Home Minister Churchill positioned a gunboat in the Mersey during the transport workers' strike in Liverpool in 1911. Miners, plus their wives and children, were machine-gunned down in their tent-city in the Ludlow, Colorado massacre of 1914, in the Colorado Coalfields War.

Political-Economic Dynamics of Settler-Societies

Population dynamics, *per se*, were an essential but not sole route to settler dominance. 'Plantations' – nascent settler-colonies – were first established in Ireland under James I of England, and thereafter by British and other Europeans in the Americas. In its original sense the word plantation had the connotation of implanting colonists with their modes of production on a land, already in production under the management of its original owners. But the term then more commonly assumed its other meaning: extensive estates devoted to arboriculture or horticulture, often exploiting slave, indentured or convict workforces. As in some North American colonies, and their successor states. There were also 'blackbird' labourers enticed or kidnapped from the Pacific in Queensland.

Among the Anglo settler-societies, the United States, which has been subject to many varied settlement-flows, would seem to be markedly different. But it still can be classified as a settler-society simply because it has unresolved issues of relations between its 'white' majority and its indigenous minorities. Its social dynamics are far more dominated by 'white' interactions with the much larger minorities descended from African slaves and Hispanic-origin populations, than with Native Americans. By contrast, in Australia, Canada and New Zealand, until the onset of mass migration from the Third World about 1980, race relations were relatively bifurcated – between the settler majority and the indigenous people. For example, Canada has a significant Black population who cluster in eastern provinces and are its third largest 'visible minority', about two to three percent of the total population²⁶, as against four percent who are Aboriginal.

After the suppression of the Upper and Lower Canada rebellions (1837–38), some of whose leaders were transported as convicts to Australia, the 'Anglo' settler-colonies never had a Washington-, O'Higgins- or Bolivar-led war of independence of colonial 'white' elites against the imperial metropole until Ian Smith appeared in Rhodesia in the 1960s²⁷. The Canadian grievances, addressed in the Earl of Durham's report, produced the notion of overseas Dominions (Canada 1867, Australia 1901, New Zealand 1907, South Africa 1910, and others later: Ireland was a different case). These Anglo-colonies eased into independence, but throughout much of their history,

whether as colonies or nominally independent, relations with Britain were a foreground issue, though recently slipping more into the background. It could be argued that dependence on Britain was a more important sub-theme of the New Zealand story than for Canada or Australia because Aotearoa's metropole-dependent mentality flourished for years after nominal independence in 1947. Governors-General were sent out from 'England'²⁸, the Union Jack still often flew, sometimes the preferred flag, 'God Save the King/Queen' continued to be played before movie shows, and the audience was expected to stand.

Generally, New Zealand's Pākehā, were, and some (more so among older age-groups) still are, Anglophiles, just like many Canadian Anglophones, prototypical 'white Australians' and many Americans. But, as elsewhere, New Zealanders widely observe the nation's annexation, February 6th, 1840, when the Treaty of Waitangi was signed between the British Crown and Māori chiefs, representing most sovereign iwi²⁹. Moreover, 'Waitangi Day' has increasingly become dedicated to honouring the Treaty, and the opportunity for robust discussion – and contestation – about its contemporary implications. This opportunity is particularly important for Māori, who see Te Tiriti o Waitangi as a protection of their rights, and equally important for non-Māori, as a reminder that they are 'tangata Tiriti' – people here because of the Treaty.

Despite the absence of 'independentistas' of the Washington or Bolivar mould, frequent significant uprisings and conflicts did occur in different ways in settler-states, including those that became settler-societies. These outbreaks were not between the metropole and its 'white' colonials, but between the imperial power or the largely self-governing polities that succeeded direct rule, on one side, and the natives on the other side: the New Zealand Wars are classical examples. None successfully overwhelmed the colonial governments or their successors, but despite the way the wars were reported, settlers were not always the victors – and some wars produced no clear victory on either side. The list includes the frontier wars with the indigenes in pre-revolutionary America; the New Zealand Wars (1840s, 1860s, and some other skirmishes), which are important markers for this book; the 'Red River' Metis Rebellion of Louis Riel (1869–70). In the United States after independence there were the Seminole Wars (1818–58) and their ethnic clearance from the southeast to Oklahoma, then the 'Indian Wars' (mainly 1860s to 1890s), between the federal government and Native Americans, and minor conflicts thereafter.

In every case, encroachment onto the lands owned by the natives, or their forced displacement, noted already, was a prime cause for conflict. As New Zealand historian Richard Hill notes (2004: 11), 'Indigenous peoples worldwide have never fully accepted the subsuming of their cultures and polities by imperial powers and their successor regimes. In the face of colonisation by coercively superior power, indigenes have struggled to retain much of their own value-systems, resources and socio-political organisation as possible'.

An issue related to that displacement is beyond the scope of this story. In many colonies, severe environmental deterioration was affected by settlers or by extractive industries. The indigenous species, plant and animal were despoiled wantonly during ‘booms’ of all sorts (Chapter 5) that exploited natural resources, but even agriculture sought to alter the natural environment often to replace native plants with exotic³⁰. Destruction of native tussock grasses, and forest, by burning as a prelude to sowing clover, ryegrass and other grasses was the norm for New Zealand pastoralism (Brooking and Pawson 2011). Even floriculture and decorative arboriculture saw Pākehā settlers attempting to recreate the gardens of England. At times there was a fear, almost a loathing, of the unfamiliar environment in the colony, and during recolonisation, England’s ‘green and pleasant land’ was the model for the home gardener³¹, modified perhaps with Australian, South African or tropical plants that could not be grown at ‘Home’ except in glasshouses.

Aotearoa New Zealand’s Path

Much of the rest of this book is focused on the peopling and development of Aotearoa New Zealand *per se*. But, as I have implied, this involves far more than merely looking at population changes and at the growth of GDP per capita. These were the staples of too many early analyses that produced misleading results, but we now have the tools to allow us to ask more intellectually granular questions. Chapter 4 takes up this point: how does one study peopling and development, and, more importantly, their interrelations.

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¹ Until Tupaia, a Tahitian chief travelling with Cook who could understand Māori and their customs, intervened, cultural misunderstandings led to a number of Māori musket deaths.

² His contemporary and friend, Frederick Lugard, the founder of modern Nigeria, and father of modern imperial theory, was very racist, and deplored educated Africans.

³ In 57 years of research on Māori demography I have never heard of any instance of this.

⁴ A classic example was Colonia del Sacramento, now in Uruguay. It changed hands between the Spanish and Portuguese, and finally Brazil and Uruguay, innumerable times between 1680 and 1828, figuring in the fine print of almost every European Treaty of that era. One such exchange allowed the Portuguese to drive the native Guarani into slavery, as depicted in the 1986 film *'The Mission'*.

⁵ 'In 1913, 88 percent of South Africa's exports went to Britain...' (Belich 2009: 386), rivaling New Zealand's periphery-metropole economic links.

⁶ Belich 2009: 179-80, 209 refines the term and responds to critiques.

⁷ Citing Douglas Irwin, *United States Trade Policy since the Revolution*.

⁸ In late 1994, just after apartheid ended, I was astounded by South African 'whites' I met by chance who were ecstatic that the *Australian Woman's Weekly* would now be available to them once again.

⁹ Forgotten are the annexing of Hawaii, the extensive, bitter colonial-style wars in the Philippines, and its control of Cuba. Then there was formal colonisation of a number of territories, such as Guam, Puerto Rico. American Samoa and the Canal Zone, returned to Panama through a Treaty renegotiated by President Carter. It also holds Trust Territories in the Pacific (under the United Nations), including the Marshall Islands where atmospheric nuclear weapon tests were conducted.

¹⁰ In Chapter 1 it was noted that 'replacement' (how the adult population have sufficient babies, who then survive to adult ages) is a word that in demography has a technical meaning that goes back to the subject's modern foundations. Recently, as noted there, the word has been co-opted by 'white supremacists', who use it to mean how the 'white population' is being displaced by non-whites. In this chapter (and elsewhere) I use it in its correct technical sense.

¹¹ We should not forget that, as well as northern, western, central, eastern and Mediterranean Europeans, Ellis Island was also very much an arrival point of many colonists from the British Isles – 'cousins', as it were.

¹² Catholics were a small minority probably also with high levels.

¹³ The Total Fertility Rate is a synthetic measure of the average number of children a woman would have across her lifetime, if she were to experience the average number of births of each age group, in any given year.

¹⁴ Fecundability is the probability of conception in any inter-menstrum during which no attempts to limit conception are taken – how likely is a woman to conceive while having normal sexual relations and with no contraceptive protection?

¹⁵ This favoured status disappeared over the course of the 20th century.

¹⁶ Certainly among Pākehā, but I have heard the same sentiments expressed by 'white' Australians, South Africans, and Anglo-Americans.

¹⁷ Up to the end of the twentieth century.

¹⁸ The 1947 transfers between India and Pakistan at partition, within what had been the one colony, are a major exception to this old → new world directionality.

¹⁹ Their data have been made available to scholars and others in the public domain.

²⁰ In Chapters 6 and 18 I will return to the implications of ethnic clustering for residential segregation; Māori residential clustering will also be examined.

²¹ Defined Chapter 1: Anglo-America; Australasia; western and peninsula Mediterranean Europe; Japan.

²² Which includes a display on Hawai'ians.

²³ In 1981, while interviewing me, a local radio station in Noumea (New Caledonia, Territoire d'Outre-Mer), citing total fertility rates that were higher than in metropolitan France, asked exactly that question: 'Are we more virile?'

²⁴ In New Zealand's case, the extremes of the Australian 'history wars' have not been seen, but have taken the form of 'tabloid histories' that sensationalise aspects of Māori pre-colonial life as they 'skate over the cumulative findings of conventional history' (Pool 2015a: 18-21, 98-100, 102).

²⁵ Or, in the case of Australia's aborigines, using managed burning to develop 'parklands' that supplied most food and clothing needs. See Chapter 1; Gammage 2011.

²⁶ Many had accompanied Loyalists at the time of the American revolution, or came in the War of 1812, or came as escaped slaves (Canada was one of the first territories to abolish slavery). But most commonly today their origin is West Indian, although this has been augmented recently by Africans.

²⁷ UDI was more a part of the era and history of decolonisation than of settler-colonies.

²⁸ In fact, among New Zealand's Governors, from 1841 to 1917, the Irish-born were over-represented and English-born under-represented (Constantine 2012: 30). Canada and Australia had their share of such people, most notably the author and politician John Buchan in Canada.

²⁹ Celebrating joining an empire seemed a bizarrely charming eccentricity to the Ghanaian press of the 1960s, of which I was a reader when living there just after their independence.

³⁰ Much of Aotearoa's flora is evergreen, normally broadleaf, with little resemblance to the flora of Eurasia and North America. Instead, flora are linked to species in the tropical Pacific, and Australia. A southern and higher altitude New Zealand species (nothofagus) is related to plants in New Guinea, southeastern Australia and Chile.

³¹ This has been probably better documented for Australia than for New Zealand. See Robin Boyd's *The Australian Ugliness* (1963: Chapt 4 'Pioneers and Arboraphobes', esp 76-79) written when Australia was nearing the end of its era of 'recolonisation'. He also refers to the 'White Antipodean' tendency to see Britain, really England, as 'home'.

Chapter Four – Peopling and Development: Conceptual and Measurement Issues

Integrating Factors of Peopling, Development and Welfare

It may seem unnecessary to devote an entire chapter to issues of conceptualising and measuring peopling and development, and their interactions. Common-sense would suggest that these issues should have been well rehearsed. After all, population and ‘sustainable’ development, sometimes ‘sustained’ also, figure in the worthy declarations of many international fora (eg the International Conference on Population and Development, Cairo 1994). They are replete with calls for these factors to be integrated in research, planning and policy, and congresses focusing on the environment will certainly pinpoint population growth as a major pressure on the planet’s capacity. Unfortunately, on leaving such august assemblies, the praxis of development policy is very quickly divorced from ideals. This has been particularly true since 1980 in a period when the Washington Consensus (eg International Monetary Fund, World Bank)¹ and its national clone-agencies have placed a great emphasis on debt, structural adjustments, privatisation and the defenestration of public sectors. Moreover, there are no comprehensive textbooks on the subject, nor manuals which set out appropriate methodologies². Unfortunately, at the next stage, in the processes of planning and policy, the wish is also honoured in its breach. Even back in the ‘development decades’ (1960s-80s), unless linkages were very clear as was the case for some developing countries (eg where population growth far outstripped available resources), demographic factors were not integrated adequately into development planning. In the ‘Five-Year Plans’, of that era population was typically put in almost as an afterthought in a stand-alone chapter. Even the analysis of employment was restricted to the formal monetised sector, often in economies still heavily dependent on subsistence or informal sectors³.

This lacuna is not something restricted to the Global South and thus foreign to this book. In Aotearoa, from 1769 to at least 1939, about 70% of the span covered here, much of the Māori economy was outside the monetised, formal sector (Thompson 1985: 124), as was also true for Indigenous minorities in all settler-societies. But, even in the ‘advanced’ economies of the 21st century Western Developed Countries (WDCs), the factors of peopling and development are not adequately integrated analytically and addressed in public policy, again, at least in part, because of the Washington Consensus’s obsession with money supply, debt reduction, tax cuts, and austere policies towards welfare and other public services. So, the need for this chapter is central to this book: how we can study peopling and development in settler-societies. It does this by seeing the contribution of people as

intrinsic to a settler-, or any other sort of society's development, and the prime *raison d'être* for development policies. People are not something tangential, or secondary, to budget surpluses and similar markers, which have become the narrow targets of finance ministries that have driven post-1980 planning and policy.

I must stress here that I am not saying that demographic factors have been ignored by more recent development economists⁴. In his inaugural Noel Butlin Lecture (2004: 2), Jeffrey Williamson acknowledges the oversight, stating that '... changes in population age-composition often matters far more than changes in population aggregates'. He goes on to argue that the 'kind' of demographic shock – whether it affects longevity and thus numbers at old age, or the movement of the baby boom cohorts through the age-structure, matters greatly. This now broadly accepted proposition derives from the 'demographic dividend' framework of David Bloom, David Canning and Jaypee Sevilla (2002, 2003), arising from their examination of the 'Asian Miracle' – a period of rapid economic growth in Asia argued to be largely due to beneficial changes in age-structure⁵. The United Nations (2022: ii) is also now tracing these changes for the Less Developed Regions. The proposition is central to my argument regarding the appearance of different types of demographic dividends at different periods of New Zealand's development, demonstrated in later chapters.

Relatedly, recent theoretical and methodological advances in demography and population economics require a rethinking of the relations between peopling and development, and the role of welfare in this. Couple this with what seem to be major 21st century revolutions in work patterns, and in their inter-linkages with family life, and there is also a compelling case for rethinking welfare. The argument pursued below is that welfare is far more than a system of service provision and support for those in 'need', but is a sector that interacts closely with peopling, and social and economic development, more or less as those overlaps would be portrayed in a Venn diagram.

This book attempts a macro-level analysis of these issues. Its units of reference are populations, significant sub-populations, countries, regions, ethnic groups and other such collectivities, not communities, individuals or small groups of people. That said, the boundary between macro- and micro- is not as straightforward as this division might infer, particularly when, as in this book, a researcher is navigating along a variety of intellectual pathways: for example, later analyses here might well fit somewhat uncomfortably with the well-established distinctions between micro-economics and macro-economics. My objective is not to achieve perfect definitional 'goodness of fit' with all the contributing disciplines' conventions, but to generate a narrative about how to study the evolution of a set of definitively macro-level phenomena: a country and a society; its regions and other distinct spatial units; its major ethnic groups and other communities; its family demography; its labour force sectors; and its structures by gender, age and education.

Peopling and Development: Demographic Factors, Transition Models

The easiest task for the analyst of population and development is in conceptualising and measuring the ‘peopling’ dimensions identified and discussed in earlier chapters. Far more difficult is building models of development. For peopling, a number of key demographic variables are almost self-defining: a birth is a birth, although whether it is late fetal-loss or a live birth may require clinical judgement in a small minority of cases. Similarly, a death is a death – issues of resurrection are best left to theological exegesis. All of age, gender, residence and geographic migration are defined with limited difficulty, and this is aided by standardised multi-lingual dictionaries (eg United Nations 1958); families, households and labour force variables are somewhat more difficult. Often the more important issue for the researcher is the quality of the reporting of these data.

Analysis is also greatly facilitated by the availability of a set of what are generically called ‘transition models’. Together, these paradigms provide evidence-based, standardised comparisons that allow the researcher to evaluate the reliability of their results, but also to make a first-order explanation of trends. For example, from these models we can be sure that, at a macro-level, mortality declines have almost always preceded fertility transitions and thus probably play a role in determining them. A second-order of explanation of why mortality or fertility decreases occur lies, however, in the rest of development and is more subject to debate. To take the mortality-fertility relationship again, the modalities by which declines in death rates might provoke changes in reproductive intentions and behaviours are far from clear, particularly in the way these dynamics might play out a micro-level (Cleland 2003).

The most well known population model is the ‘demographic transition theory’ associated with economic demographer Frank Notestein (1945; Casterline 2003). More exactly, it should be called the vital or natural increase transition – it deals only with births and deaths. Like all such transition models, it traces a shift which is unidirectional, in this case from low rates of natural increase (RNI) due to high mortality and high fertility ($\text{RNI} = \text{Births} > \text{Deaths}$), to accelerating RNI as mortality declines steeply, to decelerating RNI as rapid decreases in fertility outrun the continuing but now gradual declines in death rates, to a final phase when RNI are now slow again, but because fertility and mortality are both at low levels. In New Zealand both Pākehā and Māori are at this stage, although the former are further along in their transition. Furthermore, some populations today, some nations, and regions within many countries, including New Zealand, have gone beyond this cut-off point into ‘natural decrease’ ($\text{Deaths} > \text{Births}$).

Accompanying the demographic transition are age-structural changes. Because of the heavy force of mortality on the childhood ages in populations with

high death rates (in the 1890s barely 50% of Māori reached their 7th birthday), initially the decreases in mortality make the age-structure much younger as increasing proportions of children survive. When, however, fertility declines occur, especially when they are accelerated, the inverse holds true: the age-structure becomes older as there are fewer additions to the youngest age-group relative to the rest of the population. To use a New Zealand example again, because Pākehā had an earlier transition than Māori, they are now over-represented among the elderly of New Zealand, while Māori are now over-represented at middle ages. The longer-term effects of past fertility declines produce an age-structural shift that is the major cause in the surge of structural ageing (the proportions of the total population at older ages) seen across the globe. At a much later stage numeric ageing (higher numbers at older ages) sets in, as more and more people survive to reach retirement. The popular perception of ageing, that geriatrics are extending their life-spans, is a minor later effect, following on from the real mortality declines, which have ensured that persons who are now elderly had first survived through their childhood and working ages to reach retirement. One of the more extreme ‘gaps’ in Aotearoa between Māori and Pākehā is the probability of surviving through the older working, early retirement ages. In 2006, 74% of Pākehā males would live from exact age 45 years to exactly 75; for Māori, however, only 50% would do so (Pool 2014: Table 1).

There are now population data on most of the world’s people. They show, almost universally, that populations follow the demographic transition model. Moreover, there are now very few national or sub-national populations anywhere that still have very high mortality. Most have achieved drops in mortality and are into a second phase of fertility declines. Taking United Nations data, the world’s most disadvantaged region, Western Africa, had 35 years life-expectation at birth in the 1950s; by 2000 longevity had reached 50 years. Pākehā females had reached well over 50 years in 1876; Māori, and the earliest Third World countries to industrialise (eg Malaysia), had achieved this level by the late 1940s. In the 1950s, the World had a Total Fertility Rate of almost 5.0 births per woman, the More Developed Countries 3.0, but the Less Developed over 6.0; by 2000 the World as a whole was below 3.0, with the More Developed Regions well below replacement (at 1.6) and the even the Less Developed barely exceeding 3.0. In this sense, as Swedish economic demographers Bo Malmberg and Thomas Lindh argue, (2006: 66-67) ‘The Princeton hypothesis [Notestein was a Professor there] of a demographic transition affecting countries all over the world...has turned out to be one of the most successful predictions made by social scientists in the 20th century’. But there is an important caveat: goodness of fit with the model was imperfect for many populations that had been colonised; colonisation was a demographically negative factor as well as being traumatic in other senses. But, later in the colonial period or post-colonially, the colonised peoples then followed the prescribed stages after the most negative impacts

of colonialism on demographic evolution had been passed. A ravaging related to imperial annexation came from a combination of the diffusion of virulent pathogens to populations previously under-exposed epidemiologically to the risks of these diseases, or from the warfare and violence that frequently accompanied colonialism. Together, they led not only to high mortality but often to natural decrease.

In the post-colonial era, by contrast, one of the most impressive achievements across all development sectors have been global improvements in public health, even in the poorest and most violence-wracked countries. The debates about the validity of the demographic transition theory are thus really not about its almost universal predictive power, but around the side-line issues of the varying velocities, the timing, and the explanations of the transitions. In earlier years there was fruitless debate about whether or not the paradigm only applied to the developed countries, but now most commentators accept that the model has variants that are representative of trends in most populations. The most notable distinction is between the ‘classical model’, and a ‘delayed variant’. The classical model tracked an early and gradual pattern of change, as amongst Pākehā New Zealanders and most WDC populations. A more accelerated set of changes, the path was that followed by Aotearoa’s Māori and other Indigenous minorities, and by some earlier industrialising parts of the Third World. The least developed countries have had even more recent transitions, sometimes compressed into short durations of time. What is also clear is that Māori, and other Indigenous minorities did not follow the simple one-way progression of the classical model, a problem which has been addressed for mobility (Bedford and Pool 2004), and by Kim Johnstone (2011) for fertility. Additionally, after contact and annexation, Indigenous minorities typically went through a ‘regressive pre-transition phase’, before turning a demographic corner and subsequently following an accelerated path. Even classically, there was regression as when pandemics struck, but in the modern era – since the 18th century – this was normally short-term. What sets aside some colonised and Indigenous minority populations was how long the regressive pre-transition phase lasted – perhaps much of a century for Māori (Pool 1991: Chapter 1; Pool 2015: 72).

It should also be noted that Notestein’s formulation provoked debate around ‘explanation’ and thus drove a rather sterile discussion of whether or not the paradigm was a theory. He was a man of his times, typical of his era of American ‘liberal’ academics in seeing ‘modernisation’ (which they inherently conceptualised as something akin to Americanisation) as a positive driving force of transition. This idea was then applied to development, taking it from empirical observation to ideology. From that perspective, if fertility rates could be controlled and thus growth could be contained, this would produce a cost-effective way of generating overall development. This became translated into seeing family planning as the singulate factor that would save the world, and with it the premature introduction of mass contraception programmes before there was a popular demand, as in Kenya and

Ghana. The case for this was most simplistically advocated at the United Nations' Bucharest Population Conference (1974) by some WDCs or some of their more strident non-governmental organisations, provoking a strong reaction from developing countries saying, most appropriately in my view, 'development is the best contraception'. I would refine this further to argue that, at a macro-level, health development, along with general development, especially the reduction of childhood death rates, is a prerequisite to incentivising a demand for family planning. As noted above, mortality declines almost universally preceded fertility declines and thus are probably their most significant determinant, as will be illustrated in later chapters both for Pākehā (late Victorian era) and Māori (after World War II). As a result of this ideological diversion, however, there was an unnecessary querying of the basic premises of demographic transition itself, whereas criticisms should have been directed at its misapplication.

The demographic transition spawned the 'epidemiological transition model' of Abdul Omran (1982). In his schema, a series of phases – *The Age of Pestilence; The Age of Receding Pandemics; The Age of Man-made [sic] and Degenerative Diseases* – track declines in mortality and improvements in health over time. Associated with this transition are other factors: increases in life-expectation; a major shift in the force of mortality by age noted above; a change from death being overwhelmingly due to communicable disorders to coming mainly from non-communicable; and a change in risks of death by gender. The latter has changed from either higher male than female life-expectation or limited differences early in a transition (Vallin 1983), an issue of significance in the interpretation of 19th century Māori mortality. Female life expectancy only came to exceed that of males once maternal deaths in and around childbirth were reduced. Then came greater female longevity and widening gaps advantaging females, the pattern that is best known (Ruzicka and Lopez 1983). Very recently in the WDCs, there has been a seeming diminution in the gender gaps⁶. Perhaps, this is due to a shift in attitudes in seeking care – it used to said that 'women were sicker' (because most sought medical care when pregnant and thus were diagnosed for any co-lateral illnesses), whereas 'men died' (because they did not present to medical practitioners until it was too late). In New Zealand in the early 2000s, there was a marked gender crossover, from women to men, in hospitalisations in part because of improved outreach of primary care (Pool *et al* 2009). By the late 20th century, a 'double burden of diseases' was also being identified in many countries, where communicable disorders were still common, but chronic non-communicable diseases, notably those with major cost implications for the health system (eg diabetes; cerebro-vascular and cardiovascular conditions; obesity) were becoming very prevalent (Gaimard 2014: 20).

A controversy arose over the underlying determinants of the epidemiologic transition, particularly its later phases. Thomas McKeown, a preventive medicine

specialist, extrapolating from Victorian data on England and Wales, argued that socio-economic factors, primarily ‘nutrition, living standards and income’ were the critical factors in mortality declines (McKeown 1976). I would accept that this explanation probably also applied to Victorian New Zealand, negatively so in the case of Māori health, but then positively for them in the later community health programmes, discussed in later chapters, launched by Maui Pomare at the start of the 20th century. It seems that McKeown’s view affected WHO policy in the 1970s, which was a rather wider and more disputable application. The economist Samuel Preston had already shown that ‘socio-economic factors accounted for only 10-25%... of the growth in life expectancy for the world as a whole between the 1930s and the 1960s’. Instead, this was the era of huge biomedical and technological breakthroughs, some in health *per se*, some (eg transport and communications) in ways that facilitated public health programmes. Writing in 1991, Kunitz adds another dimension, that ‘most poor people today have lower mortality than even well-to-do people a century ago’. Warren (1991) moves to reconcile these views by seeing the 1930s as the cut-off between much of history, when medical measures were limited, as against ‘the power of biomedical science’ since then that benefitted much of the world, and, in Aotearoa, brought gains to both Māori and Pākehā alike. After a detailed cause-by-cause review, Woodward and Blakely confirm this difference between the 1930s and the years since for New Zealand, showing a particularly steep decline in tuberculosis death rates the first two post-war decades. But they also argue that ‘As a result of reducing barriers to health services the first Labour Government of 1935 to 1949 made a vital contribution to long-term health gains in New Zealand’ (McKeown 1976; Preston 1976: 72; Kunitz 1991: 235; Warren 1991: 232; Scholefield and Reher 1991:7-9; all cited in Pool 1994: 37-43; Woodward and Blakely 2014: 176-78, Figure 35). My own conclusion is that, for most of epidemiological history until the 1930s, socio-economic determinants prevailed, although gradually biomedical improvements were coming into play, so, in time-terms McKeown’s ideas (but subject to caveats raised by subsequent researchers) had a degree of validity; Preston, however, has the weight of population numbers on his side – over a few short decades the biomedical revolution was so successful, affecting billions of people globally, that it produced the massive worldwide post-war population increases. These then decelerated later by the subsequent contraceptive (Pill, sterilisation) revolution.

Finally, John Caldwell (1990) argued that the epidemiologic transition should be seen as a more generic ‘health transition’ encompassing both factors that are not biomedical (socio-economic change and welfare), as well as the health system *per se* including services. Elsewhere, from empirical observations, I have posited that health service delivery in New Zealand, as it affected Māori, went through different phases: a transition from ‘Community Health Strategies, 1900-1938’, to ‘Public Health and Social Welfare Strategies, 1938-1950’, to ‘Public Health, Social Welfare and

Chemotherapeutic Strategies, 1950-2000', to 'Sectorally Integrated Services within the Health System, 2000 →)' (Pool 2016: 27).

Other transition models, relating to other trends away from health and natural increase, have been proposed and will be referred to in this book. That on the transformation of the industrial labour force is particularly pertinent (Chenery and Syrquin 1975; Maddison 1982). Others referred to are on mobility (Zelinsky 1971; see critique Bedford and Pool 2004) and age-structures (Pool 2005: 18). Wilbur Zelinsky's model is somewhat diffused as it conflates migration, primarily focusing of internal movements, with geographical redistribution (eg urbanisation), that can be due to spatial differences in rates of natural increase, and thus not to mobility *per se* at all. It also predates the of the late 20th and early 21st centuries' great intercontinental migrations that are now so profoundly changing the demography of Anglo settler and other societies.

As this review has shown, the peopling dimension of population and development is well-served by carefully elaborated frameworks. They have also been tested, as it were across many – if not most – populations globally. They have also been applied to long-term historical data. This means that the demographic component has readily available to it analytical models which are not seen for many social, cultural and economic factors.

Peopling and Development: Social and Cultural Factors

Development is far more problematic than population, and, to add to the problem, this book must deal with both its social and economic dimensions. Social development encompasses an almost infinite range of 'people factors', from the micro- to the macro-, but their scope can be limited in several ways. As noted, the primary-level focus throughout this book is on macro-societal organisation and change, thus excluding many individual or small-group characteristics. They are the raw materials of major domains in sociology and anthropology, which, in turn, provide the resources for the secondary-level explanations on which I must draw. Ultimately, any population history is dependent on numbers that relate to tangible aggregates, which are the countable analogues for more intimate social behaviours and interactions that are often not easily quantifiable. An obvious example is religious affiliation, or 'profession' as it has been called in New Zealand censuses, which enumerates those who record that they belong to a particular faith or who have no religion, without any indication of the frequency or intensity of this association. Thus, it is not a substitute for degree of religiosity and other important aspects of belief systems – while it is often used as such. Similarly, the census question on ethnic affiliation does not tell us about interactions with different communities and the depths of feeling that might be involved, particularly in a country such as New Zealand, where many people have affiliations with more than one ethnic group. But when triangulated with other

correlates, as Tahu Kukutai (2011a, 2011b) has done, the simple fact of affiliation can tell us a great deal about ethnicity even at a more macro-level.

Kukutai also raises another important point affecting the data analysis in this book. She shows that the state does not necessarily conduct counts that attempt to be neutral, but often it imposes definitions in censuses and other data collections to achieve policy objectives. Her case study was New Zealand, but her arguments apply to other jurisdictions, where ethnicity is a complex phenomenon. In some earlier censuses, for example, Canada allowed *Canadien* and American as responses, but not *Canadian*; in their race-based questions Americans wrestle with Hispanics, some of whom are Black, others White and many Mestizo. In New Zealand, over many years, the goal of Pākehā legislators was assimilation for Māori, so attention was paid to using biological criteria based on ‘degrees of blood’. Until 1921, attempts were made to distinguish between different sorts of ‘half-castes’ (living as/not living as Europeans).

This proactive role by the state is not just true for ethnicity, but for any number of variables: family membership (eg what is a ‘family’) is subject to question designs that reflect changing values relating to marriage, gay unions and other factors. Employment is particularly prone to exogenous concerns that have an impact on question design: eg the tracking of labour force sectors over time is affected by the emergence of new occupations and the disappearance of others. Another relates to definitions of ‘actively looking for work’ in labour force surveys. Yet a further case is distinguishing meaningfully between part- and full-time employment. In labour markets in which clocking-in and out is less and less common and where workers often exceed what used to be a normal work week, there are no inherent signposts. Education attainment, by contrast, is somewhat simpler in that there are self-defining systems’ markers: attendance/non-attendance; qualification; years of schooling.

Thus, use of macro-social data suffers a further disadvantage because much of the explanatory analysis in these domains, and the theories in which they are grounded, revolve around micro-level interactions and behaviours, that may be unsatisfactorily defined during a data collection phase. Moreover, they are subject to the effects of norms, values and mores. Norms, which comprise a major part of the interpretative armoury of sociology and anthropology, are by definition the property of the collectivity, relating to what it expects and what are the modal behaviours of its members, albeit expressed through the behaviours of individuals or small groups. Mores are both collective expectations and yet behavioural guidelines each person crafts to determine their own actions. Values can be micro- or macro-, but in this book the focus is instead on values-systems, which are macro-. Norms and values, and the parallel notion of market forces, Adam Smith’s ‘unobservable invisible hand of market forces’ in economics, are all unquantifiable intangibles – until viewed through a demographic lens.

An imperfect solution is to draw on secondary sources, citing micro-level expository and field research, where these issues can be explored, and, where possible, to forge micro-macro linkages. Cross-national comparisons can make such analyses even more powerful. Models for such exercises exist already in the demographic literature. A classic example of forging macro-micro linkages comes in Susan Watkins' historical study of the trends in fertility in Europe 1870-1960, where she shows how the spread of markets from a local circuit to national, state education and similar factors, homogenised countries like France and changed social behaviours down to the couple-level (Watkins 1991). John Knodel, Apichat Chamrathirong and Nibhon Debavalya were able to explain how in rural Thailand fertility changes overlapped in time with urban reproductive declines. They benefitted from very good fieldwork⁷, which yielded multi-level data (from repeated large-scale surveys to micro-level anthropological fieldwork), something clearly not available to Watkins. They identified how the roles of 'perceived rises in the costs of living and child-rearing; market penetration, monetisation and consumer aspirations; increased educational aspirations; and a decline in the contribution by children to economic activities... countered a cultural value, "a deeply entrenched sense and practice of parent repayment..." ' It, 'Like many cultural norms [...] had both quantitative and qualitative dimensions.' Because of their analysis, Thailand's rapid fertility decline in the 1970s has been able to be used as a comparator for the even more radical Māori decrease in the same era. As Thailand had never been a colony, this comparison allowed a quasi- 'case-control' approach that increased the robustness of the analysis (Knodel *et al* 1987: 171, 201; cited in Pool 1991: 173-74, 185-87).

Peopling and Development: Economic Factors

The objectives of economic development are different from those of social development, although their trends are frequently, but not always, correlated; one thinks of Cuba or Kerala, with low GDP/capita yet high life-expectations, as notable exceptions. But conceptually economic development becomes intricately linked to – perhaps even determined by – how it is measured. Conventionally, measurement has come from the national accounts, which directly analyse monetised transactions, or indirectly analyse them by converting non-monetised transactions, such as some services that are deemed to be of economic importance, into currency values. The focus there is on the costs and financial benefits or how these are facilitated by financial capital; or proxies for costs and benefits, of goods and services, examples being the volumes (as against monetary values) of goods handled by the export, import or retail trade. In this book, by contrast, the emphasis is on the wellbeing of the population, not on analysing the financial and economic growth of the polity. That does not mean that I eschew references to conventional economic indices – instead, I

use them to help understand how wealth and population wellbeing have been generated.

This is also partly a fact of life. Economic history legitimately depends on data sets that by definition simply do not lend themselves to research on the contributions to the macro-economy of population sub-sets such as ethnic groups and each gender. A perverse consequence of this, for example, is that the roles of women and of cultural minorities in productive activities tend to be lost in generic statistics. Appropriately, GDP is blind to ethnicity and sex/gender⁸; its per capita, its denominator, is everybody. This denominator has a further latent but unintended consequence. It is said that history is written by the victors. Here I must deal with an analogous situation. Progress and development, as measured by indicators free of specific demographic markers, by statistical design neutral indices, lose this quality once a narrative unfolds. They become rather proactive observations, the consequences of the determination of the principal or most prominent actors in the political economy, in settler-societies most typically ‘middle-aged, prosperous white men’. Later chapters will attempt to address these issues, in particular to show that an Indigenous minority, even a tiny segment of the total, as Māori were by *circa* 1900, were still a presence in the productive and social sectors of the society and economy. How Māori guarded this capacity and then expanded it, is an important, indeed essential but oft neglected part, of the story of New Zealand, yet the data are, at best, fragmentary.

The limited availability of data sources affects a major early empirical task: how to assess the economy of Aotearoa prior to annexation when Māori were the major economic players. Unfortunately, as noted in Chapter 1, we are bound by the euro-centricity of the data sources, that failed to pay sufficient attention to domestic production, to the existing trading networks up and down New Zealand, and from *circa* 1790 to the contribution of Māori to the production and shipping of international exports. Moreover, Māori are seen as bit players in what were archaic forms of joint ventures in the extractive industrial sector – in reality they may often have been the instrumental partners. Even Māori global exporting has only recently been given the due it deserved. In Chapter 8ff. I attempt to rectify this lacuna, aided by business historians (eg Petrie 2006) and to show, admittedly by the most indirect of means, that even into the 1850s Māori may have been the major contributors to the real GDP. This was far more than that estimated from colonial statistical sources, which essentially reported just a narrow range of Māori contributions (eg when they paid fiscal duties), but comprised the sum of factors of production and exchange of goods and services, generated by both Māori and Pākehā.

In New Zealand’s post-colonial economic historiography, which, because of their numbers and political power, is effectively a Pākehā story, financial capital is accorded an important role in explaining development, with flows sometimes viewed

as very dependent on overseas financial institutions. The finance sector is the bread and butter of many conventional economics' studies, yet its activities are really the markers of development rather than its drivers; financial capital, and hopes about profits, definitely facilitate development, but are not ends in themselves – the real aim of development is general wellbeing. Julius Vogel (1870s), renowned for his borrowing to generate public works and immigration policies (Chapter 2), is seen either as the master manipulator of loans, or the profligate who threw New Zealand into debt⁹. But what he did achieve lasted far longer than many other economic initiatives and increased the wellbeing of the populace, many of whom his government had assisted financially to get to New Zealand. Vogel opened land up for settlement – Māori being the unwilling victims of his initiatives – and instituted a major infrastructural programme that served New Zealand into the 20th century. The depression of the 1880s, to which his borrowing has been linked and sometimes blamed, was, in fact, part of an international financial collapse (Ministry of Culture and Heritage 2014). For example, there was a 'Panic' in 1873 in the United States, and their depression lasted off and on until 1901. Then, as in the 1930s and in 2008, New Zealand was not immune to what happens in other settler-societies or in the City of London.

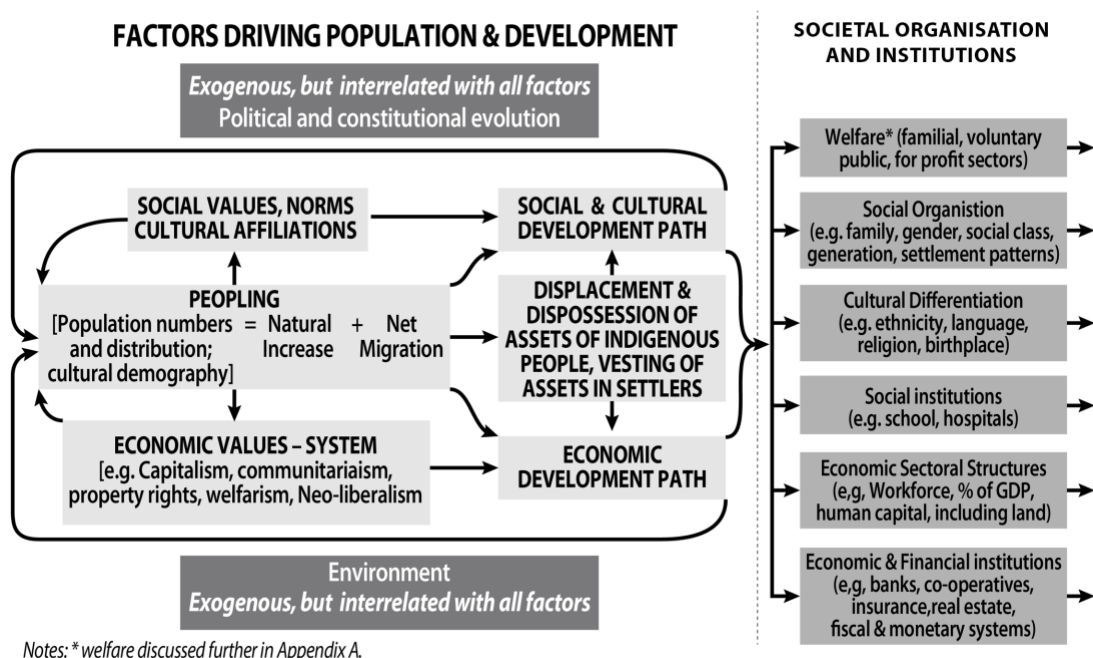
Furthermore, London and the City were not the sole sources of finance to aid the development of New Zealand, for some of it historically has been generated in New Zealand itself, from the 1880s often by cooperatives that later assumed a wide range of financial activities. Of course, some of the returns were repatriated as dividends for British capitalists, but probably far less profitably than from what they gained, for example, from Barbados sugar plantations dependent on slave or indentured 'coolie' labour. As Jim McAloon says, 'Certainly New Zealand's economy relied on external prices, and Britain's influence was pervasive. But there was little that was inevitable about the shape of New Zealand's development... there was a complex interplay of metropolitan and local forces...' (McAloon 2009: 197-98; citing Hawke 1985; Belich 1996).

Thus, a very different approach is adopted here. In defining development, population is integral to it, and it includes social as well as economic change, as is shown in Figure 4.1. From this perspective the focus is not on money or equivalent values for non-monetised transactions, but seeing development primarily as comprising factors of population wellbeing. The focus is on people, working to produce, to exchange goods and services and to achieve satisfactory standards of living, as demonstrated by the way they have access to those goods and services, and to health, employment and a living wage. It is also about their family lives and how all the other elements of welfare are produced and distributed across the population.

The impacts of development, or underdevelopment, can be summarised in a monetised way (in pounds or dollars), or by proxies such as capital assets (acres or

livestock owned) as is done in research on income and wealth. In New Zealand this provides us with valuable data on the wellbeing of the population, on all of its overall dimensions, on its sources and on its distribution, or its mal-distribution. In later chapters I will be citing directly from the major studies in this area but suffice to say here that Aotearoa's researchers face something of a paradox: it is probably easier to study wealth than income until World War II. Thereafter, when national accounts' systems saw the systematic collection of such data in surveys and censuses, and more recently through anonymised, aggregate tax records (Creedy *et al* 2017) income is easier to quantify.

Figure 4.1: The Impacts of Population and Development on Societal Organisation and Institutions in Settler-Societies



The classical way of studying wealth, which yields data back to the 1870s, is explained by Brian Easton and Margaret Galt (Easton 1983: 132-35, covering the post-war period; Galt 1985: Chapt 4, covering 1870-1939), who used administrative data such as probate records and estate duty information. As they both note, there are methodological problems, probably including, I would add, the introduction of 'censoring' biases (weighting results towards those who die younger, compounding, as Easton argues, sampling errors for deceased young rich), so these data are less appropriate for the most recent deaths. In any case, the abolition of inheritance and gift taxes in New Zealand has done away with this record. Recent specially designed surveys have, however, shed more light on wealth disparities in the last few decades (Scobie *et al* 2005; Cheung 2007). These were synthesised by Max Rashbrooke ((ed)

2013). Income data also have their own problems, both classificatory (eg earnings versus all sources) and accuracy for all sources; even tax data face problems of undeclared income.

For income, economists conventionally use custom-designed survey data that separate out earnings from other incomes. If one is looking at wellbeing, as is the emphasis here, all sources of income, including benefits are, however, of importance, as is the case for the data collected in censuses. Censuses also have the advantage of including a wide range of co-variates and, as they cover all of the population, eliminate sampling error problems inherent in sub-national research (Jackson 1998: Chapt 10; Martin 1998). The source of income is an issue that has magnified in the 21st century because of the shift to a ‘gig’ economy, much greater resort to contracting and the unreliability of commission earnings.

The New Zealand primary research base provides sufficient information on welfare that I am able to rely on other writers and make just a secondary analysis of this. It is the most sensitive of peopling and development questions: how development provides population wellbeing in inequitable or more equitable ways. Rashbrooke (2014) has given us a brief long-term history that identifies major themes, and above all the growing inequality as the country entered the new millennium (discussed later chapters). Thomas Piketty provides an invaluable international comparator on long-term trends and complements the classical research on inequality centred around Tony Atkinson (Piketty 2014: Atkinson 2014).

Piketty sets the hypotheses for my analysis of New Zealand trends, with two important observations, referred to earlier. The first is that, until the mid-19th century, capital and wealth, were primarily land-based – for Piketty land is capital and not merely a factor of production. Land gave way to profits from industrial investments other than farming, and equities. Secondly, he showed that wealth inequalities weakened after the start of the 20th century, reaching low levels after World War II, and then increased again at the end of the millennium.

Too often in development research and policy formulation, population is a neglected factor or is analysed very simplistically and its relations with development measured ineffectively, such as by correlating economic factors with demographic growth rates or labour force entry/exit ratios. But, the ‘demographic dividends’ paradigm, uses far more refined demographic variables, particularly age-structures (Bloom *et al* 2003, discussed later). This becomes perhaps most apparent for the aspects of society in Figure 4.1 that I have called ‘Welfare’ (Fig 4.1 and Appendix A).

As is also shown in Figure 4.1, it is important to recognise that the political system and constitutional arrangements are going through their own evolutions, the subject already of earlier chapters. These factors have a very significant impact on all of peopling, social and economic values, and social and economic development, but are conceptualised as exogenous in this book – that is ongoing and having an impact

on a society's trajectory but not central to my narrative. This is not to suggest that they hold no significance for the national story, so, where their role has immediate implications for population and development they will be identified, but will not be discussed in further detail except for those that need a little more elaboration. Seminal examples of this are: annexation in 1840; the individualisation of Māori land titles in the 1860s; the New Zealand Wars raging at that time; the Native Land Court and the continuing displacement of Māori until after 1910; the agrarian and other reforms of the Liberal Government in the period 1891-1911; the *Social Security Act* 1938; the dismantling of the welfare state (1984-1990s); the policy environment for responding to Britain's entry into the European Union; and the way New Zealand globalised from the 1980s.

In a similar vein, as was noted earlier, the natural environment has suffered the consequences of human footprints from the earliest Māori arrivals, to today. New Zealand has also faced the wrath of major natural disasters such as earthquakes (Figure 5.1), but like constitutional and political factors the environment must be seen here as an exogenous variable. The eco-system is a very powerful determinant of peopling and development trends – for example, the desirability of Aotearoa for Pākehā settlement – but, while it is omnipotent, it must remain outside the scope of this study.

Measuring Peopling and Development

To sum up the foregoing comments, it is easier to measure peopling than development. In part, as was noted above, this is because of the virtual self-definition of key demographic variables and because concepts and definitions have been standardised. But it is far more than that. Most basic demographic indices, computed using what are called 'conventional techniques', have been around for a long time, their properties have been exhaustively evaluated, and they have been tested thoroughly and standardised – some vital rates (fertility, mortality) since the 1830s, and modern actuarial life-table functions and their methodologies since the mid-19th century. Since then, the armoury has been extended into internationally standardised indicators used for aspects of social and economic demography that have emerged as important topics in the 20th century. Censuses have been taken in most if not all countries in the world and data collected also on sub-populations, plus on people in history. This provides a very detailed system on which to calibrate analyses: we really do know what is feasible and what are the biosocial and other limits for the phenomena under scrutiny under 'normal' circumstances. The population data, including computing population sizes and growth after analyses of census data quality have been undertaken, are of more than narrowly demographic concern as they provide the baselines for economic and social indices.

To add to this, the conventional population techniques have been enriched by a large number of what are termed ‘non-conventional techniques’, used to estimate vital (and now other) parameters where data are inadequate. These too have been exhaustively tested – many of the basic rates published each year by the United Nations Populations Division, and other agencies, are computed this way. Some of the techniques involve fitting raw data to model populations that are drawn from every available source and then estimating the parameters in which one is interested. In this book, these methods are mainly drawn on for estimates on Māori vital rates and life table values in the 19th and early 20th century, and to adjust directly computed rates up to 1936 and 1945. For Pākehā these techniques are turned to only for the early Victorian period, but after that time some data transformations are made to provide conventional indices for Pākehā historical rates. This issue will be returned to in Chapter 7.

Earlier chapters have made reference to the summary conventional indicator of development, GDP. It is a measure constructed by converting into monetary values the factors of production and exchange, goods and services. As a result, this statistical orthodoxy reifies the factor of monetisation by reinforcing the perception that the target of development is financial growth, either as a stand-alone goal or a proxy for more fundamental aspects of economic change. Variables that measure money values or transform other factors into monetised indices become the conventional tools for all evaluation and planning, sometimes in ways that become dysfunctional and counter-productive, particularly as they have penetrated both private and public sector ‘managerialism’. For example, science journalist Jenny Nicholls (2017) cites, with disapprobation, a recently released official document setting out the criteria by which to measure the impact of this scientific research. The unit of reference it selects is ‘money’, the ‘most pervasive common unit of value’ in current society¹⁰. So ‘pervasive’ is this perspective that politicians, officials, businesspeople and others see ‘the bottom line [of accounts’ statements]’ as the criterion for success, not the effectiveness of policies or strategies.

For the researcher analysing a wide sweep of history, this emphasis on monetised values brings them face-to face with a real measurement flaw: the need to peg indices to a wildly fluctuating variable as their point of reference. Of course, the science of economics pays a great deal of attention to measurement issues and diligently attempts to overcome the inherent instability of their raw data, but, to a layperson, this seems a somewhat unrewarding task. This is because the raw data for money variables are unreliable, even in highly monetised economies, and even where black economies are of minimal importance. Not only do purchasing power and rates of exchange swing wildly almost from week to week, especially in globalised economies, but so too do the time-bound pressures to buy some goods, or perceptions about what are basic needs, or about what items will be in high demand as

discretionary expenditures. For example, the New Zealand middle-class household of the 1950s would typically have made a visit to a tobacconist to buy cigarettes, or for the less well-off, the makings of ‘roll-your-owns’, as a part of the basic shopping basket. Today this is far less common, and other ‘middle-class’ people would look on this most disapprovingly¹¹. By contrast, the raw data on numbers of people and some of their tangible attributes are far more reliable¹². So too, are many of the variables economics monetises – trade flows, drawn on heavily in this book, would be a good example.

By contrast, people are tangibles with basic traits that are enduring. This, of course, immediately brings in demography as an integral component of measuring development. We know approximately how many people are born, and, in a low mortality population, we know that most will survive to reach retirement, although some (a minority) may emigrate, and perhaps be replaced by immigrants, or return home themselves. Overall, however, there is a relatively robust indication of how many persons in a birth cohort will reach key life-cycle stages up to old age 60-80 years hence. This is a function of population cohort momentum, which ultimately produces ‘numerical ageing’, changes in the numbers at various ages. We can be less certain, however, about the proportions of the total at those ages (structural ageing), simply because the reproductive intentions of young adults, and even worse of generations yet to be born, are far from clear. Nevertheless, these fluctuate far less severely than do economic cycles (Pool 2003; 2007a and b). Demographers are very concerned about the validity of longer-run forecasts, yet the cycles economists must deal with are far shorter, but at least they have the luxury of far longer durations than do financial forecasters. We might wonder how John Galbraith’s famous aphorism, ‘The only function of economic forecasting is to make astrology look respectable...’, would sound if it were applied to financial prediction. Yet, much of the discussion of future ageing, for example, is based on how needs might be financed as far out as 2050.

This seeming digression into the realms of ‘econo-epistemology’ serves a major purpose for this book. Much of policy, and much of its retrospection and search for models around which to evaluate policy initiatives, depends on financial analyses, subject to extreme impacts from exogenous factors; by contrast, as I have just argued, the people variables are far more constant in their structures. This reaches an extreme in fields like health where public discourse on policy needs is couched on costing measures being forecast at present, sometimes decades into the future, to meet the far more tangible factor of probable numeric ageing in years to come. We have some approximate idea about the demographically driven needs, with less certainty we might forecast technological breakthroughs, but the money side is subject to factors that no one can possibly predict, such as trends in GDP¹³.

Now let us retro-project this idea to the task on hand for my research – building an historical narrative. A person aged 30-34 years and working on a farm constitutes the same human entity whether in 1880 or 1980; they are both tangible entities. Of course, how they milked their cows, the number they have, or the amount of their income, and what it might buy them in terms of a ‘basket of goods’, or whether they went by horse and cart each month to a dry-goods store located in the closest hamlet or by car 50 km to a supermarket in a town, and what is actually in that basket, will all be very different. But we do know how many people there are in this and that category in 1880 and 1980.

There is another aspect to the ‘econo-epistemology’ referred to above which is highly apposite here. Viewed over the long-term, these movements – the accrual or use of capital, whether human, physical, including land, or financial – is driven by macro-level demands emanating from a population or society’s needs. The mix of needs for a population or society do not remain constant but change over time. In the 1890s investments in their plants were needed to help farmers increase the production of exportable commodities; in the 2000s a major challenge for the finance sector is how to build the savings regimes that will be needed to sustain an ageing population’s health and wellbeing. Consequently, the values and actions of people drive development, rather than some innate capacity of financial capital. To turn the telescope around, to claim, as Niall Fergusson (2008: 2-3) does, that ‘money is the root of most progress... financial innovation has been an indispensable factor in man’s advance...’ is simply a spurious assertion. It just does not appreciate how the processes of fundamental, sustainable and sustained development operate, as against bubbles that burst, and verge on the chimerical.

The Interactions of Peopling and Development

There is another theme that I will attempt to model as this story unfolds: the way in which population and development interrelationships are fashioned. In the first instance, this is an epistemological-methodological question, concerned with identifying appropriate conceptual and measurement tools with which to conduct a study. In many domains such instruments are fashioned and available, so can be taken down from the shelf, as it were, and applied to the analysis. While the focus is on generating ways of turning empirical data on New Zealand into an evidence-based story, it also raises general theoretical questions about how development has been, and should be, analysed.

There is another aspect to the population and development field: the ‘welfare and social sectors’ are typically seen as generating fiscal burdens that are borne by the productive economy. I explore an alternative proposition that they are really an integral part of the population and development story, that contributes to the productive as well as the social sectors of the economy as implied in recent

commentaries and formulated in frameworks identifying the processes that achieve these effects. This will be taken further by looking at the successive welfare systems experienced by Aotearoa (elaborated in Appendix A). These sectors' contributions to development were probably always significant, but this has been obscured by values-systems that rated welfare as, at best, a demand-side factor and necessary entitlement for those in need, and, at worst, supporting those who, through their own lack of responsibility have rendered themselves vulnerable.

This conceptual-methodological analysis underpins later substantive chapters that describe the dynamics of New Zealand's peopling and development trajectory, both its unique traits and those shared with other countries. This also allows an analysis of the timing and triggers of peopling and development events. In New Zealand's case, for example, four mega-events occurred: (i) early on there was contact due to happenstance, and (ii) annexation a political-constitutional event. But, in the country's historiographic discourse two others are given prominence and are normally viewed as being driven by 'economic' determinants: (iii) the introduction of freezing technology in the 1880s/90s, which inexorably altered New Zealand's farming industry and export trade, and (iv) the neo-liberal restructuring a century later in the 1980s/90s, which shifted the entire orientation of both the society and the economy. When one evaluates these sets of changes qualitatively, and contextualises them with those that preceded them, however, it is clear that they were not just singulate game-changing economic trends but were elements of a complex peopling and development trajectory. Most importantly for my argument here, each was preceded by major demographic transitions, involving both fertility and migration¹⁴, and by the onset of major shifts in national demography and sub-national population geography.

As I noted earlier in this book, given these sequences, it could be argued that demographic change generated these economic transformations, but this would be a simplistic reductionist assertion and would neglect intangibles such as those due to modifications in the values-systems. Because norms and values are impossible to quantify, I use the term intangibles here in a sense parallel to its usage in economics, as for assets that are not physical in nature (eg intellectual property, or a brand). Ideational structures are a society's intangibles but must be discussed here as they clearly underpin all demographic, economic and social systems; they sustain and often drive the tangibles, such as the macro-level factors of peopling and physical development that are the focus of this book.

The interplay between the ideational system, and peopling and development becomes even more complex in a bi-cultural or multi-cultural state, which term describes all 21st century Anglo settler-societies. They confront complex values choices – assimilate the newcomers, as these colonies attempted to do incompletely in the past with European-origin migrants, and thus subsume them completely, or

attempt to achieve some other sort of accommodation. Ethno-historian, Anne Salmond (2017), has carried our understanding of the importance of this issue onto a higher plane by a detailed exegesis of the way Māori and European ontologies differ and have confronted one another, and have been modified and integrated to a degree.

The interactions of population and development take their most precise form in the field of human capital. Its ‘deepening’ through education and training, and the health of the workforce, has long been accepted as an orthodox concept, but the growth of the labour force, the ‘widening’ of human capital (Akgun *et al* 2011)¹⁵, was neglected in conventional economics, even sloughed off with the comfortable notion that supply is equal to demand (Stiglitz 2003: 35; see also Appendix A). This clearly a-demographic formulation has effectively suppressed two important elements of economic analysis. The first is obviously a problem of a demographic over-supply of labour, or any other disjunction between supply and demand, and thus unemployment (or hidden unemployment), a major issue in the Third World, but even among certain groups in Anglo settler-societies. There is a large group, mainly of young, who are not employed, nor in education, nor seeking work (often because it is not readily or locally available). They are excluded from statistics on unemployment because of not actively looking for jobs. By contrast, there can also be a shortfall of labour supply that can affect any sector – an issue arising out of structural population ageing and discussed in later chapters.

Recently there has been the emergence of a new framework that addresses population and development. This second element – noted above – is a new paradigm termed ‘*demographic dividends*’, so important for this book that it was first noted in Chapter 1. Its ideas underpin subsequent empirical chapters and will be returned to in the concluding one.

The basic idea of demographic dividends as set out by David Canning and Jaypee Sevilla is simple: that population-development interactions play out most forcefully in the effects of age-structural changes on the economy. There is a shift from high rates of youth dependency, to ageing, through the momentum effects of generations moving up the population age-pyramid. This transition is punctuated by a ‘window of opportunity’ when youth dependency has declined through fertility declines, but aged dependency not yet set in. As a result, there are disproportionate concentrations at working ages that generate the ‘demographic dividend’, provided that the economy is managed well. The mechanisms for the dividend are the labour force, human capital deepening, and their flow-on effects into household savings, and corporate and public investment (Bloom *et al* 2003; Malmberg and Lindh 2006; Pool 2007b; Pace and Ham-Chande (eds) 2016). The determinants of these shifts are, of course, the raw materials of the population side of the peopling and developing equation being elaborated in this book: shifts in the trends and patterns of reproduction and migration. Demographic dividend analyses are data hungry and

require relatively good computing resources, but data on age-composition are available, even historically, for most societies, and this has been true since the start of colonisation *circa* 1840 for Māori and just before for European New Zealanders. By charting changes in age-composition, even using simple indices such as demographic dependency ratios (Young + Old people/Working Age population)¹⁶, as against economic indicators, this model has shown that population changes have a major impact on development, including national incomes.

Throughout this book, welfare and the ‘welfare system’ will be far more broadly defined than is conventional. The rationale for this comes from both the ‘demographic dividends’ framework and from another new economic-demographic way of measuring population-economic development interactions, again first identified in Chapter 1, called *National Transfer Accounts (NTAs)*. NTAs look at both transfers from public and charitable sources, as is a norm in orthodox public sector accounting, and also exchanges within families (of cash, goods and services). Both of these paradigms raise the need to reconceptualise welfare as a factor of the economy. These new paradigms (discussed in Appendix A) show the seminal role of families in welfare transfers, often in surprising ways. Their contribution also forces the analyst to recognise that welfare is a component of the productive sectors of the economy, and not just a social, demand-side, sector. Alongside this has been the recognition by figures such as Joseph Stiglitz and Angus Deaton (2009, 2013) of health development as an element of productive sector growth.

The research results on NTAs demand a radical rethinking of peopling and development, and, in particular, about the role of welfare, both in its own right and also how it is integral to the remaining factors driving a society’s evolution (see last column, Figure 4.1). Their analytical power comes from the fact that, for the first time, it is possible to document the quantum nature, sources and directionality of flows for all support systems, wellbeing and income. Linked to this is an evaluation of the role of what, in the development decades, were called the social sectors, especially health now often called ‘health development’. The contribution of health to development may even comprise a critical role in driving the macro-economy. According to the distinguished Irish economist, Brendan Walsh (2017: 127), ‘It has been argued that the value of increased life expectancy in the United States over the period 1900-1950 was as large as the growth of GDP per capita from all other sources’. In New Zealand health development has already been applied in the work of Derek Dow (1999), so is not too radical; in fact, health was an integral component of development in the classical models of Richard Nelson sixty years ago (1956), so has honourable antecedents.

In the New Zealand context, Bronwyn Labrum very usefully defined welfare far more broadly than is often the case, an issue which I will expand on by referring to a new paradigm coming out of population economics and not available to her when

she wrote (Stiglitz 2008; Deaton 2013; Labrum 2009: 391; *National Transfer Accounts, NTAs*, see Chapter 4). This allows me to extrapolate from her paper to argue that welfare is far more than a sector that simply dispenses benefits or services to the sick and needy but is an integral component of all of peopling and development. I will also take this issue back into the pre-colonial era. In this book's Appendix A, I outline the more technical aspects of this issue and trace New Zealand's welfare history.

To conclude, the approach in this book fits closely with the argument of economic demographer Diane Macunovich (2002: ix), of the Richard Easterlin school,

‘Sometimes we lose sight of the fact that an economy is just people – working, playing, eating, sleeping, loving, learning and dying – because our tendency is to focus on mergers, acquisitions, IPOs, dotcoms and the stock market... An economy is ultimately a mechanism for satisfying the wants of a population and its performance in the long run will be a direct function of that population...its size and composition... Perhaps demographic change tends to be omitted from economic models because it is so ubiquitous: we take it for granted’.

Population and development as analysed here are each determined by, and intimately involve, people, their numbers, characteristics and values. To paraphrase the Māori phrase, the most important thing in the world is people: ‘He Tangata, He Tangata, He Tangata’ – ‘it is the people, the people, the people’.

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¹ A technical term first coined by Jeffrey Williamson but now used far more widely denoting neo-liberal ideology as applied to development policy (see Bloom *et al* 2003).

² Recently, the World Bank has played an instrumental role in a study of population policies published by one of their ex-staffers: May's book (2012) is a useful summary of the field as perceived conventionally, but, as should be clear in this chapter, the domain is far wider, and requires new and different approaches. A failure to recognize the inter-connectedness of development sectors, and of their links to population is clear in the way that the United Nations' Millennium Development Goals were silo-ed and became the prerogative of the different agencies, with the World Bank and WHO allocated those with highest profile. Functionally, this segregated the alleviation of poverty from health (Pool *et al* 2007).

³ These comments, and much of this chapter, are based on evaluations I carried out across Asia and Africa, and in a global draft synthesis I prepared for the United Nations (UNFPA 1989).

⁴ Even in the past, many development indicators have simultaneously been demographic indices, such as life expectancy, fertility rates, and population growth rates. Rather, it is an argument that the 'level' these demographic indicators have reached has tended to be seen as either arising out of at that development, or constraining it, not also, as proposed in this book, contributing to it.

⁵ 2002. Banking the "demographic dividend". How population dynamics can affect economic growth. Conclusions emerging from the RAND Population Matters Project 'The Demographic Dividend: A New Perspective on the Economic Consequences of Population Change'. An early iteration can be seen in D.E. Bloom and R.D. Freeman (1988) Economic Development and the Timing and Components of Population Growth. *Journal of Policy Modelling*. 10 (1): 58-81.

⁶ To reiterate what was said in Chapt 1, f.n.2 (see also f.n.6 below), in demography sex (the biological situation) typically interacts with gender (the behavioural dimension) in ways that cannot be disentangled, and thus I use the terms interchangeably.

⁷ This is based on my own observation and evaluation of their field work, near Chiang Mai.

⁸ Kwame Appiah (2018: 16-17) cites feminist theory, '...we distinguish now between sex (the biological situation) and gender (the whole set of ideas about what women and men will be like and about how they should behave)'. Demography, of course, must deal with both, often simultaneously – for example, maternity is the biology of conception, gestation and parturition, all of which are also mitigated by social factors determining the likelihood of intercourse, risks of conception and the viability of the pregnancy; childrearing is even more a mix of sex and gender.

⁹ Paul Krugman (2015) even questions whether some level of government debt is a bad thing.

¹⁰ Jenny Nicholls (2017), in a popular monthly magazine, citing from a recently released document authored by 'The New Zealand Government' (Ministry of Business, Innovation and Enterprise (a major funder of applied science and technology). It prescribes what is apparently the official view on 'the concept of impact as it relates to the science system'.

¹¹ In the gentle Irish film, '*Older than Ireland*', on centenarians (circulating 2019), one of the women, who is well-dressed, lights a cigarette and buys more, producing shocks among the cinema's patrons.

¹² This comment is based on field work I have conducted, in New Zealand, Canada, and different countries in West Africa, in which both monetised and non-monetised variables were collected.

¹³ This issue was brought home to me when developing indices by which to study hospitalisations. To measure efficiency over time, we used life-table measures based on 'Days-stay', which in 1981 was essentially the same factor as in 2010, whereas the costs of the interventions, procedures and 'hotel' expenditures were very different (Pool *et al* 2009).

¹⁴ Even contact, which involved the movements of people; as will be seen in later chapters, annexation was preceded by high fertility among the few Pākehā women in New Zealand, and was provoked, in part, by the impending arrival of significant numbers of Wakefield settlement colonists (Chapter 1).

¹⁵ I am very grateful to my colleague Jacques Poot for this important insight (see Akgun *et al* 2011: 1209).

¹⁶ They would not meet modern standards of accuracy, but the methods I will apply here dampen down their error properties by using cumulative data: eg children versus adults.

PART TWO:
Aotearoa New Zealand
1769–2020:
An Overview

Chapter Five – Aotearoa New Zealand: Its Voyage

Aotearoa New Zealand: ‘Last, Loneliest, Most Loyal’

New Zealand Literary Figure, Eric McCormick, in Keith Sinclair (ed)
Distance Looks Our Way (1961).

Because of its size and location, out in the Pacific part way between Australia and Chile, New Zealand too frequently suffers the indignity of being left off world maps, or of having the publisher obscure it with the key to their map, or, even worse still, being mistaken as South African or Australian¹. By contrast, Aotearoa was probably lucky that its colonial story never made the Saturday ‘cowboys and Indians’ movie circuit. It was seen, more or less accurately, as a convict-free Australia, and, somewhat less exactly, as a sort of tranquil, but warmer, southern hemisphere Canada. Certainly, it lacked the allure, wealth and adventure of South Africa, ‘Rhodesia’ or Kenya, territories that, back in the metropole, became almost the poster children of ‘white’ lifestyles and privilege in Anglo settler-colonies. Australia probably came second after ‘Africa’ as an exciting destination, but, somewhat disadvantageously, as it was on the other side of the globe. New Zealand was even further, at the end of ‘The longest Emigrant Route in the World’ (Millen 1984: Chapter 1). In Chapter 6, however, I show empirically that Aotearoa was the most British of the settler-societies. Together these attributes fit well with Eric McCormick’s sobriquet (1961) – it was well down the imperial pecking-order, largely forgotten or ignored, yet, at least until this relationship was ruffled in the 1970s, steadfastly pro-British.

The unflagging loyalty of Aotearoa also brought rewards to ‘Mother England’ itself. By comparison with the more glamorous domains of empire such as India or some African colonies, New Zealand caused Westminster few major headaches, even as the Dominion reluctantly slid out of the nest in 1947. The wars against Māori had some impact in England, although British concerns about the New Zealand campaigns of the 1860s, seem to have been oblivious to the fact that their military significance was more than local: ‘In proportion to New Zealand’s population at the time, they were large to scale – some 18,000 troops were mobilized for the biggest campaign’ (Belich 1986: 15). By comparison, in the 1873-74 Anglo-Ashanti War, there were 2,500 British troops plus some West Indians and Africans. But, being closer to England, those campaigns had embedded journalists, like Henry Morton Stanley, to bring the news ‘quickly’ to a British public eager for imperial triumphs. Instead of substantive fears, anxiety in Whitehall about New Zealand’s wars was more mundane, centring on the costs to British taxpayers.

The Anglo-Māori wars were the most manifest markers of what has been New Zealand’s strongest perpetuating theme in nation-building – relations between settlers and the Indigenous people. The cultural tensions generated by this issue recur in all

periods covered by this book. Sometimes the theme is more subterranean, as was true in the years 1920-39 (Chapter 15); at other times, as in the 1860s, at least in the North Island, they dominated all dimensions of the country's demographic, economic, political and social life; I say at least in the North Island, because the South Island had its own preoccupations with wool and gold in this period and the country thus seems to have been almost two separate entities. In different ways and in different periods, Australia and Canada also share this theme, whereas in the United States it becomes secondary to Black-White relations, and today perhaps in third place because of the high profile of Hispanic-white interactions.

Settler-Māori interactions came after contact and particularly after formal colonisation. Nevertheless, while continuous contact from 1769 is the starting point for my charting of New Zealand's historical passage in Figure 5.1, we must not forget the much longer journey of Māori over almost 800 years, from first settlement until today. As noted earlier, their voyage, in Mason Durie's words (2005: viii, Table 1.1), whether relating to prehistory or history has been one of 'endurance'. Navigating across the vast, landless south Pacific Ocean demanded great skill. Polynesians were not timidly skirting around gulf to gulf, or hopping island to island, as Vikings, Arabs and the other great explorers of their day were doing (Pool 2015a: 12). Arriving in Aotearoa, the tropical Polynesians had to acclimatise themselves, their way of life and their crops to a mid-temperate latitude land mass. Then from 1769, when the story I am telling commences, Māori had to 'acclimatise' once again but this time quickly and to new immigrants – the settlers.

Historically, and even in this post-millennium epoch, no country's voyage will be free of storms. Over the last quarter of a millennium, the Anglo settler-societies, despite being members of the rich nations' club, have passed through both relatively turbulent and more stable periods. This chapter describes the voyage – the ups and the downs of New Zealand – one of these settler-societies, starting with continuous contact and colonisation.

Later chapters will focus on Aotearoa's peopling and development but the present one identifies key events that contextualise these demographic, economic and social changes – be they short-run shocks and booms, or game-changing occurrences, or enduring trends. The passage that New Zealand has travelled since 1769 is compressed into Figure 5.1, from which three eras (1769-1880s; 1880s to 1970s; since 1970) have been identified as a framework for all the later chapters (Chapter 7ff.).

Events Forging a Settler-Society

In Figure 5.1 key events are identified, but the diagram is not intended as a comprehensive timeline of everything of importance that has ever happened in New Zealand since Cook's voyages. It is selective, focusing on those events most germane to peopling and development – or that were exogenous forces that impinged on the story being told here. Thus, it does not record what could be rated as New Zealand's two worst tragedies, but neither of which occurred in New Zealand itself: the burning of the wooden sailing ship *Cospatrick* (Chapter 6) off the Cape of Good Hope (1874) with the loss of 470 lives, and the Mt Erebus plane crash in the Antarctic (1979, 257 lost). It cannot hope to capture all of New Zealand's history, so many events, even major ones, are missing, or merely skeletal details shown. For example, Māori land loss can be noted (bottom panel, Fig 5.1) as an empirical fact, but the emotional ramifications of dispossession cannot be shown there. Instead, where appropriate, it will be elaborated in the text.

Figure 5.1 does not portray what are three fundamental phenomena. First, except in passing it cannot refer to the individual men and women who were affected by, or who launched, these events – Captain Cook is one exception simply because his arrival is a date marker. Secondly, Figure 5.1 does not cover the age and gender dimensions of the populations living in Aotearoa, yet these factors crosscut all others. In reality, as I will discuss later in this chapter, the socio-cultural factor of gender is an all-pervasive one in this book. Moreover, its adjunct biosocial phenomenon of sex is fundamental to all demographic analysis, in more than the core biosocial demographic factors such as birth and death, but also in the more social analyses such as on labour force and family demography (see Chapter 4, f.n.s 4 & 6). In Figure 5.1, there is an exception to the absence of age-sex variables: the game-changing legislation giving votes to women in 1893, making New Zealand the first nation-state to introduce universal franchise. Thirdly, the environment is a key factor in peopling and development, as it both underlies and overlays every aspect of New Zealand's history. It also is an omnipresent component of the society's values systems in manifold ways. Yet, it will be evident that Figure 5.1 graphs only its more violent manifestations. In various chapters it is referred to where it arises as an issue but is not systematically treated. Its absence does not, however, signify a lack of importance. This lacuna arises because the eco-system is comprised of a diffused and complex set of factors, requiring a dedicated three-way analysis of peopling, development and the environment, something beyond the scope of my work.

Thus, the objective of Figure 5.1 must remain more modest: to identify the different sorts of events and factors that have directly played key roles in, or contextualised, New Zealand's population and development over the last quarter millennium. Together they represent, '...long-run trends and short-run perturbations'

– to borrow an apposite phrase from Alistair Woodward and Tony Blakely describing their book (2014: 205). Whether endogenous to the main themes, or exogenous, these ‘long-term trends and short-run perturbations’ fall into three categories:

- (i) **Shocks**, natural disasters, external and internal wars involving New Zealand, and other short-run but battering events, such as commodity booms;
- (ii) **Game-changers**, evolving over a longer period, which shifted Aotearoa in a new or different direction;
- (iii) **Enduring Determinants and Values**, abbreviated here to ‘Enduring Trends’, which can continue across different eras.

The various ‘**shocks**’ recorded in Figure 5.1 include natural disasters and wars, domestic and external, plus the ‘booms’ of one sort and another, typically in the extractive industrial sector. Nature plays a significant role, as New Zealand is geologically in the Pacific ‘Ring of Fire’, so has numerous active or recently dormant volcanoes. New Zealand is also located on a number of major fault lines so earthquakes are common, but often occur in regions with low population densities and thus cause limited loss of life even for large quakes.

The wars noted in Figure 5.1 were at first domestic: inter-tribal in the pre-colonial period, then the Crown against Māori after colonisation. The latter involved large inflows of imperial troops, but had finished by the early 1870s, except for later heavy-handed policing actions. By contrast, the major and minor wars of the 20th century, to some of which New Zealand sent disproportionately large contingents, were all external. Deaths due to violence must include the Christchurch Mosque shootings of March 2019.

Other ‘shocks’ came from commodity booms, of which the gold rushes of the 1860s are a prime example, eventually petering out later in the 19th century. After this, New Zealand was never subject to the dominance of mining that, for example, drove Johannesburg, or was as important as it is in the other Anglo settler societies. Perhaps more phenomenal, but far more short-lived, was Aotearoa’s surge in wool sales in 1950-51 during the Korean War that produced a spike in GDP. Anecdotally, sheep farmers drove their ‘Rolls Royce’s out to their paddocks to pick wool tufts from barbed wire fences (see below, pastoralism).

Secondly, identified in Figure 5.1 are longer lasting, sometimes very profound ‘shocks’, that I have called ‘**game-changers**’, which fundamentally shifted the direction of all demographic, economic, political and social trends. Cook’s voyages are obvious early examples. Along with his crew’s introduction of diseases², came crops and animals, particularly pigs, feral varieties of which are still called ‘Captain Cookers’, and potatoes, which totally and quickly altered the horticultural systems of Aotearoa.

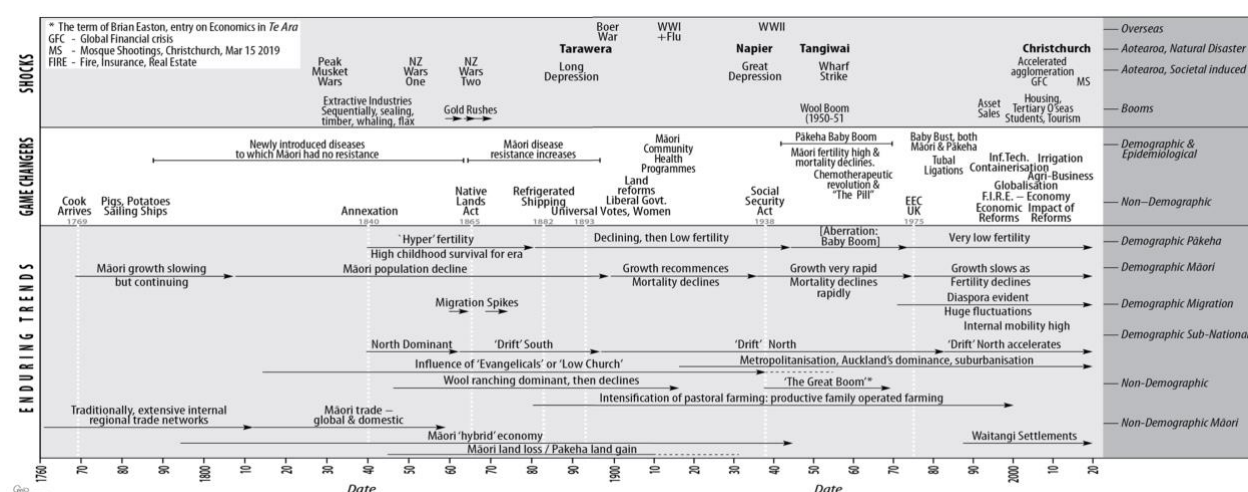
THE PEOPLING AND DEVELOPMENT OF AOTEAROA NEW ZEALAND

The eponymous Baby Boom was a demographic shock, starting in 1943 but really getting underway in 1947 and ending about 1973. It has had – and will continue to have – long-term significance, demographically, economically and socially.

Finally, Figure 5.1's lowest panel lists '*enduring trends*', lasting over longer durations and having impacts fundamental to the country's population and development. Their significance lies not just in their manifest effects on Aotearoa's demography, economy and society, but they are also typically sustained by deep-seated underlying values systems. As, by definition, these span two or more eras.

A first enduring trend, going back to before 1800, but persisting as late as the Great Depression of the 1930s, and locally perhaps after World War II, was the development by Māori of a 'hybrid economy' (Figure 5.1), one in which there is both market and non-market production³. In this book, I will use the term to refer to a mix of household production with bartering exchanges, and monetisation as these unfolded after about 1790. The idea was implied in the work of Raymond Firth (1959, first published 1929 with a different title), who integrated anthropological insights into economics, thus valorising the role of social organisation in production more than does conventional economics. More recently, Jon Altman and his colleagues have extended this concept. They argue that 21st century Australian Aboriginal hybrid economies have contributed to their material wellbeing as effectively as the more monetised activities studied by conventional economics (Russell nd.; Altman and May 2011; Gregory 2016)⁴.

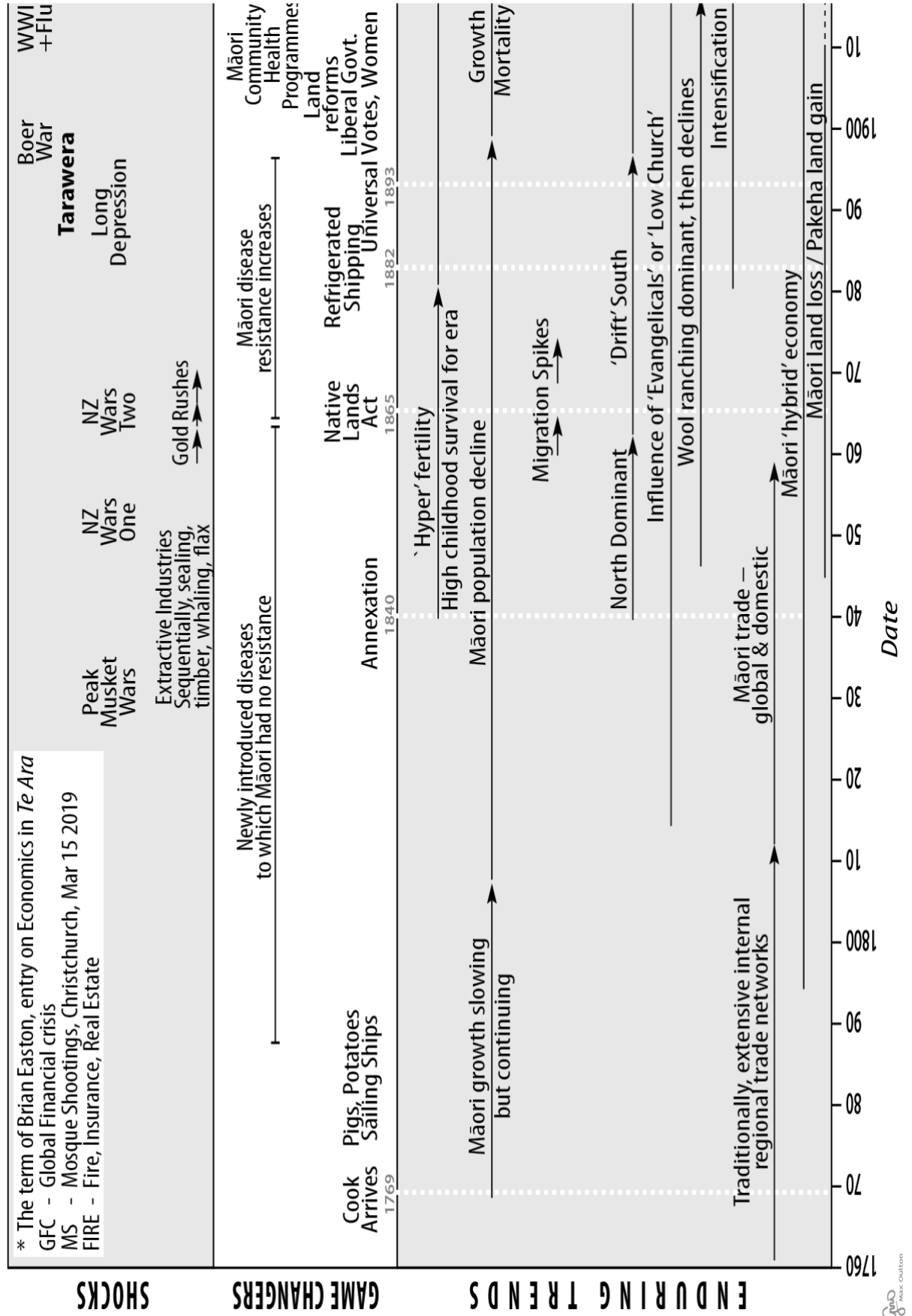
Figure 5.1: Events and Factors Contextualising, or Contributing to, Aotearoa New Zealand's Peopling and Development 1760-2020 (Before onset of Coronavirus Pandemic) (Compiled by the Author)

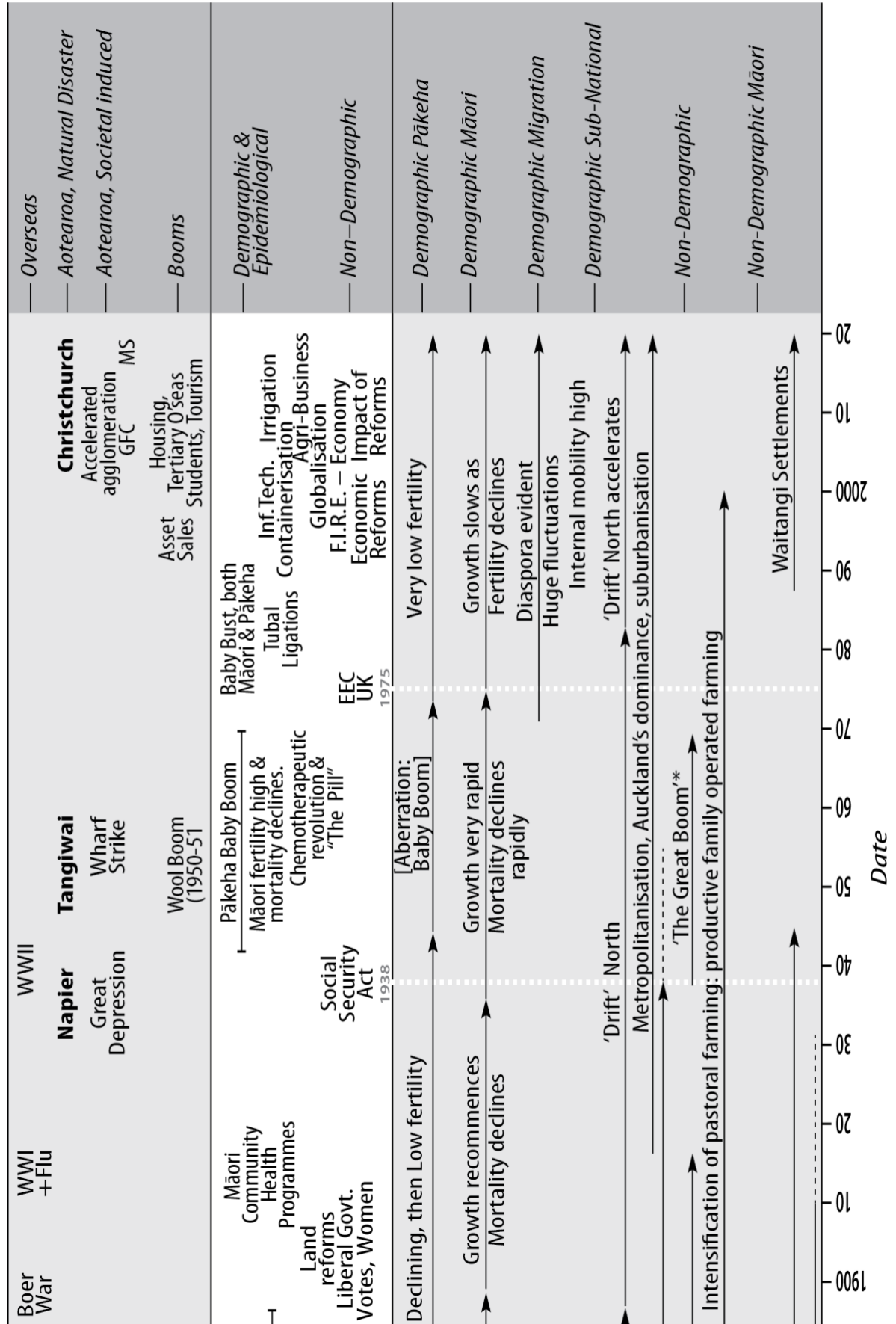


Enlarged version of Figure 5.1 follows next two pages.

The full Figure 5.1 in high resolution can be downloaded from

<https://hdl.handle.net/10289/17941>





A second example of an enduring values-system were the persistence of ‘Low Church’ Anglican ‘Evangelical’ social values (Figure 5.1). These had an impact on the process of colonisation, noted earlier, then endured in both their egalitarian and also socially conservative dimensions. Their survival was not as some sort of single corpus driving specific trends, but rather as low-key ideas influencing very diverse subsequent actions, each of which had some impact on Aotearoa’s long-term development. For example, in the midst of the New Zealand Wars (1867), Māori men were all given the franchise, before their Pākehā counterparts (1879), and Māori were allocated guaranteed seats in parliament. Belich (1986: 309) has a more *realpolitik*’ view of this⁵.

A philosophical bent favouring government intervention has long endured – although strongly rejected by neo-liberals – and perhaps has its roots in evangelical values. It was illustrated by the implementation of Vogel’s *Immigration and Public Works Act 1870*, producing the second of the ‘Migration Spikes’ in Figure 5.1. Avowedly healthy, law abiding, semi-skilled workers, especially farm labourers, and good, honest, married ‘yeomen’, were recruited and often assisted to migrate.

The most persistent example of a values-system and related development strategies affecting the national consciousness has been New Zealand’s obsession with pastoralism, the ‘protein industry’ (Belich 2001). As noted in Chapter Two, it was not unique to this country, but part of a land grab of immense proportions (Weaver 2006; for New Zealand by Tom Brooking and Eric Pawson (eds) 2011): everywhere, it required the displacement of the native owners, whose mixed-mode farming or nomadism was to yield to beef and sheep ranching, and sometimes to extensive grain production. It also occurred back in the metropole, with the Highland and Irish ‘clearances’ and the Anglo-Welsh ‘enclosures’ (Pool 2015a: *passim*). New Zealand’s pastoralism and extensive grain farming were propelled by a myth of ‘land-abundance’, possible only if Māori could be divested of their capital. Pastoralism was intensified from the 1880s, a shift facilitated through new technologies, plus real land reform legislation. Together, these factors created and cemented in New Zealand’s iconic regime of family-owned and operated farms. Grasslands’ farming, and its attendant values and myths, still remains highly significant in the New Zealand economy and national identity, although it has gone through many changes since c.1980.

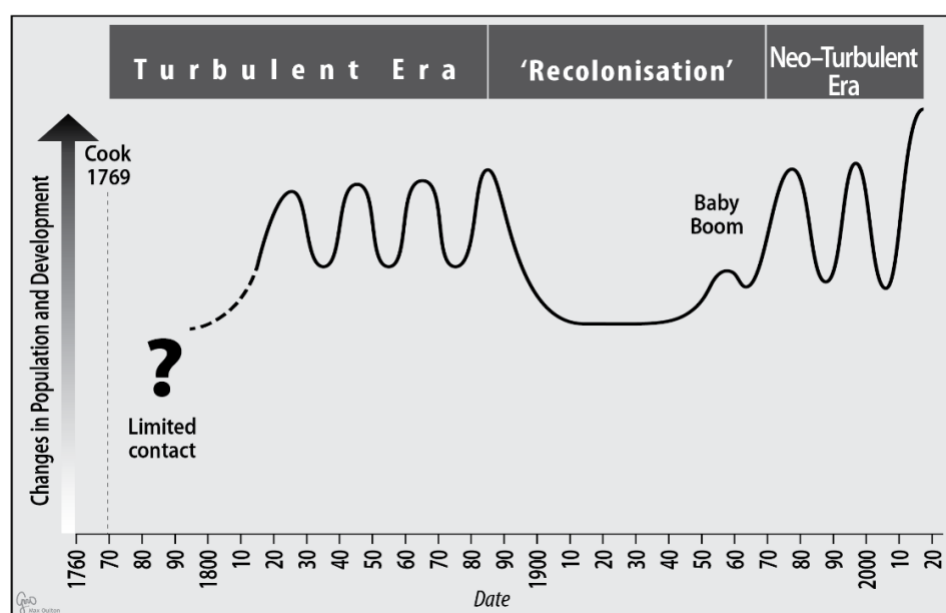
The Voyage: Wild Seas, Tedious Middle Passage, Stormy Last Leg⁶

The chronicling of the contexts to New Zealand’s peopling and development allows me to further divide the New Zealand voyage into three fairly distinct phases or eras: from 1769 to the 1880s; from the 1880s to the 1970s; and since. These are portrayed

schematically in Figure 5.2 and provide the framework for the remaining parts of this book. Some trends recur across two or three eras. In Chapter 6 for example I show that New Zealand's cultural demography manifested itself into three distinct cultural waves (Figures 6.1 and 6.2). While those waves overlap broadly with the three eras identified in Figure 5.2, the fit is imperfect in the shift from a rough initial passage to a calmer middle passage⁷.

The severe, violent, cultural conflict of the Turbulent Era, characterised by war and increased Māori deaths from introduced diseases, disenfranchisement, and impoverishment, more or less began to resolve around the 1880s, far from perfectly but with sufficient papering over of the cracks to allow the settlers to slide into the 'Recolonisation' Era. Many could now forget that the country was bi-cultural except in ephemeral contexts such as 'those great Māori blokes' in rugby teams. During Recolonisation the blinds were pulled down even more, only to be tweaked aside then stared through, with surprise, as Māori became a more apparent feature of Aotearoa's city life through their rapid post-World War II urbanisation.

Figure 5 2: Schematic Diagram of Eras covered in this Book⁸



Then, over a few short years after 1970, New Zealand's population began to diversify. This coincided with, and was the marker for, Aotearoa sailing into its stormy last leg – the Neo-Turbulent Era – that is still continuing. In 1980, over 90 percent of New Zealanders were still either Māori or Pākehā; by 2018 the equivalent proportion was around 70 percent⁹. Through the Baby Boom, fewer than 20 percent of the population had been born overseas, a high figure internationally but low by New Zealand historical standards. It shot up in the 1970s, both as a reflection of the 'Baby Bust' (when fertility rates began their dramatic fall) and increased international migration,

and in 2018 reached 27 percent, higher than Canada (23%), slightly below Australia (30%), but well above the United States and United Kingdom (respectively 14% and 8%)¹⁰. I summarise each era below, before more fully elaborating them in the remaining chapters.

Wild Seas: The Turbulent Era, From 1769 to 1880s/1890s

I have called the first period in Figure 5.2 the *Turbulent Era*, 1769-1880s/1890s, arguing that turmoil was an inherent characteristic of all cultural, demographic, economic, political and social trends. It was also the period in which both the inter-tribal and Anglo-Māori wars raged. As defined here, it is marginally longer than the period delineated by economist Phil Briggs (2003:5, 1769-1870). Both his demarcations of eras and those used here differ, however, from the seminal marker used in much of New Zealand's historiography, which tends to take the Treaty of Waitangi and formal British suzerainty in 1840 as the critical date. But, post-Treaty Aotearoa took several decades to become a full-scale settler-society. Briggs, attributing the notion of 'quarrying' to Brian Easton and Norman Thomson (1982), called this period 'Colonisation and the Quarrying of Resources'. which identifies, most appropriately, the exploitative, often wasteful, but significant role of the extractive industries that dominated the economic activities reported for that time. I include ranching in this category because it is a pre-industrial mode of production, but also because the burning off, particularly of native grasses, was highly destructive.

Through these extractive industries, European and other sojourner-exporters literally and metaphorically 'quarried' the fauna and flora (as well as minerals) sometimes almost to the point of endangering bio-species (e.g. the New Zealand fur seal). But colonisation *per se* was implemented only in the last 40 of the 120 years in the Turbulent area, and full *de facto* imperial control not really until the end of the period. It will be recalled that until the 1850s New Zealand was still more or less mono-culturally Māori.

Major shocks, game-changers and enduring trends in this period were identified above in Figure 5.1. If cross-examined most New Zealanders would recognise the inter-tribal (Musket) and New Zealand Wars as examples of turmoil in that period, perhaps the gold rushes, and possibly the impacts, including environmental, of other extractive industries. Most, however, would not realise the marked perturbational effects of almost all demographic, economic and social events unfolding at that time, in particular the far more long-lasting and comprehensive traumatic event of Māori land loss and population decline.

For much, but not all of this period, New Zealand was mono-culturally Māori who quickly adapted to 'paleo-globalisation', trading to Australia, California, and even beyond, in their own ships, and, for domestic production, adopting new crops (potatoes), animals (pigs) and technologies (shipbuilding). Between contact and

colonisation, native peoples such as Māori were also often beset by internal strife, frequently the continuation of conflicts whose genesis predated contact. But, as noted earlier, even more significant impacts on Māori mortality came from introduced diseases to which they had no immunity.

In Pākehā public perceptions of events over the entire period 1769-1880, first rank as factors that destabilised Aotearoa would probably be given to the ‘Musket’ or inter-tribal wars of the early 1800s to the late 1830s. In popular imagination they exceed the far longer lasting traumatic event of Māori land loss and population decline, and even the New Zealand Wars. There is no doubt that the New Zealand wars lasted a long time (20-25 years) and that loss of life was appalling, but (as I show in Chapter 8) they led to far fewer deaths than mortality due to introduced diseases. The campaigns were not the full-frontal campaigns such as in the Russian or Western Fronts in World War II, and, far worse, in World War I. They were spasmodic and irregular in occurrence. Furthermore, the eponymous muskets were inferior, unreliable weapons, particularly in the hands of the untrained (Crosby 1999: Appendix).

We would have had few systemically recorded, reliable details on these wars had Ron Crosby (1999) not done a superb forensic job collecting the available data on them, drawing on a wide range of information sources¹¹. Most earlier historical analyses have depended on the reports, primarily of the few missionaries, or writers who reconstructed that history second-hand later in the Victorian period. The accounts of missionaries there¹² were weighted towards showing the ‘barbarism of the natives’, and thus, by inference, the need for annexation to protect the natives from themselves. Conventional history is somewhat sceptical about their achievements, dubious that their interventions had stopped the wars, as they claimed (e.g. Belich 1996: Chapter 7). For me, the major ‘failing’ of the diarists was their focus on the negative aspects of Māori life, with limited reporting on what ordinary Māori were doing, producing, consuming, trading – and reproducing.

In fact, over the 110-20 years of this era, far more widespread turmoil came from 1840 to 1880 from all of the many factors associated with Māori displacement after colonisation. Moreover, Pākehā demographic trends and their economy also were both tumultuous at that time, adding hugely to the impression of turbulence and societal instability (Chapters 7-12). New Zealand had become ‘bi-cultural’ by 1880 but was perilously close to being mono-culturally Pākehā – Māori were there, but barely surviving and clustered in the more peripheral regions, and this trend was to be entrenched by 1910. This cultural shift was partly effected by two major colonial wars, the second of which (1860s), lasting 12 years, had very high fatality rates for Māori; Vincent O’Malley (2016) is surely correct to call this *The Great War for New Zealand*. The war was significant as it ‘turned the tide against Māori...’ Yet, in the end, Māori found that the most persistent and formidable enemies of all were the

“swamping tides”, the new British of New Zealand: the Pākehā’. Crown purchase, mainly in southern New Zealand, then land confiscation and sales in the north, achieved what ‘thousands of imperial troops and millions of imperial money...’ could not (Belich 1996: 272). They facilitated Pākehā ‘swamping’ Māori, which was the mechanism by which cultural transformation and the mega-displacement was realised.

The impacts of the turbulence in this period are often seen by Pākehā as something which occurred a long time ago and which have little direct relevance for present-day Aotearoa. Moreover, in a settler-society there will always be two narratives about the past. The memories of displacement, often negative, have not disappeared for Māori. Land loss, mainly realised by 1911, is still, understandably, a source of bitterness, mitigated, to a degree since the 1970s, by the work of the Waitangi Tribunal and the Office of Treaty Settlements. This process restores some of the capital essential for development; until then Māori development had had to rely on earned income or welfare (Cochrane and Pool 2017).

The dispossession of prime-estate New Zealand from Māori was not a determinant of the recolonisation period, but it was an important pre-condition. It was Pākehā colonists who gained that land-based capital and much of their own success, and thus New Zealand’s early development, relied on its efficient exploitation, so that many Pākehā are proud of those achievements¹³. Nevertheless, the spectre of Māori displacement remains in the Pākehā sub-conscious, as in other settler-societies: it is still the ‘ghost at the party’ that many Pākehā refuse to acknowledge, although it makes an appearance from time to time in the public discourse (see also Woodward and Blakely 2014: 95-97).

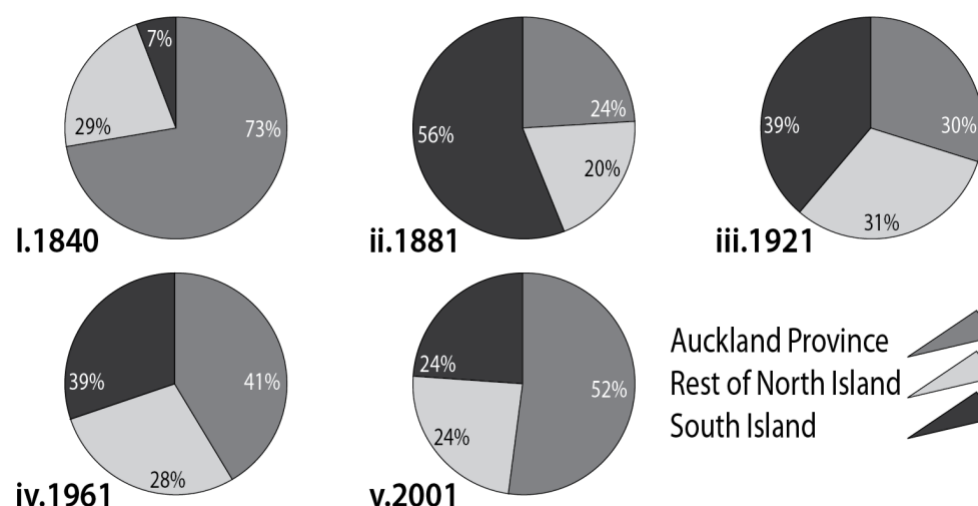
The turbulence that was both a determinant and a consequence of the cultural shift noted just above, was multi-dimensional for Māori and Pākehā. Beyond disease, death and deprivation, Māori population geography changed, but at a local level, not national, whereas Pākehā mobility (see below) was inter-regional.

Pākehā turbulence was also extreme and multi-faceted in this period. There were major migratory inflows, that, given the small settler population base, were massive in scale. Relatively, they were the most important in volume ever in the post-contact history, and also absolutely until over 100 years later at the end of the twentieth century. To add to super-growth, Pākehā levels of marital fertility were extremely high throughout this period, and child survivorship high for that era, until the late 1870s.

Moreover, as is shown in Figure 5.3, in this period there were major shifts in population geographical distribution affecting Pākehā in particular. In 1840, three-quarters of the settler and Māori populations combined were in the north. But, gold rushes, ‘ranching’ and extensive grain production booms, plus the fear of war in the north, saw a large-scale movement of Pākehā to the South Island. Geo-politically, from 1852 until 1876, New Zealand became virtually (but not legally) two countries,

comprised of two sets of Provinces, whose Legislatures controlled immigration, education and public works, and had uneasy relationships with the colonial Parliament. Keith Sinclair states (1959: 105) that ‘The South Island Provinces were allowed to advance with little regard for the interests of the country as a whole’.

Figure 5 3: Proportion (%) of the Total Population, Māori and Pākehā Combined, in Various Regions, Selected Years



Note: Recent data relate to areas that approximate the former Auckland Province

There was, however, another New Zealand, the North, wracked by war. The North Island’s Pākehā population clustered around secure settlements while the rest of the North Island was barely under colonial control. Even as late as the 1880s, parts of the central North Island were effectively outside the empire’s *de facto* bounds (Belich 1996: 249-61). By 1901, the demographic axis had shifted north again, and Auckland was once more the leading settlement.

Calmer Seas: Recolonisation, 1880s/90s–1970s

The second period in this book is what James Belich (2009: Chapter 6, esp 176-81) calls *Recolonisation* after its abiding ethos. It lasted from 1880s/1890s to the 1970s/1980s. Phil Briggs (2003) puts forward a series of sub-periods that fit closely to economic history, and which have some degree of overlap with the separate chapters into which the era is subdivided here. A difference is that he sees the period from 1966 as the start of the most ‘recent period’, to some degree echoing economic historian Gary Hawke (1985), who devotes a chapter to the pivotal significance of 1967–68 when Britain’s application to enter the Common Market was formally initiated.

As recolonisation gradually unfolded in the late nineteenth century, Pākehā entered a phase of relative stability, achieved through the implementation of more fundamental and enduring forms of development. In New Zealand this was based largely on efficient modes of grasslands farming and, to a far lesser degree, grain production; in other Anglo settler-states, the means were also pastoralism, but with grain farming on a larger scale. The other Anglo settler-societies also established heavy and textile industries. This trajectory of recolonisation carried itself forward further after World War II. The '50s and '60s were the decades when the Anglo-world went through a period of social and economic growth, with households becoming better and better-off. In the words of Michael King (2003: 237), New Zealand was 'the "dairy farm of the Empire".'

By 1910, it was evident that, for Māori, sheer survival as a people was guaranteed and their numbers were growing. Their survival probabilities and longevity improved gradually through to mid-century. However, recolonisation was largely a collective Pākehā experience. For James Belich (2001: 29), constituting 'a renewal and reshaping of the links between colony and metropolis after an earlier period of colonisation'. From the 1860s, New Zealand was demographically a European British domain – as was true in the other Anglo settler societies – and this dominant status continued and became even more compacted through much of the recolonisation era.

At first it may seem inexact to call recolonisation a stable era, whether for New Zealand or other Anglo nations. It was punctuated by shocks (Figure 5.1): the Boer War, two World Wars, other significant wars, major depressions (1880s; 1930s), the 'Baby Boom', the Korean War Wool Boom (Australasia, 1950-53), the 'Great/Long Boom' (1935-66 – Easton 2010), and, in Aotearoa's case, the rapid Māori rural exodus referred to earlier. Nevertheless, the underlying norms and values remained relatively stable, at least for Pākehā, who adhered to mores and ideas they saw as characterising the 'mother country'.

The shift from the first Turbulent Era into Recolonisation seems to have been associated with radical changes in normative values affecting Pākehā demography, specifically family formation¹⁴. This sort of intersection of demographic and other material changes and values-shifts recurred, in the 1970s and 1980s, at the end of recolonisation, and will be returned to later. This swing back to British reproductive regimes coincided with other values-shifts that Belich identifies (2001: 30):

'[R]obust and ruthless town- and camp-led progress was written out, steady and farm-led progress was written in... relations with Britain became more deferential...sub-nationalist...[a] permanently junior partnership... Before the 1880s New Zealand imported people, goods and money at rates

that were gargantuan in proportion to the numbers already here. After the 1880s... [growth] greatly diminished in rate and changed in kind.'

Recolonisation was ushered in by New Zealand undergoing radical alteration from pre-industrial modes of pastoralism (ranching for wool) to industrial modes (dairying and sheep meat production), facilitated by new technologies and genuine land reform. Recolonisation became underpinned economically by pastoralism.

What Figure 5.1 does not show is the underbelly of intensified pastoral development, effected during the recolonisation era – the profligate despoliation of large areas of the national estate. From the 1880s, the destructive extractive industries were no longer of great significance, but pastoral farming was also exploitative of the natural environment, by cutting the bush ('indigenous rainforest' in New Zealand English, *OED* 2010: 235) and firing it, in a way which was particularly profligate in this era.

Near the end of the recolonisation era, Pākehā indulged in the longest, highest and most intense Baby Boom in the Western Developed Countries (WDCs) in terms of timing (age at birth), and spacing (interval between births). Its duration exceeded the American by almost a decade, and its other attributes were more extreme (Sceats 1981; Pool 2007). The Baby Boom remains an enigma that I will explore later, an aberration in a long-term decline in fertility from the 1880s that continues today.

Pre-empting that discussion, in analysing the Baby Boom the question can be asked: was it a discrete short period or the aberrant dying days of recolonisation? To add to the problem, like the 'Musket Wars' its memory is often myth and misunderstanding of its dynamics and impacts and not empirical reality; to a degree (but in very different ways) they are phenomena dependent on branding rather than hard historiography. This Pākehā reproductive surge then generated an economic 'long-boom' (Easton 2010; Figure 6.1) that had elements of a 'sugar rush' (Authers 2018, in *Financial Times*), seldom leaving behind basic economic structures.

In the final years of recolonisation complex sets of changes were underway that would accelerate in the neo-turbulent period. While recolonisation had taken several decades to get underway fully, it unravelled very quickly, largely because of demographic shifts – in all of migration, fertility—in particular the abrupt end to the Baby Boom, known as the 'Baby Bust'—and in population geography. Geographical redistribution accompanied a shift in the industrial structure of the labour force.

Wild Seas Again: The Neo-Turbulent Period, From the 1970s

The many different events and factors occurring in New Zealand since 1970 are presented in the right-hand segments of Figure 5.1. As across the WDCs, this period is best known for its neo-liberal revolution, inspired by Reagan and Thatcher – New

Zealand joined in avidly. The term neo-liberal ‘denot[es] a modified form of [nineteenth century] liberalism tending to favour free market capitalism’ (*OED* 2010: 1190). Neo-liberalism is often seen, however, more as an ‘ideology and policy model that emphasizes the value of free market competition’ (Smith n.d.). It is important at this point to acknowledge, however, that the New Zealand economy of that time was impaired and thus needed interventions and restructuring¹⁵. Moreover, as I show later, the neo-liberal reforms had some positive impacts.

Once New Zealand embarked on this course, it undertook radical financial-economic restructuring, affecting management and employment protocols. New Zealand may have gone further along this path than did Anglo-America or Britain, and certainly went beyond the reforms undertaken in Australia (Dalziel 2002). In both Australia and New Zealand, the ‘anti-statism’ of this era (Castles 1993: xviii) and the erosion of the welfare state were challenges to the notions, which had served two countries well for almost a century, of a social wage and of full employment¹⁶. They ‘were virtually eliminated in New Zealand’ (Esping-Andersen 1999: 89). The neo-liberal reform movement failed above all to take account of peopling, of age-structural factors and the consequent cohort flows that will drive both policies and markets into the foreseeable future¹⁷. This is most vividly reflected in the national accounts, where 14 percent of GDP was transacted in the Finance, Insurance, Real Estate (FIRE) sector in 1986, but reached 25 percent in 2006; the community, social and personal services sector, which includes health and education rose also, from four to 12 percent of GDP.

The era did see one very important upside, essential for social harmony in a settler-society. The Waitangi Tribunal, through its rulings, the ministries involved (Office of Treaty Settlements), and ministers of all political leanings, moved to make reparations to Māori for the land and other losses in the period 1840-1910, and even beyond.

Transformation has, however, not been an absolutely universal feature of post-1970 life. Functionally, pastoral farming still continues to hold a highly significant place in New Zealand’s economy and national identity, even though it now employs a minute proportion of the labour force. Nevertheless, it too has gone through major mutations over recent decades, mainly through further intensification, and a geographic expansion to less humid parts of the east of the country, especially Canterbury. The farm workforce has also changed dramatically (Jackson 2013).

Aotearoa New Zealand: Gender¹⁸ in Peopling and Development

A cross-cutting factor – age-structure – was discussed earlier, both as a major determinant of peopling and development, and for its more technical connotations (demographic dividends). I now turn to three other factors that also crosscut all of

peopling and development: (i) gender, (ii) the environment and (iii) the fact that New Zealand seems to join in mega- demographic, social and economic trends sweeping other Western Developed Countries, or even the world as a whole.

Peopling, development and the events and trends that contextualise these, portrayed in Figures 5.1 and 5.2, have affected both women and men. Nevertheless, in the more social and economic dimensions of peopling and development, which are driven by both genders, too frequently the crucial role of women is grossly underreported. This seemingly obvious fact is often forgotten, ignored or even suppressed in historical analyses, in part because the records on which history must draw most heavily are weighted towards the actions of principal actors, who in much of the conventional documentation are seen as men.

Demography approaches this from a rather different perspective: because of its biosocial roots, its core areas must address sex trends and differentials. Composition by sex and age is a factor that will be covered in all subsequent analyses in later chapters, most typically in their explanatory analyses, as most population trends are affected by them. Age and sex are not specified in Figure 5.1, simply because they are omnipresent, inherently a factor in all events and trends represented there¹⁹.

Peopling and development are not just driven by men, although, because of the circumstances operating at various times, most of the visible actors in New Zealand's political/constitutional history were men. There were also very prominent female actors in the Aotearoa story. The list is very long, but, as examples, one thinks of the Māori women chiefs who signed the Treaty of Waitangi, or Kate Sheppard, who led the first successful national female suffrage campaign anywhere in the world. But my vote goes to the ordinary women of 1893. The *Electoral Act* was passed into law on September 19th, 1893, giving women six weeks to enrol for the November 28th election; 84% of all Pākehā women enrolled and 69% voted, as did approximately 1/3 of Māori women (Atkinson 2012: 4). Remember, that for many voters, this was no mean feat as it entailed a long walk or buggy ride to a distant polling booth.

Historical demography has neither heroes nor heroines, just ordinary people, producing and reproducing. Thus, except in passing, this narrative is not particularly interested in prominent people, whether women or men, but focuses on the population as it acts collectively, for some purposes dividing it by sex (biological) or gender (behavioural), or both (see Chapter 1, f.n.2). The real heroines in this narrative, were the anonymous wahine (women), who worked alongside men in Māori village productive activities, and then in seminal battles during the New Zealand Wars, stood beside them as they defied British sieges of pa (fortified villages)²⁰. New Zealand's development was also highly dependent on the Pākehā pioneer wives, who frequently had to assume control of family farms when their husbands were incapacitated or had gone off to the goldfields or become itinerants. It went beyond this. Women lodged

their own mining claims in the goldfields in the late 1860s, so made an impact even in the most male oriented of occupations. We can think about the milkmaids, who played a pivotal role in the birth of the dairy export industry until men took over – only, of course, when milking machines became common, and the work mechanised and less tedious. Development in the 1900s would have been impossible without the celibate women in the labour force, whom Melanie Nolan (2000: *passim*) documents. By confronting the prevailing ‘cult of domesticity’, they opened paths into the urban workforce²¹, both its skilled and unskilled sectors. In cultural development there were the kuia (old ladies) who re-vitalised Māori language through establishing immersion pre-schools and then schools. I stop here but could go on as the list is infinite.

It is impossible, however, to ignore the realities of gender differentials, particularly in the social organisation of work (Hyman 2014). This in turn has ramifications for all social organisation, and, in the Neo-Turbulent era has been a key determinant of significantly delayed childbearing: a historically unique phenomenon. By contrast, the most central factor of peopling, reproduction, is conditioned by the family lives women are building, plus contraception and abortion. Women have played the pivotal role in both of these, as early adopters and users, and as advocates in debates around them (Sceats 1981, 1988).

Aotearoa New Zealand: Peopling, Development and the Environment

The environment is an enduring trend, although the imprint of humans, not the least their effect on climate change, does alter its features. Its basic forms predate Māori arrival, and many of its characteristics will be there, gradually changing, forever. Its changes accelerated, however, too often negatively, with the arrival of waves of people.

Unlike transition models, there are no clear frameworks on population and the environment – in this sense, it is like population and development, omnipresent, its cardinal facts reiterated as aphorisms, yet still piecemeal and not systematically articulated into a theory that has then been investigated thoroughly (see Chapter 4).

For New Zealand, a thoughtful analysis of the issue can be found in an essay by Charles Crothers (1985). He links population and environment to enduring values systems, particularly those built around notions of economic progress. His study is country-specific, expressed with an appreciation of New Zealand’s particular eco-system.

Beyond this in New Zealand, there is widespread legitimate interest in population and the environment, as demonstrated by recent reports on the effects of climate change on commercial and residential properties in coastal and other low-lying areas, or on earthquake risks to buildings. Some commentators call for low levels of reproduction, but do not take into account the fact that New Zealand already

has below-replacement fertility, which will eventually result in Zero Population Growth (ZPG). Continuing replacement levels of fertility is also an ideal policy goal by which to achieve ZPG but also stable old-age demographic structures, as the per cents at child ages remain consistent. New Zealand is very fortunate in this regard as it has been at replacement since the late 1970s, but, if migratory churning (defined above) of the levels seen recently were to continue then this would affect any attempt to diminish age-structural fluctuations that render planning difficult. As France has shown, using family policies to help couples have around 2.0 children on average has given them a far more balanced age-composition, by comparison with Italy, which went through a radical decrease in fertility to well below replacement (Pool 2010: Fig. 1).

Many commentaries about population pressures on resources, in New Zealand and elsewhere, do not distinguish between increasing rates of ‘social density’ (intensity of use of land and natural resources by people) as against New Zealand’s low levels of ‘physical population density’ (number of people per km squared). Instead, social density levels are increasingly affecting the environment, in some cases dramatically (eg major walkways), as a result of easier access to favoured recreation zones and a rapidly growing international tourism industry. Aotearoa’s hallmark had always been that its low population would indicate a lack of stress on the New Zealand environment ... Closer examination shows, however, that this was true only to a limited extent’ (Crothers 1985: v 2, 170, 180-82). Exponentially increasing pressures on even the most remote areas because of ‘recreational use’ put a lie to this belief, if it were ever completely true. Moreover, social density is more than direct contact between people and nature but may be indirect as in the increasing use of satellite-based communications.

Each of New Zealand’s peopling waves imported their own values about the environment. Indeed, population pressures were often a ‘push’ factor in the decision to migrate; if they knew about it, New Zealand’s low density was a ‘pull’ factor. Too often, technological progress and economic growth had gone hand in hand with environmental degradation, but that was seen as a price worth paying for development²². Assaults on natural resources were a pre-condition to many advances in industrialisation in manufacturing sectors, while the rapid urbanisation of the 19th century, a concomitant to the ‘settler revolution (Chapter 1), and subsequent metropolitanisation have had major impacts on the environment.

For newly arriving settlers to Aotearoa the new land was seen as having a limitless abundance. Once Cook and his crews had reported on New Zealand, bountifulness, especially as marketed by settlement boosters, was the perception that drew would-be settlers to its shores. All post-contact peopling waves have held precepts about the New Zealand eco-system and have made an imprint on it. Pākehā have, however, had the greatest impact as they systematically tried to alter Aotearoa

in the name of progress, or to make it more like the ‘mother country’, by importing British and other fauna and flora, often with dire consequences, and by firing its native bush.

There was another factor of the early industrial revolution (until the 1860s) that had an immediate impact on New Zealand even before many settlers had arrived: logging. When Geoffrey Chaucer’s 14th century pilgrims made their way along the Downs, they would have viewed large, wooded areas, belonging to nobles. But, as the Royal Navy expanded and demanded massive supplies of timber for hulks, masts and spars, these oak woods were brutally deforested. By the 18th century the navy was desperately importing supplies from the Baltic and Canada; then, from the 1790s, they turned their attention to New Zealand – first kahikatea (white pine) and later kauri (*agathis australis*), which were cut down profligately and with wanton disregard for sustainability. When shipbuilding turned to using iron, kauri deforestation still continued as it became an export commodity, in the process of which large areas of Northland and the Coromandel were further denuded (Swarbrick 2007).

Meanwhile, back in the metropole: ‘England’s green and pleasant land’ had almost become ‘England’s grimy and polluted land’, although a lack of coal and the agricultural revolution had saved swathes of southern England from being another ‘Black Country’. By the time that New Zealand was being colonised, much of the region, the wooded areas of Chaucer’s day, had become ‘capitalist farms’ (Shaw-Taylor 2005), but still the estates of the gentry. This was the farming system that the 19th century grain producing areas in New Zealand tried to emulate, but grain was a minor player as ‘wool was king’. The ovine pastoral system followed widely in Aotearoa came instead from the ranching of Scottish land from which Highland crofters had been brutally displaced in the clearances (Pool 2015a).

New Zealanders wrestle with a particular development factor that still enters popular discourse – although, ironically, is perhaps voiced more among people living in Europe or North America thinking of Aotearoa, than among New Zealanders. Aotearoa was, as I noted earlier, at the opposite end of the world – the farthest ‘White Dominion’ from the imperial capital – so distance has been a factor in nation-building. Distance’s effects have diminished over time, particularly as New Zealanders have shifted their gaze to Australia, Asia and North America. Nonetheless, it cannot be totally relegated to the benches as it still plays a role in New Zealand’s national ethos, today with the diaspora (some 20% of New Zealanders live overseas). The 1960 *University of Auckland’s Winter Lectures* were titled *Distance Looks Our Way* (Sinclair (ed) 1961). The most resonant line in the *Split Enz* song ‘Six months in a leaky boat’ is ‘Tyranny of distance’.

While distance is important as a backstory to New Zealand identity, to see it as a prime determinant of New Zealand’s human history, simplifies what is a far more complex reality. In many instances, New Zealanders have not only adopted new ideas

and new technologies, but sometimes have done so very quickly as a lead population. An example is the adoption of the Pill in the early 1960s, when New Zealand women and couples were in the forefront of acceptors – ahead of North Americans (Pool *et al* 2007: 196).

Distance has, however, not protected New Zealand from invasions of species that have had an effect on its ecology. This has been mainly through human imprint, but also by wind-borne carriage²³, normally of small fauna and flora, but, reputedly, as large as the Australian native bird, the white bellied sea eagle. But, most devastating have been the impacts on what was in New Zealand when Māori and subsequent settler waves arrived, and the effects on the ecology of the inflows of people, plants, animals, pathogens and material objects, including technology brought by people accidentally or by design. James Beattie *et al* (2015: 3-4) have argued that ‘Today’s globalized world bears enduring traces of the eco-cultural networks generated by the British Empire...[yet h]istorians of the British Empire have rarely acknowledged the importance of environmental factors in the creation, maintenance and eventual decline of imperial power’.

In the recolonial era the ‘bountiful New Zealand ideology’ still reigned, so there was no need, so it was felt, to curtail the ‘clearing of the bush’. Charles Crothers (1985: v 2, 170, 180-82) shows that ‘[a]lthough there were occasional shocks to this viewpoint, particularly as massive soil erosion spread in some areas, these were easily explained as anomalies arising from the wild, untamed nature of the environment, rather than reflecting deep-seated environmental limitations’. He says, ‘[B]y late Victorian times, amidst the buoyant confidence of imperial expansion, the wealth of New Zealand’s resources became its dominant environmental image. Under this cognitive framework exploitation of resources was thorough, persistent and wasteful, with little recognition of any need for restraint’²⁴. Aotearoa’s analogue of the ruthless ploughing of what became the ‘dust bowl, in America’s Midwest was the firing and clearing of the North Island’s regions of weak mudstone, hilly country noted for its intense local relief (Introductory Map 3). Whole hillsides went ‘down to the sea in slips’, as geographer Kenneth Cumberland’s was reporting as early as 1946 (Crothers 1985: v 2, 170, 179 fn 31; *Envirohistory NZ* 2012).

New Zealand’s Evolution: How It Fits Global Trends

The subsequent substantive chapters will elaborate on issues raised in the first five introductory ones. Looking at what can be postulated about New Zealand’s demographic experiences, it seems to fit major paradigms described in Chapter 4. If anything, Aotearoa tends to sit at the ‘edges of normal’, not as a divergent case but as a variant, such as for the exceptionally high fertility rates (for WDCs in that period) seen in the Pākehā Baby Boom. New Zealand has also been exposed to the various dimensions of a mobility transition²⁵: vast intercontinental and inter-country

migration flows, and intra-country and intra-city migration flows, including rural exoduses and, recently, urban exoduses. Against this, in the 19th century Māori did not fit these conventional models of transition, neither demographic nor epidemiological, but went through a regressive phase, with natural decrease and very high mortality. In the 20th century, by contrast, they followed delayed versions of the classical models. Internal mobility levels were probably always high, whereas international migration, and a diaspora was a very recent phenomenon (Pool 2015b; Bedford and Pool 2004).

From time to time in New Zealand's history it has been a relatively egalitarian society. It is illuminating to visit Melbourne or Buenos Aires where private land-based wealth at the start of the 20th century, often in the hands of absentee landlords, metropolitan-resident 'station'/property/hacienda-owners, was invested in art galleries, and other social and cultural institutions. There is simply no real equivalent in New Zealand, where instead land-based wealth was significantly redistributed by the Liberal's land reforms (Figure 5.1). Wealth fell instead into the hands of owner-operator farmers and their families; they owned large farms by many standards but much smaller than stations or haciendas.

At various times, different sets of shocks, game-changes, values and determinants of trends appear to have discretely coalesced. As is graphed in Figure 5.2, their correlation in time has been sufficient to be able to argue that New Zealand's post-1769 history has evolved through three relatively distinct eras, which overlap with, but are different from, the cultural-demographic phases noted earlier: 1769-1880s/1890s, from then until the 1970s and since the 1970s²⁶. Trends in peopling and development are determined by these events, singularly or in combination, yet they also mould these experiences into what becomes the distinguishing feature and even the pervasive ethos of each epoch. Working alongside constitutional changes, they are thus the midwives of what becomes a 'society', an 'Anglo' settler-colony that was transmuted into an independent state yet remained a member of a broader 'British' family sharing its collective values.

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¹ Captain Cook named Mount Taranaki (2,518 m) 'Egmont' after the Lord of the Admiralty, The Earl of Egmont. It is a symmetrical volcano (last eruption 1854), arising from a narrow coastal plain. Egmont's descendant was asked if he had ever seen it. He replied 'No', but that he did 'intend to visit South Africa sometime'. ('Display on Mt Taranaki', *Te Puke Ariki Museum*, New Plymouth). The air distance from New Zealand to the nearest point in Australia (2,200km) is not far short of flying from London to Moscow (2,500km).

² Cook's crews introduced sexually transmitted diseases, and probably a virulent form of tuberculosis. It was not until after 1790, however, that interactions with foreigners were sufficiently continuous and intense to allow increasing inflows of pathogens to which Māori had no resistance (Chapters 7 and 8).

³ See Chapt 7 ff.

⁴ They see Aboriginal development as involving three sectors that intersect (as in a Venn diagram) – the state, customary and market sectors – invoking government interventions that are often negative.

⁵ Belich takes a more realpolitik view. He suggests that this was because of the major role kupapa (Māori supporting the Crown) played in the 1860s wars. Colonists had needed them but ‘had never liked relying on them for help’ (Belich 1986: 309). With increased numbers to compensate for population growth, these parliamentary seats have come down until today. Many Māori see this as a way of protecting their minority rights – Māori can choose to vote in these electorates or in general electorates. Māori have represented Māori and general seats; at different elections, James Carroll, a distinguished Minister, represented both. Numerous Māori in parliament today represent general seats, or, under MMP, are List MPs.

⁶ With acknowledgement to Brian Easton and the title of his book *In Stormy Seas: The Postwar New Zealand Economy* (1997), on which I draw many times in this book.

⁷ Appendix A to this book provides an overview of the history of different welfare regimes from 1769 to the present. Again, these phases overlap with, but do not perfectly fit with the phases graphed schematically in Figure 5.2.

⁸ This threefold division comes from my research in The Royal Society of New Zealand’s Marsden Research Fund Programme, National Institute of Demographic and Economic Research, University of Waikato, Hamilton, New Zealand, led by Natalie Jackson: *The Sub-National Mechanisms of the Ending of Population Growth: Towards a Theory of Depopulation: Tai Timu Tangata – Taihoa e?*. See Pool 2017.

⁹ As noted earlier the total response strategy in New Zealand censuses – accepting up to six ethnicities per respondent, with no prioritising, prevents a more meaningful ‘headcount’ figure being given. In 2018 Māori and ‘European’ together accounted for 77% of all responses, of whom around 12% are counted in both groups.

¹⁰ Latest census round.

¹¹ In later Chapters, as I will explain, I use his study as a data base to analyse the Wars’ periodicity and geographic distribution (e.g. Pool 2015a: Table s 8.1 and 8.2). Crosby also reviewed and commented on my drafts, so I have a major debt of gratitude to him. He covers the period from 1806, but I used 1815.

¹² There were very few Pākehā until the 1830s and probably no missionary diarists ever accompanied taua; Chapter 11. The most comprehensive source, collating first-hand accounts is *British Parliamentary Papers...* (1838).

¹³ Many settlers gaining land in this way worked hard and successfully at developing it.

¹⁴ When women and couples enter conjugal unions, have babies, stop bearing children and the means by which this is achieved (e.g. the nuptiality valve referred to earlier, and/or contraception), and when and how the conjugal union terminates.

¹⁵ The Business Roundtable, the pressure group for neoliberalism in New Zealand, argued that welfare was more efficient in Victorian New Zealand than under the welfare state, and commissioned David Thomson (1998) to research this idea. He concluded the opposite and, by mutual agreement with the Roundtable, published without their support. His comments (*passim*) on the re-emergence of Victorian liberalism are highly apposite and will be cited later.

¹⁶ Critics fairly pointed out that these notions were based on the idea of a male breadwinner and his wife and family. When first formulated, circa 1900, these were very radical concepts for the day. But, by eroding the legislation and its underlying ethos, the assault was not on their sexism – which could be amended to meet end of 20th century standards. Instead, it was their notions of fairness – that every worker deserved a fair wage – which were anathema to the neoliberals.

¹⁷ Much labour market modeling uses very crude data – e.g. those entering the market and those leaving. This obscures the complexities of the labour force’s own age structure and the consequent cohort flows.

¹⁸ For practical reasons, I do not specifically discuss LGBT populations. While Homosexual Law Reform dates from 1986, the more comprehensive legislation for LGBT rights (same-sex marriage and rights to adopt) dates only from 2013. New Zealand is legislatively advanced, but its data systems have not caught up with social progress. Same-sex unions were included in the nationwide probability survey (1995), *NZ Women: Fertility, Family Employment*, which I directed, but numbers reporting this were very low.

¹⁹ To make this book readable, much of the tabular and graphical material is not presented by details of sex and age, although reference will be made to these two composition effects when explaining trends.

²⁰ At the Waikato battle of Orakau (February 1864), one of the more decisive battles in the second New Zealand Wars, there was a suggestion that the women be allowed to leave the pa. Te Paerata's daughter Ahumai replied: 'Ki te mate ngā tāne, me mate anō ngā wāhine me ngā tamariki' – 'If the men die, the women and children must die also.' <https://nzhistory.govt.nz/war/war-in-waikato>.

²¹ Their increased rate of prolonged celibacy was also a causally more remote determinant of fertility declines around the turn of the 20th century.

²² As is well known, the conventional index of economic worth, GDP, not only does not take account of the burdens of environmental deterioration, but, in its computation, cleaning up the environment actually contributes to the national product. Simon Kuznets who played a major role in developing national accounts systems and the index was aware of these defects and tried to get them remedied, but they still remain. More success has been achieved with wellbeing, and in 2019, New Zealand's Minister of Finance presented one of the first 'wellbeing' budgets in any country.

²³ Often these are thrown into the air, say in bushfires, and then get carried very quickly to Aotearoa by wind streams.

²⁴ This is a theme that I cannot pursue in depth here. Crothers (1985) reviews the existing literature until the 1980s. Since then, the realignment of dairying, about which I will comment later, has further complicated the issue, and pollution by stock (methane emissions) has become a question of global importance.

²⁵ James O'Neill (1979: 126), extrapolating an Australian study to New Zealand, argues that '[i]t was British immigrants who brought a knowledge of contraception, and the materials which made it possible to regulate, however imperfectly, the size of their families'. This included knowledge about the Bradlaugh-Besant family planning trial (1877).

²⁶ By way of a caveat, none of these periods has perfectly delineated boundaries, nor are the attributes and qualities of any era exclusive to it alone. In Chapter 23 some commonalities will be identified.

Chapter Six – New Zealand’s Cultural Transition

The Evolution of Anglo Settler-societies

In earlier Chapters a settler-society was defined as one where a formerly dominant Indigenous culture – or a group of different Indigenous cultures in the cases of Australia and North America – has been displaced by another or by others. In the Anglo settler colonies and societies, English became the master tongue, even where diligent efforts were made to maintain bi- or multi-lingualism; simultaneously, British cultural lineaments became the most pervasive tradition. Additionally, many British Isles’ migrants went to southern Africa, and significant numbers migrated to countries that were not Anglo-Saxon, notably in the southern cone of Latin America. In America, non-British Europeans, Hispanics, plus enslaved Africans comprised large ‘immigrant’ blocks. In the 16th century, the Spanish had already explored and settled in Florida and south-western areas of the United States. From the 16th century, the French were penetrating North America from the Atlantic via the St Lawrence River, and eventually French and Metis ‘coureurs des bois’ and ‘voyageurs’ (trappers, hunters and traders) were spanning out across the Mississippi Valley, and into the vast territories to its north in present-day Canada. These and other non-British Europeans were assimilated into English-speaking and Anglo traditions, sometimes assertively so, in order to homogenise the public cultural life. In Anglo-America, Quebec has stood out as the most distinct entity; Louisiana has maintained its cultural uniqueness less successfully. Vestigial Spanish-speaking enclaves, predating the Pilgrim Fathers, have been vastly reinforced numerically by recent Hispanic arrivals. Nevertheless, until recently overall there was an Anglo-centric cultural hegemony in North America and Australasia. This has recently been challenged by multi-cultural divergence coming from the waves of non-European migrants entering the settler-society countries, particularly by Hispanics in the United States.

This chapter focuses on the different transitions in the cultural demography of Aotearoa New Zealand passed over time. Similar, but not identical, passages were followed by the settler-societies of Anglo-America and Australia. For each of these societies one sees a series of shifts from Indigenous cultural dominance, to Anglo-cultural dominance, but with a remnant Indigenous culture, then both giving way to multi-culturalism, but still with an Anglo-hegemony. New Zealand makes an apt model because its passage is probably the most straightforward to chart, at least in its first two phases. Originally, there was virtually one only Indigenous culture composed of two sub-groups, Māori and the closely related Moriori, both of whom were displaced by an Anglo-dominant (British Isles) settler group.

As this book is mainly at a macro-level, the dimensions of culture reviewed in this chapter are also collective traits. Thus, the definition of ‘culture’ I will use refers

to ‘a society or group characterised by its distinctive customs...outlook, etc’. I do not deal with micro-aspects of culture (eg ‘refinement’), as defined by the OED (1993: v 1, 568), nor with arts and other forms of leisure, which are often classified as cultural activities; I use the more expansive notion of culture as defined by the anthropologist, Edward Tylor, not culture as viewed by Mathew Arnold, whose ‘ideal was a man of culture...’. Not all macro-dimensions of culture, language and religion, which Kwame Appiah identifies (2018: 187-92), are discussed here. For example, language is clearly an aspect of, and prop for, cultural maintenance, but it is beyond the scope of my research here.

Likewise, religion is not covered systematically despite its obvious links to culture. The exceptions are the religious affiliations reported in New Zealand in the colonial period, which initially parallel the origin of settlers from within the United Kingdom – English Anglicans versus Scottish Presbyterians, who dominated particular settlements in New Zealand. Catholics were always under-represented except earlier on among Irish immigrants, being a modest majority (55%) of Irish until 1890. But from then on, the Irish flows were increasingly Protestant, with Ulster, and especially Antrim (mainly Belfast) contributing 50% of all Irish. Extrapolating from these data, about 10% of New Zealanders would have been Catholics of Irish origin, whereas, more or less consistently over the decades, 13-15 % were Catholics of all national origins. But this does mean that Irish-Catholic traditions probably had a disproportionate impact on New Zealand Catholicism (Phillips and Hearn 2008: Chapter 3, esp. Table 23, 125: Young 1997: Figure 5.2).

A review will be made in this chapter of the way affiliates of the mainline Protestant faiths intermixed in the different Provinces during the Victorian era and of the decline in dominance by various religions within Provinces where they had originally comprised a major force. This reinforces arguments about the way the ‘British’ settler groups, from different ‘countries’ in the United Kingdom, quickly integrated, an issue later in this chapter. The other major question on religion, but discussed much later in this book, is the shift towards secularisation, which is a proxy for a major shift in the values-system.

The cultural demography of a society is comprised of ‘tangible’ factors, a usage adopted here from business economics (having physical qualities)¹. This is because cultural micro-level analogues relate to the attributes by which members of a society are typically described by themselves or by others. This is also true for other macro-level aspects of culture I work with – ethnicity and birthplace – both of which are identifiable traits, and both are markers that publicly identify someone’s customs, outlook or norms that they follow for part, often all, of their lives. One must accept that, by contrast with identification for purposes of social interaction, defining ethnicity for statistical purposes is more problematic, an issue investigated by Tahu Kukutai (2011) and returned to often in this book. Although distinctions are becoming

blurred, in social discourse New Zealanders will frequently identify who is ‘Pākehā’ or who is ‘Māori’. Many will identify themselves or others in these terms, although Pākehā are sometimes called Europeans (eg in the census), or ‘whites’ a racial identity imported from the United States and elsewhere. For some purposes, such as health and crime reporting in the media, there is also the use even of the imprecise ‘biological’ word ‘Caucasians’, that comes down to us from American racist legislation².

I then move on to the cultural structures of a settler-society determined by ethnicity and birthplace. I ask is it composed of one, two or many cultures; that is, whether it operates as a mono-, bi- or multi-cultural society. Then, because ‘Britishness’ has played such a critical role in all of New Zealand’s cultural life, a section of this chapter looks at the British, disaggregating them both in terms of their birthplace in the United Kingdom, their ethnic divisions and how they integrated after arrival in the colony.

Aotearoa’s Population Growth by Ethnicity, 1769 to the Present

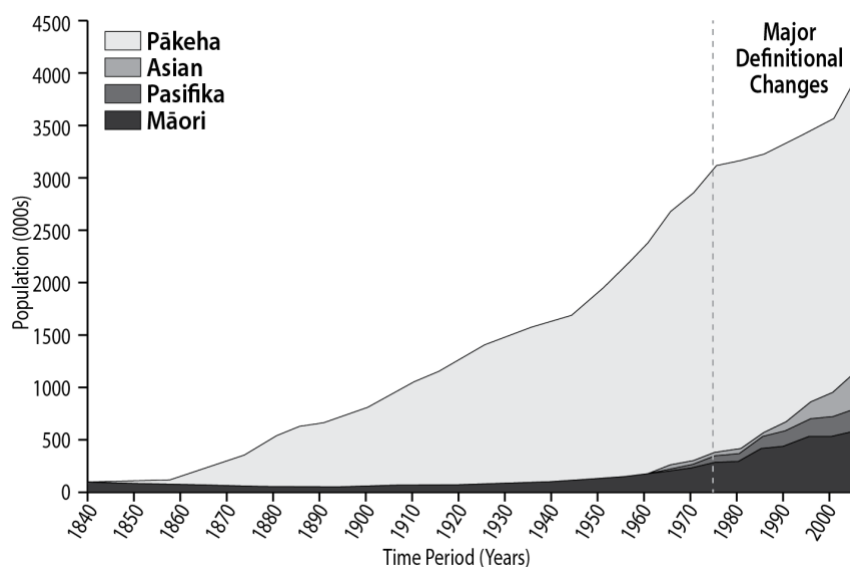
This narrative starts when Māori were Aotearoa’s hegemon, but it does not cover their 500 years of occupation before 1769. While Cook’s voyage, and the accelerating encounters with Europeans thereafter, makes a convenient starting point for this story, it is essential to acknowledge that this apparent boundary between prehistory and history is not as sharply demarcated as the division outlined here might suggest. Moreover, as archaeologist, Atholl Anderson, has convincingly argued, the pre-contact Pacific historical record – through oral tradition – is far more robust, much more akin to conventional history, than was suggested by Oxford’s Hugh Trevor-Roper in a damning and inexact assertion: ‘ “the unrewarding gyrations of barbarous tribes in picturesque but irrelevant corners of the globe” ’ (Anderson 2014: Chapter 2, esp. 44, citing Trevor-Roper). I will return to the validity of these sources later as they throw light on how perceptions of traditional Māori society are generated.

Māori were still probably 98% of the population in 1840, the starting date for Figure 6.1, a graph showing the numerical sizes of the main ethnic groups as recorded in counts and censuses from then on. By 1860, declines in Māori numbers because of high levels of mortality, coupled with the migration and reproduction of colonists, brought numerical parity between the two cultures. Immediately after this, the balance was further altered by the gold rushes and the British military inflows. Military personnel comprised perhaps 10-20% of all Europeans in the colony, and some stayed on as settlers, becoming fencibles or militia. This weighting was to shift further and immutably through the effects of settler family recruitment schemes in the early 1870s, the last mass migration waves for a century. Net migration, which had obscured the high reproduction rates of colonial Pākehā, gave way to fertility-driven

replacement and to the elevated levels of natural increase that were to endure until a transition to lower birth-rates occurred.

Everyone in Aotearoa today – or else someone among their ancestors as far back as AD 1250 – made the momentous decision to immigrate there. Figure 6.1, using population counts and estimates, shows how these ancestors and their New Zealand-born descendants defined the ethnic composition of Aotearoa’s population throughout this story, from 1840 when Aotearoa was entirely (until 1769) or overwhelmingly Māori, to the period from 1860 to the 1970s when New Zealanders were either Pākehā or Māori, to the increasingly diverse distribution seen since about 1980. But there is a backstory to this evolutionary path: the many events – the natural disasters, and ‘shocks’, ‘booms’, ‘game-changers’, and ‘enduring values and trends’ – that have occurred and shaped Aotearoa from 1769 until the 2010s, discussed in the previous chapter.

Figure 6.1: Population Growth by Ethnicity (’000s), 1840–2006³

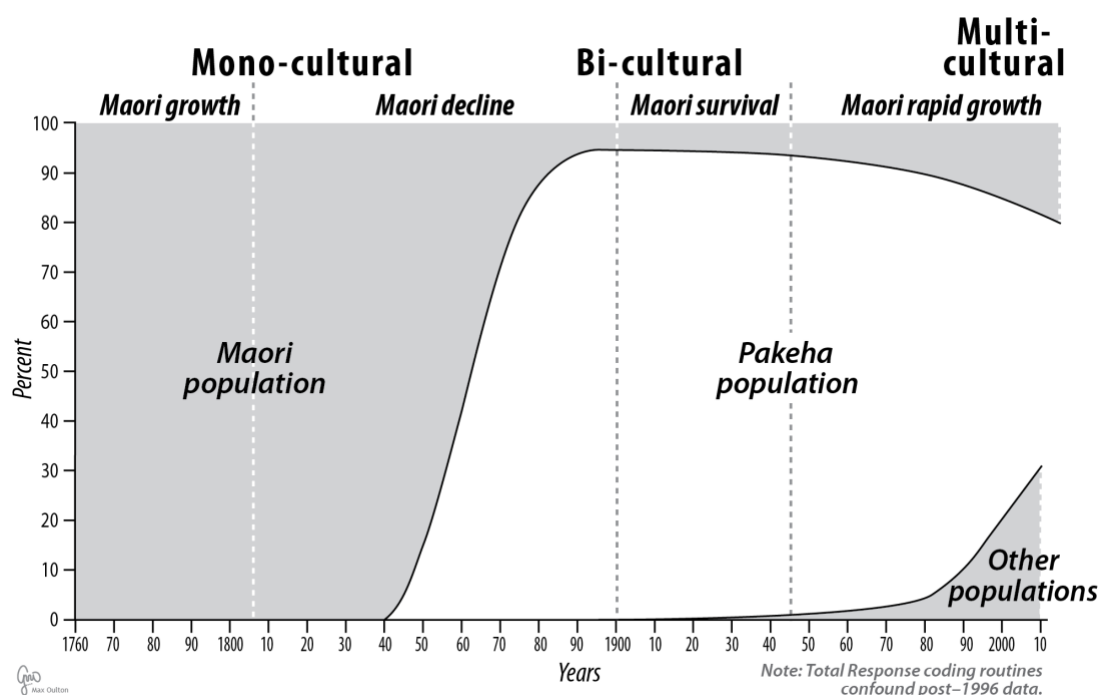


Societal Effects: Mono-Cultural, to Bi-Cultural, to Multi-Cultural

Figure 6.2 takes the ethnicity data presented in Figure 6.1, combines ethnic groups, especially for the most recent decades, and then classes New Zealand society into levels of cultural plurality – mono-, bi- and multi- – as a percentage of the total population. Thus, it graphs the phases in New Zealand’s cultural evolution. Like Figure 6.1, it is also based on actual population counts, but is rather more schematic, showing how New Zealand’s cultural evolution has split into three phases. Had that graph’s left axis been extended to circa AD 1250, Aotearoa would have been mono-

culturally Māori for six hundred years – 1250-1850. The important point is that, even after contact, New Zealand was effectively a Māori country for another 80+ years. Then, for a further 130 years New Zealand was firmly bi-cultural, even though the Māori population was barely surviving *circa* 1900. Finally, Aotearoa entered a period of extreme multi-culturalism in the late 20th century. These three cultural phases overlap with, but are different in timing from, the welfare phases (Appendix A), and population and development eras around which the next and later chapters in this book will be built.

Figure 6.2: Aotearoa New Zealand: Three Cultural Phases



A first population wave, of east Polynesians, Māori and Moriori, had arrived in large sailing canoes around AD 1230-80 – earlier in Moriori oral tradition. Their decisions to migrate into the unknown were very brave, but were due to what Atholl Anderson calls the ‘push’ factors, recorded orally and confirmed by modern science – ‘resource pressure, population growth and inter-lineage warfare...’ plus ‘the largest volcanic eruption of the last 7,000 years occur[ing] in AD 1257... somewhere in the tropical Pacific...’ (Anderson 2014: Chapter 1). Arrival in New Zealand did not free them from threats, whether from natural disasters, even mega-tsunamis and volcanoes, climate change and warfare.

Captain James Cook ‘rediscovered’ New Zealand in 1769, tracing the fragmentary pieces of information circulating in Europe about the fleeting visit (1642) of Dutchman Abel Tasman. Following Cook’s voyages, explorers’ ships were few and intermittent for two decades, but from the late 1790s/early 1800s navigators,

sealers, and others in extractive industries, traders, then missionaries arrived with increasing frequency. For their part, Māori began travelling to Australia and elsewhere.

The period of 70 years from contact in 1769 to annexation was really just the first movement in a symphony, in which Māori remained the hegemon, politically and demographically, for another decade or more. It is important to underline this point, because, as I have already noted, the story about Aotearoa, even in this period, from contact to 1850, when it was very much a Māori territory, was writ large from a European perspective. Even the voyagers, who greatly enriched New Zealand's historiography by their diaries and travel notes, typically published in Britain, still spent a disproportionate amount of their prose on the tiny number of colonists sprinkled mainly across the strip of land between the Bay of Islands and the Hokianga harbour, and their surrounds. Their accounts, especially when they wax eloquently about the 'house and kitchen gardens' and calm life of the missionaries, with whom they seem to have had endless cups of tea, is presented as a counterpoint to the chaos they perceive to constitute the everyday lives of the 'savages' outside. Even the lives of their fellow Europeans in the port of Kororareka, in the Bay of Islands, which they tended to view as one of the most sinful places on earth, are reported second-hand, and quite possibly also exaggerated. After all, it had a resident Bishop, Jean Baptiste Francois Pompallier, the 'Vicar Apostolic of Western Oceania' nonetheless, but, when all was said and done, he was a Papist. This, of course, is a function of the social class and religious origins of the early chroniclers – those people who could write, who were very often resident Protestant missionaries, were anxious to paint a picture of both their tribulations and triumphs out in the field. The British House of Lords, in a fascinating in-depth enquiry in the late 1830s drew in many of these travellers and missionaries to testify. A jarring sub-plot to their report is the covert antisemitism displayed towards Jewish traders who were also called as witnesses (*British Parliamentary Papers* 1838).

By 1840, Māori had been joined by some 2,000 Europeans, mainly of British-origin. British numbers then increased exponentially: Jock Phillips and Terry Hearn record that, 'over half a million [...] came out from Britain and Ireland to a new land on the other side of the globe between 1800 and 1945'. From 1830 to 1890, one-fifth of all emigrants from the British Isles came to Australia and New Zealand, and perhaps a quarter of these to New Zealand: say about 5% of all British emigres of that time. Each such voyage also took courage and, particularly in early days, great endurance. Aotearoa was, after all, the furthest settler-colony from London, so, in the event of failure, escaping back home was not an easy alternative. Even in recent decades the obstacles to deciding to migrate to a settler-society may seem formidable: Australia is full of snakes and other fauna, Canada is too cold, and, though New Zealand lacks snakes and has a mid-temperate climatic regime, it is too far. In

historical periods, these sorts of considerations had to be weighed up against the ‘push’ factors, which were very real for many would-be migrants, particularly because of the rural enclosures and clearances, and the impacts of the industrial revolution’s restructuring. In 1842, one such migrant was Daniel Munro, a Paisley weaver, an industry in recession. He and his family voyaged across the world to better their lives, despite the widespread ‘belief that everybody who went to New Zealand “was liable to be eaten up by cannibals”.’ Their ship, ‘the *Duchess of Argyle*, on the very last leg of their trip, stranded on a sandbank near Auckland, and ‘the next day the family disembarked... They received a friendly welcome from Māori on the beach’ (Phillips and Hearn 2008:1-2; they extrapolate from Simpson 1997: 7).

Their fate could have been far worse – fatal in fact. All the crew and passengers perished in a fire on the sailing ship *Cospatrick*, off the Cape of Good Hope in 1874 (engraving reproduced Phillips and Hearn 2008: 22-23): if that conflagration had occurred in Aotearoa itself, it would have been worse than any of the known disasters occurring there (see Figure 5.1 in the present book). Like their predecessors over six centuries since *circa* 1250, and some of their successors since, British colonists came in sailing canoes or ships. But, from the 1880s steamships became the norm and shortened the trip; later canals, the Suez and, particularly, Panama, further reduced voyage durations. Ironically, the first iron-clad ship came the same year as the *Cospatrick*’s fatal voyage.

At the same time the Māori population was in decline, both in absolute numbers and as a proportion of the total New Zealand population, as was seen in Figure 6.2. Victorian writers and some of their successors, even as recently as after World War II, predicted a final demise through ‘fatal impact’ due to contact: Māori would die out, or, in the views of the more compassionate Europeans, would be assimilated by ‘a superior culture’. As the Rev James Buller said, ‘It is a popular opinion that they are dying out. With many, I fear, the “wish is father of the thought” ’ (Belich 1996: 156-78, 192-93, 247-49; Buller 1878: 164). Alfred Newman (1881) predicted the disappearance of Māori, but was certain that Pākehā were not to blame, categorically seeing their demise as predating contact. The duty of the colonists was to make their death as quick and easy as possible – the natural fate of Māori was to die out, a demise which colonisation could not, and should not, attempt to stall. In the words of Dr Isaac Featherston, first Wellington Provincial Superintendent, Māori ‘were doomed to extinction and that the most Europeans could hope to do would be to “smooth down their dying pillow”’ (Hamer 1990).

It was not just in the Empire that such thinking abounded, but also paralleled attitudes towards the overruled in the metropole itself. ‘Ancient Britons as well as Māori might be described as “savages”, while Scottish Highlanders and other Celts could be described as “savage” or “barbarians”.’ (I will return below to the more ontological dimensions of ‘stadial thinking’, that Anne Salmond (2017: 249) has

explored). Suffice to say here that in 1860, the Rev Charles Kingsley, calling the Irish ‘Human chimpanzees’, made an assertion about the conditions of the Irish, simultaneously patronising and inaccurate, but assuaging any guilt felt by ascendant populations. This was a comment that was repeated about natives across the imperial realms, certainly in New Zealand. Kingsley said of the Irish, ‘I don’t believe they are our fault. I believe there are not only more of them than of old, but they are happier, better (sic), and more comfortably fed under our rule than they ever were’. Unfortunately, prejudice did not disappear with the end of the Victorian era, but has persisted in New Zealand into the 21st century, to the extent that the Human Rights Commission has made judgements about comments by some prominent New Zealanders (Hechter 1975 quoting Kingsley: xvi-xvii cited in Pool 2015b: see also Pool 2015b: 21n, 99).

Forty years after Newman’s oration, Māori ethnologist, Te Rangi Hiroa (1924: 362-62) had the last say, in a powerful address to what became the Royal Society of New Zealand, to which he had been elected as its first social science Fellow:

‘“*The Passing of the Maori*”. These words have a sad and mournful sound. They almost convey the idea that in order to do justice to the subject... we should raise the wail of the tangi [funeral], “for a race that’s speeding sadly onward to oblivion”.

‘[Archdeacon Philip] Walsh quotes von Hochstetter as observing, in 1865, “The Maoris... look forward with fatal resignation to the destiny of the final extinction of their race. They themselves say “As clover killed the fern and the European dog the Maori dog, as the Maori rat was killed by the Pakeha rat, so our people also will be gradually supplanted by the Europeans...”

‘...the present generation refuses to comply with this picturesque but illogical simile of following the way of the vanished Maori rat and extinct dog. They do not seem to belong to the same class of mammal. The native fern does not seem to be giving way tamely to the European clover...’

‘The quick and easy death prescribed in 1881 by Dr Newman has not been availed of as he led us to expect’.

Nevertheless, natural decrease (Deaths > Births) of Māori, possibly commenced around 1805 because of the invasions of pathogens against which they had no natural immunity. This, plus the migratory inflows and the aforementioned hyper-fertility of Pākehā settlers, had quickly changed the cultural-demographic balance by the 1860s. By 1860, Pākehā were politically dominant in the South Island and around Auckland and Wellington. But Pākehā were still not hegemonic, as

‘[e]lsewhere, in main Māoridom [most of the North Island] 50,000 Māori interacted with 25,000 Pākehā. Here, Māori [still had the power to impose their definition of consent, or at least to force Pākehā to negotiate with it...]’ (Belich 1996: 228). At the census of 1857/58, the country’s population had not only been bi-cultural but split 50-50. The wars of the 1860s changed the political balance, even for ‘main Māoridom’; the subsequent decades shifted the demographic balance of ‘main Māoridom’, probably for ever.

New Zealand was strictly bi-cultural except briefly during the gold boom when ‘Other’ ethnicities were represented by some 2,000 Chinese gold miners, reported by Manying Ip for 1869 (2005). The first Indian migrants (as against the odd sailor leaving a ship) did not come until the very end of the 19th century (Leckie 2001). Many of the Asians later departed but a few remained. The reality was that, throughout the long years of recolonisation, ‘Others’ (populations neither Māori nor European) were few (eg 0.3% in 1901), while Pākehā numbers ballooned.

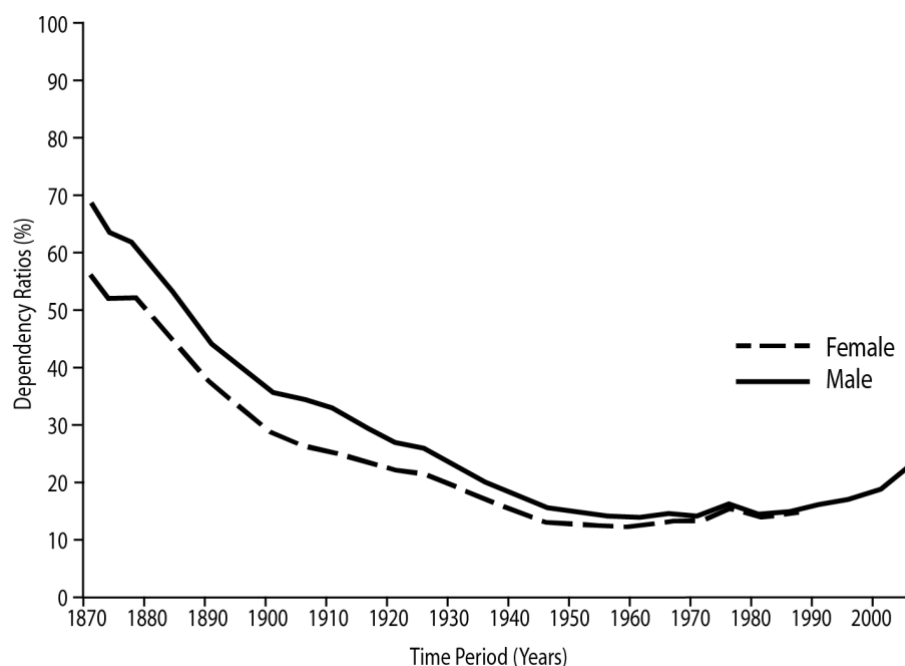
Thus, for more than half of its post-contact history, and three-quarters of the period since annexation, from *circa* 1850 until the 1980s New Zealand was bi-cultural. That said, by the 1890s this was touch and go, as Māori had reached a demographic nadir, declining to 5% of the total, so Aotearoa almost became a mono-cultural Pākehā country. But, by 1906 Māori numbers were starting to turn around. Their demographic situation at the dawn of the 20th century was dire, but not as extreme as that of Native Americans (0.4% of the total United States’ population, 1900). Māori not only survived, but today are 14% of the total, or 16% if one counts persons reporting Māori descent. Few Māori were overseas-born until the 1970s, but this then changed with the growth of a large Māori diaspora, especially in Australia.

After 1980, New Zealand’s cultural make-up changed quickly: in 1981, 95% had been Māori or Pākehā; by 2013 this was only 82%, and Pākehā had dropped from 86% to 68%. Migrants of today arrive in hours or days by air, but who knows what the refugees among them may have faced before they boarded that last flight. Nevertheless, many will have faced the effects of a diverse mix of ‘push’ and ‘pull’ factors in their source country. Furthermore, for some arrivals, especially refugees, having their entry visa examined at Auckland airport in 2019, a return is as difficult as it was for an Oxfordshire farm labourer entering New Zealand in AD 1875 (Arnold 1980), or a Māori arriving on a large sailing canoe in AD 1275. We can merely imagine the hardships at source and *en route* experienced, for example, by the white-robed Somalis one sees leaving the mosques that have sprouted in New Zealand’s suburbs. Even a ‘documented’ Australian, British, Chinese, Indian or Polynesian Pasifika migrant still has to make a difficult decision to leave the place they know, and their kith and kin.

Impacts of Migration and Birthplace on Cultural Groupings

The ethnic groups and the broad cultural structures are just one dimension of the cultural demography: net immigration, particularly inflows of foreign-born is one of the critical drivers of shifts in ethnic structures. This was most evident in the mid-Victorian era. Twenty per cent of all the net migrants who arrived in Aotearoa over a span of 160 years, between 1840 and 2000, entered the country in the brief period of just two quinquennia – 1860-64 and 1870-74. In the year 1863 alone, 35,120 arrived, and in 1874, 38,106 came (Simpson 1997: 8); these are figures that almost equal the next two peaks exactly 100 years later, of 1974 (35,100) and 2003 (42,500). The Victorian inflows were over a short duration amounting to a mere 6% of a 160-year timespan. Relatively speaking (as against numerically) these were New Zealand's greatest migration inflows ever – by a very, very large margin. In terms of their proportional contribution to settler population stocks, they completely dwarf the 21st century inflows about which there is such a great deal of political discourse. Indeed, even in absolute terms they were impressive – not too far below 21st century peak inflows when New Zealand had 40 times as many people (Pool 2015a).

The effects of this inflow on birthplace statistics are significant because the data prior to 1956 exclude Māori. Thus, the birth figures for the late Victorian era are strongly influenced by the inflows of settlers before 1876. If Māori are included in the data for 1881, for example, 49% of Aotearoa residents were New Zealand-born⁴. The force of reproduction in that period was so powerful, however, that only five years later, by 1886, a clear majority of Pākehā (54%), and even more of all New Zealanders (57%), had been born in Aotearoa. By the date when New Zealand was about to become a Dominion (1907), more than two-thirds (68%) of Pākehā and 70% of all New Zealanders were New Zealand-born. By 1961, despite the high profile given to post-war inflows of British and Dutch, migration still had to compete against the Pākehā Baby Boom as a factor of replacement, and natality levels were so high that New Zealand-born comprised 86% of the entire population; foreign-born were merely 14%. The proportion overseas-born crept up again briefly in the early 1970s to 17%, when there were record inflows that challenged those a century earlier noted above. The proportions then declined, to increase again to 20%+ in the 2000s. This brief review supports a general issue that I will discuss later – the limited significance of migration as a factor replenishing New Zealand's population stock in the era of 'Recolonisation' (1880s/1890s-1970s), but its radical reprise since the 1970s to once again become more important in its impact.

Figure 6.3: Percentage of Population born Outside New Zealand

Note: There were no censuses 1931 and 1941; data on birthplace were not reported in 1951; these data exclude Māori until 1956

In recent years, Aotearoa has been close to Australia and Canada in terms of the impacts of migration streams on its social structure, as is seen in Table 6.1 for birthplace data in the 2010 round of censuses. In the great peak inflows of the 1860s and 1870s, the foreign-born had been mainly from the British Isles (see below), but from the 1970s their birthplace composition was very different and thus affected the ethnic distribution as was seen in Figure 6.1. What is interesting in Table 6.1 is that the proportion of the total comprising foreign-born is much lower in the United States and the United Kingdom than in Canada, Australia and New Zealand.

Table 6.1 also presents data on Asians by ethnicity (ie from *all* birthplaces including the country where they were enumerated). Again, Australia and Canada have higher proportions of this ethnicity and United States and the United Kingdom rather lower, but with New Zealand in between. The United States and New Zealand stand out, however, because they each have other large ethnic minority groupings⁵. Moreover, in the 2010 round of censuses, about 15% of New Zealanders were Indigenous Māori whereas natives represent much lower proportions in other settler-societies: Australia, 3%; Canada 4%; United States, including Hawaiians, 2%.

Table 6.1: Percentages of Anglo-American, Australasian and United Kingdom Residents Born Outside their Country of Residence, and Percentage of ‘Asian’ Ethnicity: ‘2010 Round’ of Censuses

Country of Residence	% Foreign-Born	% Asian Ethnicity*
Anglo-America		
Canada	21	15
United States	13	6
Australasia		
Australia	27	12
New Zealand	25	9
United Kingdom	14	7

Notes: *All of Asia except Israel, but mainly Indian subcontinent and China.

A Vietnamese Minister of Population once said to me, ‘So you are a New Zealander? You are a nation of “boat people”,’ so any book on New Zealand’s population must cover immigration. But, as discussed earlier, over the longer term, peopling comes from much more than migration. Far more important are the subsequent complex population changes, both dynamics (eg births, deaths) and structures (eg age, gender, family, geography, workforce). They are the factors that really drive development, and both the demand and supply-sides of the economy. They generate every New Zealander’s story, women and men, Māori, Pākehā, recent migrant arrivals – they are the story of all of its peoples.

That said, one migrant stream, from the British Isles, has played a major role in New Zealand’s peopling. I turn to them now.

‘The British Are Coming, the British Are Coming’

This book emphasises that settler-societies or their predecessor colonies comprise two sets of actors: the settlers, backed by the imperial power, and/or colonial and post-colonial governments, and the Indigenous people(s). Later, in every case, these founding populations have been joined by other cultural groups. In the United States for example, the ‘white’ settlers themselves came from diverse parts of Europe, and, additionally there were slaves, and Hispanics from Spain’s and then Mexico’s territories. Nevertheless, one can also forget how ‘Anglo’ America actually was. The *New York Times* in 1900, cited by James Belich, asked ‘“are Americans an Anglo-Saxon people?”’ and, Belich continues, *The Times* ‘concluded with relief that they were: 60% of whites, it claimed, were insular Anglo-Saxons proper while 23% were “continental Teutons” and 11% were Celts, leaving the melting pot only 6%’ (Belich 2009: 67).

There is no doubt, however, that Australia’s and New Zealand’s settlers came overwhelmingly from the British Isles, at least until after World War II. In Australia’s

colonies, British-born comprised 87% of the foreign-born in 1861, 84% (1881) and 80% (1901). Even in Victoria, Australia's largest colonial population, during its 1850's gold rushes, 86% of the foreign-born, and 68% of that colony's entire population, were British-born (Borrie 1994: Table 6.8, 74, 90). The New Zealand cultural composition looks similar, 85% of the foreign-born were British in 1861, 84% in 1881, and 80% in 1901. Not all of Aotearoa's 'British' were born in the British Isles, properly speaking: many were born in Australia, or elsewhere in the empire, or beyond, but the following tables only cover persons born in the 'home countries', which is thus not a real measure of the extent of 'ethnic 'Britishness' of the New Zealand population. If, for 1901 for example, one adds on the Australian-born, most of whom would have been of British-descent, then the 'Britishness' of the population is seen to be even stronger.

This 'Britishness' had implications for the way that New Zealand's development trajectory evolved but is simply taken as a given in the later parts of the book. This is not to diminish the role of the particular cultural histories on the diverse British-descent populations of New Zealand in the nation's story, but to recognise that in Aotearoa's peopling and development the 'British' – born there or of British ethnicity, or who felt that they had a 'belonging' as British – have played a very significant role, rather more as a bloc than as individual entities. I will show below that internal differences in the British-descent grouping were dampened down rather quickly, so we should view all of them as one broad British grouping, co-residing with Polynesians, for its first 210 years of history.

The British came, of course, from different countries and regions in the British Isles, so it is useful to disaggregate this large settler inflow. But I start here by looking at the British as a whole, then their component cultural groupings, and then whether and how integration of British sub-groupings within that broader descent population occurred. Unfortunately, the data statistically analysed to date are fragmentary, so that it is difficult to get a cumulative, overall view of the relative contribution of the different sub-groupings among British Isles' migrants from 1800 to 2010. Qualitative studies are available, however, and they yield results that reveal much about New Zealand's identity-building. This is because issues of identity and cultural maintenance are important, not only among the overseas-born but for their children and descendants. But, an understanding of descent – which the New Zealand statistics do not cover – can come only from qualitative research.

Quantitative analysis is possible to a degree, but the most reliable statistical series, census birthplaces, have not been analysed systematically over the whole period, and even less is available on duration of residence, a key factor in assimilation. An alternative set of cross-sectional pictures comes from data on birthplace for migrants arriving each year, but again this has not been systematically analysed over the entire period. Lastly, there are samples of which the most

comprehensive is the data file for the years 1800-1945 innovatively generated by Phillips and Hearn (discussed earlier). But, for sound methodological reasons, their results were not cumulated to give overall figures, and were published for periods of varying lengths⁶. I look at various years, but focus on 1901 as a reference year, when the distortions due to the mass migration of the gold rush and Vogel years had passed, and because, fortuitously, Stephen Constantine has documented censuses in the empire's 1900-round to provide a valuable set of comparisons with the other British settler-societies, but that do not include the United States (Phillips and Hearn 2008; Constantine 2012).

Table 6.2 summarises the 'Britishness' of migrant flows; in earlier censuses all of British Isles-, New Zealand- and Australian-born were classified as 'British'. The British contribution was largest in 1886, but had dropped by 1901, when the effects of inflows of 'British' from Australia were being felt: in 1886, 7% of the overseas-born were Australian-born, but by 1901 it was 10%. Migrants in the huge British inflows in the 1860s and 1870s, especially under the Vogel schemes (1870s), had aged in place by 1901 but not been 'replaced' by as many new British. The British contribution had decreased further by 1961 and would have dropped more by 1976 except for the fact that the inflows in the early 1970s disproportionately included British immigrants. By 2001, with large post-1980 migration inflows from Asia, the Pacific and elsewhere, the British-born had dropped among the overseas-born, a figure which was similar to that of 2013. In 1986, migrants from 'preferred sources', a term used until then for recruitment, and strongly 'white' or Pacific in orientation, still constituted 85% of all migrants; a majority of these arrivals, 61%, were from the United Kingdom, Ireland and Australia alone. But, by 2006 the former 'preferred sources' comprised only 53% and the British Isles plus Australia just 28% (Pool 2015a: Table 4; sourced, with permission, from Spoonley and Bedford 2012: Tables 3.3, 3.11 and 3.12).

Table 6.2: Percentage of Foreign-Born New Zealanders with British Isles' Birthplaces, Selected Years

Year	%
1886	96
1901	80
1961	64
1976	56
2001	27
2018	22

Source: 2018 Statistics New Zealand

To conclude this brief review, it is important to assess the impact of British birth on the population as a whole (foreign-born or of New Zealand birthplace). British-born comprised 42% of the entire Pākehā population of 1886, or 39% of the overall total (Māori + Pākehā). But the ‘ageing in place’ meant that their contribution had already dropped to 27%, or 25% (Māori included) by 1901. It had all but dissipated by the Baby Boom, to 9% in 1961. In 2001, despite large migration inflows, especially of British in the 1970s, only 6% of the population had been born in the British Isles (Ireland included).

New Zealand seems to have been more British in its inflows than its most immediate comparators, Australia and Canada. This shows up in Table 6.3, which takes the per cent of the British-born spread across the three British settler-societies, Australia, Canada and New Zealand, in 1901, with the proportion of the total British settler-society population living in each of those three countries. While Australia had received the most British-born, New Zealand’s inflows relative to its population size among British settler-societies were higher. New Zealand was home to 17% of all of the British-born living in the three British settler-societies, but New Zealand’s overall contribution, 8%, was half that of the total populations (foreign-born plus those born in their country of residence) living in the same British settler-societies. Canada’s total and its British-born was particularly affected by the large, long-established francophone population⁷.

Table 6.3: Percentage of British-Born living in British Settler-Societies, 1901, and the Percentage of their Combined Total Population in each Society

Settler-Society	% of British-Born in All Settler-Societies	% of Total British Settler- Society Populations*
Australia	49	38
Canada	34	54
New Zealand	17	8
Total	100	100

Source: Computed from Constantine (2012: Table 2.1), and census data for each country.

*Note: * Wherever born – in Britain, in the settler-society itself, or elsewhere.*

The British Isles Country of Origin of Immigrants

Within the British Isles’ migrant groups in New Zealand, the English were the largest segment constituting a clear majority in most eras except 1853-70 (Phillips and Hearn 2008: Tables 1, 2). But this was primarily a function of their numbers in the source regions, as their percentage among immigrants fell below their contribution to the

homeland's population. Within the British Isles, the English population had grown to encompass two-thirds of Britons by the late Victorian period and three-quarters by 1921. The disjunction between home population size and contribution to British settler-society migrant steams to Aotearoa is shown in Table 6.4, for 1901, which compares the proportions of British-born in New Zealand coming from each of the United Kingdom's four constituent countries, with the per cents living in those same countries in the British 1901 census. It was a reasonably representative year in New Zealand, although, as noted below, by then the Irish had gone through the population decline that dominated their 19th century demographic narrative.

Table 6.4: Percentages among British-Born enumerated in the New Zealand Census, 1901, coming from Constituent Countries of the United Kingdom, compared with the Percentage of the United Kingdom's Population living in Each Country at the 1901 United Kingdom Census

Constituent Country	British-Born Living in New Zealand	Residents of United Kingdom
England	54	72
Scotland	23	11
Ireland	21	12
Wales	1	5
Total	99	100

Sources: British-born, Constantine 2012: Table 1; UK Residents, Phillips and Hearn 2008: Table 3

Table 6.5 shows that, among the British settler-societies, New Zealand was the most 'Scottish'. As in Aotearoa, the English were also under-represented among British-born migrants in other settler-societies and settler-states and even in much of the 'true empire'; in 1901 this occurred everywhere except for the 'Orange River Colony', where, anyway, United Kingdom born numbered only 18,000, and for tiny British enclaves in some other Empire Territories. Nevertheless, the English numbers, as against proportions, were large, so that their presence was significant, although perhaps less than might be expected. Stephen Constantine (2012: 16-19, 31-38) attributes this muted impact to their being a ' "soft" force', and from diverse origins within England. There is also the fact that many traits designated as Englishness 'were identities that were not even uniquely British, let alone English'.

In Aotearoa, the Welsh were also very heavily under-represented, but this was true in other British settler-societies (Table 6.5) and also the settler-colonies in southern Africa (Constantine 2012: Table 2.1). The Irish inflows to New Zealand, which included large numbers of Ulster protestants, were sometimes slightly below their percentage in the British population over the more than a century from 1840 to 1971-74, except for 1861 and 1871, when they were slightly above. The 1901 data are affected by the massive emigration from Ireland following the famine and clearances

between 1871 and 1901, when the per cent of United Kingdom residents living there had dropped from 19% to the 12% shown on Table 6.4. Irish ex-soldiers were more likely than other military to gain their discharge in New Zealand.

It was, by contrast, the Scots who were most heavily over-represented among the migrants to New Zealand, comprising around 21-30% of the arrivals 1840-1945, as against about 11% of the British Isles' population (Tables 6.4 and 6.5). Curiously, people from Britain's offshore islands, from the Channel Islands to the Shetlands, also migrated disproportionately to Aotearoa. Jock Phillips and Terry Hearn argue, provocatively, that, when the large numbers of settlers from southwest England are looked at also as immigrants, arguably, from part of the Celtic fringe, 'New Zealand's [Pākehā] founding stock is less English than might be expected...': more Celtic/Gaelic. Despite this, as noted earlier, in popular speech England is often used as the name for the 'Home country' instead of Britain or the British Isles (Phillips and Hearn 2008: Tables 1-3, 51-68).

Table 6.5: British-Born by UK Country of Birth, as a Percentage of the British-Born in each British Settler-Society, 1901 'Empire Censuses'

Country of Birth in UK:	Australia	Canada (New Foundland)	New Zealand
England	57	52 (55)	54
Scotland	15	21 (17)	23
Ireland	26	26 (28)	21
Wales	2	<1 (-)	1
Total	100	100 100	100

Source: Constantine 2012: Table 2.1. Australia, computed from data on individual colonies – they had just federated on Jan 1, 1901. New Zealand and Newfoundland both became Dominions on the 26th September 1907. In 1901, Newfoundland's British-born numbered only 1,923, not surprising given their very long period of colonisation and inflows.

Integrating the Settlers from the Various British 'Home' Countries

In the periods of peak migration inflows in the mid-Victorian era, Aotearoa's migrant source areas were, therefore, diverse from within the British Isles in a multi-dimensional way ('creed, country, [but not colour], class, culture', Appiah 2018). Yet, an outstanding feature of settler New Zealand was how soon its British sub-populations integrated, in part because of high levels of itinerancy. This generated a great deal of interaction and behavioural homogenisation, between colonists of different British origins. A multi-level study, combining expository and statistical

techniques, allowed historian Miles Fairburn to posit that early colonists and their families were ‘bondless’ and that ‘atomisation’ was a feature of Pākehā pioneer life. He concludes that late Victorian Aotearoa, experienced levels of internal geographical mobility of settlers that were ‘high, being at the top end of the North American scale’ (Fairburn 1989: 191,130-31). In addition to mobility, Phillips and Hearn note that there was ‘considerable intermarriage between people from different parts of the British Isles’. They argue that education was an important agent of integration, notably the very early *1877 Act*, which made primary schooling free, secular and compulsory, and mixed new arrivals from different backgrounds. The *Act* came, strategically, in the Vogel period of mass immigration. Indeed, ‘Marriage outside the founding group often followed’ (Phillips and Hearn 2008: 179-80; Swarbrick 2012: 2).

Patterns of reproduction provide a statistically independent verification of Fairburn’s findings on the mechanisms of societal integration. We do not have data on fertility on the different ‘British-origin’ groups in Aotearoa, but it is possible to compare the British Isles with New Zealand. What is striking is that the settlers, in all parts of New Zealand, whether established by a Presbyterian or an Anglican colonisation association, or by more diverse inflows, adopted a universally very high fertility regime; rates were higher than that of all British countries, and higher than for England and Wales (whose fertility was highest in the British Isles) had been at Jane Austen’s time, when English natality had peaked. Lowest in Britain were the Catholic Irish, below the Protestant Ulstermen. Within each of the ‘home’ countries, there were also significant fertility differentials – spatially within Scotland, and by class and region in England. Overwhelmingly, the New Zealand settlers came from middling or lower-level fertility British ‘home country’ groups, yet almost as they boarded a ship or left it at wharf-side in the colony, their reproductive intentions and achievements changed. Spatial differentials disappeared, as all regions had very high rates – the mining areas, where there were high masculinity rates, had slightly lower fertility, but birth rates were still high. Moreover, there were limited differences in the prime determinant of high fertility – early age at first marriage; settler women were far more likely to be married at 20-24 years than were their British peers, and most married, whereas a significant minority of British women remained celibate. When Pākehā fertility declined from about 1880, the ‘new’ reproductive behaviours – a re-adoption of British marriage patterns to a later age and higher levels of celibacy – spread north from both of the more settled and developed regions, Otago (more Presbyterian and Scottish; Canterbury Anglican and English) to the pioneer regions (Pool *et al* 2007: 47n, Section 3.4, Chapter 4).

For example, work on the fertility of Scots in colonial New Zealand and Scotland (Pool 2012), showed that, by the late 1870s, not long after the first Scottish immigrant ships arrived in 1848 at Port Chalmers (Dunedin, Otago Province) and

particularly after the settlements in the 1850s, both fertility and child survivorship levels resembled those for colonists elsewhere in New Zealand; they were very different from rates in the 'old country'. General fertility rates (Births/1000 Women aged 15-44) were 132 for Scotland as a whole (1881) but varied from 99 (far North) to 147 (Glasgow Region), a marked (48%) difference. For Pākehā, the national rate was then 195 (1881), much higher than Scotland's, with Otago (189) just 6%-points (3%) below the New Zealand-wide Pākehā figure. Moreover, Otago varied little from other Provinces, except Auckland, which was marginally lower. As the main port of entry for migrants from Britain, Auckland's reproductive regime probably was affected by recent arrivals whose patterns were most likely to resemble those in Britain.

Child survivorship levels were also high among Pākehā in Aotearoa. While 10% (rural) and 15% (urban) of Otago's children failed to reach 5 years of age in the 1880s, probabilities in the Scottish homeland were almost double those rates.

Another indicator of mobility and its possible effects on integration among the British-born comes from data on religious affiliation. In 1858, Presbyterians, overwhelmingly Scots, had constituted roughly two-thirds of the population in Otago; in all other provinces they were a minority. Anglicans, mainly English, were the majority except in Auckland, which was more mixed with higher proportions than other Provinces belonging to Catholic and other mainstream Protestant churches (eg Methodists). By 1901, Presbyterians had become a minority everywhere, even in Otago, and Anglicans below 50% in all Provinces except Auckland, presumably there an effect of the turnaround northward, away from the South Island, in internal population distribution (Pool 2012; Young 1997: Figures 6.2 and 6.4). Thus, founding Pākehā New Zealand was homogeneously British, but not culturally representative of Britain's populations. Within Aotearoa it developed a new colonial homogeneity, different from that of any region in the 'mother country'.

The decline of the Māori population to its nadir could easily have continued and generated a uniformly British South Seas European culture. Instead, Māori survival, then subsequent revival through the 20th century ensured their continuation as a cultural force. Very soon after immigrating the British became Pākehā New Zealanders, yet, paradoxically, also yearned for 'home', as I will show later, and had become different demographically from groups in their British Isles regions of origin.

Historian Angela McCarthy gives a different perspective on this by arguing that British-origin identities survived through the maintenance of networks and associations, such as pipe bands, Burns' societies, Scottish Freemasons, and, for the Irish-descent groups, Hibernian societies and the Orange order. But, to show that, in terms of behavioural norms, settlers converged rapidly almost to the point of becoming indistinguishable in everyday life, is not to deny the significance of identity nor of associations serving nostalgia. As Linda Colley, cited by McCarthy, argues,

‘Identities are not like hats. Human beings can and do put on several at a time’. Informal and formal networks could have existed in the absence of a sense of ethnic identity, as seems the case in the most Irish Catholic part of New Zealand, the South Island’s West Coast. McCarthy quotes Lyndon Fraser who attributes this ‘to a dearth of discrimination’. Of course, Loyal Orange Lodges and anti-Catholic polemics existed in Aotearoa – ‘do not marry a Catholic’ (nor a Māori, nor a Jew, nor a Croatian for that matter) was many a ‘white’ protestant grandmother’s exhortation – but their effects were muted. Catholics were a small minority (1901, 14%) of the population and lacked the militancy seen, for example, in nearby Victoria, in Australia, most notably with Bishop (later Archbishop) Daniel Mannix’s opposition to First World War conscription (McCarthy 2011: 1-11).

The Ideational Context of Cultural Demography

Interactions among different British-, or European-origin groups were an issue of limited importance alongside the really significant question. Settler-societies differ from other colonies because of the singular importance of the relationship, often polarised, between immigrants from Europe and the Indigenous Peoples they supplanted. In this regard, the human history of New Zealand is broadly representative of those of the other settler-societies. While the Māori and Pākehā population and development histories must be seen as one integral story, this need not subsume the Māori experience into some bland, collective New Zealand story. The paths of the two peoples have been inseparably intertwined, with interactions for many on a daily basis and by high rates of intermarriage. Despite this close contact, however, the strength of Māori culture is such that, since Captain Cook first visited in 1769, the two cultures have also remained distinct in many ways – at times following markedly different, almost opposite, trends. Moreover, to this general picture of interdependence, each of these two cultures have brought their own unique value-systems that are still instrumental in 21st century New Zealand.

Peopling thus involves far more than the tangible factors of migration and replacement. It also entails the carriage and generation of ideas. In a typical bi- or multi-cultural society there are likely to be different, even competing or conflicting, norms, values and mores, and each wave of peoples brings its own values-system, and ontological principles underlying these. This makes even more significant the fact that for the first 80-90 years after contact Māori values were still dominant. By the 1850s, however, they were losing out rapidly to Pākehā, both through ‘swamping’ of Māori life-ways, by their being outnumbered through migration and reproduction, and by missionary conversion (Salmond 2017: 2, Chapter 8, 286-87, 413). The interplay between different belief systems is not just something quaint and of little current importance, best left to anthropologists to deal with. Instead, norms, values and mores drive the entire fabric of daily life in any society, its basic ethos and essentially, they

represent all the underpinnings of the processes of population and development, the cultural life, ethnic and class interactions, and its political and constitutional patterns.

After contact, many features of pre-contact Māori life were maintained, such as the inter-tribal wars (1815-40), including taua (war parties), as Angela Ballara (2003) has argued. Because the records and journals written by Europeans are the most accessible documents, we have a Euro-centric view of the first century after contact. In passing, I should note that throughout this book I use the term ‘Euro-centric’ in a somewhat unconventional way to mean a focus on Europeans (in settler-societies), rather than a bias towards Europe and European civilisation. Suffice to say here that conventional history has attempted, with some success (eg Belich 1996; King 2003; O’Malley 2012), to restore a balance, but still leans towards exchanges described by Europeans from their perspective. Other leading scholars, such as Anne Salmond, have turned to Māori oral tradition, written down in whanau (family) and hapu (sub-tribe) books as Māori alphabetised early in Victoria’s reign, when elders, born before or shortly after Cook’s voyages, still survived (Salmond 1997; see also Biggs 1960⁸; Binney 2009).

Māori carried with them to Aotearoa Polynesian concepts of social organisation that still persist, actively and effectively, in 21st century New Zealand. The word whakapapa, (genealogical ‘linkages and...the nature of th[ose] relationships’) refers to a data system that is a key factor in determining iwi (tribal) membership. It is also one of many Māori concepts and words that have entered everyday modern discourse in Aotearoa, expressing ideas that approximate, but are different from, their English counterparts. For example, whanau, used in common parlance among all New Zealanders as a synonym for family, means something wider than that, incorporating linkages achieved through adoption and shared residence, as well as biological parenting. The term whanaungatanga, loosely translated as family connection also has a wider more spiritual meaning for which there is no equivalent term in English. Here it is adopted in the context of intra-family transfers as employed in National Transfer Accounts methodologies (Pool 2015b: 79; see also Appendix A; Kukutai and Taylor 2016: 21).

Kaitiakitanga, loosely translated as stewardship, particularly of natural resources, is a principle inherited from Māori antiquity and grounded in their ontology, yet widely used today in public discourse, invoked in some issues of national development, such as usage of major waterways. It is a concept often in conflict with the Pākehā notion of individual property rights. Yet, Anne Salmond shows how Māori thinking and beliefs, and their ontological underpinnings, have extended into issues of sustainable land-use: ‘...ancestral Māori and modernist ideas entangle in debates about fresh water in New Zealand’ (Salmond 2017: 308, 313). This extends into national applied policy domains, ‘[I]n the *Local Government Act*, ..., councils are required to take into account the relationship of Māori and their

culture and traditions, with their ancestral land, water, sites wahi tapu (ancestral sites [sacred to Māori, especially burial grounds]) and other taonga [treasure, anything prized]'. On March 16th, 2017, Parliament passed the *Whanganui River Claims Settlement Bill*, according that waterway 'personhood', a concept which derives entirely from Māori belief, but has major implications for future protection of the resource.

Using newspapers published in Māori, by Māori in the Victorian era, Hemi Whaanga and Priscilla Wehi demonstrate that questions of sustainability are not just a recent issue. In Victorian Aotearoa, Māori values were being expressed by reference to another classical Māori concept in calls for rahui (prohibitions or restrictions) to protect Māori resources. In the light of the rapid loss of land and other capital assets, it is understandable that Māori made urgent calls to protect natural resources and traditionally used fauna and flora, employing as their weapon Māori language newspapers, published from 1840 on, and interventions by prominent Māori leaders and parliamentarians like James Carroll. For Victorian Māori, this was a concern provoked by current legislation, land alienation, and statements by Pākehā politicians. In this context, conservation by applying rahui was as much a basic survival mechanism, protecting their rights to gather food and hunt, as an ecological principle (Whaanga and Wehi 2017).

In the 21st century, Māori corporations are rising in New Zealand's business world, with management processes to meet all of financial capital, political-economic and social capital objectives. Prominent investments are in scholarships and the maintenance of marae, which are community owned clusters of buildings; profit is for the iwi (tribes) or hapu (septs), not for the individual. Marae comprise meeting houses, dining rooms, ablution blocks, using designs that are inherited from antiquity, incorporating traditional carving and other building materials, plus modern utilities and today used to serve collective purposes (eg meetings, both cultural and political, and funerals). When natural disasters strike, as in the cases of the Edgecumbe (Bay of Plenty) and Kaikoura (North Canterbury) earthquakes, they were the facilities that could accommodate families of all ethnicities who had lost their dwellings; Kaikoura is both a tourist and fishing village, and the foreign tourists there that day were also well catered for – they were served lobster for breakfast. Ironically, 21st century marae fit exactly the 'communitistic' Māori ethos, excoriated by Justice Minister Sewell in 1870 (Chapter 3), and which the individualisation of land titles in the 1860s was supposed to have eliminated.

Pākehā also brought with them a very important set of norms and values. Early colonisation was to have been governed according to socially reformist principles, and even the annexing of Aotearoa itself, was affected by values prevalent in the metropole at this time. Because of the dominance in British political circles of Low Church Anglicans and other evangelicals, who were concerned about the

wellbeing of ‘Aborigines’, New Zealand never suffered slavery, nor indenturing. Perhaps even more curiously, considering that both New Zealand and Australia were ‘discovered’ by Cook within a few months of each other, New Zealand was taken over, somewhat reluctantly, as a free colony, not a penal settlement. Belich (1996:129) notes, however that ‘New Zealand itself was considered as a site for the [Australian] penal settlement planned by England in the 1780s, but its natives were thought to be too dangerous and bloodthirsty. Thus, the Māori killers of Tasman’s [and other explorers’] men prevented New Zealand from becoming Australia’.

The protection of Aboriginal rights was stressed in the instructions to Captain William Hobson, who represented Queen Victoria (the ‘Crown’) at the Treaty of Waitangi (1840) when Aotearoa became a colony. But, as historian Michael King points out, such principles were quickly brushed aside as more immediate issues took precedence (King 2003: 157). The Treaty’s articles itself, again intended to protect Māori, were breached to their disadvantage, such as by the manner in which the invasion of the Waikato was initiated in 1863 (O’Malley 2016: Chapter 12) and by the way the Native Land Court (NLC) wrongly interpreted the *1865 Act*, which had individualised Māori land titles. These NLC breaches were very explicitly condemned by an illustrious Commission reporting to Parliament in 1891 (Rees and Carroll 1891: *AJHR* G-1, Session II, vii; detailed later).

Bi-/Multi-Culturalism, Racial Attitudes, Stadial Thinking

British and other Europeans colonised vast segments of the world in the 19th and early 20th centuries carrying with them the notion that they were morally, socially, physically and mentally superior to Indigenous Peoples. They often transmitted this into demonising the natives. The Spanish were particularly adept at this as Eduardo Galeano (1973: 52-53) comments, ‘The bleeding of the New World became an act of charity, an argument for the faith... [A] renowned Spanish theologian ...argued that [Indians] deserved the treatment they got because their sins and idolatries were an offense to God’. Those of faith were not alone: sceptic and enlightenment philosopher, David Hume ‘declined to recognize the “degraded men” of the New World as fellow humans’. Given this sort of context, not surprisingly even the more liberal and sympathetic Pākehā coming to New Zealand were not immune from assumptions about their own society’s inherent superiority and more advanced comprehension of technology. In 1815, John Liddiard Nicholas (1817: v 1, 324-26), accompanying the missionary Samuel Marsden, was served potatoes prepared in a hangī (steam oven of wet earth, grasses and stones) whose ‘vapour’ cooked the ‘nicely scraped potatoes’ within 10 minutes. He muses, without a hint of irony in his writing, ‘Thus does necessity supply instruction to the untutored mind, while it makes even the wildest barbarians become, unconsciously, practical philosophers; and the

power of steam, which is of late so well known in Europe, has been resorted to most probably for ages past in New Zealand’.

The denigration of Māori and other Indigenous people was often extreme. Europeans felt that natives would be saved from their deprived and depraved situation through contact, colonisation and conversion to Christianity. It was grounded in the notion of a ‘Great Chain of Being, in ‘stadial theory’ that saw societies progress from ‘primitive’ to ‘advanced’, from ‘savage’ to ‘barbaric’ to ‘civilised’, a hierarchy which saw civilised people, as the English saw themselves, as ‘intrinsically superior’ to savage or barbaric cultures. Salmond (2017: 94-95) says that this was

‘fundamentally inimical to Maori ideas of utu, which relied on reciprocity and balanced exchange. In the Great Chain, on the other hand, those at lower levels were expected to offer up tribute to those higher on the cosmic ladder, and to be grateful for whatever they received – an ethic of *noblesse oblige*.

‘Stadial thinking was the heart of the evangelical enterprise, with its ideas about benighted savages who had to be redeemed by Christianity, and “raised up” to civilisation’.

In this world view ‘in the state of savagery there was no private property...’ (Salmond 2017: 249). This puts into further perspective the views of Henry Sewell, Attorney General, in 1870 (already cited in Chapter 2) who saw Māori land tenure as abiding by ‘the principle of communism...’ and ‘Detribalization of the Maoris...’ as a means of destroying this (reprinted *NZ Official Year Book* 1990: 414). As a result, to a large degree (but not entirely, see above), ‘The assumptions of Pākehā culture had overridden Māori communal interests and dispossessed Māori women in particular’ (Brookes 2016: 135). This totally different perception of property rights also produced cleavages at the interpersonal level between Europeans and Māori from the first arrival of Cook’s ships. As noted in Chapter 1, there is frequent mention of Māori and Pacific Island Polynesians stealing nails, iron objects and many other items from ships, something which infuriated the navigators, led to severe misunderstandings and often severe punishments. By contrast, there is little mention of Europeans stealing significantly large volumes of perishables from Māori and Polynesian gardens, almost as if the Europeans were entitled to this, and offending Māori protocols. A vivid illustration of the philosophical chasm is reported by historian Vincent O’Malley (2012: 47-48). In 1805, Te Pahi, a Northland Māori Chief, who spoke fluent English, was dining at New South Wales Governor King’s Government House. Hearing that a convict was to be hung for stealing a pig Te Pahi pleaded with King, but to no avail. Te Pahi then identified a ship’s captain present at the table and asked why if British

law were so protective of property rights this captain should not be hung for stealing potatoes from Māori gardens while at anchor in New Zealand.

In quoting the views of colonists and some of their populist successors, it is important to avoid the reverse trend – the demonisation of Pākehā. Some colonists and more recent contributors to public discourse have indeed been racists by any measure, but today, as in the past, many leading figures have positive attitudes about Māori, appreciate their perspectives on public issues and espouse Māori rights. Others seek to understand Māori perspectives, yet some hold confused and even self-contradictory views. These complexities and their implications are identified by Peter Walker in a monthly magazine, writing around the theme of the line, ‘in the bonds of love we meet’, coming from Aotearoa’s notably un-martial national anthem (Walker 2017). It is interesting that this issue is topical enough to be discussed in the non-academic, but serious, popular media.

Reinforcing the complexities of race relations in Aotearoa is the fact that intermarriage levels have long been high (Harre 1966, 1972)⁹. In regions with large Māori populations, and even elsewhere, intermarriage and interactions, such as through sport go far back¹⁰; many families trace common Māori and Pākehā descent-lines from the Victorian period and even earlier. Because of the significance of whakapapa (genealogy) for Māori social organisation, Māori are often more informed about British branches of their family than are Pākehā. Beyond descent-lines there are also infusions of cultural practice bi-directionally into Māori and Pākehā life-ways. Just by growing up in a society dominated by Pākehā values and norms, most if not all Māori are exposed to Pākehā practices as a daily occurrence; whether or not Pākehā are as deeply affected by Māori attitudes and behaviours is debatable. Yet, in everyday life, Māori practices are incorporated into Pākehā, often without this being recognised. I have already noted use of the word ‘whanau’, but others are heard in everyday parlance: for example, the words ‘hui’ (meeting) and ‘korero’ (talk or discussion) are commonplace in the media; the social anthropologist Sally Rauden (2018) has recorded that Pākehā funeral practices, which are rather different from British and other Europeans ‘ways of death’, have been markedly affected by Māori ‘tangi’.

One of the reasons New Zealand did not join Australia when their colonies federated (1901) may have been that Māori would not be Commonwealth citizens, but would hold the inferior status accorded Australian Aborigines (Pool 2015b: 21-23, 56, citing Hunn 1961:77-78; Mein Smith 2012: 2). Individual and group acts of discrimination occurred, and still do, but they are not only outside any legislative bounds and the statutory frameworks limit such acts.

Nevertheless, the loss of capital by Māori and their consequent marginalisation is an ever-present reality that cannot be ignored. Most observers recognise that it will be impossible to compensate fully for what has happened; in

Waitangi Claims' Settlements, an apology from the Crown, especially when, as has happened, it is made by the monarch in person, is accepted by Māori elders as a significant offering. Without excusing their severe loss, however, it is essential to recognise that there are also other dimensions to the development of a bi- or multi-cultural society. New Zealand, as judged by macro-level measures, Human development Indices (HDIs) and GDP/capita, has been among the more successful states worldwide, and all segments of the population have benefitted, particularly during welfare state eras when redistribution of income and wellbeing were achieved. For example, the rapid decrease in Māori mortality levels between 1945 and 1961, when there was a significant decline in the gap with Pākehā, at that time could have been achieved only in a wealthy country with effective programmes of equal access to high technology, pharmaceuticals but also equal availability of a social security system (eg housing, incomes, employment, Pool 1967). There is a more micro-level analogue to this. Many Pākehā settlers and their descendants set about, ambitiously and successfully, developing rural properties or managing urban enterprises they built or inherited. The wealth of New Zealand as an entity has been very dependent on their initiatives. But, so too, have Māori and Pākehā, together with the more recent waves of migrants, through public discourse and debate, sought an accommodation of divergent sets of values.

There is, however, a new dimension. The sets of values, imported by the most recent immigrant groups, are confronting the established norms and mores of post-1980 New Zealand, although only time will tell how the normative systems imported by the new waves will play out. Their contributions to commerce, food-consumption patterns and for other consumer goods, and to achievements in education, sport and some employment sectors (eg health) have been positive, and seemingly rather significant, may be altering beliefs. Any assessment of the impacts of new arrivals has been confounded by the fact that cultural diversification has coincided in time with radical neo-liberal economic restructuring, and major demographic and social revolutions. Related to these trends have been the onset of growing inequalities (Rashbrooke (ed) 2014), too easily ascribed to migrants – that they depress wages or, in Auckland, as in Sydney or Vancouver, are inflating property markets. Such transformations and their impacts parallel closely what has happened in the other Anglo settler-societies and somewhat less closely with what has taken place in the WDCs in the old world.

Cultural Demography and Development

The New Zealand described in later empirical chapters is representative of its fellow European-descent dominant, Anglo settler-societies. But it also has analogies with Latin America's southern cone countries, where Indigenous Peoples also became minorities. Like other Anglo settler-societies, Aotearoa has seen its ethnic

demography diversified dramatically over the last three or so decades. Overall, in New Zealand today persons of Non-European descent, as against ethnicity, are over 35% of its total.

This review of the cultural demography of Aotearoa New Zealand leaves the story of its peopling and development with a very complex and sensitive agenda to pursue; seeking a balance between the different groups is a difficult task to fulfil. The remaining chapters cannot ignore the cultural – and material – loss suffered by Māori and must address the effects of this on their wellbeing and economic development over the quarter millennium since contact. Central to this is an analysis of how losses occurred, of measures to ‘close the gaps’, as this is called in Aotearoa’s public discourse, and the successes and failures in achieving this objective. But, at the same time, there is the story of Pākehā and the development objectives they sought and often achieved. For much of the period since the end of the New Zealand Wars (1870s), this Pākehā story appropriately dominates the narrative. What we know of the recent migrant groups, their longer-term goals and the outcomes to date are also woven into this story.

New Zealand’s National Anthem was mentioned earlier in this chapter. Verse two pleads ‘Make our country good and great’. Neither in demographic terms nor economic will New Zealand accumulate a large enough quantum of people, product and wellbeing to make it ‘great’, in the sense of being powerful. But, later chapters ask whether or not it became ‘great’ in a per capita sense, and ‘good’ in the way its product and wellbeing have been equitably and equally distributed across its people.

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¹ There are also intangible cultural factors, such as norms and other society-wide aspects of the ideational system. Norms and values are both culturally-determined, especially from birthplace and ethnicity, but there are those with a different, often less tangible, provenance (eg diffused by popular 'culture', fads, globalisation, the media, etc) which will be raised in later chapters where appropriate.

² The complex mix of ethnicities from the Asian-European Caucasus mountain regions has very few representatives in New Zealand, so there are few 'Caucasians' requiring hospital or prison services. The term Caucasian was also used in America in conjunction with the highly pejorative word 'miscegenation', for statutes banning marriage between ethnic groups.

³ This graph covers ethnicity not birthplace/nationality. There is a small but rapidly growing group of 'Others', including Africans, particularly from Southern Africa, but also elsewhere such as the Horn and North Africa. Middle Easterners from West Asia are included among Asians, and there are also Latin Americans. Pasifika are mainly from Tropical Polynesia, but also include Melanesians. Fijian Indians are included among Asians.

⁴ The percentage is lower if Māori are excluded: 46% of Pākehā.

⁵ Ethnicity is called 'race' in the United States, which is confusing because Hispanics, who share many aspects of language and culture, correspond to a range of 'races' from White to Black as classified for non-Hispanics.

⁶ As is clear from their methodological Appendix, extrapolating to a 'population' would have been fraught with problems. In some other countries where individual census records are archived, this would have permitted much simpler sampling, but New Zealand has not kept its individual census schedules. Thus, no cumulative picture can be drawn, so an overall figure is not available.

⁷ 'French-Canadians' also included descendants of Scottish Jacobites and Catholic Irish – at the Plains of Abraham battle (Quebec, 1759), Montcalm's Aide-de-Camp was a Jacobite.

⁸ His methodology was very rigorous, as I have reported elsewhere, Pool 2015b: 118-19; I thank anthropologist Tom Ryan for his insights.

⁹ He traced this statistically through names in marriage registrations back to *circa* 1900.

¹⁰ My late father-in-law was one of several Pākehā players in a 1918 photo of the 'Young Māori Party' Rugby team, Poverty Bay, East Coast, North Island (an area in which Māori were numerous). The team was captained by a Māori and named after a significant late-Victorian political movement that is credited with the resurgence of Māori.

PART THREE:
Contact, Peopling and
Development
1769–1880s/1890s

Chapter Seven – A Century or More of Turbulence

The Epoch that Ushered in Modern Aotearoa

This chapter introduces and provides an overview of the following five chapters, which span the period from contact to 1880. Thus, they also cover the first 40-50 years after annexation, details about which were graphed in Figure 5.1. Together these events generated high levels of turbulence in every sector and every segment of New Zealand's demographic, economic and social systems. And, culturally, the country changed forever, although vestiges of traditional Māori life still had a role to play – increasingly so in some cases. The chapter covers the broad historical themes common to much of the period and then identifies sub-themes. It finishes by asking, epistemologically, how one can study these themes: the available data, its quality, and techniques that allow one to overcome some of these difficulties.

As explained earlier, this era, above all others, was dominated by one mega-phenomenon: a 'reallocation' (Weaver 2006), achieved by the displacement of Māori and the transfer of most of their resources to the colonists. Overriding most if not all of the minor, more specific factors of turbulence was thus this omnipotent, seemingly inexorable, massive tsunami that drove New Zealand's peopling and development from about 1790¹; it determined what sort of a country New Zealand would be, not just in the nineteenth century but also the twentieth, and even some elements of the twenty-first. Yet, ironically, this mega-phenomenon, which was fundamental for New Zealand's peopling and development over the very long term, has become almost lost among many far less significant but higher profile events in the historiography; it even subsumed some of these (e.g. the 1860s New Zealand wars). By contrast, other episodes of history, notably the Musket Wars, 1807–37, have gained a high profile but were largely tangential to the long-term, overall trajectory of peopling and development, unfolding between 1769 and 1880, or for New Zealand's twentieth or twenty-first century development.

This neglect of the important role of reallocation has occurred regardless of the means by which dispossession and displacement of Māori was achieved – by warfare (1840s, 1860s) of which the campaigns in the 1860s constituted a major colonial war, on an empire-wide scale, and sundry other smaller skirmishes from the early 1840s until 1916, or by legal means, which were often Machiavellian and corrupt. By 1880, the British had gained hegemony, both political and demographic. Despite its massively destabilising effect, this transfer is often seen in history as a systematic, almost inevitable process, something that 'just happened', as if it were a part of the normal course of events. Many of the actions that contributed to its success were very turbulent in their own right – the machinations of the native Land Court,

for example, had such impacts as Rees *et al* (1891) documented in their parliamentary report.

Until then, New Zealand, in Brian Easton's words, was still a 'colony of exploitation', only becoming a 'colony of permanence' thereafter (Easton 1997: 41-52). It was at this stage that the sojourners, dependent on boom-and-bust extractive industries, were superseded by massive inflows of settlers, dependent instead on the displacement of the Indigenous Peoples and the settlement of native lands. This displacement had already been achieved in the south of the North Island and in the South Island but affected few Māori. It was the war and confiscation in the North Island from 1865 on and the subsequent long innings of the Native Land Court until *circa* 1920 that really affected the majority of Māori: they lost their assets and capital; Pākehā settlers gained at their expense.

I am not denigrating the settlers who settled New Zealand with all the aspirations, good and bad, that could be expected among hardworking people who did no more than attempt to better themselves, and had come to New Zealand, or had parented children born in New Zealand, with this aim, and probably little appreciation of the *realpolitics* underpinning these opportunities. They could even take pride in the fact that their efforts eventually brought economic stability that lasted a century from 1880, but only after the Turbulent era had entered the history books. Unfortunately, accounts about the six percent of fellow residents in Aotearoa at the time were at best selective and at worst highly biased². Māori were there to be wheeled out for Royal Visits, but the story of how colonists 'broke in and tamed a land' diminished and even demonised Māori, while valorising the initiatives of the settlers, which, to repeat, were genuinely significant and, under other circumstances, highly worthy in their own right. My dilemma is, of course, simply a microcosm of the basic dilemma of citizens from the majority and politically hegemonic group in all settler-societies. We are there at the expense of the Indigenous minorities who had once had suzerainty over the lands; settler majorities cannot eradicate that memory, but can attempt to mitigate its worst effects. In Aotearoa New Zealand, this situation is given voice in the concept of 'tangata Tiriti' – those who belong to this land because of the Te Tiriti o Waitangi³.

The biased narrative to which I intend to give a better balance becomes evident when one reviews each sector – economic, demographic, social. At first, the economy was dependent on a series of commodity 'booms' coming from extractive industries that were Aotearoa's economic drivers, at least as seen through a Euro-centric lens. In that story, itinerant foreigners are the lead actors, with Māori playing bit-parts. In reality, in organisational terms, extractive industries involved gangs of workers and were like primitive joint ventures, with Māori engaged in a variety of roles. They were normally dependent on the establishment of a station from where hunters went out⁴, and where the first processing occurred, or where harvesting of timber and flax occurred and the initial processing of it. From the beginning, trade in

grain, potatoes and pork was not by Pākehā, but by Māori, exported in their ships and sold in Australia (and elsewhere) or to ships' crews. Recent research has revealed the extent of Māori trade exchanges, beyond Aotearoa's shores, and the gardening and milling that sustained it. Beyond this, the Māori economy had always been hybrid, a mix of gardening, hunting, fishing and gathering, but after contact trade and monetisation, sitting alongside subsistence provided an efficient new form of hybridisation: for example, potato crops could have been for export or for home consumption (Pool 2015: 75-76, Chapt 9, 31n and 164n, citing Anne Salmond 75-76). Even in antiquity the economy had involved a subsistence base, but trading throughout New Zealand, such as the carriage of seal meat wrapped in giant kelp, exported from the far south to the far north⁵.

The stable elements in the economy came from Māori production. If one includes subsistence, until *circa* 1860 a significant proportion of the GDP of Aotearoa – probably the major part – was generated by Māori in contexts that maintained some degree of stability. There were what I call 'clip-ons', some very important, of crops and animals, notably the potato that became basic to Māori living and trade, and technology. 'Clipping-on' the all-important potato, however, had relatively modest alterations to existing farming regimes, as its production techniques resembled those of the sweet potato (kumara), a staple of the Māori diet. Harvested two or three times a year, producing high yields, grown throughout the country, easily traded to colonist customers within New Zealand or on the Sydney market (or stolen by war parties), the potato did little to destabilise the existing food production system, but rather, greatly enhanced it. All this came to a sudden end in 1860 with the Taranaki and Waikato Wars, which had sub-plots driven by prominent settlers to destroy the farming that underpinned Māori trade, and also in the Waikato, British forces wantonly trashed Māori subsistence farms.

The demography of Aotearoa was also in turmoil. From about 1805, newly introduced diseases to which Māori had little, or no resistance brought them increasingly higher rates of mortality. Death rates peaked after colonisation (1840–57/8), mainly from disease, then slowly declined a little over the rest of the turbulent era. It is important to stress that in the pre-colonial phase, death rates from disease far exceeded those from fatalities due to the Musket Wars (*circa* 1807–37; see below and also Chapter 8). Displacement was probably a more significant effect of the Musket Wars than fatalities, but this major form of disruption of native population geography did not cease in 1837. First, Māori expelled by the Musket Wars drifted back to their home territories. Then in the colonial period, Māori, dispossessed of their land through confiscation (1860s) and war, were coerced to migrate. During the New Zealand Wars, particularly the second ones (1860s), Waikato, Taranaki and Bay of Plenty Māori were forced off their lands and large numbers moved from the Waikato south into the King Country and, later, into inland Taranaki. Finally, the transfers

effected by the Native Land Court as late as 1920 forced Māori to move from their villages.

Meanwhile, colonist and settler numbers were being built up by massive inflows (1840–66; 1870–76), and then by exceptionally high fertility rates, throughout the period. Reproduction quickly exceeded net migration, enough to allow natural increase to outrun net migration in 1866–70, and in every quinquennium from 1876 on until 2001–05. To add to this aspect of demographic instability, settler New Zealand was a high mobility society, with elevated levels of itinerancy. From the 1860s Pākehā New Zealanders moved to the South Island which briefly gained demographic ascendancy.

The social order was now very much bifurcated into two components, Māori and colonist/settler. Until the massive inflows of ‘yeomen’ settlers under the Vogel schemes (1870s), within Pākehā society there were several distinct streams: official, military, sojourners and itinerants, especially in the gold rushes, small farmers and proprietors of small businesses and owners of larger businesses, many of which in Dunedin benefited from the gold rushes. For a few decades there was also an aspirant squire class – the wealthier wool ranchers, but it was essentially eliminated by the Liberals in the 1890s and 1900s by means of significant tenurial reform.

All the foregoing points are empirically valid, yet the public profile of the Turbulent period is clouded in enigma, not least because so many actions and events were occurring simultaneously that the era’s mega-phenomenon, this transfer of resources from Māori to colonist, has become obscured. Earlier I referred to this reallocation as the synthesising factor, yet this would probably not be the perception of the era held by most New Zealanders. Instead, the popular imagination has been captured by one set of events more than others: the Musket Wars that occurred from circa 1807 to 1837 (in much of the later analysis I use 1815 as a base point). Some commentators see these as being of greater significance than the New Zealand Wars, and over thirty years they did produce more deaths than the Second New Zealand Wars did – over only 12 years (1860–72). Belich (1996: 157) rates them as ‘the largest conflict ever fought on New Zealand soil’. It seems that for some observers these pre-colonial Musket wars even run into those post-colonial New Zealand wars. For others they provide a vehicle for demonising Māori and minimising the importance of the New Zealand Wars, yet my later analysis in Chapters 8 and 9 shows that in large measure they were tangential, albeit gaining a high profile in branding perceptions of Māori pre-colonial life. If they had remained merely tangential, they would have made a colourful footnote to Aotearoa’s history, but instead too often they have often become the dominant theme that moulds our perceptions about that entire period, in the process squeezing out the collective memory of equally, or even far more, important segments of the historiography. Largely ignored is the contribution of Māori to the economy in what Heather Petrie (2006) has called the

‘golden era of Māori business; obscured is the way that Māori provided the subsistence production which sustained between 98 percent (1840) and 50 percent (1857/8) of the population, yet simultaneously were trading with Sydney, and feeding and housing colonists in New Zealand; and the colony’s revenue was disproportionately dependent on Māori customs and other dues.

The Musket Wars were purely campaigns conducted by Māori against other Māori, so were not the Colonist-Māori wars of the colonial period. As I show in Chapter 8, their lethality, by comparison with that of disease mortality at that time, has been grossly exaggerated, often because of poor arithmetic. Their impact on peopling and development was also exaggerated. Certainly, they live on in Māori collective memory, but for some Pākehā they are simply an indicator of the more lurid aspects of pre-colonial Māori society. But constitutionally, they do have significance in a very specific context. The expulsion of groups of Māori from what were seen as their rightful territory was probably the most important demographic impact of the Wars. Who resided where on February 6th, 1840, becomes an important consideration for Waitangi Inquiries which use this very particular cut-off point for their deliberations about the rightful control of territory, as it affects compensation.

Reporting on the Turbulent Period, 1769–1880

The number of chapters given to this epoch, only one of the three eras into which this book is divided, may seem excessive, but this is by far the longest timespan: 120 years; as against 90 for the next era, and 30 for the most recent. It is also seminal, because some critical long-term features of the peopling of New Zealand and fundamental aspects of its society and economy were being laid down in these 120 turbulent years. Arguably, the most recent neo-turbulent period (1970s-) has seen a huge deviation from some elements of that trajectory, yet some of the foundational components remain in place, and have even increased in significance – for example, the strength of Māori in the life of the country post-1980 signals a reprise of some features of Aotearoa that were eliminated by the Wars and confiscations enforced on them in the 1860s, and the land loss through ‘judicial’ processes into the early twentieth century.

Viewing the entire period 1769 to 1880s/90s as one era may seem at first to be counter-intuitive and does not fit with standard practice in New Zealand’s historiography. For most historical narratives, Aotearoa becoming a colony in 1840 was a fundamental constitutional step that immutably altered the direction and impetus of the political trajectory followed from *circa*.1250, and then from contact in 1769, until 1840. But as I explained in Chapter 1, the present book is less interested in changes in political status, seminal as they may have been, and is focused on the paths of peopling and development. In reality, many major features of New Zealand’s evolutionary path laid down prior to annexation in 1840 just rolled over and continued

on to at least as late as the 1880s, despite Aotearoa becoming a colony nominally under British rule. Some pre-colonial trends even appeared beyond this date, but typically in an increasingly muted form, and mainly among the diminishing numbers of Māori outside the orbit of the majority Pākehā dominated world.

There were three major overriding trends, which are unifying themes across this long period of 110-125 years. The first and most significant hallmark of the entire era was the changeover from a uniquely Māori world to one that by 1890 was virtually Pākehā, except at its more isolated margins. Land sales and other forms of transfer were encouraged or enforced even in the twentieth century⁶, but the fundamental transformation essential to develop New Zealand, according to the precepts imported by Pākehā, had been realised by about 1890. As I have noted, this transfer of authority and power was not immediate. While, constitutionally, Britain assumed the governance role in 1840, in reality effective control by ‘the Pākehā state’ (Belich 1996: 249), and by Whitehall and its local colonial governments, was achieved much more slowly. Moreover, the unfolding of this political-constitutional transition from 1840 was coterminous with shifts in other factors far beyond who ruled and managed the country: transformations in the demography, the economy and the society of Aotearoa.

Secondly, this was a period of great turbulence both before and after colonisation. This is very much a common feature of the entire era. Nevertheless, at a popular and tabloid historian level there has been a tendency to see turbulence as a function of the inter-tribal wars of the period 1815–40, and to argue that colonisation and missionary conversions brought much-needed stability. But this is just not true. In fact, two major colonial wars, and a series of skirmishes well and truly put the lie to that argument, and they were just the more manifest dimensions of the colonial, post-1840, era demographic, economic and social turbulence. The ravages of the war parties of Hongi Hika (especially 1819 into the 1820s) make dramatic reading, because of the use of newly introduced muskets. But, as I show below, their lethality was exaggerated not in the least because missionary and other raconteurs of this period sent lurid accounts of them back to the metropole and because some recent commentators have done bad arithmetic on the rates. Donald Brash, the leader of ‘Hobson’s Choice’, a one-nation group, sees the devastating post-colonial New Zealand Wars as far less lethal: ‘Clearly, the major warfare of the nineteenth century was in the pre-1840s, when tens of thousands of Māori were killed by Māori’. Suffice to say here that the normal figure accepted by historians is 20,000 deaths. In the next chapter I show that this was a minor component of mortality, even when I adopt a much higher number (30,000) for Musket Wars’ fatalities, a figure higher than I have ever seen in the literature. I look further at this and related issues in Chapter 8, including the dynamics of (Musket Wars) war parties cutting narrow swathes across the land, as against more conventional frontal campaigns in the New Zealand Wars.

In the Musket Wars, asymmetry was a function of whether or not tribes had many muskets; as I show in later chapters, real asymmetry came after colonisation and was the hall mark of the colonial wars between the well-equipped, numerically very large British forces and the poorly armed, small numbers of Māori insurgents. But prior to 1840, the small number of European rapporteurs – and we must remember that there were only a few of them, albeit that their written output was prolific – did an effective branding exercise counterpointing the chaos, blood-thirstiness and cannibalism of the Māori (most of whom they had never encountered), with the calm religiosity of the missionaries and their families clustered in the Bay of Islands. In fact, who is to say that colonial war tactics in the 1840s and 1860s were any less devastating or the British any more civilised than were Hongi's taua (war parties) of *circa* 1820: these were, after all, the same British who had strapped Indian mutineers to cannon and fired, simply to show who was who in India. Moreover, in Aotearoa the British were responsible for the wanton destruction of the Māori horticultural industry of Waikato Māori during Lieutenant General Cameron's invasion (1863–64), and the 'Scorched Earth' campaign of Colonel Whitmore in the Urewera (1868).

Thirdly, it was the period that saw a New Zealand-specific imperialist agenda played out, following something of a grand design fashioned in Westminster. It emanated from an imprecise idea stimulated by the fragmentary knowledge base emerging from Tasman's south sea voyages (1640s). Then it was reinforced by whatever was a current British global geopolitical fad, much of the time aimed at outmanoeuvring the French. So, it was focused on India and North America rather than the southern Pacific, much of which comprised more a mapmaker's dream than territories explored systematically by Europeans. It was given more precision in Whitehall's motivations for sponsoring the explorations of Captain Cook and the instructions he received, some of which told him to voyage into the unknown to search for continents and sea passages to be claimed British, and, as something of a side-line, to meet peoples as yet un-encountered. Once places and people were 'discovered', the grand design gradually evolved further *in situ* in New Zealand, Australia and elsewhere. *Grosso modo*, these initial grand-designs were implemented over the next 120 years until the 1880s/90s. They were followed by a new generation of residual or rehashed British imperialist ideas that continued to haunt Aotearoa until at least the end of the twentieth century. In 1973, Britain joined Europe but simultaneously attempted to maintain its Commonwealth networks and wider global ambitions.

I started this story in 1769, when James Cook and his crews made contact with Māori and were the first non-Māori to go ashore in New Zealand. Over the next five chapters, I abide by New Zealand's historiographic convention by distinguishing between the pre-colonial (70 years), and post-annexation periods. Nevertheless, as

indicated already, this division is not as distinct as might be thought even given the singular political-constitutional act of colonial acquisition. Belich argues that it is ‘in some respects an artificial watershed’, because in the post-contact, pre-Treaty era, there had also been increasingly frequent encounters, so the decades until annexation can be viewed as a period in which colonisation was being incubated. Colonisation was not a once-off process, involving putting empire in place through ‘false’, ‘loose’ and ‘tight’ phases, so was not absolutely and definitively achieved even 50 years after the Treaty of Waitangi had been signed in 1840 (Belich 1996: 116, 249).

1769–1880s/90s: A Cultural-Demographic-Political Transformation

To analyse this era, three themes will be explored, and are introduced here. Theme One relates to Population Change – the Peopling Dimension. Theme Two covers its most consistent feature – the entire period was one in which turbulence, in one form or another, was a backdrop to the very significant events that unfolded, decade after decade. All aspects of the demographic, economic, social and political life were punctuated by sudden shifts, and even by warfare and violence on a scale never seen since in Aotearoa itself. Theme Three is the Backstory – that Aotearoa was merely a sub-story of a wider Imperial Agenda that still dominated its life.

A first unifying theme for this long epoch was that it was the *mise-en-scene* for New Zealand’s single most significant game-changing, cultural-demographic-political transformation ever – from a totally Māori to a virtually Pākehā domain – to be detailed in the next five chapters. This transition is encapsulated by the demographic shifts shown in Table 7.1 below. By 1901, however, it seemed that the population shift-share had reversed ever so slightly, and Māori numbers had begun to start to edge back up.

The most rapid decrease in numbers per annum (two percent), was suffered by Māori from 1840 to 1857/8 with severe perturbations on all aspects of their population dynamics and structures. This was a very rapid decrease but was not a collapse of the sort seen in small-island tropical Polynesia. The acceleration directly followed annexation, which suddenly opened Aotearoa to large inflows of Pākehā and their attendant pathogens. In one year, 1840, large numbers of settlers arrived in Wellington Harbour, suddenly greatly inflating the sum of 2000+ Pākehā who had been present across the length and breadth of Aotearoa on February 6th of that same year. The growth rates of 20 percent (1840–57/58) and 11 percent (1857/58–74) per annum that Pākehā passed through at that time are dramatically rapid. In the space of only 18 years, 1840–57/8, Pākehā numbers rose almost 30-fold, although, of course, the statistical base in 1840 was very small. Nonetheless, the immigration of settlers and officials, bolstered by large troop movements, and, further strengthened by high rates of reproductivity once in the colony, was to alter Aotearoa’s peopling into the

twenty-first century. Even at the end of the Victorian era, the four percent growth per annum recorded for 1874–1901, coming mainly from fertility, when net migration's contribution to growth was small and even negative, was a very high per annum rate. What is interesting was the impact on Māori health: wherever Pākehā were found in small but appreciable clusters – the South Island, Wellington-Manawatu, Taranaki, Auckland-Thames-Hauraki, and, to a lesser degree Northland, as there was a longer imprint there – Māori child survivorship declined. With the exceptions of Taranaki and, to a lesser extent, Auckland-Thames-Hauraki, in both of which settler inflows continued in waves, these were the first regions to see child survivorship improve as exposure to disease generated resistance to infection (Pool 2015: Figure 12.1).

Table 7.1: Core Demographic Parameters of the Turbulent Era: Population Sizes Māori and Pākehā, and Percentage Māori (Best Estimates) 1769–1901

Years	Māori (‘000)	Pākehā (‘000)	Māori (%)
1769	90	Nil	100
1840	80	2	98
1857/8	59**	59**	50
1874	47	299	15
1901	46**	770**	6

*Source: Pool 2015 Tables 11.1 and 11.2; *See detail Table 8.1; ** = Censuses, Māori count 1857/8*

Simultaneously, control of the nation's capital assets – its land – shifted from Māori to Pākehā. In the early days, different extractive industries emerged, went through booms then busts. But, for the long-term mainstream development of New Zealand, extractive industries became more and more tangential, remaining as a dream that emerges from time to time of mineral riches; petroleum is a recent example.

The first century or more after Cook was an era of change that was due to the turmoil coming from shocks and game-changing encounters between two very different peoples, in which a sort of imperfect accommodation was eventually achieved. The Indigenous inhabitants were ravaged by newly introduced diseases, by classical colonial wars and by their being ‘swamped’ by the newcomers. In Aotearoa, ‘swamping’, in Belich's words, ‘was simply the massive outnumbering of a shrinking or static Māori population by a Pākehā one’. It replaced the far less successful strategy of military conquest as a means of controlling the country and its natives (Belich 1996: 249). By the end of this era, the settlers were surgent demographically, were constitutionally in *de jure* control, even if not totally in a *de facto* sense, and were assertive in the development strategies they adopted. In 1840, most New

Zealanders had been Māori; half were still so in 1857/8; but only between five and six percent in 1901. Perhaps more tellingly, the 1901 Māori population was 50 percent of its total at Cook's time; 43 percent smaller than at the Treaty of Waitangi; and a fifth smaller than it had been just before the 1860s war. In 1901, there were 385 times more Pākehā than in 1840, and 13 times as many as in 1857/8. These are powerful indicators of the cultural-demographic impacts of 'swamping'.

A second factor in common across this entire era, before and after annexation, was turbulence. This came from a very wide range of factors, of peopling, of development, of political-constitutional transitions and of the impacts of these on the environment, as was shown in Figure 5.1. Beyond those, there were all the shocks and game-changing events identified in Figure 5.1.

These were particularly challenging years for Māori, especially from c.1805 to c 1896. What happened, how they finally survived – why there was no 'fatal impact', nor a failure to reproduce, nor a population collapse – is detailed in the next five chapters alongside the narrative about Pākehā.

There was a third factor in peopling and development. In this era, New Zealand was never free of the direct and indirect effects of imperialist ambitions, aspirations, agendas and inter-linkages, often (but not always) fashioned in Whitehall.

Lest this seems to posit some sort of 'invisible', but sometimes highly intrusive, 'hand' for Whitehall, I want to be clear – I am not suggesting that there was some omnipotent, grand master plan or vast imperial conspiracy (Paxman 2011). By and large, at least viewed retrospectively, imperialism was an untidy business often enacted by less than competent operators, not a process played out methodically by masterly statesmen. Very often, Westminster muddled through, rather than executing brilliant geopolitical strategies.

On the ground in Aotearoa, the manifest issue was that, from the 1790s, the few European sojourners were interlopers really operating on the margins of New Zealand's development. But, because of the Treaty of Waitangi in 1840, the British became the suzerain power, so, in turn, the colony's direction was subject to empire-wide meta-ideas. The first was how to perceive and fashion relations between Indigenous Peoples and Europeans. The second was how to make New Zealand a 'White Colony' suitable for Europeans but performing a paternalistic 'duty of rule' over a small native population, although lofty principles typically gave way to more pragmatic quotidian issues. For many incoming migrants, and even their successors, the natives were a barrier to settler aspirations because Māori held the land; as colonists saw it, Māori were standing in the way of Pākehā achieving their entitlements to property. Māori, like their peers in other settler-colonies, justifiably saw the resources as theirs, and thus after annexation there were two sets of major wars resulting in conquest by the Empire and minor skirmishes, including one of the most unforgivable incidents in New Zealand history: the armed invasion of peaceful

Parihaka village in Taranaki, a full apology for which was made by the Crown in 2017 (Gillespie 2019).

Continuities and Transformations

Not all was turbulence and churning in this era. It also saw the establishment of what became continuities, even drivers of further peopling and development in Aotearoa/New Zealand. This process does not abruptly start with contact but goes back hundreds of years before Cook's arrival. Consequently, as noted earlier, the delineation between pre-historic and historic that I make is less clear than the exact date of 1769 might suggest. Māori had carried with them from the tropics important ideas about social and economic organisation, also bringing what were to become basic food crops as well as dogs, which, along with rats, were one of two exploitable land mammals⁷ and were to play an important role, for chiefly food and clothing. Accidentally, kiore, Pacific rats (*rattus exulans*) came too and were hunted for food at special feasts (Haami 2008). There were also complex trading networks, as reported by Matene and Tyron Love (2010).

Māori values and behaviours had been fostered by a culture that sprang from eastern Polynesian roots and ideational structures, built on, and extended over 100s of years, as was also true for patterns of social organisation. Despite half a millennium's separation, the similarities between their Polynesian origins and their evolved life in Aotearoa were sufficiently close, however, that Tupaia, a chief, born on Ra'iatea, whom Cook brought from Tahiti in present-day French Polynesia, spoke a language intelligible to Māori and understood their social rituals.

In the Victorian era, a European 'colonial society' emerged, a 'Better Britain of the South Seas' as it saw itself, with all the status distinctions and internal tensions this term invokes. By the 1870s, the country was becoming overwhelmingly Pākehā, but with vestigial Māori elements, increasingly being driven by resource loss into the North Island's poorer, less agriculturally productive marginal regions.

The last decades of this era saw Pākehā become hegemonic, demographically and politically, and thus occupy the foreground of the national narrative. But Māori were also there too, albeit surviving precariously, and thus I must document what were their worst decades since contact. Their contributions to colonial development are often overlooked, because their numbers were so small and their parallel hybrid economy, mainly subsistence, generally played an increasingly peripheral role in the socio-political life of the wider colonial society. Consequently, many Pākehā tended to forget Māori social and economic development, or more correctly their underdevelopment: this counterpoint between two contrasting peopling and development paths is a norm in settler-societies.

This present chapter finishes with a discussion of the data sources available for this period, an issue that raises major epistemological as well as more technical

questions. It is easy to snipe at the validity of the estimates and data presented here, but they are presented after building up a general picture through taking different methodological strategies in search of numeric parameters, backed up by a large volume of qualitative contextual analysis, each revisited as new data sources appear. I first started this process in the 1960s but have exponentially extended it as new indirect estimation techniques opened up, particularly in Africa where I was frequently on population missions for international agencies⁸. The most robust estimates come from retro-projecting from the first relatively ‘hard’ piece of empirical information in the 1874 census and interpolating what is known about intervening events such as epidemics, which are qualitatively (but less quantitatively) reported for New Zealand and internationally. Moreover, by the 1870s, causes were reported in the Pākehā vital statistics, which were remarkably good for those days – the numbers of births and deaths were pretty exact, whereas the causes of death were not certified in ways that meet modern standards. There is just no substitute for empirically grounded indices; economic and other forms of modelling raise substantive issues, but in the main their utility lies more in setting these out than the validity of the results they yield. Thus, in this and subsequent chapters my statistical analysis starts in 1874, works back to the Fenton 1857/8 count, to Dieffenbach’s figure, to Cook’s estimate.

Epistemology: Data, Qualitative and Quantitative, Estimates and Guesses

Data quality is the albatross around the neck of those who attempt historical reconstruction. Thus, it is necessary to review, epistemologically as well as methodologically, the data in this chapter and those that follow. I draw on a wide range of expository sources, plus counts from musters and from censuses at different dates from 1857/8 on, from the *Statistics of New Zealand* for various years, and from colonial returns collated by Arthur Thomson in his remarkable two volume book published in 1858. In passing, one wonders how the good doctor ever found time to practise medicine, for he also published statistical papers and reviews (as ‘anon.’) for literary journals. He also prepared New Zealand’s first epidemiological study, a remarkable exercise, comparing the health of infantry in the colony and elsewhere in Empire (reported Chapter 9). In Chapter 12, I also turn to reasonably reliable analyses and retro-estimates made by economists to allow me to look at the Pākehā colonial economy.

The dominant story over the next three chapters is mapping how and when the great transformations noted earlier occurred. Doing this is difficult because of a major epistemological problem. Prior to annexation, Aotearoa’s society was Māori – in 1840, Pākehā were a mere two to three percent of the country’s population residing in tiny Pākehā enclaves – yet the historiography is weighted disproportionately towards their contributions, and, far more importantly, their perspectives on colonial life. With

the major exception of some of the more lurid aspects of Māori life (e.g. cannibalism), which receive disproportionate historical attention and are normally exaggerated, the main dynamics of Māori society prior to 1850, how its social organisation and production unrolled on a daily basis, are severely under-represented in the narratives available to researchers to date. To be fair, the nineteenth century records, on which this expository research relies, was overwhelmingly written in European languages, mainly English but sometimes another such as French (Jennings 2014). In future, I am sure, the data base will be more comprehensive and balanced as a new genre of research based on far more diverse sources, including Māori, becomes available⁹.

A major qualitative source comes from published journals and memoirs. In the Georgian and Victorian eras, travellers and settlers in New Zealand, not just missionaries, but naturalists like Ernst Dieffenbach and even traders such as Joel Polack, were ardent diarists. They seem to have had a ready market when they published their memoirs in Britain, be these attempts at accurate accounts or somewhat sensational reports. From these accounts, we know a great deal about missionaries and mission life, such as details about their flower and kitchen gardens. Additionally, we know a fair amount about colourful figures such as ‘Pākehā-Māori’, who lived among Māori, adopting their customs and performing mediator roles, while much is known of about traders, and even about extractive industries in far-flung corners of Aotearoa. The accounts of Pākehā life were then embellished by sometimes lurid, often second-hand, descriptions of Māori life, sometimes much later by Victorians at the end of the nineteenth century and even more recently. The net result, however, is that we undoubtedly know far more about the tiny number of Pākehā, and particularly about the Bay of Islands and its surrounds, than we know about everyday Māori of that era, especially those living well away from points of contact.

For all their weighting towards the Pākehā experience, these reports are extremely valuable and have been perused in detail by New Zealand’s leading conventional historians, who document much about early post-contact New Zealand. The more rigorous of these researchers have also cautioned their readers about taking the writings of missionaries, and some other writers, too literally. Despite their self-assumed importance, the Pākehā of the day until the Treaty of Waitangi were, in fact, merely bit players in the dramas facing Māori. Post-1840 the situation changes and by the 1860s is starting to reverse. From the 1870s, Pākehā are the main actors, and this is reflected in two chapters (11 and 12) dealing with this era on their society and their economy.

For earlier years and even later, this leaves the researcher in a bind. As most of the sources are European, that perspective becomes the public record of this period. I cannot alter that basic fact, but I shall adopt two strategies in mitigation. First, I will start with Māori, estimating how many there were, and what might have driven changes in population size. This demands that an assessment be made of the

prevalence of their alleged social pathologies, to determine the demographic impacts of these phenomena – or incidence in the case of homicide and even suicide. Some of this can be bizarre. For example, the late Victorian writer (Dr) Alfred Newman, sought to explain why Māori as a race had been disappearing, at least according to his judgement, even before contact had occurred, a decline he attributed to suicide, among other causes. Belich (1996: 247) pithily comments ‘Newman’s unique access to pre-contact suicide notes, presumably telepathic, enabled him to deduce that “suicide was extremely common”.’ But, above all it is necessary to evaluate the morsels of information we have on the spread of diseases and on the Māori economy.

By contrast, we have available the fine forensic work by Ron Crosby (1999), noted earlier, who records every piece of valid evidence on most taua trajectories, and, in a related context, of Dorothy Urlich (1969) on the consequences of the taua for population distribution. Thus, the Musket Wars are far better documented than most events prior to 1840, and this allows a systematic analysis of both their temporal and spatial dimensions; this does not inhibit commentators with an ideological agenda to pursue from largely ignoring Crosby and citing the more sensational accounts. I will show that this is a gross exaggeration of their importance. They were certainly high profile, but they were not the only, or even the major event, of the period. Nothing puts their significance into perspective more than the statistics – yes actual statistics – for the 1820s which I will present later. They show that peak trade with New South Wales was occurring at the very time when the Musket Wars were raging across New Zealand and, according to some commentators, with an impact like the 100 Years’ War in Europe.

To the extent that I can, I review the Māori economy. Most were engaged in traditional economic pursuits – horticulture, enriched because of the ‘clip-ons’ of potatoes and other plants and animals I noted above, and by adopting technologies that enhanced horticultural productivity. The analyses of William Schaniel (2001) have brought rigour to this economic story, and this has been significantly helped recently by business historians such as Heather Petrie (2006). Finally, Belich (1996) was most assiduous in his attempts to bring a balance to accounts of the Māori economy and their society in this era. What emerges is that the 70 years from Cook’s voyages to the Treaty of Waitangi saw Māori laying down the hybrid economy (also defined Chapter 5) that was to remain their hallmark until World War II. Ordinary Māori families lived by their subsistence activities combined with trade, whether exchange-based (pre-contact) or monetised (later).

Māori survival had an impact on New Zealand statistical protocols, resulting in attempts to compartmentalise ‘half-castes’ into various categories, and, until 1926, was determined by a census enumerator, who was probably a Pākehā. ‘Race’ was assessed in later censuses by respondent self-reporting, providing data on their ‘fractions of Māori blood’, a practice that continued until the 1981 census (Kukutai

2011). Data on Māori societal structures and organisation and on their economy are even more diffused than demographic information, and even more difficult to quantify, but can often be gleaned from expository research findings. For Māori demography it is necessary to draw on methodologies termed ‘non-conventional techniques’ (see below). By contrast, to analyse Pākehā peopling and development it is easier using conventional techniques that are familiar to most ordinary citizens as they are drawn on for the standard discourses on policy in the media and elsewhere, as methodologies conventionally used by statistical bureaus.

Victorian intellectuals were fascinated by ‘moral statistics’. Their statistical methodologies were established by William Farr, a founding figure of both demography and epidemiology, in analysing the 1841 census of England, and in his work on vital statistics dating back to the late 1830s (Bourdelaïs 2003). For Pākehā, after making normal tests for reliability, many conventional rates can be directly computed, and the censuses also provide a range of data on social factors. The monetised economy was mainly Pākehā in this period, so its statistics, reworked carefully by economic historians, give some information on settler development. By contrast, because of a paucity of numeric data on Māori the luxury of such a statistical approach does not exist. Instead, resort must be made to non-conventional methods to estimate demographic rates, the validity of which can be confirmed by reference to a wide range of generally qualitative information that could be called ‘circumstantial evidence’. These also open insights into social and economic changes.

Once differences in definition and diagnosis between the Victorian era and today can be sorted out, expository research on reported diseases among Māori can also be verified remarkably well even from exogenous comparative data. For example, Charles Creighton’s now dated (1894), but still venerable, compendium of epidemics in Britain gives patterns of periodicity that fit well with what both Māori and Pākehā were facing at approximately the same time in New Zealand; a notable case is influenza, appearing in the late 1840s and then not again until the late 1880s. Then there are more geographically proximate comparisons – the Melbourne and Fijian measles epidemics spread to New Zealand in 1875. Within New Zealand itself, comparisons with death registrations for Pākehā show spikes that coincide with qualitative reports on high mortality tolls for Māori – influenza in 1891, part of a pandemic, is a case in point.

In the nineteenth century ships came from ports where outbreaks of various infectious diseases were occurring, so knowledge about the home ports and Britain can be invaluable. When the passengers landed, they introduced epidemics to Māori, who typically had no resistance to what were new pathogens. For New Zealand, smallpox was a notable exception for which there was successful intervention, as it could be diagnosed, there was also a vaccine for it, and ships with it aboard were quarantined with success, except in 1913 when it finally came ashore killing 113

Māori. Thus, unlike even neighbouring Australia, New Zealand never suffered from devastating smallpox outbreaks. With an incubation period of only a few days, people suffering from cholera could have come to New Zealand as survivors only in the era of air travel. So, despite stories circulating in the popular press (eg Hunt 2014), it is unlikely that, at the end of the Victorian era, members of the Beauchamp family, the parents of famed New Zealand author Katherine Mansfield, died from cholera. It was probably typhoid which was definitely spread from time to time by Wellington's inadequate water and sewage systems; Department of Statistics researchers, in a detailed summary of mortality related events, never mention cholera (Dunstan *et al* 2006); nor do Woodward and Blakely (2014) in their authoritative history of public health; nor does the Ministry of Culture and Heritage (Historical Branch) in a PDF timeline of epidemics, 1817–2009. Bubonic plague appeared in 1900, when a few people, plus some rats, died. This scare precipitated the government into a typically New Zealand political flap – set up an agency. Thus, this panic resulted in a rather positive outcome – the establishment of a unified public health system.

Demographic data have been collected since the Babylonians, and, even in the relatively distant past, enumerations have taken similar, even standardised, forms, of which the most basic is a muster, count or census. Consequently, we now have data that are reasonably comparable in form spanning world history for key demographic variables. They are also relatively free of the definitional tangles that bedevil most other social and economic phenomena. In some cases, population data are even self-defined; by definition, a birth is a birth, although whether or not it is recorded is a different matter. Of course, once one goes beyond narrowly demographic variables problems emerge, as in the case of defining 'race' noted above.

There are now basic data on just about every twenty-first century society of any significant size, and on many that are quite small, even sub-national populations. Moreover, historical demography and paleo-demography have endowed us with a plethora of population histories. As a result, there is an enormous volume of data on the demographic parameters to be *expected* under 'normal' circumstances – and even 'abnormal'; the infant mortality rate during the siege of Leningrad, for example, gives us an idea of truly extreme conditions. Consequently, the feasible limits for population growth and its components are very well known. Population change is very much a process determined by a mix of biological experiences and social behaviours. In the nineteenth century, both Māori and Pākehā had 'natural fertility' regimes, where conception risks were not controlled by family planning, but later in that century Pākehā used delays in age at marriage and spinsterhood, and probably also abstention from sex within marriage, as a means of reducing levels, described in earlier chapters. While medical science was still very primitive, death rates were affected by social conditions that greatly favoured Pākehā; today, we may eschew a protein-rich diet, of mutton three times a day, but this gave Victorian Pākehā settler

children a huge advantage over their British cousins, whose meat eating was infrequent – Pākehā children were thus heavier and taller than their cousins and even Americans (Pool and Cheung 2005).

Demography went through a process of major technical elaboration in the early days of the Royal Society of London (late seventeenth century), mainly in relation to life-table methodologies ('Bills of Mortality'), which have been fundamental to it (and actuarial science) since, both theoretically and methodologically. Since World War II and until about the 1970s, much of its methodological focus was on a sub-field of indirect estimation of demographic parameters, mainly vital rates, for populations with inadequate data, a defect faced by much of the world, then and still today. The methodologies and techniques developed since the 1950s, have been grounded in very powerful mathematical demographic theory, derived from empirical observation across the world and over time, then tested on numerous populations, including those for which rates are very reliable. These techniques can be, and have frequently been, applied to populations in the past with inadequate data – for my own research since the 1960s on Māori, from when the first of the developments in these techniques had appeared (e.g. Pool 1991; 2015). Subsequently, this research has been extended and updated as empirical evidence mounted and techniques improved.

From this research were derived what are termed 'model stable populations', where birth rates and death rates are constant or change consistently over time, and to which age-distributions can be fitted and vital statistics estimated from appropriate selected models. These statistics are essentially the rates that, under assumptions of stability just noted, would have produced the stable age-composition in each model. These rates thus 'renew' the population, as is postulated in 'renewal theory', elaborated by a mathematical demographer Alfred Lotka over the first decades of the twentieth century (Tuljapurkar 2003). In passing, as empirical experience has accumulated, so too have Lotka's rigorous conditions been loosened, and robust estimates made from what are merely 'quasi-stable' structures. The Indian demographer 'J R' Rele took this even further, by testing the robustness of his techniques, which I have used to establish Māori time-series, against complete registered data for populations that were certainly not 'stable' (Rele 1967; Pool 1991: 66-73)¹⁰.

In the next two sections of this chapter, I discuss the inherent problems in reconstructing the history of Māori population and development, and then those for Pākehā. But first it is necessary to cover a problem that is generic for both Māori and colonists. There are marked imperfections in the data on gender once one attempts to go beyond simple numbers and issues that were central to the Victorian view of the world, such as marital status (where currently/ever-married were almost certainly over-reported), 'allegiance' (nationality/birthplace) and religion, which was spelt out

in countless detailed tables. By contrast, for both men and women data on occupations were inadequately collected and coded in ways that render difficult analyses that fit modern formats, but a further factor was the way in which Victorian census takers (and even their successors) viewed women and imposed their precepts – that men were the ‘breadwinners’ and women their unpaid helpmeets dependent on their husbands – on the design and analysis of schedules. This was analogous to these in the way in which, in keeping with their desire to see Māori be assimilated, Victorian officials paid disproportionate attention to ‘half-castes’ (Kukutai 2011). Catherine Bishop (2019: 16-22, Chapt 7) points out that, at the 1874 census women categorised in the ‘Domestic Class’ (principally women and children) included ‘those persons engaged in personal offices to man’ (i.e. prostitutes). In 1892 von Dadelszen ‘separated occupation categories into “Breadwinners” and “Dependants: Non-Breadwinners”’. Wives were automatically categorised and dependants unless specifically stated otherwise. This downplayed any economic input by them or their children’; among these women obscured by statistical design were real entrepreneurs.

Bishop (2019: 17) argues that for Australian and New Zealand statisticians the ‘Breadwinner/Dependant’ distinction was seen as basic to ‘a nation’s prosperity’. In fact, this philosophy was much more deep-seated than this might imply, as it underpinned all public policy until its precepts, but not material factors of gender-bias, were eliminated in the neo-liberal revolution of the 1980s. It was an enigma, as it carried with it deeply sexist values, yet it had allowed the establishment in New Zealand (and Australia) of relatively successful comprehensive welfare and work regimes guaranteeing what was termed a ‘social wage’ (discussed in Chapter 5).

Bishop (2019: 17-24) has had to turn to a wide range of sources to build up her analysis. But she adds that while the documenting of Pākehā businesswomen may have been difficult, tracing Māori was even more problematic – not the least because of the Euro-centric bias in the reports of that day that I have raised as a general issue here.

Data on Māori

The next three chapters will review 110-120 years of Māori demographic history, as against only 40-50 years for Pākehā. Prior to 1840, there are a few tiny fragments of data on Pākehā to which I refer, and which are surprisingly informative, but is essentially a side issue. Documenting the Māori population in this period is the core question and is very difficult – the harsh reality is that, for almost a third of the entire timespan of this book, there is almost a demographic *terra nullius*. To attempt to make sense of the few snippets of information available, I turn to the field of methodology discussed in the last few paragraphs (Pool Unpublished). Serious nineteenth century Māori population analyses really start from Fenton’s census in which there are national data on men, women and children. These, and similar age/sex

groupings in later censuses, allow some crude indirect estimates, which, in one of the rare cases when they could be tested against directly computed rates from data collected for Rotorua by (Dr) Maui Pomare in the community health programme 1902-06, proved to be reliable. Both the indirect estimates and his data show crude death rates around 40 per 1000, and the aetiologies reported by his health inspectors fit well with what one would have expected for Māori at this period: the majority of deaths were to young children, ‘who had contracted measles or influenza¹¹, or who suffered from dysentery or severe diarrhoea...’ (Kukutai *et al* 2002: 83).

For Māori there were local enumerations from the 1840s, but the first ‘national census’ was 1857–58, coinciding with one on settlers also in 1858. A series of censuses on settlers occurred and included Māori again in 1874 and 1878. Nonetheless, Māori data in both vital and census counts remained incomplete until after World War II, so adjustments have had to be made to their data, even those to be used in later parts of this book and not just in the Victorian period. In some official time-series (eg population size), where a ‘total population’ is a useful statistic, but Māori were excluded.

Expository accounts, and what I have just called ‘circumstantial evidence’, become very critical in assessing these data. A very useful example of how the process unfolds can be extracted from Ron Crosby’s book on the Musket Wars, noted above, a forensic account based on qualitative data of the taua and battles over twenty-five or more years. By parsing his information and tabulating the temporal and geographical spread of these events – not their intensity as this demands levels of measurement that are not possible, although a crude notion of this was applied using descriptive reports – it is possible to raise important questions about the real impacts of those wars. Such details as fatality rates could not be computed, but the regional spread and periodicity of the Musket Wars still provide compelling data, albeit qualitative, allowing some of the more exaggerated accounts of the impacts of these wars to be challenged (Crosby 1991)¹².

As noted, the settler-native wars in New Zealand have been largely neglected by Hollywood, which, on balance, is probably fortunate. But, until recently they were also largely downplayed in the national narrative. The ‘Māori Wars’, as they used to be called, were viewed as a litany of imperial military successes, in which the numbers of Māori warriors they bravely defeated and casualties they inflicted on the rebels were often exaggerated, all supported by monuments and memorials dedicated to the British side. Māori, so the story ran, were guilty of savagery; soldiers and militia were gallant. This historiography has been reappraised in recent Waitangi Tribunal hearings, and by Belich, building on the research of James Cowan, *The New Zealand Wars* and Keith Sinclair, *The Origins of the Māori Wars* (1986: Chapt 15; Cowan 1922-23; Sinclair 1957). He dissected the British Victorian interpretations of the wars, identifying the pivotal role place of the ‘New Zealand Wars’ in the

country's national history. He achieved this by setting out the key metrics, that, 'They were not, as is sometimes suggested, storms in a teacup or gentlemanly bouts of fisticuffs, but bloody and bitter struggles...' In fact, they were asymmetric, with the Māori insurgents greatly outnumbered by British forces – infantry, artillery, and naval and marine contingents heavily armed with the latest weapons, backed up by gunboats and other military assets. Māori fatality rates were also far higher: Easton (2020: 140) gives figures of five percent for Māori versus 0.4 percent for Pākehā.

At their height the second major New Zealand colonial wars of the 1860s were important enough for 'Mother England' to send out to this most distant corner of Empire 27 percent of all the imperial military outside the United Kingdom and India, among them battle-hardened, post Indian Mutiny, regiments of the line. In Aotearoa, the Crown also had at its disposal significant forces of colonial militia and kūpapa – Māori who fought on the British side. Most recently, in a magisterial work centred on the Waikato Wars, Vincent O'Malley (2016) has cemented in this domain of scholarship as fundamental materials for the construction of national identity.

In the absence of statistical accounts, expository confirmatory data are even more essential in analysing the Māori economy than its demography. There are a few numeric gems that are strategically important, such as information on goods from New Zealand unloaded in Sydney in the 1820s. Data on the Māori contribution to national production are largely, but not entirely, missing from the nineteenth century equivalents of 'national accounts'. A major exception, for example, is piecemeal information on livestock and land-use (grass or crops) collected in a few censuses. In any case, even after the national accounts' methodologies were extended and refined after World War Two, subsistence or hybrid (subsistence plus some cash income through casual or seasonal work) economies were effectively ignored. Yet, a significant part of any developing country's economic production was, and still is, often missed, and for Aotearoa, this holds true for the Māori inputs to the nation's economic growth at least up until World War II. I have recently attempted to address this issue for late nineteenth century Māori. Though the results are indicative, systematic and interesting, they are not definitive (Pool 2015: 276-82, 286-90).

The expository record for Māori is mainly dependent on journals written by Europeans, but there is now a growing literature based on Māori oral tradition (discussed earlier). These sources have been used by a number of authors, in part to analyse Māori pre-historic migration and settlement, as Atholl Anderson has done, while others have studied first encounters with Pākehā, the particular contribution of Anne Salmond. Linguist Bruce Biggs's rigorous study on marriage, using these sources, relates not just to his own iwi, but, by consultation with a number of leading Māori scholars, also to other iwi (Anderson 2014: Chapt 2, esp. 47-51; Salmond 1997; Biggs 1960)¹³. In Australia, when criticising the work of legions of conventional historians on Aboriginal- 'white' relations, Australia's revisionist

historians at the end of the twentieth and beginning of the twenty-first centuries, the ‘history warriors’, have aggressively disputed the validity of oral tradition, gaining the enthusiastic approbation of conservative politicians, including Prime Minister John Howard. Their dean, Keith Windschuttle, virulently, but very inaccurately, attacked Salmond. In a rather more nuanced way, New Zealand historian Paul Moon summarily dismissed Māori oral tradition as unreliable. Recently, however, Anderson, who has used oral tradition both for pre-historic and historic analyses, has affirmed its value. His detailed analysis of their utility and robustness, includes how genealogical data (whakapapa), which are central to these records and other information, are found in different regions for different tribes, in ways that could not have caused the cross-contamination of records. For their use in prehistory, such as the Māori migration to New Zealand, he also demonstrates how oral tradition confirms results from other totally independent sources (Windschuttle 1997: 275; Moon 2008: Chapt 7, esp. 55, 58; Anderson 1998; Binney 2009, calls this ‘orality’).

For any meaningful analysis of Māori population and development, a starting point is to approximate the number of inhabitants in Aotearoa in 1769, in order to posit what trends might have occurred. The census of 1874 provides a moderately reliable total figure. It was far more complete than Francis Fenton’s census (1857/8), which was a remarkable undertaking, but one which, in some regions where there were no enumerators, was dependent on estimates – really guesses. Of my several methods of estimating Māori population size in 1769, retro-projection from 1874 to Fenton’s census to Ernst Dieffenbach’s estimate (see below) to 1769, taking into account intervening events, seems the most robust. Years ago, I also looked at forward ‘projections’, based on growth rates reported in paleo-demography, for different-sized settler groups, starting with different dates of arrival, to determine what the population size might have reached by 1769. I will not repeat that exercise here except to note that with Tahu Kukutai, I revised my earlier figure of 100,000 down to 90,000, which is often quoted by scholars I respect. There was a need to take account of a recent reassessment by the economist Brian Easton, who had raised issues about ‘Malthusian’ limits plus the effects of natural disasters (a truly mega-tsunami documented and dated in both geology and oral tradition (Pool 1991: Table 5.2, ‘Best Estimate for 1874’, and 57; Pool 2015: 154; Pool and Kukutai 2011; Easton 2011).

It is equally important to estimate how many Māori were present in Aotearoa in 1840, and from then until 1857/8 and 1874. This determines whether or not the rates of decline between Dieffenbach’s estimate and Fenton’s count, and then to subsequent censuses, are feasible or not.

The distribution of the Māori population at various points is critical in order to assess how development, and especially land loss affected Māori in different periods. The population’s geographic distribution is a start, while data on age-structure

significantly fill in details, not just about the age/sex breakdown but about important background information on factors affecting development (eg dependency ratios = Young + the old /working age population). By fitting Māori age-distributions to model tables to apply the indirect techniques noted above, demographic parameters such as possible ranges of life-expectation can be estimated (Pool unpublished, which summarises my earlier research). Combining geographic and iwi (tribal) distributions, when these data are available, with age-distributions allows a crude but incisive analysis to be made of the demographic and health consequences of land alienation (Pool 2015: Chapt 12, 288-91).

From contact until the census carried out by Judge Fenton in 1857-58, coinciding with one on Pākehā in 1858, and the first national count of 1874, the numeric record on Māori is very limited. The most problematic period is before 1840 as there were no systematic attempts to count Māori before this. About 1770, there are several estimates, really guesses, of a population of 100,000, which cluster around a figure attributed to Captain Cook, but actually recorded in a book published by Johann Reinhold Forster (1778)¹⁴. This figure was supported by the traveller John Lydiard Nicholas, who walked through rather densely settled areas inland from the Bay of Islands in 1814-15, so at least had some ideas about what might have lain away from the coasts. From then on, there is little else until various writers and explorers from the 1830s ventured guesses, whether their own or other people's is sometimes not clear. These are reported mainly in the exhaustive 1837-38 *House of Lords Inquiry*, which resorted to cross-examination of witnesses, a valuable function for later scholars trying to evaluate the quality of these records (*British Parliamentary Papers* 1838; Nicholas 1817).

Ernst Dieffenbach bridged this knowledge gap seventy years after contact. He undertook a count, *circa* 1840 based on regional estimates of Māori. This yielded a national total of 114,890, which will be returned to in further detail in the next two chapters. He thus plays a pivotal role as the first systematic recorder of Māori numbers, so that his figure affects perceptions about Māori population sizes both going back to Cook and forward to Fenton's census of 1857-58. From the 1870s on under-counts are minimal, although other problems, addressed later, persist.

Retrospectively, I greatly admire Dieffenbach for his seminal contribution. Nevertheless, as I will note, his data are too readily accepted as exact, perhaps because he quoted them with seemingly precise detail, yet they probably contain over- and under-estimates, both significant. One cannot ignore Dieffenbach's own caution: 'I was inclined to place the population at a *much lower rate* than that which I have given here' (my italics). He is modest about the robustness of his data, and critical of the 'exaggerated estimates of some navigators....', making a major caveat (Dieffenbach 1843: v 1, 81-82; v2, *passim*):

‘In this census I do not pretend anything like accuracy; but I have visited nearly all the tribes myself, and if, as I think is the case, the data which I obtained of the number of fighting men and the average of the rest of the population are to be relied on, my estimate is entitled to some credit.’

Data on Pākehā

The range of numerical data available for Pākehā is extensive, complete and as robust as might be expected for those variables for which data were collected (Papps 1985: v2 Annex). A notable omission in the Pākehā statistical armoury was information on births by age of mother, collected only after the *Vital Statistics Act* of 1913, the act that also legislated Māori vital registration. The General Fertility Rate (Births/Women at Reproductive ages) can, however, be directly computed from data available shortly after colonisation, both nationally and later in the Victorian era, sub-nationally. Elsewhere, using a transformation employed in abortion research, reliable Total Fertility Rates (the familiar Births per woman) have been estimated (Pool *et al* 2007: 77-78)¹⁵.

As noted earlier, middle-class Victorian British were passionate believers in ‘healthy districts’, and, by extension, the value of ‘therapeutic migration’ to the colonies. As a result, death rates by cause were analysed to advance this cause. New Zealand benefitted as Pākehā mortality data became wide-ranging and by the 1870s were complete as a count, although far from perfect in detail (Woodward and Blakely 2015; Pool and Cheung 2005). The information on causes of death, for example, are interesting and provide a very generalised picture, but except for a few categories, notably phthisis, or tuberculosis, and accidents, probably do not approximate the accuracy of modern certification of cause of death procedures. For censuses, Pākehā counts are available almost from the time of first colonisation when ‘Colonial Blue Books’ were assembled, and in an 1851 census.

In 1881, New Zealand became a part of an Empire-wide census programme, with a ‘round’ of at least one enumeration prescribed to be held each decade in all colonies – New Zealand adopted a five-yearly schedule (years with last digits 1 and 6, although the sequence is imperfect¹⁶. Māori and Pākehā were recorded for the same date, but the Māori census schedule was separate and less detailed. Until the 1920s their count, about the same time, was really based on estimates made by district officials. Thus, to take the 1891 Empire census round as a case, New Zealanders were enumerated as well as the settlers in Canada, and the various colonies in Australia, an enumeration was attempted in India¹⁷, plus a census in the metropole itself and elsewhere in the Empire. As in the case of vital data, the census excludes some important variables but reports others in great detail – religion was paid a great deal of attention, as was sickness and infirmity, yet more economic variables were under-

represented. In 1926, the Māori and general counts were more closely aligned, and finally fully integrated in the 1950s. New Zealand also moved towards following common international practices, and this was reinforced under guidance from the United Nations' Statistical and Population Divisions after World War II (Papps 1985: v2 Annex).

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¹ Several Māori were killed by musket fire in 1769. Tupaia, the Tahitian chief accompanying Cook, spoke a maternal language was very close to te reo Māori intervened to resolve the issue. In 2019, the British Crown made a formal apology for this sad event, a British responsibility, as New Zealand did not exist in 1769.

² A new generation of historians, in the footsteps of some rigorous pioneer historians, has brought more depth and balance to this dialogue.

³ As non-Māori were formally referred to by Sir Edward Taihakurei Durie, Chairman of the 1989 Waitangi Tribunal. <https://nwo.org.nz/resources/who-are-tangata-tiriti/>

⁴ Including kidnapped or recruited Māori crew members aboard whalers across the Pacific.

⁵ In a sense, though, there was nothing new in this except monetisation. Firth's classical study still remains authoritative, but a new generation of economic anthropologists, mainly in Australia in a policy context, has extended this concept into the economy that counterpoints tradition and the penetration of the wider economy, both its social and consumer sectors (e.g. Altman and May 2011).

⁶ This sort of creeping dispossession by stealth was not unique to New Zealand. On the American Great Plains, into the 20th century the settlers, 'Scandinavians accumulated but the Dakotas [Native Americans] lost their land. The Indian Office, controlled the income, land, and everyday lives of the Dakotas. If a Dakota died without any verified heirs, the government would take over the land' (Marklin 2018: 80, reviewing Hansen 2013).

⁷ There were also two indigenous species of small bats.

⁸ All this work has been internationally peer-reviewed and, even more rigorously, tested under assertive legal cross-examination in Waitangi Tribunal Inquiries, above all by Crown Law Office barristers with both legal and academic historical training (Pool unpublished).

⁹ e.g. Marsden Research Project, 'Counting our Tiipuna', directed by Tahu Kukutai.

¹⁰ The underlying importance of empirical experience in the development of this field cannot be overstressed, not the least the contribution of the African programme at the Office of Population Research at Princeton University. It assembled leading demographers with field experience in Africa, produced a seminal book and a major, very widely used, United Nations technical manual written by Princeton professors, Ansley Coale and Paul Demeny, who were also African programme staffers. These methodologies are commonly called 'the Coale-Demeny (or Princeton) techniques' (Brass *et al* 1968; United Nations Population Division 1967).

¹¹ This was a period still beset by recurrent waves of the 1890s pandemic of influenza, which had an age profile far closer to the "norm" for that disease than did the better-known pandemic of 1918.

¹² I wish to thank Ron Crosby (1991) most warmly, as his forensic skills are reflected in my work, and rightly gain an accolade from Michael King in his seminal *Penguin History of New Zealand* (2003). Crosby generously read through an early version of my chapter in Pool (2015: Chapt 8) on this subject, corrected a few errors and made some suggestions that he graciously allowed me to footnote.

¹³ I am particularly grateful to Dr Tom Ryan, Anthropologist, University of Waikato, who drew my attention to the significance of Bruce Biggs's 'Preface'; see also Pool (2015: 118-19).

¹⁴ Johann Forster (1778). It is still not clear whether this estimate was Cook's or Forster's. In my 1977 book (50n), I acknowledged the assistance given to me by Auckland University Press's then editor, Dennis McEldowney, 'who drew attention to the problems inherent in interpreting what has been termed...Cook's estimate, and the ambiguity surrounding its exact attribution. On my behalf, he also searched and cross-checked the primary sources in an attempt to resolve this issue'.

¹⁵ In Pool *et al* (2007: 77-78) a comparison was made between the directly computed Total Fertility Rate (TFR) for 1913 = 3.2 births per woman, and an estimate based on the General Fertility Rate (GFR) for 1911 (Births/Women aged 15-44 years * 30, to simulate the duration of the reproductive span), was very close, 3.4. Similar comparisons are also shown there for 1921.

¹⁶ Usually in March/April. Exceptions were 1931 and 1941, which were not taken; 1946's was undertaken earlier than conventionally in August 1945, and 2011's had to be postponed to 2013 because the earthquake in Christchurch destroyed the census HQ building. The attempt at an on-line census in 2018 seems to have yielded markedly incomplete counts.

¹⁷ Indian census actuaries used the 1881 and subsequent censuses to undertake indirect estimation of survivorship – an important step towards the methodologies I use in New Zealand on Māori historical data, and in my earlier research in West Africa, e.g. Dankoussou *et al* (1973), Courel and Pool (1973).

Chapter Eight – Aotearoa’s Inexorable Path from Initial Contact to Colonisation, 1769–1840

The Interval Between Contact and Annexation

Colonisation – annexing a sovereign territory or lands as an imperial power becomes more and more involved in the daily life of the Indigenous Peoples – does not inevitably follow contact but is probably one of the more common sequences. This was the passage New Zealand experienced. There is, of course, great variance in terms of timing and the forms that the imperial interventions take, and there are numerous other routes to colonisation. Another common example was being exchanged or relinquished as a part of a wider treaty, normally signed to meet geopolitical objectives within Europe itself, or even as a dowry for a dynastic marriage¹.

The Interregnum between Indigenous sovereignty and colonisation In Aotearoa has been called by me (2015: 172) ‘the Imperial-Incubation’ era to infer a series of discrete events that together developed their own momentum, seemingly making a formal takeover inevitable². The span from first contact to formal colonisation constitutes an uncertain period, for which the historic record is likely to be highly selective, which was also the case for New Zealand. This is not because of any systematic bias on the part of conventional historians but is a function of the paucity of reliable data sources, as was elaborated in Chapter 7.

Of all the parts of this book, this chapter is the easiest for which to set date limits. It starts with the arrival of naval ships commissioned for Pacific exploration and astronomical observation. Their commander, Captain James Cook, FRS, RN, in the barque *Endeavour* more peacefully planted a British flag at Cook’s Beach in Mercury Bay on November 9th, 1769. Then this chapter ends with the arrival of another British naval captain, William Hobson, RN, in the ship *Herald* in January 1840. The Treaty of Waitangi was signed on February 6th, a mere eight days after his arrival. He was the first Lieutenant Governor of New Zealand, which was briefly a part of the colony of New South Wales. There is almost a deterministic path between the two events. It is also worth remembering that both voyagers headed off close French competitors, De Surville in December 1769, and in July 1840 Captain Lauvaud sailing the *Aube* arriving in the Bay of Islands with a shipload of French immigrants destined for Akaroa (Mackay 2012: Simpson 2013).

There is, of course, a great deal we do not know. Above all, little is really known about Māori living away from the coasts in lands where few Pākehā ventured. My arguments must therefore be accepted as provisional. I am optimistic, however,

that new and future generations of scholars versed in te reo (Māori language skills) will be able to glean far more from oral traditions.

During the first twenty years after James Cook's and Jean-Francois de Surville's arrival in 1769 and Cook's later voyages, there was no contact between Māori and foreigners. From the 1790s the quantum of interaction grew exponentially. In 1792, sojourners arrived, sealers and whalers, plus crews seeking ships spars. These exchanges were between Māori and seamen, or other visitors, who passed by fleetingly, not contact with Europeans intending permanent settlement. But, as Ian Smith (2019: 56, 63, 66, 83, 96, 106) shows, they left behind material objects, plus animals and plants – and disease. The first permanent settlers were much later, missionaries, who started to come from 1814, as did traders or those who worked in extractive industries, and then for various reasons stayed on. 'Significant as these beginnings are, for the first quarter of the nineteenth century trading in New Zealand was, with an isolated exception, slight and irregular. The exception is sealing on the south-west coasts of the South Island...', (*Te Ara* 1966). Apart from these tiny enclaves, reinforced from 1814 by the establishment of mission stations, the Pākehā presence overall in Aotearoa remained negligible until after 1820 and was tiny even at the Treaty of Waitangi (1840). Consequently, this chapter focuses on Māori. That said, Pākehā impacts exceeded their small numbers, but became more evident for only about a quarter of the timespan the chapter covers, from the 1820s, and especially the 1830s.

The signing of the Treaty of Waitangi (1840) was not actually recorded pictorially on the day, but has been resurrected in idealised form as, for example, in Marcus King's painting (1939). There, in a marquee overlooking the Bay of Islands, Māori are signing a document – and many could indeed really sign their names with more than an 'X' – on a flag-covered table, at which Hobson and Pākehā dignitaries sit in full imperial regalia³, in a tent on what are now the Treaty Grounds. What is not shown there is the very handsome dowry Māori were tabling. They brought almost all of the land resources, the sea and the inland waters, as the Treaty says, plus what was not in the contract – a productive business life that they also vested in the new colony. In sum, they tabled virtually 100 percent of the land and resources, 98 percent of its human capital and a thriving business life.

As a people, they had also already 'globalised' in ways that affected both their economic and social life. There were joint ventures for the production and export of commodities from extractive industries most commonly marketed by Europeans, but also Māori trade, mainly foodstuffs, to Australia and further afield. They also had travelled all around the world, as far as Europe – more than 1,000 voyagers from one tribe alone. These intrepid navigators returned and imparted knowledge about Australia and Europe and their inhabitants (Kuia and Kaumatua – Elders – of Ngāpuhi, 2012: 51). Māori learned about the outside world from other Māori, for

‘Until the 1830s, few Europeans were really fluent in the Māori language. Most Māori learned most of what they knew about Europe from other Māori’ (Belich 1996: 140-45). Yet, by the early 1800s, numbers of Māori already spoke English, including those who had been kidnapped or otherwise taken from New Zealand. By 1805, as reported earlier, the northern chief Te Pahi could engage in advocacy during a vibrant dinner-table conversation at Governor King’s table in Sydney. In 1820, another northerner, Hongi Hika, went to England, visited the linguist Lee at Cambridge University, along with a missionary who had spent some time in New Zealand, helped compile a Māori dictionary, met George IV and received a suit of armour. He also obtained muskets and became probably the best-known actor of the era and one of the more feared war party (taua) leaders in the inter-tribal wars (see below).

Disease and Warfare

Unfortunately, there was another side to ‘globalisation’ – the transmission of micro-organisms. Hanham, using micro-biological evidence from New Zealand, Oceania and Asia, plus Māori cultural knowledge, argues that there were ‘a limited range of infectious diseases endemic to East Polynesia’. Effectively, Māori were totally isolated from most major killers and even so-called ‘childhood’ diseases. Apart from infections spread to Māori by the first crews around 1770, Aotearoa remained isolated from further germ invasions until the 1790s. But, by the early 1800s, newly introduced diseases to which Māori had no resistance were having an impact on their health, as the germs had high levels of pathogenicity, including both acute respiratory disorders such as influenza, and tuberculosis, first noted about 1808 ‘among those who had travelled outside New Zealand...’ (Hanham 2003: *passim*, 16, 26, 52-56) Historian Alfred Crosby argues (1986: 232) that, the previously isolated Māori, suddenly encountered newcomers from ‘Great Britain, which... was especially fecund bacteriologically...’. Add to this the effects on fertility of the sexually transmitted diseases (STDs), which Māori had never previously experienced. They were a legacy of Cook’s crews and then of the seamen of most ships thereafter, facilitated because Māori culture accorded sexual freedom to young women (O’Malley 2012, see below, devotes a chapter to this issue).

Most enigmatically, in the early 1800s an epidemic termed *rewha rewha* in Māori seems to have had an impact – at least in high-profile writings about introduced diseases, if not in its actual virulence or spread⁴. The problem is that the provenance of reports on it are difficult to identify, as are its actual cause – sometimes it is seen as dysentery, sometimes as influenza, two very different diseases. A recent estimate (Rice 2019, citing Chapple) has posited a fatality rate of 50% for *rewha rewha* about 1808, producing 100,000 deaths; whether there were really 200,000 people in Aotearoa at this time is very much open to question, as I will elaborate empirically in discussing Table 8.1. The original source of the mortality data is also problematic,

and even more questionable is the epidemiology of the diffusion of these epidemics. For dysentery, the original source seems to be Dr Thomson, in the 1850s, who apparently draws on Māori tradition. Dysentery was rampant in Europe around 1800, but to be highly pathogenic, it requires dense concentrations of population, such as in refugee camps or squalid slums, neither of which would have applied to Aotearoa at this time. For influenza the initial source seems to be Dieffenbach quoting East Coast Māori tradition of a ‘ “bad form of influenza” ’, whose victims were so numerous that ‘ “they could not bury them but threw the bodies into the sea” ’. Collective memory there was undoubtedly vivid and valid for a first epidemic of introduced pathogens, but its aetiology and metrics (how many cases would there have been and what was their fatality rate?) are more difficult to rationalise. First, Europe would have been the immediate source of an influenza epidemic, but British data on periodicity shows a relative lull in influenza death rates at that time. Secondly, and more importantly, for the disease to spread, large numbers of sickly voyagers would have needed to have descended on Aotearoa’s shores and contacted not just Māori on the coast, but also the significant numbers inland. Thirdly, for most other infectious diseases, none of which have been named in the literature, this factor of a crucial threshold in the size of the disease vector would be important. In sum, the conditions for a massive epidemic, and thus a population collapse just did not exist in New Zealand at this time. Finally, and turning to chronic disorders, a very nasty lethal form of tuberculosis was indeed prevalent in Europe at this time and was passed on to Māori. On first exposure Tb can take a more virulent form but its spread and lethality lies in its prevalence rather than its incidence. It thus became ‘the curse of the race’ later in the century (Pool 1977: 114-37, citing the sources noted above; 2015: 131-35).

In the historical record, this very significant epidemiologic story about the invasion of pathogens by accidental transmission or by sexual congress has, however, been overshadowed, even sublimated, by reports, often grossly exaggerated, about the inter-tribal, or ‘Musket Wars’ of this time to which I will return later in this chapter. Suffice to say that here is no doubt that the wars occurred and were significant, not the least because they involved the first use of firearms in Aotearoa and lasted 25 or more years. But, on investigation, it can be shown that they were responsible for only a minority of the annual deaths of the era (see below), and were merely one of a number of significant events occurring at that time in the social and productive sectors, including business and trade. The seminal work of Crosby (1999) documents the Musket Wars in detail, and thereby sets the ‘record right’, yet in the national narrative the wars still seem to remain the paramount happening of this period. Some writers even compare their lethality to the fatality rates of Europe’s Thirty Years War.

My objective in this chapter is to attempt to provide a more balanced picture of the period. To do this I will go beyond death rates, missionaries, traders, extractive industries and the other commonplaces of pre-colonial history, and address a question

that is seldom asked: what were the average Māori family doing? The extant record leans towards their suffering disease, fighting in inter-tribal wars, as noted above supplying the labour for industries such as flax harvesting, or being converted by missionaries. But common-sense suggests that these could be only a part of the story, otherwise the population would have ‘collapsed’ as occurred on many small islands of Oceania (see below). Instead, not only did Māori attend to their own subsistence, but they supplied food and building material to the small but growing Pākehā population, they traded with New South Wales and elsewhere and also participated in extractive industries with international sojourners.

The over-emphasis on Inter-tribal War death rates, is a tendency exacerbated, as I will show, by bad arithmetic. As a result it has downplayed the arguably more important question of the impacts of the Musket Wars on the Māori population geography of this period (Urlich 1969). This is a factor of significance not just for development at that time, but because of disputes over tribal boundaries that continue until this day, being addressed peacefully, albeit imperfectly, in Waitangi Tribunals.

The over-dramatisation of the effects of these taua (war parties engaged in campaigns) is symptomatic of a more general bias in the source-data that build up a lurid picture about Māori accusing them of almost every imaginable social pathology⁵. With the exception of the wars, it is necessary to ask whether these reported behaviours were widely prevalent, outside the Bay of Islands and few other points of contact, and thus did they truly make an impact on peopling and development? There is also the flow-on problem that such reports have stoked the demonisation of Māori, not just at that time but, particularly among late Victorian commentators, and even by some commentators into the 21st century, an agenda aided and abetted by what I have called ‘tabloid historians’ (Pool 2015).

How Many Māori Were There in 1769, and What Happened Until 1840?

The historical demography of Aotearoa must start from how many Māori there may have been at the time of Captain James Cook’s arrival in 1769, with estimates varying from less than 100,000, to 500,000, even to a figure of one million advanced by one geographer (Cumberland 1949). A related but pivotal question is how many Māori were there in 1840? In Table 8.1, I present ‘best estimates’ for early years and census counts later for selected dates in the entire historical era from 1769 to 2006. The following pages look at the empirical evidence between 1769 and 1840, 1840 and 1857/8 and 1857/8 to 1874 (the first relatively ‘hard’ count) to build up the argument – counter-intuitively as it may seem – as to why Cook’s figure might not have been too far from the mark.

Table 8.1: Population Numbers ('000s) and Average Annual Growth (%), 1769–2018, Māori and Pākehā (until 1966), Māori and Non-Māori (1986–2018)

Year	Population Size ('000)			Average Annual Growth (%)*		
	Māori	Pākehā	Total	Māori	Pākehā	Total
1769	90a	-	90			...
1840	80a, b	2a	82a	-0.2	NR	-0.1
1857/8	59a	59	118a	-2a, c	+21c	+20a, c
1878	48a	412	460a	-1	+10	+7
1906	50	886	936	+0.1	+3	+3
1926d	64	1,344	1,408	+1	+2	+2
1966d	201	2,476	2,677	+3	+2	+2
		Non-Māori**			Non-Māori**	
1986	405	2,902	3,307	+4	+1	+1
2006	566	3,577	4,143	+2	+1	+1
2018	816	4,084	4,700	+4	+1	+1

Source: Pool 2015: 11.1; Pool 1977:58; Stats NZ Censuses; see also Figure 4.1 here.

Notes: * This provides a broad overview for relatively standardised periods. ** Non-Māori (= Pākehā + All Others) in recent decades. a. Best estimate: b. Dieffenbach gave 114, 000, but see text why I have suggested a lower figure here; c. Māori 17 years duration, Pākehā 18, Total 17.5; d. I have used a 40-year span 1926-66 because the 1946 census was held in late 1945, and the data were confounded badly by troop movements. The use of an annual average standardises the growth rates. 1926 was representative of the first 12 years of the interwar period; 1966 the Baby Boom. Data prior to 1986 would have included overseas visitors; 1986 and since = usually resident population.

Pre-contact growth would have produced its own 'momenta' continuing for several decades thereafter. In this context, momenta are trends affected by the passage up through the age-pyramid of cohorts of varying sizes born in the past; numeric ageing (increases in the numbers at older ages) are a 21st century manifestation of this. Momentum is important but is often neglected in demographic accounts. We know from the case of Italy, for example, that when total fertility rate had fallen well below replacement (from 2.1 to 1.2 births/woman), and before migration became a factor of replacement, momentum effects still caused national growth to continue. Positive effects on Māori health around 1800 could have come from the 'clip-ons' of crops, animals and tools, above all the humble potato. Māori did not just adopt these but adapted them to increase economic productivity. Some introduced ideas were not taken on, such as the use of animal manure for fertiliser (Schaniel 2001: 3-5).

To assess Cook's own figure, 100,000, we are fortunate in having the detailed work of Gordon Lewthwaite (1950), which has stood the test of time as a piece of

diligent expository research. Positing a possible figure for this date is important because it then sets out what might have occurred by comparing this figure with more reliable ones later. These figures must also be set alongside what seems feasible given our knowledge of populations in history and prehistory. After contact, Māori do not seem to have gone through a ‘demographic collapse’ of the sort seen elsewhere in Oceania, but they were for small islands where there were high population concentrations along the coasts ringing a volcanic interior, ideal conditions for the diffusion of germs. By contrast, for Aotearoa, like New Caledonia, geographic size is an important difference, in the spread of pathogens (Rallu 2007). I have also retro-projected from the 1874 census that was a relatively more complete count, to Fenton’s census of 1857-58, which had some problems for some North Island areas, where a lack of enumerators required Judge Francis Fenton to make estimates. I then projected this back to Dieffenbach’s estimate of *circa* 1840, and finally back to 1769. In Table 8.1, a ‘best estimate’ 90,000 is proposed for 1769, in part to respond to Brian Easton’s challenging comments about Māori natural increase in antiquity (noted Chapter 7). Unless the Māori population had continued to grow until 1840, this would mean that the figure for 1840 would necessarily be below the number posited for 1769 (Pool 1991: Chapter 3; 2015: 153-56). What happened to Māori demographically in the period after Cook pivots first around what can be made from the fragments of data for the period from Cook until Waitangi. A second consideration is what we make of the estimate of Ernst Dieffenbach for *circa* 1840. In turn that depends on how one views what happened between then and Fenton’s Māori count of 1857-58, or the census of 1874. The comments in the following paragraphs are drawn heavily from my last two books (Pool 1991: Chapter 3; Pool 2015: Chapters 6-9, 11-12).

From Cook’s time, crews definitely introduced new infectious and sexually transmitted diseases (STDs). But there were few Europeans until around 1820, and most were in areas where there were almost no Māori, or where there were relatively few (Foveaux Straits). Where there were more Māori, early voyagers made fleeting trips ashore at the coastal anchoring places rather than interacting longer and with greater intensity. Consequently, there were insufficient numbers of newcomers carrying the same infections, and probably they did not travel beyond selected coastal zones of contact, which are also the focus of reports. As a result, the newcomers do not seem at first to have reached a critical threshold sufficient for major epidemics to be generated (Hanham 2003); national-scale epidemics seem to have first appeared with influenza in the late 1840s and measles in the 1850s, but by the 1830s there were severe localised epidemics, such as measles in the southeast of the South Island. Reports on this outbreak carry a cautionary tale for researchers. Its effects were probably limited to around the eponymous ‘Measly Bay’, yet its impact has been sensationalised by one recent history. In an era in which the South Island’s population numbered perhaps 2,000 according to various estimates (Pool 1977: Appendix B),

Paul Moon tells us about ‘thousands of Māori in the South Island burning with the fever of a new source of doom, the measles...’ (Hanham 2003: 57-58, limits the measles outbreak to the ‘lower South Island’; Moon 2006: 118).

The diffusion of STDs was a somewhat different matter as they depend on person-to-person infection rather than mass contact. Thus, STDs could even have spread inland as individual infected persons had intercourse with others. Moreover, on first exposure, STDs take a virulent form, a phenomenon widely reported in Central Africa and the Pacific, wherever epidemiologically virgin populations experienced the initial impacts of STDs. Hanham hypothesises that the rates of infection introduced by the very first crews (*circa* 1770) would have dampened down or even disappeared, but then would have been re-ignited and greatly strengthened after 1790 by far more frequent contact with ships’ crews. This would explain why STDs may have taken a particularly virulent form in early 19th century. Hanham also distinguishes between the effects of gonorrhoea and of syphilis, adding in the fact that endemic yaws protects against syphilis. But, unlike tropical Polynesia, as shown by Peter Pirie and Jean-Louis Rallu, yaws was absent in Aotearoa, so among Māori syphilis followed an aggressive path. In the first instance, it is fertility rather than mortality that STDs affect, but this is another, important, cause for a diminution in rates of natural increase (Pool 1991: 78-82; Hanham 2003: 23; Pirie 1972: 196, 203; Rallu 1990).

The Effects of the Pre-Colonial ‘Musket Wars’

After first continuous contact in 1769, Aotearoa’s trajectory witnessed more than a century of wars and violence, as well as other forms of turbulence. Conflict came first in the inter-tribal wars before New Zealand was a colony, and then in the New Zealand Wars fought between Māori and the British. The inter-tribal Wars prior to 1840 and to colonisation were not so much provoked by contact, but were intensified by it, above all by the introduction into campaigns of a new weapon – the musket. This weapon has provided the most commonly used name used for these battles: the Musket Wars. By contrast, the conflicts that followed actual colonisation, particularly the New Zealand Wars (1840s and 1860s) after annexation, were due to a different set of causes. Unfortunately, they are frequently equated with the Musket Wars, so I will return to the New Zealand Wars later this chapter, and also in Chapters 9 and 23. Suffice to say here, that the New Zealand Wars were executed by imperialism to achieve its more general goals – a very different genesis and outcome from the Musket Wars. The broad goals were seldom precisely defined – the concerns of the evangelicals about the fates of ‘Aboriginal’ peoples and slavery were some of the few that became guiding principles, rising above mere tactics directed at meeting the crisis of the moment, but these values withered away in the mid-Victorian era. Out of ideas that interlinked the events of contact and a feeling of certainty that they were superior peoples, morally and technologically, the British constructed an elegant, albeit

spurious, theory of ‘fatal impact’, to which I will return later. The Musket Wars in earlier decades played a major role in feeding this theory.

Fatal impact theory is dependent on the assumption that history more or less started with the arrival of Europeans; the rigorous research of Angela Ballara (2003) challenges and dismisses this notion. Later in the 19th century commentators of the day did posit a Māori pre-contact antiquity – in which the Indigenous people were dying out, which Victorian commentators saw as the fault of Māori themselves: in missionary Wohlers’ words (1881: 134; see also Newman 1881), ‘I can positively say that the coming of the Europeans has nothing to do with the dying out of the Māori... As a race they had outlived their time’. In its most extreme form, the fatal impact theory posited that native peoples would wither as they met superior civilisations⁶. At its least extreme, the theory attempted to explain the turbulence that followed contact – the Musket Wars to be addressed here were seen as proof of the power of the theory: Māori were barbaric and, with contact, intent on self-destruction. In this optic, missionary intervention was their main safeguard. What is surprising is that the ideas of fatal impact were still present in imperial history after World War II.

Well before the conflicts with the British erupted after colonisation, Māori had engaged in conflicts, most notably the Musket Wars spanning *circa* 1815-late 1830s. These battles were, entirely between themselves, but this focus tends to get confounded with the New Zealand Wars of the 1840s and 1860s when the protagonists were very different as imperial might was pitted, asymmetrically, against Māori. In the public mind the Musket Wars seem an instrumental set of events in New Zealand’s basic development, and extremely violent; the New Zealand Wars are placed on a lower scale and, as it were, a step towards making New Zealand a settler-colony. In this section of the present chapter and in later chapters I will be forced to move backwards and forwards between the pre-colonial and colonial periods in order to discuss three issues: 1. Briefly to describe the military history of the various wars, and more importantly to estimate their demographic impacts – lethality – drawing on some very diligent historical studies; 2. To compare the two sets of wars, a task that is easier said than done because the wars lasted for very different durations, with markedly different patterns of periodicity, and fluctuations in their impacts; 3. Most importantly, I want to set the Wars into their peopling and development contexts – what were the long-term impacts of the Musket Wars and of the New Zealand Wars? This, of course, is the core business for my book.

Unfortunately, as I will explain below, the lethality of the Musket Wars has often been overstated. These miscomputed rates are seized upon, especially by some conservative commentators who wish to demonise Māori. The reality was that the Musket War campaigns were spasmodic and geographically limited, typically involving war parties (*taua*) cutting through a narrow swathe of territories causing mayhem in the process and stealing potatoes and other food: whenever campaigns

erupted they were thus limited in duration and geographic impact. James Belich suggests they are even better seen as the ‘Potato Wars’, a far from frivolous comment as their peak years actually coincided with a spike in Māori exporting potatoes, pork and other goods to Sydney. It almost seems as if the ordinary Māori was not going to let a skirmish get in the way of commerce.

I have tabulated the taua, or war parties, skirmishes and battles reported by Ron Crosby (1999; Pool 2015: 137-50, 168-69) in his exhaustive expository analysis. This exercise showed, very clearly, that they were indeed outbursts rather than continuous, and that their spread and intensity varied both temporally and geographically. Whole years were free from their ravages, and, when they did erupt, whole swathes of Aotearoa were outside the theatre across which taua were rampaging. The argument has been advanced, however, that the Musket Wars spanned more of New Zealand’s geographic territory than the New Zealand Wars did (*NZ History 2015*). My detailed parsing of Ron Crosby’s monumental work shows that this is just not correct. Taua were indeed notable for the huge distances they travelled up and down the North Island (Pool 2015: Map 8.1), in the process alighting on regions as far apart as Auckland, Hawkes Bay, Wellington and Taranaki. The Musket Wars also encompass the deposing of Taranaki Māori on the Chatham Islands in 1835, when they killed and enslaved the Indigenous Moriori⁷. These were certainly not frontal advances as seen in the Napoleonic Wars but proceeded in a path like a devastating narrow tropical cyclone rather than a widespread storm, much of the time passing through regions with few inhabitants. In the years they occurred they occupied but a limited part of the year, or just were limited to one taua. By contrast, in terms of their impacts on Māori population, the New Zealand Wars spread in major ways across every North Island Region⁸ except parts of its eastern littoral. Thus, the New Zealand Wars had a more systematic sweep, as against the Musket Wars more spotty impact albeit causing mayhem where they occurred.

Moreover, the Musket Wars had been between sovereign Māori entities (tribes), in this regard not dissimilar to the many small wars that broke out all over Europe between mini- and other princely states as they vied to build national sovereignty over others: the unification of Italy and Germany were major eventual outcomes of this messy process. For Māori, displacement of other tribes was a prime effect, and, as a consequence, who controlled what area in 1840, at the moment of colonisation, is a headache for Waitangi Tribunals who take the population distribution in that year as their baseline. But beyond this, their long-term impacts on development were minor. Yet, by contrast, a major effect has been the branding of that era in the popular image of pre-1870 Māori life as savage and violent.

There is no doubt that the Musket Wars were highly disruptive and would definitely have increased death rates overall, but the lethality that they inflicted is more open to question. The most commonly accepted figure for the total fatalities,

over 25 years, is 20,000 (eg Crosby 1999:17; Belich 1996: 157; Wright 2011: 20). Some authors divide this number by 100,000, using my earlier, and probably most widely accepted population estimate for 1769). This yields a 20% ‘fatality rate’, which confuses the deaths over 25 years with the annual numbers killed, the only meaningful rate. It leads one author to state that the deaths were ‘on a scale matched only by the Soviet Union during the Second World War’ (Pool 1991: 57; Trotter 2007: 36). The arithmetic flaw lies in the fact that the wars lasted somewhere between 20 and 25 years. Turning the deaths into a rate per annum, war fatalities would have amounted to only 17-26% of all deaths, from disease as well as war. Even if one hypothesises that the number of war deaths was 50% higher – 30,000 – than the figure normally accepted and assumes that when they peaked, their intensity was higher because the duration of conflicts was shorter (eg the spike around 1820-21), they would still only have comprised perhaps 37% of total deaths. By the same logic, this gives a figure for all deaths in that period around 100,000, making pioneer ethnographer Percy Smith’s (1910:10) estimate of 80,000 deaths from all causes during the Musket wars period seem rather modest. So, even after assuming that there were far more fatalities, the rate of natural decrease during the Wars, 1825-40, would still only have been the same as the minus 2% rate average annual of decline 1840 to 1857-58 (Table 8.1 in the present chapter).

The pre-colonial Musket Wars were dramatic but had a far less long-reaching set of effects than the New Zealand Wars, which involved the violent process of reallocation of resources from Māori to the British (see also Chapters 9 and 10 below). Tactically, the New Zealand Wars may have been inconclusive, but, as the Easton citation (above) suggests, they were a fundamental inflection point in Māori-Pākehā relations: the colonists had to look for a more effective way of divesting Māori of their resources. This they did with the highly instrumental Native Land Court and with Vogel’s *Immigration and Public Works Act* (1870). In its effects and procedures – the fact that Māori had to camp around the Court under squalid conditions or lose their rights – the Native Land Court was probably a little less compassionate than the Wars had been, but was far more effective and allowed the swamping by colonists, who briefly arrived in large numbers in the early 1870s. These were the pre-requisites if New Zealand was to become a ‘white’ domain.

It would thus be wrong to compare the Musket Wars with the Second New Zealand Wars, especially the 1860s Waikato segment which in Vincent O’Malley’s words, was ‘New Zealand’s Greatest War’. Brian Easton reinforces this view by noting that, during the Musket Wars, ‘What Māori did not foresee was a far greater war [1860-72] over a matter of greater mana: the occupation and ownership of the land’ (O’Malley 2012 – the title of his book; Easton 2020: Chapter 5).

Yet, the fact remains that the image of the Musket Wars has been so strongly branded in New Zealand popular thought and historiography that many New

Zealanders, even today, would see the Musket Wars as the cardinal event in the 19th century, or certainly its major military occurrence, of greater significance than the New Zealand Wars. Recent historical analyses plus growing public interest, and a more general concern that New Zealand history is not a compulsory subject in the curriculum, has started to change this bias. Whether or not fatality rates caused by various taua exceeded those of the New Zealand Wars is a less important question than the long-term impacts of the two series of wars. But, as Belich has said, in a strategic sense they were major colonial wars that ultimately did not produce what was probably their desired outcome – the virtual displacement of Māori to make Aotearoa suitable for ‘white’ settlement. Consequently, the colonists eventually had to seek other more effective strategies, to which I will return in later chapters, by which to become the country’s overwhelmingly dominant partners. This is an issue central to the purpose of the New Zealand Wars but tangential to their tactics – on which much of historiography has appropriately focussed. Regardless of the military dynamics and tactics of the Wars of the 1840s and 1860s themselves – the British tended, through their access to asymmetric military power, greater troop numbers and support logistics to win the battles – strategically the campaigns were far from successful; the imperial British and the colonists essentially failed to defeat the Māori, whose warrior numbers were far smaller and who had far inferior weaponry and logistics’ support⁹. That said, the wanton destruction of the economy of Māori Waikato, and the confiscation of their lands brought continuing turmoil to the Waikato tribes.

What about the relative lethality of the Musket Wars and the New Zealand Wars, say at their peaks? Putting together what I have written elsewhere, and positing some highly speculative hypotheses, a comparison might be made. The Musket Wars seem to have reached a mode in terms of impact around 1820-21 (but had competing peaks spasmodically in various other years from 1817 to 1833). Moving to the New Zealand Wars, the Waikato segment peaked in 1863-64. Vincent O’Malley gives a death rate for 1863-64 of 4%, or 40 per 1,000 to use the format for the rates employed here. Drawing on Ron Crosby’s book (see below), I have estimated an average annual Musket War fatality rate of 7.5-10 per 1,000. But, if death rates in 1821-22 had been markedly above this – say four times as high, the Musket War fatality rate (30 per 1,000) would have been appalling but still not matching the Waikato campaign’s rate of 40 (O’Malley 2012: 370; Pool 2015: Chapters 8 and 9, and Tables 8.1 and 8.2).

In reality, however, the Musket Wars were probably in the lower ranges of the estimates I have given. First, the weapons themselves were notoriously unreliable, as is detailed in Crosby’s technical appendix (Crosby 1999: Appendix A; see also Schaniel 2001). Muskets, many of which were among the poorer weapons on sale, were being used by untrained personnel running through the bush or firing at earth and wooden palisades, and to add to the problem they were slow to load. In Aotearoa,

their use was not at all akin to that at Waterloo – they were not being wielded by huge phalanxes of men marching towards each other, with artillery balls also dropping on them, our classical picture of musket battles. In fact, possibly far more Māori were killed with traditional weapons in hand-to-hand fighting – perhaps even while reloading. The number of muskets available at first were relatively few, but held by the Ngapuhi tribe, and this undoubtedly gave them an upper hand to terrorise other iwi (tribes). But, as numbers of weapons increased so too did the balance of arms, probably bringing hostilities to a gradual close – the perception, still extant in the 21st century, that their termination was due to the civilising role of missionaries is probably much more a myth rather than a reality (Belich 1996: Chapter 7).

The notion of pre-colonial Māori savagery has been reinforced by the idea that taua subsisted through cannibalism – this makes good copy but does not fit with reality. Verifiable tales of taua having cannibal feasts do, of course, exist and have been told and retold, becoming exaggerated in magnitude and frequency with each telling. Instead, for basic sustenance during most passages there was a better source: taua brought potatoes with them from the Bay of Islands, or stole them en route, rather than eating captives: potatoes were found in every locality, were easier to acquire than captives, much easier to carry than bodies, less prone to rotting, more nutritious, far more chewable, and quickly and simply cooked.

The effects of taua on population geography is certainly evident and empirically verifiable. They produced larger-scale shifts of population, most notably in what is now Auckland city and the Hauraki plains. Fatality rates were also high in these two neighbouring regions, when, perhaps, 25% of all Māori killed in the wars from 1818 to 1840 in these two areas perished in just two years, 1821-22. This underpins the way in which high lethality rates were concentrated into a few places and fluctuated between years. The impacts on Hauraki were compensated for by a movement into neighbouring areas and also farther away from inland Waikato to around Wellington. Other shifts involved Taranaki Māori moving south to around Cook Strait, Hawkes Bay Māori shifting north, and Bay of Plenty and Taupo people moving into nearby regions (Pool 1991: 50-53, Tables 3.3 and 32.4, citing Ulrich 1969; Pool 2015: 140-49).

In sum, the Musket Wars were important events of the 19th century and are now carefully documented – to the extent that is possible for the pre-colonial period – in Crosby's (1999) forensic study. They undoubtedly caused widespread death and desolation, not in every year between 1807-15 and 1837, but in those periods in which they erupted. They were typical of the chaos sovereign entities, states or tribes, impose on one another as they strive to increase their power. But, the Musket Wars were not a fundamental step in New Zealand's development path – that label applies instead to the post-colonial period including the New Zealand Wars, as they were among the mechanisms by which resources were transferred from Māori to colonists,

and built the population, economy and society that was bequeathed to subsequent generations. Moreover, the first few decades of the immediate post-colonial era set the inter-iwi, geographic and cultural parameters, of significance to Māori and the Crown as well as the settlers in Aotearoa until at least *circa* 1980. The earlier Musket Wars simply provide a major, high-profile, set of events, worthy of documentation and consideration in New Zealand's history, but they were not major game-changers in its population and development trajectory.

Māori Population Until 1840 – ‘Demographic Ephemera’

Savage warfare was not the only socio-pathology of which pre-colonial Māori have been accused, both in the accounts of that time and since. The list has encompassed drunkenness, abortion, indolence, suicide, infanticide, sex on a significant scale with visiting crews, ‘the depression of spirits and energy...which ensues on contact with civilised man...’, ‘drudgery imposed on their women...’, lack of ambition and untrustworthiness, among many undesirable traits. For example, the explorers and Victorian settlers believed that Europeans came from societies that had reached the peaks of civilisation, in such behaviours as their treatment of women and judged the advancement of any society against their measures of this. Presumably, Victorian Pākehā commentators based their comparisons on middle-class women, who lived cloistered lives, choosing to ignore the 30-40% of working class women employed in the ‘mother country’ in factories, domestic service, or in mines. The Scrivens’ Commission (1841) was horrified to find that women worked underground, for half the pay of men, naked, bare-breasted, or worst of all in trousers (Brookes 2016: 9, 50; Hudson 2011; Frost 2017). The one exception missing among the long list of pathologies of which Māori were accused seems to be the use of opiates – perhaps because they were then props for nice middle-class English ladies and aristocratic poets, so of course not something ‘savages’ might appreciate.

The historian Vincent O’Malley (2012) has systematically analysed the reports on these purported pathologies in the pre-colonisation period, carefully weeding out hyperbole, and in the process providing a very balanced assessment. Nasty behaviours were undoubtedly perpetrated by some Māori individuals, as was equally true in the fetid alleys and gin parlours of urban Britain. But, elsewhere, drawing in particular from O’Malley but also other sources, I have asked whether or not they were sufficiently prevalent to be important demographically. Early writers, and even more those reporting on them later in the 19th century, tended to build myths, many of which contained grains of truth. For example, it is clear that sex between Pākehā and Māori occurred liberally, but this was translated into the perception that Māori women were abnormally licentious and that Kororareka, the largest pre-colonial settlement, was a vast bordello. The issue is further confounded by whether or not Māori sexual morality had broken down after contact or represented an extension of traditional

practices, or as Belich has said was ‘more like traditional marriage than brothel-like supermarket sex’. No less an authority than scientist Joseph Banks, who accompanied Cook and had enjoyed himself greatly in Tahiti, lamented that Māori women were more inhibited than Tahitian. Paradoxically, the same accounts that upbraided the liberality of Māori women saw them as drudges. Belich summarises the issue well: ‘a long strand of assumption that Māori women lived in utter subjection to their men, needs correction’. At contact, Māori society ‘was somewhat more sexist than Europe believed itself to be, and somewhat less sexist than Europe actually was’ (O’Malley 2012; Belich 1996: 101). Cannibalism is another good example. It was a ritual process associated with war, which destroyed the mana (prestige) and tapu (sacredness) of enemy victims, especially ariki (chiefs). But as the missionary Samuel Marsden (Salmond 2017: 111, 181, citing Marsden) noted, ‘Like the British custom of hanging criminals, Māori cannibalism was simply an ancestral practice’.

The enumeration of such negative traits was not restricted to the demonisation of Māori, but appeared wherever interactions of this sort occurred; the Americas and Africa were particularly subject to this, and, as noted already, it even occurred in Britain itself applied to Celts. Elsewhere, I conclude that materially these attributes – to the extent that they were prevalent – were in fact ‘Demographic Ephemera’ (Pool 2015: Chapter 7), of little significance for the narrative I am presenting here. Nevertheless, a number took on an ideational role that was remarkably enduring, becoming embellished by major Euro-American intellectual movements perhaps even contributing to their gestation, so they must be briefly addressed.

Some of the claims about Māori and other Indigenous Peoples became more elaborate themes, which had a surprising life-span. The pre-Victorian Pākehā did worry about the ‘fatal impact’ of contact: that Māori culture and society (and those of other natives worldwide) could collapse in the face of superior technologies. Even the sympathetic colonists were sure about their superiority over natives, Britain’s Celts and, so it seems, anyone not English. The possibility of fatal impact, albeit in a less systematic form than was developed later, drove the evangelicals and their quest of ‘Aboriginal Protection’. But, as a fully formed thesis this notion did not really emerge until later in the 19th century. It took both a sympathetic form of concern about Māori, but also turned into demonisation of a sort seen across other Neo-Europes. The perception even persisted for a long time in academic circles – the notion of ‘fatal impact’, the demographic collapse of inferior peoples, who encounter ‘technologically’, and, so some commentators argued, ‘morally superior’ races. For Māori, over most of the 19th century, the impact of contact was indeed negative, but it was not fatal. Yet, in the 20th century, in the interwar years, this notion of native peoples wilting away in the face of superior civilisations was still being enunciated – elaborately so by George Henry Lane-Fox Pitt-Rivers (1927), perhaps the most controversial member of a wealthy family that spawned several prominent

anthropologists. The notion of ‘fatal impact’ was even being repeated as a scientific verity after World War II (eg Price 1949) and at a popular level into the 21st century.

Another tenacious assertion, about gender inequalities, reappears from time to time, in New Zealand’s case spurred on by the high masculinity rates in the Māori Victorian census data (and at some ages in census and life-table data well after World War II). This observable fact was (and still is being) retro-projected to the pre-colonial, and pre-contact eras to support the demonisation of Māori over supposed traits ranging from gender-biases in the allocation of household resources to female infanticide. The issue needs mentioning here, but, as I have pursued it more fully elsewhere it can be briefly summarised (Pool 2015:119-22, 285-86, 292-93, 315). High masculinity rates occurred among Aotearoa Māori and elsewhere because, in past eras, male survivorship levels were higher than female at some ages. This held true even in what are now WDCs, as George Stolnitz (1956) illustrated long ago using every available life-table at Princeton’s Office of Population Research (a central repository). In the 1870s, Pākehā fitted that model typical for the epoch, as settler males had higher survivorship at reproductive ages than was true for women. Pākehā infants in pioneering Hawkes Bay in 1858 aged 0-4 years (because of their young ages a measure free of sex-selective migration effects) had far higher masculinity ratios than Pākehā children in the colony as a whole (Pool 2015: Table 14.2). For Māori and Pākehā, this was, for verifiable epidemiological reasons, mainly to do with the physiological burdens of childbearing in societies with higher rates of both fertility and morbidity.

There is also evidence of this recently in populations with reasonable data, with patterns of gender relations that are among the more equitable worldwide, and with police monitoring that would inhibit infanticide being a common cause of death. Māori, whom anthropologists rate as having patterns of social and economic organisation that favour gender equality¹⁰, fitted that category in the 1920s and 1930s, yet female life-expectation was below male. Moreover, age- and cause-specific data show that the death rates of young boys in those years exceeded that of girls, particularly for so-called ‘accidental causes’, and dysentery and diarrhoea. If the gender-bias hypothesis has merit, then does this mean that boys were being discriminated against? Clearly, these differences had biomedical causes, not gender inequality.

Unfortunately, this is not just a localised issue. The construction of model populations, on which indirect estimation techniques used widely across the world are based, assumed that female life expectation everywhere exceeded male (Pool 2015: 117-22, 291-300). This issue was addressed and incorporated into the published conclusions at a conference on sex differences in mortality, involving the United Nations and the World Health Organisation. The organisers, Alan Lopez and Lado Ruzicka summarised the discussions by seeing three historical sequences for sex

differentials: *Phase I*, with high mortality and 3-6 years life expectancy at birth, in favour of men; *Phase II* with reducing mortality and longevity advancing more rapidly than that of men; *Phase III*, with low mortality and female life expectation being 4-6 years higher than for men (Ruzicka and Lopez 1983: 478). The sex differentials I use in life tables cited in this chapter and later follow their schema.

Among the most persistent issues have been theories relating to racial origins and also to eugenics: Pitt-Rivers was a leading eugenicist. Both of these topics are too vast to review here in-depth, but they owe their genesis to the enlightenment, to Darwinian thought and to early developments in anthropology and psychology, which tried to metricise racial differences. Darwin seems a counter-intuitive source, but Victorians saw evolution, and by extrapolation the superiority of the ‘civilised’ races as justification for colonisation (Paxman 2011: 122).

Some commentaries about the primitive pre-colonial and colonial life-ways of Māori and those of other Indigenous Peoples, based on little empirical evidence, became the convenient props supporting opportunistic theories. A common one related to resource dispossession. It was that, because of their ‘simple economies’, the land of natives was not being used efficiently, or even was unused and should be taken to exploit it appropriately. The most infamous example was Australia’s doctrine of *terra nullius*, raised in Chapter 1, but similar views were commonly expressed earlier in the United States (eg to justify Andrew Jackson’s ethnic cleansing of the south-eastern regions early 19th century). In New Zealand they were prevalent more in the Victorian era, when settlers poured in needing land than in the pre-colonial period. In 1877, the Chief Justice of New Zealand declared the Treaty of Waitangi ‘worthless’ and a ‘simple nullity’. The effects of this on constitutional law have been argued at an academic level and cited as a justification for rejecting the Treaty by some recent right-wing commentators, yet his statement seems to have had little actual effect. Certainly, by 1891 an influential Parliamentary Commission was talking about ‘the misinterpretation of statutes in direct violation of the Treaty of Waitangi...’ (Rees *et al* 1891: G-1, Session II, vii).

The New ‘Actors’: Pākehā Until 1840

No numbers nor growth rate for Pākehā before 1840 are given in Table 8.1, for which date I use the Government Historian, Jock Phillips’, figure of 2,050. This is a widely accepted estimate, which comes from a detailed analysis by his research group, covering every available source (*NZ History*, no date). The numbers had increased radically from when Pākehā arrivals were starting to increase, in the 1820s, when there were perhaps 100 sealers living in the south including French and Americans, even one African American. By the mid-1820s, 20 missionaries and their 40 dependents were resident in the Bay of Islands. To them must be added the inhabitants of Kororareka (Russell), which ‘attracted retailers, grog-sellers and other

“panderers to the worst sides of abandoned men”. By the 1830s they outnumbered the missionaries’ (Phillips 2005: 1-2, citing Dunmore Lang writing in 1839). If we assume that in 1825, there were about 400 Pākehā in total across Aotearoa, then the growth in the 1820s and 1830s to 2,050 in 1840 was rapid, 11% per annum, but from a low base. The British Resident James Busby next estimated the Pākehā population in February 1836, yielding a figure of 722, four years before Waitangi. He did a count again in 1839, with less success, when he only covered Pākehā north of Thames. Of these, 52% lived in the narrow semi-subtropical area where the missions were concentrated, around the Hokianga Harbour and the Bay of Islands, at 35 degrees south of the equator, about the same latitude as Tangier in Morocco is north¹¹. In 1836, some 71% of Pākehā were in the North Island, and the rest in the South, Chatham and Stewart Islands, and Aotearoa’s remote ‘sub-Antarctic islands’, sealing as far south as the Campbell Islands. By the mid-1830s, there were reputed to be 200 convicts and ships’ deserters, including a few ‘Lascars’, many in the south, engaged in sealing and whaling, and also debtors escaping penalties. If so, then a quarter of the Aotearoa Pākehā were fugitives of one sort or another.

Most historians accept a figure around 2,000 for 1839-40, close to the figure of 2,050 noted above for February 1840, seemingly originating from New Zealand’s most diligent early statistical chronicler, Arthur Thomson (1859: v 2, 329). But the number excludes the South, Stewart and Chatham Islands where there were significant enclaves of sealers and whalers. Using the geographic distribution reported by Busby in 1836, so as to estimate the missing populations, yields a figure of 2,791, and an average annual growth rate 1836-40 of 40% per annum. This rate seems implausible, but it must be recalled that between January and March 1840, Wellington alone grew by 900 settlers immigrating through the Wakefield scheme, arriving in six ships. This fleet’s size, and the speed with which surveying, recruitment and the voyage out were completed, had even excited the press in London (Temple 2002: 260-69).

It is obvious that ‘un-documented immigration’, whether by formal arrival, as for the official Busby, or by jumping ship, was the potent factor, responsible for 80-90% of the growth. Away from the Hokianga-Bay of Islands missionary hubs there was an extremely high masculinity rate for Pākehā: 7.8 adult men per adult woman nationally, and 4.8 at all ages. But we should not overlook the reproductive capacity of those Pākehā, glimmers about which can be inferred from Busby’s count (*NZ History* no date). There were 216 children per 100 women, a ratio which, fitted to model life-table populations (United nations 1967), would suggest a Total Fertility Rate (TFR) of 6.8-7.2 births per woman and a birth rate of just under 50 per 1,000. To give a comparison, Jane Austen’s England saw Total Fertility Rates peak at 5.8 in the last years of her life and decline to 5.4 by the period 1826-50 when Busby’s respondents may have been reaching levels close to biologic maxima, as among the

first Quebec women, whose reproduction is taken as a marker in demography of very high levels.

Most early Pākehā families, as against the rest of the European population, came from English protestant religious backgrounds. In the British Isles, fertility was higher in England than in its other constituent countries. Alongside this there was a settler death rate of say 20 per 1000, the great force of which would be on the early childhood ages, although undoubtedly far less so than in England from where they had come. The reproductive rates posited here were not, however, the childbearing patterns of a super-fecund small religious enclave but presaged the reproductive regimen that was to characterise all British settlers, English, Scottish or Irish, for the rest of the Turbulent Era.

How Many Māori Were There in 1840? What Happened Until 1857/8?

At this point I am going to pre-empt some issues that really belong to Chapter 9, by looking at Māori population numbers and events between 1840 and 1857-58. If the Māori population grew in the period 1769-1840, or was much higher in 1769 than I have estimated, but declined slightly between that date and 1840, then there is a problem accounting for what happened after that, between Dieffenbach's and Fenton's counts. A significant 'collapse', producing a very rapid decline of 4-5% per annum, would have to be advanced. If one retro-projects from 1874 and reviews the changes before 1840, this produces a lower feasible figure for 1769 – a figure of 90,000 seems reasonably defensible in terms of the scenarios presented in Table 8.2. The death rate was high and then increased; the birth rate initially was high, not exceptionally so (40+), and certainly not rivalling that of Pākehā in 1836, but dropped, probably in response to the spread and effects of STDs.

In line with the earlier comments on Māori, in Table 8.2 I have modelled gradually increasing death rates and decreasing birth rates, drawing on model life-tables. Against this, I have not posited a positive growth scenario between 1769 and 1840, as to do so would assume that the 'best estimate' for the latter date was the figure Dieffenbach gave. Below, I will test the validity of his figure by retro-projecting from the first census back to 1840.

Table 8.2: Māori Population Change Scenarios 1769-1857/58. Implied Average Annual Crude Birth Rates, Crude Death Rates and Rates of Natural Increase/Decrease, Per 1000

Period	Crude Birth Rate (a)	Crude Death Rate (b)	Rate of Natural Increase (a – b)
1769-1810	35-40	30-35	+5
1810-1825	31-35	35-39 (45-49)	-4 (-14)
1825-1840	30-35	38-43 (48-53)	-8 (-21)
1840-1857/8	30-35	47-52	-17

Source: Pool 2015: Table s 9.2 and 11.3

Notes: Following convention, these rates are cited per 1000 (cf. percentages in Table 8.1). Figures in Brackets include Musket War fatalities, 1810-40.

The next step, therefore, is to look at 1840 and then events between 1840 and 1857-58 for Māori. Turning to 1840 itself, for which well-travelled Victorian contemporaries had recorded data on some regions, Dieffenbach's data, a national figure of 114,000, are reasonably comparable. But, my own detailed regional analyses (Pool 1991: 50-51; Tables 3.3 and 3.4) plus retro-projections from the 1857/9 and 1874 censuses suggest that he gave inflated figures for regions where Māori were over-represented (particularly the East Coast), and under-estimates where they were under-represented (eg the south-western North Island). This holds even after consideration is given to the expulsions of Māori, from Auckland and Hauraki by Ngapuhi tribal invaders during the Musket Wars and a subsequent drift back to those areas. The problem is that he was highly dependent on principal informants giving him data on 'fighting men', who may have exaggerated these figures. He then used a multiplier to estimate totals and was hesitant himself about putting forward a higher figure. In fact, he said he was 'inclined to place the population at a lower rate'. Unfortunately, Dieffenbach's estimate has sometimes been 'given the credence that the Old Testament has in the eyes of some biblical fundamentalists: for reasons that are not clear to me, some commentators see it as 'a literal truth'. Yet, if they considered this critically, they would have to explain a collapse from Dieffenbach's to Fenton's count (1857) of 4% per annum *after colonisation* (1840), which they see as an event beneficial to Māori. If Cook's figure for 1769 is accepted, then there would have been an increase until 1840 – the period covered by the Musket Wars that conservative pundits exploit as a bloodbath and use to demonise Māori (Pool 1977 53-54; Pool 2015: 210). So, much as I greatly admire Ernst Dieffenbach for many of his observations, I think he got this one wrong; his 'gut feelings' were correct, that his estimate was indeed too high.

I have queried the possibility of a population collapse before 1840 and equally well it does not seem to have been true in the period following that date until 1858. That said, a decline of minus 2% per annum was extremely rapid, although it was not

as accelerated as those occurring in the small Oceanic islands. In making this estimate, I have accepted Nancy Pearce's (1952) adjustment to Fenton's census based on diligent expository research nationally and sub-nationally. Hers is a not insignificant correction giving a figure 5% higher than Fenton reported. Moreover, the implied rate of negative growth without that correction would have been - 2.7% per annum, as against the -1.8% (a rate of natural decrease of -17 per 1000, to quote it conventionally) that I have adopted here.

The recorded events between 1840 and Fenton's census certainly support the vital statistics' scenarios in Table 8.2. Importantly, the Pākehā population suddenly jumped in numbers thereby increasing the size of the vector for introduced disease. This was primarily because of migration, implying more new arrivals importing new pathogenic strains from overseas. Nevertheless, 20% of their growth came from natural increase, a function of the rates of hyper-fertility that were to characterise the settlers throughout the Turbulent era. Few among the settlers were old and thus exposed to higher risks of death, while colonists' children had far better survival rates than their peers in Britain. These Pākehā started to spread out across limited sections of Aotearoa but were clustered particularly in the South Island and the southern parts of the North. There were also larger groups of new arrivals around Auckland and they were already present and expanding in Northland. As a result, through the spread of pathogens their presence affected Māori mortality patterns – there were verifiable regional differences in the demographic declines in Māori population numbers.

This is verified more powerfully by a statistic which is a remarkably robust proxy for childhood survivorship, itself a sensitive indicator of the effects of development on health – Child-Woman Ratios (Children/Women) ¹². These can be computed region by region for the 1857/8 enumeration. Southern New Zealand, including Taranaki, Whanganui-Rangitikei and Manawatu-Wellington, Auckland, plus Northland had the poorest survivorship; Waikato and Hawkes Bay the best; there are no data for the East Coast and Bay of Plenty. Later in the century, these rankings were to change significantly for some regions, notably for Northland and the South Island, as resistance to disease coming from exposure to risk built up. For other regions the trends were more complex, being affected typically by temporal patterns of land loss. Taranaki, and to a lesser degree Auckland with continuing inflows always fell below the national level (Pool 1991: Appendix 1; 2015: Figure 12.1).

To add to this, there were skirmishes and then a war that brought in 1,300 or more imperial troops to central Northland and the south-western North Island. Then a nationwide influenza outbreak occurred, part of an international pandemic, in the late 1840s and into the early 1850s.

Following this, in 1854 the first nationwide measles epidemic occurred, and as is normal where there is no resistance because of a lack of previous or recent exposure, people of all ages died. Māori suffered exactly the same fate as their

European contemporaries in the Faroe Islands. Observing that epidemic in 1847, Danish doctor Peter Panum, surprised that adults died whereas in Copenhagen it would only have been the children, noted that the previous outbreak had been many decades before; that observation allowed him to contribute a basic foundation to the science of immunology. Woodward and Blakely take the case of measles to indicate a more general condition affecting the first introduction of pathogens through culture contact. Factors in their ‘antigenic presentation’ have been identified that ‘may help to explain the speed and lethality of many of the epidemics following first contact, not just measles’. Some 7% of Māori might have died in this one year from measles alone and perhaps 10% from all causes. This is not some exception. In Fiji a first epidemic in the 1870s may have killed 20% of the population. The nature of disease episodes is such that a peak like this might have been preceded by a much lower trough, so that is why an average annual death rate of 50 per 1000 is proposed in Table 8.2. Child survival rates dropped to particularly low levels, a nadir, at this time.

The prevalence of tuberculosis probably reached peak levels at mid-century before Māori had started to develop some immunity, exactly the trajectory seen in the tropical Pacific as reported by Jean-Louis Rallu. While talking about resistance to disease, Māori were still faced with the effects of STDs leaving them with high-medium fertility levels, 4.5-4.9 births per woman. In the Waikato, and perhaps elsewhere, there may even have started to be a modest reprise in fertility, perhaps as Māori gained immunity to STDs that is apparent in time-series data on one Waikato locality collected by Francis Fenton in 1844 and 1857/8. Again, this sort of trend was seen in the tropical Pacific (Pool 1977: 132, Fn 66; Pool 2015: 222-31; Woodward and Blakely 2014: 58-59; Rallu 1990).

In terms of death rates, the period after annexation was probably Māoridom’s worst hour. Thus, the rapid decline suggested in Tables 8.1 and 8.2 seems feasible. But New Zealand was not composed of the small islands analysed by Rallu (1990) and summarised in his book with Patrick Kirch (Rallu 1990: Kirch and Rallu 2007). Consequently, the mechanics of disease diffusion were very different, much slower with some areas still protected by their isolation from intensive European contact. Thus, the rapid decline posited here seems a reasonable conclusion; a far more rapid Oceanic-type collapse a less likely trend. There was one very peculiar exception – in 1835 the Chatham Islands were invaded by 900 mainland Māori, who enslaved and killed many of the Moriori inhabitants, and introduced diseases to which Moriori had no resistance. They suffered an extreme collapse, but it was unique in Aotearoa’s post-contact history¹³.

Development, 1769-1840

The would-be analyst of Māori, and thus of New Zealand's, development in this era does have some tangibles – about as concrete as one might expect for those days – that give insights. Their analysis, and what they say about development requires one, however, to move from empiricism into speculation.

First, there are merely fragments of data available to them on which to build a story. Consequently, despite Aotearoa being the land of the Māori, like many other aspects of pre-Waitangi Aotearoa, the picture of the economy that emerges from the record in the existing narrative is highly Euro-centric. We are reliant on the bits of information that exist, mainly in written records or in data repositories, overseas as well as in Aotearoa. For example, both from accounts written in New Zealand and from market reports overseas, we can identify a sealing boom as early as the first few years of the 19th century. It produced huge numbers of skins for hat makers in China and later Britain (McAloon 2008: 199-200). Over the entire forty years from 1800 to 1840, only a small number of Europeans in Aotearoa were engaged in these high-profile activities, mainly in the far south. These were paleo-joint ventures, with Māori sharing in both the collection and preparation of commodities and playing instrumental roles in their export. The Pākehā sojourners, moreover, were there by 'grace and favour of Māori.

Among the many productive activities occurring in Aotearoa, the extractive industries gained the widest attention outside New Zealand yet were not at all representative of the country's economy. Through nobody's fault there is a severe imbalance of sources of information, because of which misperceptions about the economy abound, and, by default, misperception becomes reality. If the GDP of Aotearoa could have been truly estimated, including both its monetised component and, in terms of the workers per sector, its much larger non-monetised component, then Māori economic production would have to be given far greater recognition, the extractive industries less. The extractive industries generated cash and probably contributed most to the monetised segment of the economy, or would have done so until Māori started exporting perishables to New South Wales, as well as goods produced by the extractive industries; the freight would have been potatoes, pork, flour, flax, spars and like commodities, yet the Euro-centric record has focused on the shipping of shrunken tattooed heads. Until the trade was stopped they may have been high value goods but would have occupied little cargo space. In fact, they may have been items that were greater in magnitude in urban myth than in quantum: McAloon (2008: 197-201) in his authoritative paper does not even mention this trade. But whether implemented by Māori or Pākehā, the cash component derived from all commodities would have been only a part of the real economy. The lacunae in the development record are also due to the fact much of the Māori hybrid economy, what most people in Aotearoa were really dependent on, was taken for granted – Māori

were simply seen as doing what they had always done, hunting, gathering, fishing and growing crops, including the clip-ons and traded items – and this was not considered worthy of reporting.

Trade with Sydney or wherever (even to Britain), whether by Pākehā exporting Māori-produced products or by Māori themselves, was merely an extension of pre-contact era economic exchanges, Māori had traded up and down Aotearoa, employing complex non-monetised exchange networks. Initially, hybridity, as employed here (defined in Chapter 5), took the form of ‘joint ventures’ of Māori with exporters of extractive industry products. But, very quickly, even from first contact, they were adopting and adapting what I have called ‘clip-ons’ – new foods, animals and technologies, potatoes being a superb example – to their subsistence and trading production and then quickly thereafter started exporting these themselves. A hybrid economy characterised Māori production through the Victorian period and was a tradition that perpetuated itself from before annexation to serve them well for many decades – more than a century later. In the Victorian epoch dispossession often required the substitution of contract labour as a survival mechanism. Additionally, late Victorian Māori faced enforced monetisation. For example, although largely dependent on subsistence, they had to pay local taxes in cash for their remaining pockets of land, often rendered unusable because of multiple ownership imposed by the individualisation of titles by the 1860s *Native Land Laws*, in a society in which inheritance was based on complex cognatic principles (Pool 2015a: 162-70, 258-60 and *passim*). Hybrid economies were extant in many Māori communities at least up until the Second World War, and meant, ironically, that they were better equipped than Pākehā to deal with the lack of a cash income during the 1930s depression.

Another dimension of development, covered in modern national accounts’ systems is welfare, so it would need to be built into any assessment of the real Māori economy of this time. As is discussed in Appendix A, this was comprehensive, although not formalised and statutorily driven. Whanaungatanga bears resemblance to what the 21st century model National Transfer Accounts record, especially assistance in non-monetised ways and services from within a family. Again, by ignoring this we downplay Māori GDP in this period.

Related to this, is a second reality about what probably happened to the demography of Māori in the epoch, from which deductions can be made indirectly about the economy, in its totality of hybridised sectors. I have shown earlier that the Māori population size seems to have changed minimally over the entire 70 year span, an average annual decrease of perhaps 0.2%, despite the Musket Wars and despite the inroads of disease. The relatively limited changes in peopling, the slow decline trajectories noted above, were in part a function of the varying path of development in the period from 1769 to 1840. With the significant beneficial addition of new crops, particularly potatoes, and the feral pigs that were spreading around, the Māori

economy until *circa* 1800 was essentially the same as it had been in antiquity. Away from the coasts change would have come even later. Negative logic supports this argument. Had the economy of New Zealand been ‘globalised’ immediately after Cook’s visit, had Europeans become involved in extractive industries from the 1770s, and had the volume of ships visiting in the late 18th century up and down the country equalled anything like the numbers reported to have berthed at Kororareka in the 1820s¹⁴, then the spread of pathogens would have been far greater and at an earlier stage in Aotearoa’s history. In short, had the Māori population interacted more continuously and intensely with Pākehā from c.1770 to c.1815, rates of natural decrease would already have become marked. In the same vein, had the economy failed, had Māori subsistence producers ceased to provide the basic needs for their people, and food production reached low levels, the effects of pathogens would have been increased by malnutrition-infection mechanisms, and thus the declines would have been more severe.

By the 1790s potatoes had entered the equation and by 1803, so business historian Heather Petrie (2006: 28) tells us, ‘Māori plantations were such that potatoes could be purchased by the ton’. Potatoes and other crops, and wild pork, coming from feral pigs that were first released by Cook, and other commodities were then exported, and soon Māori were involved in all parts of the supply-chain, including building, owning and navigating ships (Butterworth 1991:14). I have called this paleo-globalisation, ‘simple trade in commodities with distant places...’. Beyond this, the potato, which agronomists now widely praise for its yields and nutritional value, became the core item of household sustenance in Aotearoa itself – for Māori and Pākehā. It is also necessary to recognise that the Musket Wars peaked in the 1820s, exactly when Māori were major suppliers particularly of food items to Australia and other places – Māori were thus both trading internationally and domestically while some were engaged in taua. As Petrie argues, extractive industries boomed and bust, and ‘were not sustainable in the long term, which may have encouraged an intensification of agricultural production’. But, this trade, a mix of foods and extractive industrial products was not inconsequential. From 1826 to 1832, the value of goods imported from New Zealand into South Wales exceeded by 3.2 times the value of good exported to Aotearoa (Pool 2015: Chapter 9, 166-69; Petrie 2006: 20). This was the general picture in 1840, although often by then commerce was monetised. By then, Māori businesses were in a strong position to supply the newly arriving British colonists to New Zealand, 40% of whom, in the 1840s, were in tertiary sector employment – soldiers and officials. While Australia was still a destination for trade, Māori commerce was directed increasingly towards the newly burgeoning colonial settlements. As I noted earlier, at the Treaty of Waitangi Māori vested in the new colony all the land, sea and inland water resources. But they also brought a productive business life, within the colony – sustaining the colonists, and

those who joined them soon thereafter – and trading overseas, especially to the Australian penal colonies. Additionally, they were supplying their own subsistence needs. This Māori business hegemony was, in the long run, to be a disadvantage as competition with Pākehā business was one of the factors that triggered the 1860s wars in Taranaki, Waikato and the Bay of Plenty. In 1840, the Māori economy was ready for commercially oriented ‘take-off’ to use Walt Rostow’s phrase; I employ the term here as a simple descriptor, free of the ideological baggage that contaminate his uses¹⁵.

The further reality was that, apart from a few tiny pockets of land used by Pākehā, plus, by the end of the 1830s, some promissory notes made with would-be colonisation agencies, the land was Māori-owned and controlled. In 1840, almost all Pākehā still lived in coastal localities. The godly¹⁶, clustered around the Anglican mission stations on one side of the Bay of Islands in the north. In counter-face, across the Bay, was sinful Kororareka, labelled the ‘hell hole of the Pacific’, housing a cast of true ‘deplorables’, grog-merchants, plus the more respectable traders and ships chandlers. Bizarrely, as I have noted, Kororareka also housed the mission headquarters of the opposition, French Catholic Jean Baptiste Pompallier, gloriously titled Vicar Apostolic of Western Oceania and Titular Bishop of Maronea¹⁷.

For their part, the godly settlers, from the first missionaries on, had tried to recreate a version of England. A symbol of this was their gardening. In their journals, early travellers make much of this, comparing the calm of the missionary garden with the perceived chaos outside. This may seem ephemeral but became an outward manifestation of ‘recolonisation’ later (later chapters), because with these fads went a failure to accommodate comfortably to the New Zealand natural environment – exotic British vegetation was favoured over native.

In the 1830s, most Māori lived in areas that had seen few Pākehā, yet were Christianising rapidly, often because of Māori catechists who went ahead of Pākehā preachers. With that came alphabetisation. Beyond this, a tiny colourful set of sojourners were resident in some isolated Māori villages: sealers, whalers, flax and timber workers, milling spars, masts, and construction timber for Australian building, traders, ship builders, diverse craftspeople, and other itinerants. Among them were the poster children of frontier-life, who often adopted Māori customs, acting as mediators between Pākehā and Māori. Their numbers included two flamboyant, ‘notorious’ escaped convict women labelled ‘mutineers’, and James Caddell, a 16-year-old adopted by Māori, who had killed the rest of his sealing party. When encountered thirteen years later, he was tattooed in the Māori style and had lost his English language skills (Phillips 2005: 1-2).

From Networks to Annexation

After 70 years, post-contact, pre-colonial Aotearoa had to come to an end. It was about to become a colony, but the path that was emerging was for it to become a component of ‘settlement empire’, rather than ‘true empire’ (see Figure 2.1). By the end of the Turbulent era, 40 years after the Treaty of Waitangi¹⁸, this had finally been achieved. By 1860, in fact, the foundations had already been laid for a particular type of settler-colony, one that was to transition into a settler-society, with a demographically hegemonic European-origin population. The next two chapters will review the trajectory to settler-colony and settler-society, while the last two for this era will focus on the emerging Pākehā society and Pākehā economy.

There was to be another extremely important dimension to this: the post-contact, pre-colonisation Māori Aotearoa described in this chapter had developed a unique economy. It had incorporated and perpetuated the traditional gathering, hunting, eeling, fishing and horticulture, including use of plants like bracken fern and karaka, which was on the verge of being domesticated (Leach 2010: 25-29), and clipped-on crops and technologies. The important introduced animal, the pig, was feral, grazing the bush and forests in a way reminiscent of Iberian porcine pastoralism. Together, this system, whether directed to subsistence at a particular kainga (hamlet) or for export to New South Wales, was dependent on horticulture and arboriculture. Pākehā came equipped not only with aspirations to farm the country, to take from the natives what Europeans felt inherently entitled to, but to do it their way – this was pastoralism, sheep ranching which they introduced almost as soon as the ink had dried on the Treaty document. In the 1830s, James Busby had wanted to direct production to viticulture and conducted successful experiments; the French Marists also introduced winemaking. But quickly this was swept aside by sheep and their flocks started to disperse across the country, as pastoralists engaged in ranching, including across what today are some of New Zealand’s finest wine-producing, and horticultural, regions. A few decades ago, one highly prized terroir, the Gimlett Gravels, was just rough overnight holding paddocks for sheep about to be slaughtered.

This transition was not conceived and implemented in a vacuum. Fed back to Whitehall were the alarmist reports of the missionaries about the savagery and sin racking Aotearoa. There were also fears of a French or American annexation of the country – not unfounded in the case of the French. Given the New England whaling interests in the region, it was also not too implausible for the Americans, who were now looking out into the Pacific, with the first wagons setting out, in 1836 on the Oregon Trail. In 1833, the governor of New South Wales sent James Busby to the Bay of Islands as resident, a position in which he was rather ineffectual – he was dubbed ‘a Man of War without guns’. Then, in the late 1830s, the House of Lords held an in-depth inquiry on New Zealand (*British Parliamentary Papers 1838*, 630:

vol xxi). Historian Michael King, citing Treaty historian Claudia Orange, records that the prevailing philosophy conceived of Aotearoa as ‘a Māori New Zealand in which European settlers were to be accommodated...’. In the event, as the Colonial Office ‘learned of the New Zealand Company’s private-enterprise plan to colonize parts of New Zealand, the emphasis changed ... [to] “a settler New Zealand in which a place had to be kept for Māori”. Inevitably, Māori interests would suffer as a consequence of being moved down the priority list’ (King 3003: 157).

Underpinning this was recognition that both Australia and New Zealand were mid-latitude zones with mid-temperate climates, at least the southern coastal parts of Australia, and, therefore, were both deemed to be highly suitable for settlement by Europeans. Travellers and journal writers like John Nicholas (1817: v 2, Conclusion), who accompanied Samuel Marsden to New Zealand in 1814-15, had already argued this case, in doing so strongly praising New Zealand over New South Wales. He was probably not the first such advocate, and not the last, but his argument was typical of many in its insensitive certainties and, unconscious, air of superiority that makes a rather back-handed compliment to Māori (Nicholas 1817: v 2, 263):

‘During my residence in the colony of New South Wales, I had frequent opportunity of conversing with the original inhabitants and observing their habit. And mode of living. Of these people, therefore, I can speak from my own experience... The wretched and improvident habits of these people, and their total ignorance of the art of cultivation, and of any the means which contribute to raise the existence of human beings superior to that of brutes, must leave them considerably behind the natives of New Zealand, sunk even as the latter have always been in utter barbarism. The people too of this continent [Aborigines] appear totally incapable of exercising their reasoning faculties, while the New Zealanders, considering their abject state, are uncommonly shrewd and argumentative’.

These two territories were not the first, nor the last, such colonies British imperialism had established for European settlement. North America was much earlier; southern Africa was viewed in this light and, later, even highland Kenya. By the 1830s, the various settlement schemes, particularly those promoted by the Wakefield family, saw New Zealand as ideal for Pākehā colonists, although another of their desires, never fulfilled, was to replicate the rural class system of England. The plan was to create large landholdings, medium-sized owner-operated units and a sizeable population of tenants with limited land themselves, but who would work on the large estates. Māori did not seem to have been a factor worthy of mention in this scenario. From annexation, however, Aotearoa adopted far less this capitalist-farming

model, fit for agricultural production, or the mixed farming of New England or Upper and Lower Canada, and instead shifted into pastoralism.

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¹ A somewhat extreme example of this was Colonia del Sacramento, now in Uruguay. It changed hands between the Spanish and Portuguese, and finally Brazil and Uruguay, innumerable times between 1680 and 1828, figuring in the fine print of almost every European Treaty of that era. One such exchange allowed the Portuguese to drive the native Guarani into slavery, as depicted in the 1986 film *'The Mission'*.

² Other authors have called it the 'Musket Wars', 'contact, or 'networks' era, but all seem limiting.

³ The reality may have been far less glamorous – one anecdote has Hobson wearing his pajamas.

⁴ The dates posited for it vary significantly from the 1790s to 1810. It is sometime also called *rewa rewa*.

⁵ For Victorian Pākehā, Māori could, it seems, do nothing right: they were even chastised for being over-indulgent to their children.

⁶ This theory was by no means restricted to British imperialists – for example, it is seen in the French and Belgian writing on Africa.

⁷ This set of events and their sequelae has been the subject of a successful claim in 2020 against the Crown, for which action I was a consultant.

⁸ They also briefly touched Wairau in the South Island.

⁹ Preparations for this were being made from the mid-1850s, which raises some other issues (see Chapter 23).

¹⁰ I thank Tom Ryan, Anthropologist, formerly at Waikato University for his comments on Polynesian social organization.

¹¹ The British settlers going to New Zealand often mistakenly thought that it was an antipode of London (51 degrees north). This idea still seems to persist in Britain. But the reality was rather different – see my Introductory Map 1. To colonists, moreover, the flora must have appeared very unfamiliar (Chapter 3, f.n.12).

¹² This methodology has been internationally peer-reviewed and also subject to legal cross-examination especially at the major Central North Island Inquiry (Ohinemutu, Feb 2005). Its great advantage is that it computes the ratio between two easily identifiable sub-groups (children and women) and thus virtually eliminates the risk of age-reporting errors.

¹³ In 2017, I was a consultant to Moriori in their negotiations with the Crown over this unique case.

¹⁴ When the sperm whale boom was underway, centred on New Zealand.

¹⁵ Rostow (1960) was ardently anti-communist (Lepore 2013), as the sub-title of his book shows. He was also zealously modernist, because, from his perspective, traditional societies blocked capitalist progress, which he idealised as the desired end-phase of development, a view common among the functionalist, American, social scientists of his day (Chirot 1977: 2-6)¹⁵. Rostow would thus have fully endorsed Justice Minister Sewell's denunciation in 1870 of Māori tribalism and 'communism', and the need to individualise their land-titles so as to help them escape from this predicament (cited earlier).

¹⁶ Including a few whose pastoral work, apparently, was too 'hands-on'.

¹⁷ Pompallier had a long and successful career in Aotearoa, 1836-68, returning to France when near death. At Māori request, his remains were exhumed, returned to New Zealand, where he was reburied at Motuti Church beside the Hokianga Harbour.

¹⁸ The signatories, chiefs, men and women, of most tribes were spread throughout New Zealand. This meant that the Crown had to deal with a wide range of groups often with competing views and needs. Indirect rule, a mechanism that became very important in late 19th century British Africa and India, where the colonial power ruled through powerful local tribes was thus out of the question. Retrospectively one wonders how history may have been different – perhaps for the worse – had 'Emir' Hika ruled a plurality of Māori.

Chapter Nine – Peopling Aotearoa New Zealand, 1840–1880s/90s

The Effects of the Treaty of Waitangi, February 6th, 1840

The Treaty was signed – the die was cast. New Zealand had become formally affiliated to the British Empire, and almost immediately a settler imprint was felt. This presaged what was to happen over the rest of the turbulent era. The forty years from 1840 to 1880 changed New Zealand for ever.

A first dimension, the subject of this chapter, was peopling and how ‘swamping’ of Māori by Pākehā, Belich’s term defined earlier, was achieved. In 1839 Māori were the vast majority of the inhabitants of Aotearoa, but, already, on January 22, 1840, 15 days before the Treaty was actually signed, the first of a number of ships that were to arrive in Wellington that very same year had landed at the Petone foreshore. They were to bring over a 1,000 new settlers in 1840 alone, and establish the first Wakefield Colonisation settlement. A Māori chief is reported to have wept at seeing this – and his foreboding was justified, as this was the first act in ‘swamping’. As was stressed in earlier chapters, colonisation was initially driven by net immigration, but, from the 1870s on, natural increase was to be the overwhelmingly major determinant of settler population growth. Even when migration was the dominant factor, fertility rates were significantly higher than they were in Britain; this had been true it seems from the very first among the tiny number of families in Aotearoa before colonisation (Chapter 8).

There was a parallel story: the decline of the Māori population, especially in the 1840s and 1850s. The impact of swamping, both the rapid positive growth of Pākehā number through their high levels of net migration and natural increase (births greatly outnumbered deaths) and the negative trend of Māori through natural decrease (deaths exceeded births) was multi-faceted. By the end of this period Pākehā were the vast majority of New Zealand’s inhabitants. Swamping then drove the patterns of social development and the establishment of social institutions, the macro-dimensions of which will be covered in this and the next chapter. It also determined the major transition from a mono-cultural Māori New Zealand to a bi-cultural nation, although by the 1890s Māori survival was a touch and go affair and bi-culturalism had moved close to Pākehā mono-culturalism. The emergence of an overwhelmingly ‘white’ majority population also permitted the constitutional changes described below: New Zealand became a ‘white’ settler-society, and not simply a state with transitory colonial control in the hands of a European minority.

Another impact of settler-colonisation came through constitutional changes that facilitated huge tenurial shifts, above all the dispossession of Māori from their

land. Constitutionality proved to be an insufficient tool by which to displace Māori, and thus the British turned to debatable means of acquiring land and then by wars and attempts at conquest. The British interpreted the Treaty of Waitangi (1840) as giving the Crown pre-emptive rights over Māori land. This was operationalised at first through ‘Crown Purchase’ on a massive scale prior to the 1860s, including much of the South Island, the southern parts of the North and parts of lower Northland and Auckland. The ranches emanating from ‘Crown Purchase’ – collectively called sheep runs or stations in Australasian English – were often vast, covering tens of thousands of acres, leased or purchased for next to nothing. Nevertheless, this land loss still affected merely a minority of Māori, as these losses were felt in the regions that were far less populated by Māori. At first, therefore, settlement did not bring conflict on quite the scale of the 1860s, although in the 1840s there were major campaigns in north-central Northland, battles north of Wellington and a skirmish in the northern South Island. These clashes were far outrun by the major, long 1860s war, a critical step as far as the majority of Māori were concerned. In different forms, from full direct confrontation to guerrilla tactics, followed, in the best colonial traditions, by punitive scorched earth campaigns. It raged for 12 years, off and on, across most of the central North Island, from Whanganui in the south to the outskirts of Auckland north, and saw Taranaki, the Waikato and the Bay of Plenty all conquered, and the insurgents’ land confiscated and turned over to settler pastoralism.

The New Zealand Wars: Two Decades of Reallocation Strategies

The New Zealand Wars were arguably the most important singular, major events in the three decades 1845-1872¹. This applies particularly to the Second Wars of the 1860s. Those of the 1840s were shorter, although, as Belich (1986: Part One) demonstrates, Māori were responsible for some innovative military engineering and showed that less well armed and soldiered native insurgents could hold the might of empire at bay. Those of the 1860s were much longer and complex but more decisive in meeting British ambitions to extend ‘empire’ that the 1840s campaigns had been.

A chronicler whose interests focus on peopling and development faces real quandaries when dealing in particular with the 1860s’ series of wars and the decade that preceded it. The wars were long, bloody, destructive and forced large numbers of Māori to shift from their regions of residence to neighbouring areas. But, despite all this, British objectives were thwarted as the wars were inconclusive – there was no clear victor. So, in this sense, they were tangential to development – there was thus a need to turn to other means of taking Māori resources. Yet, the 1860s Wars were central to a perverse development ethos that saw these resources as something the colonists were entitled to by right, albeit that Māori were exploiting their own lands effectively enough to sell surpluses to settlers and export them overseas. The 1860s,

when the Second Wars were occurring, was tangential in another sense, as I will outline later – the gold rushes were spectacular, but eventually mining became a small contributor to development. It had been the 1850s, before the gold rushes, with wool farming that laid down what was to be New Zealand’s long-term development path, a passion for pastoralism still driving the trade economy even today. Yet, the 1850s seem to be a decade covered in passing as paling alongside the 1860s. I will attempt to restore this balance in this chapter and the next, and again in Chapter 23 when I attempt a synthesis.

The 1850s were the scene for an ongoing operation – from at least 1855, the British were setting up the logistics base and increasing soldier numbers, exactly as if they intended to set about conquering Māori. This is perplexing because there was no obvious threat – the King Movement emerged only at the end of the period – and the imperial power was engaged in two major wars (Crimea and the Indian Mutiny). Yet, in the late 1850s Britain drew line regiments from these two theatres to send them to a small colony at the end of the earth; and the numbers of imperial troops sent to New Zealand were far from small. The marked difference between the two islands, noted in Chapter 5, was most extreme in the 1860s when this all played out. Then, gold and wool in the South; violent warfare in the North.

Until James Belich’s exegesis on the war between the Crown and the Māori King Movement, Taranaki Māori then tribes all over the North Island, then Vincent O’Malley’s more recent monumental book, appropriately called *The Great War for New Zealand*, the wars were essentially relegated to side-avenues of historiography². There, British gallantry was feted, while Māori were seen as soldierly but treacherous. For example, the asymmetry of these wars passed unnoticed until Belich and O’Malley corrected the record: the insurgent Māori, often part-time warriors and women, were far outnumbered by British professional soldiers, reinforced by Pākehā militia and Māori ‘Queenites’. The British, imperial and colonial, had far better weaponry and logistic support systems. The Taranaki campaign even seems to have produced ‘fake news’ at the greatly feted battle of Waireka Pa (March 1860), when sailors from HMS *Niger* gained VCs for an action that may have been largely fabricated to prop up the British military incompetencies³. What seems to be ‘real news’, however, was that Māori women took up arms, joining both sides of the conflict (Belich 1986: 84-88; O’Malley 2016: Brookes 2016: 88-90).

The importance of the wars here is that they were a major determinant of several ‘peopling’ factors, especially in the case of the second series of wars of the 1860s. They had negative effects on Māori, both numerically and in terms of geographical distribution, and thus on the diffusion of introduced diseases to which Māori had no immunity (both discussed below; see also Chapter 6). They had an impact on Pākehā immigrant flows and settlement – the North Island became less attractive, and a longer-term southward movement started, reinforced by the Otago

and West Coast gold rushes. More specifically, there was the inflow of large number of soldiers arriving from elsewhere in the Empire, many of whom remained as colonists. 'Empire', to adopt Belich's usage of the term, had become more established, especially in the second series of New Zealand Wars lasting most of the 1860s and a bit beyond. Empire policing was not finally complete, however, until the invasion and sacking in 1879 of the pacifist village, Parihaka, and the 'Dog Tax War' in the Far North (1898; discussed later).

As a prelude to the Second New Zealand Wars, in the 1850s a quiet transition was occurring for some factors. Above all, wool ranching took off, but also Māori trade with the Victorian goldfields and their retail commerce within New Zealand were strong economic drivers. At the same time, the colonial governments, with or without their Whitehall masters is unclear – but increasingly free of the moral shackles of missionaries who were now just a small minority of Pākehā – may have been preparing the coup that would make the transfer of New Zealand from Māori to colonist. Consciously or unconsciously, they tried war. The King Movement was sold to London as a false conspiracy that Tainui iwi would attack Auckland, which provided a justification for invading the Waikato – the real motivation, Belich says, was that the 'ethos of a colonising and progressive race, demanded that the British rule the whole of New Zealand in fact as well as name'. In Taranaki's case it was claims about pressure on land for settlers, although, in reality, 'there was no overall shortage of land available to Pākehā...' (Belich 1996: 230-31). His argument is supported by empirical data. Through the 1850s, it was increasing its troop numbers, which increased from 1855 to 1857, and support infrastructure (Commissariat Chest for Military and Naval Expenditure). In 1852, the Chest had stood at Pounds 91,000, and by 1857 was Pounds 142,000 (Thomson 1859: v 2 Appendix Table XI). We also know that prominent colonists were strongly pressuring the Governor to attack the Waikato to replace horticulture with pastoralism, and to limit Māori retail competition with Auckland businesses.

In Chapter 7, I had mused that imperialism was more a matter of muddling through rather than executing some grand plan. Yet, the latter hypothesis cannot be dismissed out of hand. The Second New Zealand Wars (1860s) were preceded by a decade in which New Zealand was relatively peaceful, with both Māori and colonists focusing on development. For Pākehā the wool industry was growing exponentially, Māori were supplying potatoes, pork, flour and other food items to Australia's Victorian goldfields, and also, to settlers in New Zealand itself. The King Movement, that was to become a point of contention between colonists and Waikato Māori arose only in 1858. Overseas Britain had two major wars on its hands: Crimea and the Indian mutiny and had garrisons in numerous colonies. Nevertheless, from some fragments of data one could equally well surmise that the colonial government in the 1850s was preparing for possible conflict with Māori, presumably to effect the

transfer of New Zealand's resources to colonists. It was in a distant corner of empire, with no neighbouring British territory other than Australia to support militarily – the Australian colonies sent troops to fight in the Second New Zealand Wars.

Land Tenure and Settler Aspirations

The wars showed that conquest alone, even allowing for the confiscation of lands belonging to insurgents, could not satiate settler demand for land, and thus another solution had to be sought. Thus, in the midst of the wars the settler government adopted a third strategy, an arguably more important step than attempting conquest. It was a step that would dispossess loyal and insurgent Māori alike, wherever Māori could be enticed to leave their land. In a series of Acts in the 1860s, they individualised Māori land titles and established the Native Land Court (NLC), that became the efficient means for systematic dispossession and set in train the taking of the land of the vast majority of Māori. This was a seminal legislative shift in tenurial laws affecting Māori, changing property rights from communitarian to individual ownership. The intended, and realised tactic, was to use one to ten 'owners' willingness to sell as a wedge to pressure the family or sub-tribe as a whole to sell. This was facilitated by court agents by a 'strange course of procedure...of issuing certificates to individuals by name...in direct violation of the Treaty of Waitangi, and by evasion of the provisions of the statute [establishing the NLC]', as was stressed by the eminent 1891 Rees, Carroll, Mackay Parliament appointed Commission (*AJHR* 1891: G-1, Section II, vii, cited Pool 2015: 177-78). Along with this, imperial control in one form and another was subsequently extended to most of the country. Access to this land dispossessed from Māori was most definitely the single most important factor permitting the long-term development of the Pākehā economy and society into the 21st century: like a stock market, gold was great for the economy when it boomed, but then a crash always followed. By contrast, land was always there, and could be the capital that would build real sustainable development. But equally well it had a downside – it moulded many aspects of race relations, by generating a major and very just sense of grievance among Māori, one still not eliminated despite the diligent work of the Waitangi Tribunal and successive recent governments (discussed later in this book)⁴.

A major factor of settler-colonisation, which drove the political changes, was that the settlers came with very different perceptions of property rights and land-use priorities from Māori. They felt entitled to gain access to large estates, as leases or freehold, essentially options closed to all but the wealthiest back 'home'. Māori communitarian control of the land, their 'communism' in the eyes of Pākehā, stood in the way of this dream. Europeans saw these vast domains as potential ranches or extensive grain farms. Shorthorn cattle were landed at Akaroa (in the South Island) in 1839, but full-scale ranching became a reality in 1844, when 950 sheep were driven

around the beach at the end of the precipitous Rimutaka range (700-900 m), now forming a dramatic extra-suburban eastern backdrop to New Zealand's capital city. From these first Merinos picking their way along the beach, the 'national flock' grew rapidly, by the late 1840s passing 100,000 (Eldred-Grigg 1980: 11; Pool 2015: 222-23). Māori business continued on into the 1850s with its emphasis on horticulture, but their economy was eventually to become marginal and hybrid, heavily dependent on subsistence. The most dramatic extractive industrial boom – the gold rushes – were yet to occur in the 1860s, before fizzling out in the late Victorian period. But, *grosso modo*, the scene had been set for settlers to build the economy 'their way'; the Māori approach to development withered in the face of war and swamping.

Confounding this view of settler-colonisation was that the political agenda flowing on from the constitutional changes, and from the demands of the settlers, turned into a need to implement starkly polar policies. How could Whitehall and its officials in the colony successfully displace Māori to make way for colonists, yet cater for a residual Māori presence? Unlike in the other Australasian colonies, or the American Wild West, there was limited space into which to push Māori, and a Tasmanian-style genocide was never contemplated, although some settlers probably harboured the hope that Māori would simply die out. This was scientifically rationalised as a foregone event, retrodicted to the pre-contact period, without any evidence base, but with Victorian certainty. In this optic, the natural fate of Māori was to die out, a demise which colonisation could not, and should not, attempt to stall. In the words of Dr Isaac Featherston, first Wellington Provincial Superintendent, Māori 'were doomed to extinction' (Hamer 1990). It is essential to refer to this political agenda as it gives a context for this history of Aotearoa's peopling and development. How swamping was achieved, how New Zealand was turned into a settler-society with a white majority – the dynamics of peopling – are discussed over the rest of this chapter. Its effects on population structures, and its inter-linkages with the emergent Pākehā society and economy and how these factors ensured that it would be exploited as a land mass suitable for 'white' settlement are discussed in Chapters 10 and 11.

The mix of the issues just outlined was not without its puzzling elements. Michael King has pointed to the paradox of Gaelic-origin colonists, who had witnessed the evils of the Highland clearances and yet saw no contradiction in repeating the clearances in New Zealand by displacing Māori from their land. John McKenzie was a prototype of these Scots. He was a member of the Liberal Government who fought for land reform so that Pākehā could have adequate land to farm on and for a raft of other agrarian policies, and who was responsible for legislation protecting public access to streams, yet oversaw major attempts to dispossess Māori (King 2003: 271)⁵. To add to this paradox, James Carroll, noted just above, Minister of Lands, was not only a member of the same cabinet as McKenzie,

but with William Rees wrote the Rees-Carroll ‘Report’ (Rees *et al* 1891), which was very critical of the practices of the NLC.

‘De-peopling’ of Māori: Scenarios of Population Change, 1840-1901

This period’s starting point is easy to define – the annexation of Aotearoa by Britain – but the end point is harder to demarcate. One is tempted to use the adoption of refrigeration for export products as an upper cut-off (1882), but that would exclude the fact that Māori reached their nadir and started to make a hesitant turnaround only in the 1890s. Moreover, by the 1890s New Zealand was only just coming out of a depression, and the Liberal Government was still initiating real and significant land reform programmes (1891-1911) that benefited the settlers. These reforms completely changed Pākehā land tenure systems and provided the seedbed for mechanised farming on lots that were economically viable. To add to the problems of delineating the period, New Zealand’s constitution was changed when it became a Dominion in 1907 – the colonial period had ended, formally at least. Whether or not this was seen as progress by the ordinary people, Māori or Pākehā, is open to question (Sinclair 1959: 238). Finally, but very conveniently, there is a reasonably comprehensive census in 1901, a rather more abbreviated one in 1906, and a full, but rather different one in 1911, so I have opted to use 1901 as a cut-off point – imperfect and artificial, but pragmatic and relatively elastic.

Table 9.1: Māori Population Change Scenarios 1840-1901. Estimates of Natural Increase/Decrease and its Components, Per 1000

Period	Crude Birth Rate (a)	Crude Death Rate (b)	Rate of Natural Increase (a – b)
1840-1857/8	30-35	47-52	-17
1857/8-74	33-38	43-48	-10
1874-1901	38-41	39-42	-1

Source: Pool 2015: Table 11.3

At the time of annexation there were perhaps 80,000 Māori, down from the number at the time of contact (Tables 7.1 and 8.1). Between then and the Fenton census of 1857/58, Māori population numbers declined rapidly because of high rates of natural decrease, as is shown in Table 9.1. But by then, as was discussed earlier, Māori were starting to gain resistance to invasive pathogens. The net result was that Māori population numbers decreased, most rapidly between 1840 and 1860, but that this loss gradually slowed until 1896. Displacement and threats to their survival produced ‘an underdevelopment trap’ that Māori were caught in by *circa* 1896 (Pool

2015: Figure 1.1, reprinted here as Figure 14.4). By the 1890s, however, a slight increase in their numbers was being recorded.

In Table 9.2, what stands out is the marked difference in fertility rates between Māori and Pākehā. Both sets of rates would be seen as ‘high’ today, but until 1878 the difference was between ‘high’ and ‘very high’⁶. From then on there was a crossover so that by the 1900s Pākehā fertility fell well below Māori levels.

Table 9.2: Estimated Total Fertility Rates (TFR)¹, Māori and Pākehā², Selected Years, 1836–1911

	Māori	Pākehā
1836	n/d	6.8-7.2
1844 (Waikato)	4.6	...
1857/58	4.9	6.5-7.0
1867	...	6.4-7.0 ³
1878	5.6	6.8
1891	5.8	5.3
1911	5.8	3.1

Sources: Pool et al 2007, Figure 2.1; Pākehā 1836, Chapter 6 above.

*Notes: (1) A TFR is a ‘synthetic rate’ using one calendar year’s data to indicate average births per woman across a woman’s lifetime from 15 to 44 years of age = Sum (5 * Age-specific Fertility Rates)*

(2) Māori rates were computed by the author using a range of indirect estimation techniques. The Pākehā estimates are derived from General Fertility Rates directly computed from registration data. GFR = Births/Women 15-44, a ‘central rate’, based on a very wide 30-year age-span, for any calendar year, an index thus subject to age-composition effects. TFRs are derived from a simple approximation, where TFR approx. = 30 x GFR. The provenance and robustness of this approximation when tested against directly computed TFRs (Pool et al 2007: 77n, 78; eg the estimated TFR for 1911 is almost the same as the computed rate for 1913 (3.2) for Pākehā; the same held true in 1921).

(3) 1867 computed from Statistics of NZ, 1867, using two independent indirect estimate techniques

Māori: Barely Surviving

The Māori growth scenarios just discussed were primarily due to changes in levels of mortality, including fetal deaths. The STDs would also have affected the capacity to conceive. As a result of these factors, swamping had two polar dynamics: the settler populations boomed in numbers (see below) simultaneously with a decrease in the numbers of Indigenous Peoples. This was certainly the cardinal issue for Māori between the Treaty of Waitangi and the end of the Victorian era. Then, at the very start of the new century, they made a miniscule turnaround in numbers, barely perceptible in the censuses. This was given the boost it had needed all along by an effective community health programme – essentially improving the housing and

immediate environment in the villages in which most Māori lived; interventions picked up in later chapters. But, make no mistake, the fight to survive was a difficult struggle as the available fragments of data show.

Here I summarise findings detailed elsewhere. Life table estimates for Māori in Tables 9.3 and 9.4 show how dire the situation was for them by comparison with Pākehā, and with the ‘home country’ British, settlers in Australia and whites in Massachusetts, all of which tables can be directly computed (as against indirectly estimated for Māori). The differences between Pākehā and other Europeans are, however, real and not an artefact of estimation. The figures speak for themselves – Māori are very different; Pākehā advantaged even by comparison with other Europeans.

I start with life expectation at birth in Table 9.3, simply because it is the most widely known life table index. But it is a very blunt measure, as any expectation at any age – is a function actuarially of survivorship patterns over the remaining life-span; in the case of expectation at birth, the rest of life (Pool 2015: Chapters 10-14; see also Woodward and Blakely 2014; Dow 1999). Māori are the only population in Table 9.3 that show higher male than female life expectation at birth, but, contrary to popular belief based on recent human experience that favours longer female longevity, greater male expectancy was a not uncommon phenomenon in high mortality, high fertility populations historically, as George Stolnitz (1955, 1956), in a seminal paper, showed. He used every available life table in the Princeton University collection, also the basis for the ‘Coale-Demeny’ model life tables used almost universally. As I have demonstrated in detail elsewhere, for Māori this higher life expectancy for males was not due to the ‘drudgery of their women’ or infanticide and mistreatment of female children, as Victorians and some recent commentators have argued, but occurs in societies such as Māori and other Oceanic populations, and elsewhere, where gender inequalities are less marked. Higher female mortality was in part due to the burden of childbearing, and to higher death rates for many diseases, most importantly tuberculosis, the rates of which were very high for women of reproductive age (Waldron 1986, 2003). For Māori, higher male longevity occurred up until, and including, 1945, when their life-table can be directly computed from reasonably accurate data, so this finding is not a flaw in estimation techniques. Then, and in the interwar years (when the differential is also seen), any infanticide would have come to the notice of the police, and this situation would also have been true in the Polynesian Marquesas and Hawaii, where the same phenomenon is seen for the same dates. By the interwar years, we also have data on Māori causes of death by gender, and young boys suffered more than girls from accidental deaths, diarrhoeal and dysenteric diseases that together might indicate gender-biases in treatment and living conditions of girls, yet the trend is in the opposite direction – the death rates for boys were higher than for girls, which, by the way, is the norm, so Māori fitted the

norm. In this regard numerous Victorian observers saw Māori as indulgent towards children of both sexes: some even criticised them for this (Pool 2015: 291-301).

Table 9.3: Life-Expectation at Birth, in Years, for Aotearoa New Zealand, Māori and Pākehā, Australia, England and Wales, Massachusetts and Scotland 1870s to 1890s

	Males	Females
Māori		
1891	25	23
Pākehā		
1874	48	50
1878	52	56
1876*	50	53
1881	53	56
1886	54	57
1891	55	58
Australia		
1890	47	51
England and Wales		
1871-80	41	45
1881-91	44	47
Massachusetts		
1890	43	49
Scotland		
1871-80	41	44
1881-90	44	46

Sources: Aotearoa New Zealand: Māori, estimates by author, Pākehā synthetic tables prepared by Jit Cheung, for Pool and Cheung (2004, 2005); Australia, Australian Institute of Health and Welfare, online; England and Wales, Registrar General, England and Wales (various years, esp. 1933); Massachusetts: Glover, J. 1921: 132, 140. The 'registration area' of the United States, with adequate data was restricted to only some states – here I have selected an industrialised, more developed example; Scotland: Registrar General Scotland (various years).

*Note: *Average of 1874 and 1878.*

A far more refined measure is failure to survive early childhood, from birth to the 5th birthday (Table 9.4). Moreover, it is a factor strongly related to overall development, so much so that the Child Mortality Rate, in a life-table, correlates very highly with GNI in UNICEF reports and is used by them as a powerful indicator of the wellbeing of children in every country (Pool 2015: 286-93). In Table 9.4, I compare Māori with Pākehā and British populations. The contrast between the experiences of Māori children of this time and their Pākehā peers (see below), could not have been more polarised. In the 1890s, only 50% of Māori children born alive would reach their 7th birthday, yet 86% of Pākehā babies would reach 5 years. I return

to Pākehā early childhood survival later in this chapter – here the intention is simply to make a Māori, Pākehā British comparison; later I will turn to sub-national differences in Pākehā and British populations.

Table 9.4: 1870s, 1880s Early Childhood Mortality Rate (per 1000), Māori, Pākehā, National and Selected Areas England and Wales, Scotland, Ireland

	1870s	1880s
Māori	n/d	473 (1891)
Pākehā, National	156 (1876)	132 (1881)
Boroughs	n/d	185
Rural	n/d	110
England and Wales	263 (1871-80)	233
London	282	265
Large Towns	295	269
Small Towns	277	249
Rural	235	205
Scotland, National	236 (1871-80)	215
Edinburgh	268 (1866)	n/d
Glasgow	347 (1866)	n/d
Ireland, National	226-250 (1864)	n/d
Belfast	344 (1864)	n/d

Sources: Māori and Pākehā, national see Table 9.3, and sub-national, Tiong 1988: Appendix C; England and Wales, Woods (2000): Tables 9.3 and 9.4; Scotland, Flinn et al (1977) 'Appendix Tables'; 1866 data Registrar-General, 1869; Ireland, Registrar-General, 1869. The Irish national range is from direct computing, published data; the higher figure comes from adjustments based on Walsh (2017): Appendix.

Notes: Early Childhood Mortality Rate = $(5)q(0) * 1000$ (from birth to age 5)

Factors Effecting Shifts in Patterns of Māori Survival⁷

A first step towards their survival was a natural bio-response as Māori started to build resistance against invasions by germs to which they had had no exposure before encountering Europeans. The initial epidemics, especially of so-called 'childhood disorders', had been devastating because, with no acquired immunity, older persons as well as children died. To produce a widespread, high fatality rate, such epidemic diseases had to be diffused across a wide area. At first, they were simply introduced to one locality where encounters with sojourners were occurring. This had been very much the pre-annexation process described last chapter – for example, the Bay of Islands and Firth of Thames were very much exposed to this sort of virulent but localised epidemic. But to become nationwide, or occurring in areas where most Māori lived, a different epidemiological scenario transpired. This was after

annexation when Pākehā flowed in, their numbers increased radically, and some sort of critical quantum threshold was passed. This also meant that there were larger numbers of Europeans in more and more localities. This situation was reached by the late 1840s and early 1850s and as a result, some 7% of Māori, of all ages, died in the first nationwide measles outbreak in 1854. As elsewhere in the Pacific, colonists attributed adult mortality from childhood diseases to racial inferiority, rather than the dynamics of epidemic waves, also seen in isolated areas in Europe and thus clearly a factor of acquiring immunity, as was discussed in Chapter 8. Victorian medicine could do little to help Māori, as it was still just laying down the most basic knowledge about the behaviour of germs and of the science of immunology – in fact, a comprehensive understanding was not to be built until the late 1930s, and particularly after World War II. Consequently, there were virtually no public health instruments by which to fight off pathogens, whether by prevention, or medical care once they arrived. Moreover, even for Pākehā, the health system was fragmentised and ineffective (Maclean 1964; see also Chapter 14 below). Smallpox was a major exception and Māori were being vaccinated by missionaries and others, while ships arriving with the scourge on-board were quarantined rather successfully. Thus, there were no ready responses to most childhood diseases, to tuberculosis and other respiratory disorders, or to the great world killers, most of which, by good chance, never got as far as Aotearoa. Even where primitive public health measures could be applied, the colonial government played a very limited role, although Māori were treated in government hospitals, a number of which were built on land granted by local tribes. Data from these hospitals, recorded by the indefatigable Dr Thomson, military surgeon and writer of New Zealand's first history, suggest that 78% of Māori treated there suffered from 'communicable diseases', much as would be expected in a high mortality population (Pool 1991: 82-83; data from Thomson 1859: v 2, 323).

The childhood diseases such as measles, mumps and whooping cough, and their sequelae, such as bronchitis and pneumonia, were all major killers of Māori. As the Pākehā population grew and diffused across the land, epidemics were introduced more and more frequently and spread more widely across Aotearoa. But increasingly, as intervals between outbreaks diminished, and because one attack of these childhood diseases gave life-long immunity, the sequencing changed as the age profile of death moved to persons who had not previously been exposed to the disease, to children. By the 1880s, these disorders became closer to what they were in Europe: a normal *rite de passage* of the young but with very high lethality: 30-40 % of the children in an 1885 measles outbreak in Whanganui (Pool 1977: Table 5.2, 122-38).

Acquiring immunity through exposure was not, however, to be the end of high mortality rates for Māori. Instead, the loss of land impoverished them. With poverty and marginalisation went malnutrition and the full onslaught of nutrition-infection interactions. Notable causes of this were the 1860s Wars and related confiscations of

vast amounts of ‘rebel’ land. To elaborate on what was said in Chapter 7, in the Waikato Wars, the British had laid waste to Māori property, crops, animals and plants such as flour mills, destroying the base of both their commercial undertakings and their subsistence. The wanton destruction and looting of Tainui villages immediately south of Auckland is perhaps the most fully documented but was repeated further south in the Waikato heartlands. There, it was accompanied by the massacre of women and children in attacks on houses and a Catholic Church (Rangiaowhia) (O’Malley 2016: Chapters 16 and 19). Later in the 1860s the Urewera was ravaged by war and widespread purposeful despoliation. The impacts of war were then reinforced subsequently by the long drawn-out NLC procedures, which criss-crossed the North Island wherever there was more land that might be wrested from iwi, whether loyal to the Crown or insurgents.

The NLC’s role was to execute the 1865 *Native Land Act* that individualised Māori property rights over what had been communal land. The loss of land in the North Island, where most Māori lived had occurred in the main by the end of the colonial period – roughly 1910. Some recent commentators seem to see the NLC, and its local court hearings, as analogous to the sober litigation process seen in commercial law courts today. But they were, as Hugh Kawharu asserted (1963, cited Williams 1999: 7; Pool 2015: 41-42), ‘an engine of destruction’. The NLC’s work had immediately negative effects because of the protracted Court hearings, often at long distances from the land under dispute, but at which all Māori ‘title-holders’, even neonates, had to attend. Keith Sorrenson in his seminal research, carefully documented the impacts they had.

But there were also long-term impacts, once Māori lost the titles, they then had to vacate the land with major effects on health and welfare (see below). Of course, there were exceptions where Māori hunted, gathered and fished on their own former lands, but the overall impact was highly negative. An approximation of the childhood mortality rate, $(5)q(0)$ in the life-table for all Māori (Table 9.4) can be computed at the sub-national level. It allows the analysis to be extended to regions and iwi, and for childhood (0-14 years) health to be related to development, or underdevelopment through land alienation. The indices are Child-Woman Ratios (Children 01-14/ Women); the higher the ratio the lower the rates of childhood mortality⁸. In region after region, Māori mortality increased – that is this ratio declined – after land losses had occurred. The varying patterns seen in each major region are set out in Table 9.5.

The first two groups of regions in that table lost great swathes of their area through Crown Purchases in the first two colonial decades; the southern North island recuperated only to be battered again (see Note). The other regions – all North Island areas where most Māori lived – lost resources through confiscation and the NLC, or the NLC alone (plus minor strategies such as forced alienation for public works). The

NLC was active in every single region, even the Chatham Islands, so its role was not only prolonged but instrumental in maintaining the continuous disadvantage of Māori. These were the factors producing the ‘development of underdevelopment’ for Māori lasting into the 20th century (Figure 14.4), but as Table 9.5 shows the impacts were not even. The most severely affected regions were the Waikato, Bay of Plenty, Urewera, King Country and, above all, Taranaki.

Table 9.5: Land Losses (a) in Relation to (b) Regional Shifts in Child-Woman Ratios

(a) Alienation Trend	(b) Region(s) / Trends in Ratios
<i>Early loss, less loss thereafter</i>	• Northland (-, +), South Island (-, +)
<i>Early loss, second loss, recuperation</i>	• Manawatu-Wellington* (-, +, -, +) Whanganui-Rangitikei *(-, +, -, +)
<i>One major surge of alienation</i>	• East Coast (+, -, +), Hawkes Bay-Wairarapa** (+, -, +)
<i>Confiscation, Māori displacement</i>	• Waikato (- -, +), Bay of Plenty (- -, +)
<i>Confiscation impacts, displacement, respite, then full-scale NLC activities</i>	• Urewera (- -, +, - -), King Country (- -, +, - -)
<i>Continuous inflows of Pākehā</i>	• Auckland*** (-, +, -), Thames-Coromandel (- - -)
<i>Continuous inflows of Pākehā, Confiscation, War, and then further Actions by Crown to assert its Authority</i>	• Taranaki**** (- - - -)

Sources: Pool 2015: Figure 12.1; 1991: Figure 4.5, which is on iwi differentials, Appendix 1.

Notes: (a)*Much land was alienated under Crown Purchase, but in the 1880-90s, there was more through the NLC and public works acts to gain land for a main trunk rail line.

**Large areas of South-central Hawkes Bay and Wairarapa had lost land through Crown Purchase; the data here relate instead to the massive NLC losses, from the Heretaunga Plains north. The iniquities in the Heretaunga Plains' purchases are heavily criticised in Rees et al 1891, Parliamentary Report (AJHR: G-1).

*** The decline in arrival rates in Auckland port during and after the New Zealand Wars until the late 1870s perversely benefited Māori as they had less exposure to newly introduced diseases.

**** A turn upward in the ratio, but still well below Total Māori ratio, was not seen until 1901.

Notes: (b) Ratios Children 0-14: Women (- Decline; - - Prolonged, Marked Decline); (+ Above or Improving to Around Total Māori Ratio)

Māori also suffered from other diseases with very different aetiologies from the classical ‘childhood causes’ that should be mentioned. Tuberculosis could be readily diagnosed in those days, although the mechanisms of infection were not understood. Until Robert Koch’s 1882 paper showing the role of a bacterium, it was considered to be inherited. But, unlike for Pākehā from the 1870s on, there was no Māori vital registration so there are only impressionistic accounts of its effects until data were collected by Dr Pomare in his health programmes in the first decade of the 20th century. That said, most observers saw it as both highly prevalent among Māori

and a ‘curse of the race’. When inflows of Europeans to New Zealand were mounting, a particularly virulent form of Tb was sweeping Europe, and not surprisingly made its way to New Zealand – it must be recalled that infection can remain latent before becoming active, so it might not have been apparent to migrants making the long voyage to New Zealand. It seems that ‘phthisis’ made a very early appearance and gradually spread, even to Māori living inland and by mid-century was widely prevalent. Infection with tuberculosis and its effects on victims was very much affected by marginalisation – the less well-nourished and housed were more at risk of infection and death. Deprivation because of the land losses forced most Māori to live in overcrowded, insanitary dwellings and they faced major problems of obtaining sufficient food, a significant risk factor for the disease. These conditions were reported statistically, much later, in a pioneering epidemiological study in the 1930s, which will be discussed in Chapter 15, but we can assume that the situation in the Victorian period was far worse.

Whenever influenza epidemics entered New Zealand, the effects were extremely severe, but in the Victorian era its periodicity followed a strange path, almost the same in the colony, with a bit of a lag, as in the metropole. Aotearoa suffered a severe pandemic in the late 1840s/early 1850s, and then there was a long interval until it was struck again by the great pandemic of the 1890s. Three reported outbreaks in the years between are not verifiable as influenza. But, whatever it was, the disease that spread in 1860 on the outbreak of the Waikato war made headlines in the Pākehā newspapers: ‘Auckland may sleep undisturbedly for some while to come, as Waikato is laid low with influenza’ (*Southern Cross* 1860).

Typhoid epidemics were common from the 1860s and produced high fatality rates. Their passage was, however, very different from the childhood disease epidemics. They flared up then abated and were usually experienced over a limited area. Its origin is difficult to determine because it was not distinguished as a separate disorder from typhus until 1849, but contaminated shellfish would have been a strong candidate, particularly where confiscations or NLC displacements excluded Māori from traditional source areas. Epidemics seem to have been particularly severe in the last few Victorian decades (Pool 1977: Table 5.2), when readjustments from land loss would have been most difficult.

New Zealand was free of malaria and yellow fever. Typhus probably never arrived – one reference to it in 1861 may be a misdiagnosis of typhoid. As noted in Chapter 7, cholera was probably never experienced. Bubonic plague, introduced from Australia, caused a few deaths in 1900. Only one smallpox outbreak occurred on land in this era (7 cases, 3 deaths from the *SS Nebraska*, 1872, Auckland), but a more severe epidemic occurred in 1913, so is discussed in a later chapter⁹.

Māori Geographic Distribution in the Victorian Era

The national population decline was accompanied by geographic shifts, perhaps even on a larger scale in the Victorian era than during the Musket Wars prior to colonisation. But as the late Victorian era movements were generally much more localised they were more difficult to identify. The Crown Purchase of Native Land provoked skirmishes and events associated with the first of these wars in the 1840s. The far greater conflagration and a guerrilla war that followed it, played out for the decade of the sixties, and a little beyond, and resulted in high fatality rates, in the confiscation of the land of insurgents and the forced expulsion from their rohe (territory) of some iwi. Most affected were Waikato Māori. A high proportion of them were forced southwards to join Ngati Maniapoto kinsmen, or onto the far less fertile hill country between the mouth of the Waikato River and Kawhia. Furthermore, Māori in Taranaki were displaced into the rugged land in the east of the province, while Tuhoe were forced south of the ‘demarcation line’ in the Bay of Plenty, separating the coastal littoral from the Ruatoki valley that is deep into the Urewera foothills (Pool 2015: *passim*; O’Malley 2010, 2013). The evidence of that line is still to be seen today, a smaller-scale New Zealand version of the infamous ‘Red-line’ laid down by the Germans in the Southwest Africa colony, now Namibia: natives and their cattle were pursued over that line, still obvious in the landscape, ostensibly to control rinderpest. But also, given the loss of their capital, Māori sought cash incomes, including government public works contracts, as a survival mechanism. For example, there was labour force age-group migration from the Volcanic Plateau of the central North Island to the Coromandel, where Māori engaged in digging kauri gum – the resin of *Agathis australis* was much valued at that time for jewellery and other purposes so was an important export, especially in the late Victorian era (Walrond 2007). There were exceptions to complete dispossession and displacement in a *de facto* sense, as when new landholders allowed Māori to hunt wild pigs or gather wild foods, but this possibility diminished with pastoral intensification. Māori then became the ‘reserve army of labour’ especially for shearing, fencing and similar jobs. They typically clustered around kainga (Māori settlements) and the small remaining parcels of land to which they still had access. Māori were never forced onto reserves along the lines of those in Australia or the United States, but, as a way of achieving control there were attempts at ‘stabilisation’, more based around incentives, such as providing seeds and fertilisers than by policing (Butterworth 1991: *passim*).

Pākehā: Migratory Inflows

The counterpoint to the Māori experience of natural decrease was the inflow and growth of the settler population, some data on whom have already been presented in earlier Chapters. The Pākehā peopling wave really gained impetus after annexation,

when the Treaty of Waitangi, 1840, opened the way for accelerating rates of Pākehā immigration (Table 9.6) and, concurrently, for the inflow of new ideas. The number of Pākehā increased fourteen-fold – from 2000 to 28,000 – between 1840 and 1852 (Phillips 2005). Consequently, these interactions also brought conflict with Māori, both ideational and military, and other negative consequences. It must be stressed that some of the documentable bad effects of the contact and colonial eras were unintended, such as the introduction of diseases against which Māori had no immunity. But there were others that were very much intended, and were essentially a function of imperialist and settlement philosophies and values widespread across the entire British empire and imported by Pākehā. After 1840, Māori numbers were quickly being balanced by settlers, reaching parity just before 1860. But Māori, discussed later in this chapter, quickly lost even this level of demographic equity; from 1878 until as recently as 1986, Māori comprised less than 10% of the total, and for much of that century-long period were around 5-6% of the population (Table 8.1).

The Pākehā population rapidly increased in the 1860s and the 1870s, as immigrants flowed into New Zealand, in what turned out to be historically extraordinarily large numbers – only to be equalled or exceeded in the flows more than a century later in the 1970s and the 2000s. Migration was the demographic dominant only from 1840 to 1875. After dropping significantly from 1876, it became the main driver again only in 2001-05, and once again in some years since 2010, as is seen in Table 9.6 (Note). From then on, and even including quinquennia in the late twentieth century, natural increase outran net migration as a driver of growth. The net immigration came from the goldrushes (early 1860s) and the Vogel Schemes (early 1870s). British troop withdrawals in the second half of the 1860s produced a decline in net migration in that quinquennium, but some troops stayed on as militia to ‘police’ Māori.

It is a sobering statistic that 20% of *all net migrants* (immigrants – emigrants) over the entire span of 160 years between 1840 and 2000, arrived in just two early quinquennia: 1861-65 (the peak of the goldrush) and 1871-75 (the Vogel migration flows). As Ruth Farmer has documented in her powerful analysis, in 1863, at the peak of gold fever, 45,730 people arrived. Let us imagine what that meant – this was adding to a total population base of Māori plus Pākehā of merely 118,000 in 1857/8. It is easy to attribute the causes of the 1860s’ inflows to the goldrushes, but also thousands of troops arrived to fight in the Taranaki and Waikato Wars of this period. The Vogel peak year was a little more modest, but still spectacular: more than 32,000 in 1874. Unlike some of the fortune-seekers of the 1860s, the immigrants of the 1870s were in Aotearoa to stay. In fact, by 1868, many miners had lost heart and headed off elsewhere and as ‘Mother England’ began repatriating British troops (1866-70), net migration was only 860; the effective gain was merely 5% (Farmer 1985: 70). To implement swamping, migration was merely a first step, the trigger, the pre-condition.

For full impact, it had to be transmuted into natural increase, so net immigration quickly became a small part of the growth regime of the Pākehā population, especially following the more family-oriented Vogel scheme of the 1870s. New Zealanders see themselves as a nation of migrants, but in reality most, three-quarters or more in 2013, were the progeny and descendants of migrants.

Table 9.6: Percentage Contribution of Migration to New Zealand's Population Growth, 1840–2010

Period+	New Zealand*	Non-Māori Only
1840-75	81	73
1876-1900	30	24
1901-25	31	32
1926-50	11	**
1951-75	25	**
1976-2000	Negative ***	**
1976-2010	1****	**

Source: Pool 2015: Table 1

Notes: +The periods vary in duration.

*These data include Māori, who are excluded from official data until 1916. I use estimates until vital data become available, and also up until World War II when Māori registrations became more complete. It is assumed that few Māori were involved in international migration in early years, and when external mobility became common, they were already included. The inclusion of Māori dampens the effects of natural increase as Māori levels were negative until the end of the nineteenth century – strongly so in the first decade or so after Waitangi.

** Too difficult to disaggregate ethnicity for both data sets, e.g. they were not collected in some periods.

***Natural increase: 686,184, Net Migration: - 39,542.

**** Natural Increase: 856,337, Net Migration: 8,255. Net Migration reached 56 percent of total growth in 2001-05.

There are no early census data on ages by birthplace, but the popular image of the migrant ships is that they carried large numbers of children, and most passenger lists support that. Julia Millen (1984: 6) makes this point, quoting the case of the *Lord Auckland*, which left Gravesend in 1841 with '15 cabin passengers, 82 adult emigrants, 72 children and 30 crew'. Some of these children, probably a majority, would have been older children, aged 5-14 years.

Nevertheless, to test whether younger children (0-4 years) came in large numbers, one can turn to colonial birth registrations when they became available. Using standard survival techniques, it is possible to estimate how many young children, under 5 years, were likely to have been born in the colony and survived between birth to somewhere in age-group 0-4 years at a subsequent census. This exercise can be carried out rather crudely for the Pākehā census of 1858, but far more definitively for later years. Already by 1858, a clear majority of Pākehā infants aged 0-4 had been born in New Zealand: the estimate yields a figure of almost 60%. The

Aotearoa-born proportions subsequently increased, and these persons became the overwhelming majority of young children aged 0-4 years: 90% in 1881, and 95% in 1891. By contrast, probably, the overwhelming majority of adults were migrants until later in the 19th century; unfortunately, the same estimates cannot be made for older people.

Pākehā: Reproduction

The factor that really ensured settler dominance was the ‘hyper-fertility’ of Pākehā families¹⁰, reinforced by their high levels of child survivorship, both of which set them apart from their British cousins. From first settlement Pākehā were notable for their reproductive capacity, as is seen in estimates based on Busby’s data for the 1830s, which fit closely with those later in the Victorian era (Table 9.2). Table 9.7 extends this into sub-national differentials in New Zealand and Scotland. The underlying determinants of the settler reproductive capacity were twofold: (i) almost universal marriage, and (ii) this at relatively young ages. But, it must be stressed, the pioneer colonists did not marry quite as young as their descendants in the Baby Boom were to do, 80-100 years later, a point to which I return in the next chapter when looking at gender relations in Pākehā colonial society. The determinants and consequences of family building in this era are analysed in detail elsewhere, so I can just summarise some key findings here (Pool *et al* 2007: Chaps 3 and 4).

Table 9.7: General Fertility Rates and Percentage of Women Married by Age 20-24 Years, Pākehā, Canterbury and Otago (1878), and Scotland Total and Selected Regions (1881)

	General Fertility Rates (GFR)	% Women Married at 20-24 Years
Pākehā	221	53
Canterbury	230	47
Otago	219	51
Scotland	132	27
Far North	99	17
Highlands	107	15
Glasgow Region	147	32

Source: Pool 2012: Tables 2 and 3

Notes: GFR = Births per 1,000 Women aged 15-44 Years

Table 9.7 compares Pākehā, 20% of whom were of Scottish origin, with Scottish populations. For example, in 1881 Scotland’s General Fertility Rates (GFR = Births/100 women 15-44) was far below that for Pākehā (1878); Scotland’s rates varied widely from its Far North to the Glasgow Region. Likewise, Scottish early marriage rates (per cent of women married at 20-24 years) were far below those for

Aotearoa's colonists and varied significantly between the Glasgow Region (32%), towns (28%) and cities (20%), and were very low in the Highlands (15%). Across New Zealand in 1878, not only was the GFR far above the Scottish rate, but varied little between Canterbury (ostensibly Anglican) and Otago (ostensibly Presbyterian); settler early marriage rates were also much higher than were Scotland's (53%), but again almost the same in Canterbury and Otago. There were also few wide differentials between settlement types in New Zealand. In 1878, the urban rate was modestly lower than the national figure; peri-urban areas a bit higher, North Island rural marginally above and South Island slightly below (Pool et al 2007: Table 4.2 from Tiong 1988: table E-2).

Notwithstanding high early marriage rates, Pākehā hyper-reproductivity was not due, as is popularly believed, to the male surplus; high levels of masculinity, even in migration flows, continued on into the early 20th century, yet then women married later and many remained celibate. Expected variants in marriage rates, say 'urban vs rural', are seen in the home countries (in peculiar ways in Scotland), but do not appear among Pākehā until very late in the 19th century. The integration of settlers overwhelmingly from the British Isles, but of diverse British stock, noted earlier may well have been achieved by the adoption of a relatively homogeneous colonial fertility regimen. This was true for all immigrant stocks, whether from Scotland's late marriage/low fertility Far North, or from London or the Home Counties, or wherever. Moreover this was not because of migrant selectivity. Relatively few migrants came from early marriage/high fertility regions or occupations; London and Scotland, both major sources of settlers, were at the lower end; Ireland notably so. In Aotearoa, an ever so slight regional exception was the high, but marginally lower, levels of earlier marriage in gold rush areas (eg Nelson, Westland and Otago), where, counter-intuitively, male surpluses were the highest. Perhaps, the women attracted there wished to avoid childbirth, particularly because of their calling; Eleanor Catton describes these women and their lives.

To sum, colonial women married in their 20s, perhaps to ensure social survival in a rambunctious world, yet one in which they may have had more degrees of freedom – but awesome responsibilities if their spouse died or was incapacitated – than they would have had in Britain. The hyper-fertility of pioneer Pākehā then dropped – rapidly for those days – from the highest in the industrialised world, in 1876, to one of the lowest, by 1901. This was achieved mainly by adjusting the 'nuptiality' valve, as Dutch demographers call it and already referred to, not by contraceptive technologies or abortion. But, by the end of the Victorian period significant urban-rural and regional differences in patterns of fertility decline had also appeared. As a generality, in Pākehā New Zealand, when fertility levels are high differentials virtually disappear, but become evident when overall rates decline (Pool et al 2007: Chapters 3-4; Pool 2012; see Baby Boom in this book).

Pākehā: Longevity

The impression remains that from first annexation, and certainly by 1876, Pākehā had achieved unrivalled levels of longevity. This is borne out by the data presented already in Tables 9.3 (*e(0)*) and 9.4 (*(5)q(0)*). Favourable longevity was due to the high average levels of socio-economic wellbeing experienced by the settlers, by comparison with their peers overseas – there is powerful evidence in support of this conclusion (Pool and Cheung 2004, 2005). Nevertheless, there is widespread belief in an alternative hypothesis: that migration involved some form of selection, favouring more proactive and thus healthier persons. As I will show below, this argument cannot be sustained from the data available. Another hypothesis is social Darwinian: that shipboard diseases killed off the weakly and left the sturdy alive. There were also attempts to screen emigrants, especially for phthisis. Epidemiologists Alistair Woodward and Tony Blakely, in their history of public health in New Zealand, are sceptical about the effectiveness of screening. But they show that by the time mass migration to New Zealand was occurring, shipboard health conditions were regulated and better than on dry-land in Britain. The last reported ship with high on-board fatality rates was the small brig *Lloyds* in 1842 (Woodward and Blakely 2015: 86, 95, 110-11; McLoughlin no date).

The impacts of the possible selectivity effects of migration on New Zealand Pākehā life tables is no minor academic issue, but one which goes far beyond local historical-epidemiologic concerns. Pākehā survival rates were employed in a major paper in *Science* by Jim Oeppen and James Vaupel, arguing about a significant issue for all of demography: the limits of human longevity. In the 1920s, so they showed, Pākehā levels had already exceeded what the pundits of that day were seeing as human limits. A paper by Pool and Cheung argued that this was not some sort of period effect but was due to momentum from inflated cohorts flowing on into the adult ages because of high levels of survival in childhood in the late 19th century. But the notion of migrant selectivity dies hard: two leading French demographers, Jacques Vallin and France Mesle, have recently asserted, wrongly in my view, that favourable Pākehā longevity was really due to selective migration. Woodward and Blakely in their detailed analysis, pointing to the rural backgrounds of many of the migrants, came to no firm conclusion, but made an interesting point: ‘If the healthy migrant effect was the only explanation for low mortality in New Zealand, we would expect to see similar results in other colonies... Life expectancy in New Zealand was consistently and substantially ahead’ (see Table 9.3). The most powerful argument that the assertion of positive migrant selectivity is wrong is if Pākehā life tables (eg 1880s) are compared with others. For settlers, life expectation at birth and survivorship through childhood is the highest anywhere for which I can find tables, and these people had not been migrants but were overwhelmingly born in New

Zealand. By contrast, for the adult population life-expectations are lower than Norway's, pointing to a negative migration effect. In Appendix B, I also present tables in support of the argument I make below that migration was not selective by region of origin of migrants. So, selective migration was not an explanation of Pākehā colonists' health advantages – if anything, they were selective from British regions which were disadvantaged (Oeppen and Vaupel 2002; Pool and Cheung 2005; Vallin and Mesle 2010; Woodward and Blakely 2014; Pool 1985: Figures 29 and 30).

Starting with why Pākehā colonists were healthier than most other populations, let me reiterate that this was not because of the health system or medical science, both of which were still taking their first hesitant steps. The New Zealand health system remained inefficient, ineffective and fragmentised until the passage of the *1900 Public Health Act* (Chapter 14) and thus played little role. So, the most singular factor for settlers had to be their overall high level of economic wellbeing by comparison with their peers elsewhere, for factors such as diet (and thus nutrition), income, population densities, and housing – not its quality, which was often appalling, but because settlers lived in stand-alone dwellings, not tenement slums. All these affected the diffusion and pathogenicity of diseases. Jit Cheung and I have also identified the effects of a decline in family sizes in the late Victorian period (see below) (Woodward and Blakely 2014: 109; Cheung and Pool 2004, 2005).

By comparison with their British or even North Americans peers, colonial Pākehā had a protein-rich diet that advantaged them. They were better-off in terms of body height and size, nutrition and general health – of course 100 years later such a protein-dominated diet is frowned upon as a health risk factor (Woodward and Blakely 2014: 104-07). Victorian-era Pākehā lived, for those days, in a land of prosperity, protein, and, also it must be said, production of garden foods, much of the year around in the lots that surrounded even the most urban of dwellings.

The key to their favourable longevity were the exceptionally low levels of childhood mortality for that era, and most of the young children had been born in the colony (Tables 9.3, 9.4 and Appendix Table B.1). Pākehā females were the first in the world to reach 55 years and 60 years of age. Moreover, this had feedback effects on reproduction. Improved child survivorship, along with the high level of wellbeing and nutrition of Pākehā by comparison with the British, were also linked to the decline in fertility 1876-1901: couples saw that their babies were surviving and set about limiting family sizes. But, in turn, this produced further improvements in child survivorship: with smaller families, the household 'pie' could be divided into larger portions, overcrowding declined, there was less risk of cross-sibling infection and early childhood accident rates declined. It must be stressed that accident death rates by gender were very close, slightly lower for girls, but decreased between 1876 and 1896 as care of younger siblings shifted to parents from the older siblings in the huge families of the 1870s, to parents themselves in the emerging smaller family units.

These improvements then had momentum effects, as more and more child survivors moved into adult and middle ages. (Pool and Cheung 2004, 2005; Pool *et al* 2007: Chaps 3 and 4).

Nevertheless, Aotearoa was not some perfect peopling paradise: adult Pākehā New Zealanders of the 1870s and 1880s were very likely to be migrants and, selectively and negatively, to a degree carried with them the health burdens and risks acquired in their homeland. At birth and childhood, Victorian Pākehā had higher levels of life-expectation than, for example, Norwegians, but, at older ages, at 30 years and over, the advantage was definitely in Norway's favour (Pool 1985: Figures 29 and 30; Table 117). You were lucky to be born a Pākehā child in colonial Aotearoa but your chances of becoming a child orphan were higher than for Norwegians. That said, colonists faced fewer actuarial risks than their British siblings or cousins at almost all ages (Appendix Table B.1). The favourable force of childhood survival, however, cannot be overstressed.

In Appendix Table B.2, I have drawn on the British Isles' comparators in Appendix Table B.1, to attempt to fit Phillips and Hearn's (2008) tables and text to British Registrar-Generals' reports. The fit, it must be admitted, was far less than perfect but did cover the vast majority of British regions and thus provides some rather compelling results. The largest group, the English immigrants, were not all representative of a healthier Britain, but a plurality, close to 50%, came from London and other urban industrial areas. Of Farr's famous 65 'healthy districts' for which he constructed life tables (Woods 2000), there were three major swathes – the far north, from where few migrated to New Zealand; the mid-coastal south (excluding ports) from Hampshire to Sussex, of which Hants contributed a hefty 6% to Pākehā immigrants, so had a positive effect on migrant health. But even those migrating from William Farr's third band of south-western 'healthy districts' may not have made as much of a positive contribution as one might expect – they included significant numbers from Cornish tin-mining areas with high health risks. Overall, Cornwall at 7% contributed almost half of those from the southwest, and among them tin-miners were a major group.

Scots had better childhood survival than the English, but at the migratory ages their survivorship rates fell below the English. Moreover, their situation was even worse as they came disproportionately from Glasgow and Edinburgh and other urban areas. The Irish are enigmatic as, at first glance their life expectancy seems elevated, yet until late in the Victorian era that country saw the continuation of its woes of earlier years – evictions, famines, strife. Recent work by Brendan Walsh (2017) points to two countervailing issues. First, Irish vital data counts improved only at the end of the century, so mortality rates seem to have been significantly deflated. His cohort analysis also suggests that the Scottish phenomenon may have been operating. They may have had relatively better childhood survival, yet higher mortality than the

English at the migratory ages. The more favourable childhood survival is not an unexpected factor given that the Irish were overwhelmingly rural. The urban Irish seem to have suffered like their peers in Scotland and England (cf Belfast in Table 9.4 – it is close to Glasgow, and both are far worse than London). The few Welsh among the immigrants frequently seem to have been coal miners, so again would not have been selective in a positive sense.

In sum, these results suggest that the negative effects outweigh the positive; that, migrants were not disproportionately selected from ‘healthy’ areas. Moreover, the Scottish migrant adult survivorship rates – that is failure to survive from 20-50 years, $(30)q(20)$, compounded by a weighting towards urban industrial places of migrant origin, especially Glasgow – are undoubtedly significant. So, the negative effects on selectivity may have been higher. But, as a counterfactual, let us assume that the Kentish farming migrants were healthier – though there was a ‘push’ factor from that county determining departures because of new punitive poor laws – and let us also assume that those from the Northeast were farmers rather than miners or industrial workers, then the positive effects would have been higher, but still short of balancing the negative effects: 58% of immigrants were from less healthy British regions, 42% from healthier (Phillips and Hearn 2008: 100-01). On balance, England and Wales may have had positive effects on selectivity, but this seems to have been outweighed by Scotland, plus, in all probability, Ireland.

Table 9.8: Death Rates (per 10,000) from Accidents and Violence, Pākehā by Gender, Working Age-Groups, 1876 and 1896 Compared With 1956

Age-Group	1876		1896		(1956)	
	Males	Females	Males	Females	Males	Females
15-24	17	3	10	2	10	2
25-44	23	3	15	2	7	1
45-64	21	4	20	4	9	3

Source: Pool 1985: Table 121

This exercise has also highlighted a very significant health divide in colonial society. Immigrants were more likely to be adults, and to have sufficiently high negative survivorship rates that adult Pākehā had higher mortality than Norway. Yet, at birth, life expectation among Pākehā was better than Norway’s, and childhood survivorship, overwhelmingly among New Zealand-born – not migrants – which was already favourable improved in the late Victorian years. As the children were overwhelmingly born in the colony, migrant selectivity was an irrelevancy, but they were the greatest beneficiaries of the colony’s wealth. By 1886, moreover, a majority of all New Zealand’s Pākehā population had been born there. Indeed, already, at the 1881 census, 17% of Pākehā were aged less than 5 years and more than 90% of them

would have been born in the colony; more than 40% of colonists were under 15 and many, if not the great majority would have been born in Aotearoa.

Before leaving longevity, it must be noted that disease was not the only factor of mortality in Victorian New Zealand. A seldom reported fact is that in that era the early working ages were fraught with occupational accident risks, especially for men. Data on accidents and violence by age for 1876 and 1896 are shown in Table 9.8. To provide a comparison, data for New Zealand for 1956, before the spike of youth motor accidents rose, are also presented. Clearly youth of all generations take risks, although those associated with the workplace have decreased over time, but off the job other risks abound: recorded for posterity, for example, is the fact that two Māori youth in Opotiki in 1886 faced no less than criminal charges for ‘furious riding...’, apparently what the boy racers of that day did for a thrill (*AJHR* 1886: G-1, 12). Table 9.7 shows that the steepest declines occurred among older working age men, especially those nearing retirement, whose occupational risks decreased as technology improved workplaces and the hours on the job, and risks of carelessness coming from fatigue dropped. At working ages, male rates far exceed female, and, for men, external causes of death exceed rates for tuberculosis. This is not too bad a comparison because, of all data of that era based on certifications by cause, we can have the most confidence in accidents and tuberculosis (Pool 1985; Pool and Cheung 2004, 2005).

Pākehā: Moving Within New Zealand

The waves of migration also affected the internal distribution of population and generated their own forms of turbulence sub-nationally. I return to this theme next chapter when reviewing data on itinerancy among colonists, but here I am talking about its macro-level analogue of the geographic distribution and redistribution of the settler population between regions and between urban and rural. Colonist numbers had at first been concentrated in the North, where most Māori lived, as was shown in Figure 5.3. In 1840, three-quarters of Māori and Pākehā combined were in the north, in the upper half of the North Island in what was to become Auckland Province. This dropped to 47% (1857/58), but still with 74% in the North Island. But, by 1874, a further redistribution had occurred, mainly of Pākehā. Goldrushes, ‘ranching’ and extensive grain production booms, plus the fear of war in the north, saw 55% of New Zealanders in the South Island. Briefly, Dunedin in the far south became Aotearoa’s prime settlement. The gold rushes coincided with the establishment of the NLC, whose predations facilitated the ‘swamping’ of the natives by settler-farmer families. Many of these arrived in the period of the Vogel migration schemes under the *Immigration and Public Works Act, 1870*, often with their passages assisted by the colonial government. Some of the gold seekers went north to the Thames area (Coromandel Peninsula, near Auckland) as fields opened there, but, unlike southern

fields, they were quartz not alluvial and required higher levels of capitalisation in crushing and other equipment, and with that there was a high level of individual failure. Nevertheless, the Coromandel town of Thames grew very rapidly, reputedly to reach 18,000 by the late 1860s; the 1871 census suggests that, in reality, Auckland urban area was larger. As more land became available in the North, as war became a receding memory, once Māori there had been displaced, and as pastoral farming intensified especially in the flatter more humid areas of the western North Island, the ‘drift south’ turned to be a ‘drift north’. This was reinforced by the fact that the fertility declines of the late nineteenth century started in the South Island. By 1896, the North Island once again definitively outnumbered the South, and by 1901 Auckland was the leading city.

In this era, Aotearoa was still very much a rural society, as is shown in Table 9.9, with almost two-thirds of New Zealanders living outside the fledgling settlements. But, more than one-third of the people were already in boroughs and townships. This was a forerunner of the early twentieth century’s rapid urbanisation, not just in New Zealand but in other settler-societies, and not just Anglo but also in Latin America, especially its southern cone (Pool 2009). The settler-societies led ‘old Europe’ in urbanising, a phenomenon all the more surprising as some, such as New Zealand, were very dependent on the export of farm produced commodities. The reason was the intensification and early mechanisation of pastoralism, an issue to be returned to in the next era covered in this book.

Table 9.9: Percentages of the Total Population (Māori and Pākehā/Non-Māori Combined) living in Rural, Urban and Metropolitan Locations, 1881–2001

	Rural	Urban	Metropolitan	Total
1881	63	37	–	100
1921	46	25	29	100
1961	23	35	42	100
2001*	15	29	56	100

Sources: Statistics New Zealand Censuses; estimates for Māori 1881 and 1921 by author as official data in these two years only cover Pākehā. In fact, there were few urban Māori until after World War II (1926, 16 percent of Māori total).

*Notes: Metropolitan = 100,000 inhabitants; *Rural 2001 includes many ‘peri-urban’ areas*

This chapter has discussed peopling and its correlate, swamping. This demographic process occurred at a national level because of the simultaneous growth of the Pākehā population and the decline in numbers of Māori. It also occurred sub-nationally because of the spread of settlers across New Zealand, carrying with them – unintentionally – pathogens, and intentionally a philosophy of development. The average Pākehā settler had a dream about personal and family enrichment in the colonies, and set about achieving it, in the process turning New Zealand into one of the wealthier countries anywhere. Marked spikes of migration, high fertility, low mortality and geographic mobility within the colony gave Pākehā society an air of vibrancy.

From today's perspective, we can admire the 'pioneers' for their hard work and resilience often against natural and other threats, not the least those coming from the colony's powerful rentier class. But, underlying this, was a broader imperialist strategy that was unsympathetic to Māori – to make Aotearoa a white man's country, and even better to return a healthy dividend to wealthy Briton investors. With this worldview went concepts such as the primacy of private property rights and thus an outright elimination of Māori communitarianism, which together were to lead to the building of a very different Aotearoa in the 20th century from that in the Victorian era. The inverse was true for Māori. By the turn of the new century Māori lacked numbers, as was documented here, and had lost land, capital (next chapter) and political power; by contrast the settlers had booming numbers, owned most of the land, managed most of the capital, or administered it on behalf of British investors, and had the political power. By the 1880s, Aotearoa New Zealand had become a true settler-society.

A shift away from this tumultuous period to one of relative stability was not achieved by one time-bound event, although some authors see the February 1882 shipment of frozen mutton in the *SS Dunedin* out of Port Chalmers as the 'big-bang'. While ranching for wool, or alluvial mining can be initiated or abandoned quickly, meat and dairy, which, ultimately, were to become the staples of the export economy, involved more basic investment in plants and infrastructure and other collateral shifts, notably in tenurial policies that favoured the average colonist. These shifts were ushered in over 2-3 decades right at the end of the period covered in this chapter and at the start of the next and are returned to in later sections of the book.

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¹ In some ways the wars, especially the second of the 1860s, were like civil wars. The second occurred simultaneously with the American Civil War and was just preceded by the Guerra de Reforma in Mexico. The civil war comparison is because Māori were on both sides.

² There has been an upsurge of interest in the Wars, and in New Zealand history in general, spearheaded in part by secondary school pupils.

³ As a pupil (1948-49) at a preparatory schoolhouse named after the HMS *Niger*, I was fed this *Boy's Own Annual* version of British history. Disabuse came years later from reading Belich's more accurate version.

⁴ One other constitutional issue of this era, which has rightly taken the attention of historians, the establishment and then dismantling of a system of sub-national governing bodies, the Provinces, is largely outside the scope of this book.

⁵ Another Scot, Angus McMillan, born on Skye, was instrumental in the massacres of Aborigines in Gippsland, Victoria 1840-50; a contemporary Angus McMillan, also born in the Highlands, had a far less controversial history as a merchant and politician on Prince Edward Island.

⁶ The Pākehā Marital Total Fertility Rate for 1878 (estimated using $30 \times$ Marital GFR, a less robust estimate) suggests the settlers reached over 8.0 and neared 9.0 births/married woman (Pool *et al* 2007: 76-78, 77n).

⁷ In demography the terms survival and survivorship probabilities are used, somewhat interchangeably, in relation to age groups or cohorts (eg childhood survivorship implying passing successfully through age group 0-14 years). But survival also has more generic meaning in demography and popular speech, applied to the risks of collapse for a whole group of people or for some other collective factor (eg language).

⁸ This methodology was developed for Pool (1991). It has been peer-reviewed academically and also tested under adversarial cross-examinations at Waitangi Tribunals. It is remarkably robust and solves major methodological problems inherent in age reporting – the numerator is all children; the denominator all women. In that era, Māori age-reporting was highly unsatisfactory with a major undercount at 0-4 of children, reported instead as 5-9 a common issue with data in developing countries. Cumulation dampens down perturbations in the data due to age-misreporting (Pool 2015: 187-90).

⁹ *Te Ara – Encyclopaedia of New Zealand*, has a PDF Timeline of Epidemics, 1817-2009.

¹⁰ In the 1870s Pākehā Crude Birth rates (Births/Population, 45/1000) were high by international standards for any era, and equal to or higher than the rates seen in any British Isles' county at that time. But even this was a misleadingly low figure: they were dampened down by the fact that they were subject to both age-compositional and gender effects (men are in the denominator but are not at risk of pregnancy). This inflated CBR denominators at the expense of numerators. In 1878, for example, when there was almost sex parity in the births (101 Boys/100 Girls), the Male CBR (Male B/1000 Males) was merely 38, but the Female rate was 47 Female Births/1000 Females (Pool *et al* 2007: 47n).

Chapter Ten – Developing Aotearoa New Zealand, 1840–1880s/90s

Māori Majority to Indigenous Minority

In Chapter 9 I showed how the peopling mix was shifting. With this went a reassessment of perspectives about national development and the entire framework identifying where New Zealand should go as a country, from the booms and busts of extractive industries, and a Māori-dominated domestic economic and business life plus trading, to farming and exporting, with southern wool production becoming the model for ‘sustainability’.

The present chapter analyses shift-shares from Māori to Pākehā that occurred in this period in the objectives governing national social and economic development, and who would control this process. These became the instruments by which the settlers built their society and economy – and by default established the major axes of national development. Secondly, it also reviews the opposite side of the coin – how Māori adapted to abrupt and dramatic changes in perceptions about the factors of production and exchange – from Māori horticulture that served domestic and international trade, to Pākehā pastoralism and mining, with exporting to the ‘mother country’. As I will show later in this chapter, there is an enigmatic flavour in the shift to pastoralism. The most radical land losses for Māori, favouring sheep ranching and a limited number of Pākehā run-holding ‘southern gentry’, had come before 1860, but in regions where few natives resided; by contrast the losses that affected the most Māori came during and after the New Zealand Wars up until the early 20th century, and thereby deprived them more or less definitively of most of their capital.

In quantum terms, this restructuring cannot be underestimated – arguably, it was even more extreme than the radical reforms imposed on Aotearoa a century later during the neo-liberal revolution (Chapters 19-22). But there was a major factor in mitigation missing in neo-liberalism’s programmes. Alongside displacement of Māori and the shift to pastoralism were the public works and infrastructural programmes of the late Victorian period that were driven by the Keynesian, far from ‘invisible’, imprint of Julius Vogel’s ideas that lingered on well after he had taken on new roles. But Vogel’s success was because his policies were leveraged by the widening and deepening of human capital towards achieving *long-term goals of development*. These had very different philosophical underpinnings from the neo-liberal policies, a century or so later, that valorised monetisation and the privatisation of state resources towards *short-term private sector profitability*. On the downside, in the Victorian era the shift to Pākehā pastoralism and the parallel Vogel policies had little room for protecting the interests of Māori, who were seen as a barrier to Pākehā ownership,

whether of farms or land deemed necessary for public works projects. Their dispossession was the means by which this barrier could be eliminated.

It is oft forgotten that dispossession was very brutal and abrupt, particularly confiscation and the losses due to the depredations of the Native Land Court (NLC). Māori, particularly at a local level, had to respond to almost immediate displacement, and formulate and implement survival-mechanisms. To make a comparison, this was done at a far more rapid pace than the 20th century restructuring undergone by New Zealand farmers when Britain entered the Common Market – it corresponded more to when farm subsidies were suddenly eliminated in the 1980s. Stories of generous run-holders allowing Māori to hunt pigs or gather food on the lands they had very recently owned appeal to our sentiments. But there are no data on how widespread this practice was, and how long it lasted. It probably stopped once land was fenced and sown in ryegrass and clover, or fears emerged of sheep-rustling by Māori seeking food. In this context, Belich makes a useful distinction between ‘nominal alienation’, when the deed was signed, and ‘substantive alienation’, when ‘Māori customary use ceased’. ‘[T]he gap between the two could be decades long...’, although such an interval did not mean that the new property owners left the land untouched. Often ‘firing’, burning native grasses, scrub and forest was done, indiscriminately, at the time of nominal alienation, well before the land was stocked (Belich 1996:226).

There were Māori throughout Aotearoa, although relatively few in the South Island. Nevertheless, in some areas there were settlers who barely ever saw a Māori and probably thought little about them on a day-to-day basis. Despite this, the 1860s wars in the North Island and their costs were a political sore point for South Islanders, who had contact with few Māori, especially for the politically powerful southern run-holders (Chapter 11). Over the colonial era Māori were engaged overwhelmingly in farming, for subsistence or, decreasingly, for trade, and in the related activities of fishing, hunting and gathering. Those in the monetised economy were also mainly in the primary sector, as seasonal and casual workers, such as shearers and fencers, or as migratory labourers in kauri gum digging. Later on near the end of the era covered in this chapter Māori often contracted to the government to build roads or put in telegraph lines – I must stress that this was contractual and, unlike in the British east and central African possessions, or some French African colonies and the Belgian Congo, this was not forced labour (Cordell and Gregory (eds) 1987; Cordell *et al* 1996; essays in Ittman *et al* 2010; cf Pool 2015 *passim*). With the decline in Māori trading from the 1850s and the destruction of Māori cash horticulture during the wars of the 1860s, a shift-share of limited magnitude would have occurred away from maritime and small trader jobs, and cash farming to farming, gathering, hunting and fishing for their immediate needs.

Even these pursuits became difficult: the colonists drained wetlands, destroyed eel-weirs; stocked rivers and lakes with exotic fish species (eg trout) that threatened

the freshwater native fish and crustaceans on which Māori depended and then imposed licenses on trout fishermen; often limited access to traditional sea fishing locations and shellfish beds; and through exploitative activities such as logging and mining polluted traditional eeling and fishing places. Above all, as Belich (1996: 342-43) opines, the ‘Early run-holders found that their most useful tool was a box of matches, and some became addicted to arson’. The massive destruction of Indigenous forests correlated in time with the heyday of the Native Land Court (NLC), spurring me to comment, ‘It was as if [the colonists] wanted simultaneously to conquer both the Natives and a landscape with which they felt somewhat uncomfortable’. It also created environmental havoc, especially as it was mostly applied to the hill country regions of the North Island, which have intense levels of local relief and are composed of erosion-prone mudstones, impacts that lasted a long time and still have not been satisfactorily overcome. Immediately, firing destroyed the source areas for Māori food and other items: bird-life diminished and the Norwegian or ship’s rat, accompanying the new owners and their flocks, added further to the destruction of native fauna and flora.

To add even more to the burden of Māori, in the later Victorian period local authorities imposed fencing, dog and other taxes on them – a people dependent largely on a subsistence base by that stage. But similar taxes were not paid by colonists, who were in the monetised economy (Pool 2015: 273-74). The last Victorian conflict, the Gilbertian 1898 Rawene ‘Dog Tax War’, in the far north, was provoked by exactly this inequity (see Chapter 14). Adrienne Puckey sees monetisation as linked to much wider forces of colonisation, notably ‘a need to establish imperial governance, impose monetised taxes alongside commerce and enforce collection’. As Richard Hill notes in his history of policing, the Rawene action ensured that ‘Substantive sovereignty had finally been imposed in the Far North’ (Puckey 2011: 83-85, 142-45; Hill cited by Belich 1996: 268).

The extension of empire to Māori had other perverse consequences. Barabara Brookes reports on the insertion of British gender norms into New Zealand, as they affected Māori, and particularly women. Individualisation of land titles was accompanied by the introduction of patriarchal forms of households as ‘a vital instrument to transform Māori society...’ She notes that there was an attempt in 1865 to abolish matrilineality, but this was modified in the 1869 Native lands Act, in keeping with this patronising view, ‘Māori, like English women had the right “to be well-governed”’. Another problem was that the collective ownership of dwellings was outside ‘the purview of English law...’. Finally, land was also recast ‘in European terms as property subject to individual ownership. In British law, those owners could not be married women. Māori women who wed European men faced the prospect of losing title to their land...’ The 1869 act saw attempts by Māori

women to redress this, but, in a sense, concubinage afforded a more egalitarian protection of property (Brookes 2016: 53-54, citing *AJHR* 1860: E-7, 5, 57-58, 78).

The Colonial Society and Economy: Māori Land Loss

The period 1840-1880s/90s stands out as that in which Pākehā became definitively implanted, socially, economically and politically, their power achieved both by war and swamping. From then on until nearly the end of the 20th century (until the 1980s), although New Zealand saw itself as bi-cultural, Pākehā almost entirely alone were the force that determined what the emerging society would look like and how it would generate its wealth. Increasingly in the colonial period, most of Aotearoa's capital – financial physical, and political – fell into the hands of the colonists. With a few minor exceptions, Māori lacked the capital, such as access to finance: 'government and banks would not lend to them...' Māori had few means of generating wealth through earnings, and they lacked access to banks and other systems of 'financial intermediation that [across the developed world] have played a central role in the history of economic development' (Piketty 2014: 213). Consequently, overall, Māori had insufficient means to enter into mainstream development, say dairying and other forms of farming (Pool 2015: 267-71, citing Belich 2001: 60-62 and Monin 2009: 142-43). But, very recently, from the 1980s, this equation has shifted to a degree when Māori, for the first time since the Victorian era, have belatedly gained access to strategically critical amounts of capital, an issue to which I will return in later chapters.

Above all, it was in the Victorian era, discussed here and in the next few chapters, that settler development primarily depended on Aotearoa's singularly most important form of capital – land, and this reliance extended well into the 20th century. Because it is so critical for my research, as I have noted before, I use Thomas Piketty's (2014: 46-48) conceptualisation of land as capital, as something far more than merely a factor of production, as it is often defined. Access to this form of material capital determined much of the shape and dynamics of the society, the economy and its human geography. It is true that, briefly, Otago, and the town of Dunedin, and then the West Coast, followed by the Coromandel, were driven by gold fever. But, in a temporal sense this was a minor distraction, although long-lasting in popular memory. The sustained and sustainable development path of Victorian Aotearoa, and then over much of 20th century New Zealand, came instead from land. There had to be large amounts available, at cheap rates, if the government were to meet the pressures coming from the inflows of colonists and their reproductive capacities once they arrived in the colony, as was described last chapter. In that era, and at New Zealand's latitude, the focus was on land for pastoralism or grain production. It will be recalled, however, that land grabs similar to that in New

Zealand, leading to ranching or grain farming were occurring across the globe, especially in settler-states (Weaver 2006).

The importance of Pākehā gaining this capital, and Māori losing it cannot be overstressed; this transformation was fundamental to all the demographic, economic, political and social dynamics of the Victorian era, and, indeed, for much of what followed later. But, there is an even more global context to this colonial phenomenon: Piketty shows that in Europe itself land wealth was a major form of capital historically – clearly it is this fact that moulded his definitions of the role of land as a form of capital. Land was displaced by other capital assets in Europe and the United States by the late 19th century/early 20th century, probably later in New Zealand. As he notes, moreover, this underscores the role of land in the New World, as against the Old: the volume of land acquired cheaply whether owned or leased, or simply by squatting, meant that New World capital/income ratios were far lower than in the Old (Piketty 2014: Figures 3.1 and 3.2, and text). Arguably, New Zealand gave primacy to land-based capital, philosophically, if not economically, probably for longer than other Western Developed Countries.

To allow Pākehā pastoralism, however, Māori had to be displaced from their land by what I have elsewhere called the ‘New Zealand Clearances’. Prominent Auckland capitalists, with interests in expanding pastoralism strongly pressured Governor Grey to invade the Waikato, and also for the subsequent land confiscation. It was marketed as a means to pay in part for the Waikato War by the sale of forfeited land to soldier-settlers, who would be a farm-based militia to keep the Māori in check (Wood *et al* 2008; Belich 1996: 230, 358; O’Malley 2016: 465-69). Their aspirations were an attempt to replicate the successful merino pastoralism of the vast South Island and southern North Island sheep runs (Chapter 11). The very different ecology of the humid Waikato, King Country and even Bay of Plenty, or the fact that the north was covered in bush not tussock grass, and that much of the hillier parts of the north were composed of erosion-prone mudstone soils and underlying strata (Introductory Maps 3: rainfall, relief), did not seem to enter their calculus – which was greed requiring a land grab. And, of course, the presence of most Māori in those northern regions was constraint that invasion and displacement might succeed in eliminating – in the event it did not – and the militia typically lacked capital with which to buy and develop their land allocations.

These processes – whether Crown Purchase, confiscation or the work of the NLC – had all the hallmarks of the Irish or Highland clearances, which overlapped in time with New Zealand’s displacement of Māori. There was brutality and major colonial wars in New Zealand, dodgy court dealings, and the substitution of the existing complex, multi-faceted peasant economy by monoculture: by grass for sheep ranching, or by grain. This occurred in all of Aotearoa as well as the ‘mother country’ in the Highlands – and even in England itself as the enclosures movement allowed. To

strengthen the analogy, the expelled peasants – Māori, Erse or Gael – now eking out a subsistence on potatoes, saw their crops subject to periodic episodes of blight over a number of regions. This was not just a problem for Celtic Britain or some other regions of Europe, but, as the New Zealand *Appendices to the Journal of the House of Representatives (AJHR)* show, for late Victorian and early 20th century Māori communities was a disastrous periodic occurrence which had severe nutritional and health impacts (Pool 2015: 255, 269).

In British Common Law this type of land forfeiture – whether by invasion, confiscation or using legal tools – goes back a long way, to Norman Ireland, reinforced brutally there in later centuries by others, most notably by Cromwell. Confiscation was not without its critics in colonial New Zealand. Grey, who had served in Ireland, saw dispossession of Irish peasants as ‘unjustifiable’, yet ‘would bear personal responsibility for implementing similar policies of dispossession as a colonial governor [first in the Cape Colony, then Aotearoa]’ (O’Malley 2016: 392-93). By contrast, the individualisation of titles and the consequent work of the NLC was seen as shifting Māori tenure into a British model, in which ‘property rights’ as against communitarian control, was a paramount principle, and, to Europeans, highly desirable. In 1891, the prestigious Rees, Carroll, Mackay Parliamentary Commission asserted, categorically, that the NLC agents even misinterpreted the ‘statutes’ of *Native Land Act 1865* ‘in direct violation of the Treaty of Waitangi, and by evasion of the provisions of the statute itself... Vast areas of land were thus acquired by Europeans in many districts...’. Beyond such breaches of ‘this fiduciary position’, the comportment of the NLC seems closer to the Chancery Courts satirised by Charles Dickens than the commercial courts of today. Keith Sorrenson, who documented these issues in detail in the 1950s, suggested that the NLC was more destructive in its effects than confiscations had been: his point seems valid, as they lasted a long time (until the 1920s) and systematically touched most regions of New Zealand (Pool 2015: Chapters 11 and 13; Rees, Carroll in *AJHR* 1891 G-1: Session II, vii; Sorrenson 1955, 1956; for an authoritative legal historical analysis see Boast 2008: 56-61).

Table 10.1 provides data for key dates on two factors related to the alienation of Māori land by all processes – Crown Purchase, Confiscation, the NLC and minor legal means (eg taken under *Public Works Acts* – but then often sold on to Pākehā). First, it documents what is a normally quoted figure – on the quantum of land taken. But, secondly and more importantly, I have recomputed Alan Ward’s data (1997; Pool 2015: Table 11.4) to look at the proportions of the Māori population who were affected. Crown Purchase prior to the 1860s allowed the alienation of most of the South Island but only limited areas in the North, where most Māori lived; thus, although the areas lost were vast, the effects of Crown Purchase on Māori were less severe than was the impact caused by the other instruments after 1860. Of course, there were negative impacts in the 1840s/50s on South Island and southern North

Island Māori. The land lost by them was leased or bought overwhelmingly by very large run-holders, who became the ‘Southern Gentry’ (see Chapter 11), or their North Island counterparts in coastal Whanganui-Rangitikei-Wairarapa-south/central Hawkes Bay. Northland and Auckland were also affected by Crown Purchase but never saw the advent of large-scale run-holding. From the 1860s, as Table 10.1 shows, confiscation and the NLC together allowed a full-frontal assault on the remainder of the North Island (north of a line from Inland Whanganui to the Heretaunga Plains¹, essentially Auckland and Taranaki Provinces (as they were then constituted), where most Māori lived. By 1910, Māori only held significant proportions of regions that were infertile and with intense local relief – that is, far less attractive to Pākehā (Pool 2015: Table 11.5).

Table 10.1: Percentage of Areas, and of the Māori Population, affected by Land Alienation by 1860 and 1910

	By 1860			By 1910*		
	North Island	South Island	NZ	North Island	South Island	NZ
% of land lost to Māori	20	99	65	73	99	88
% of Māori population affected	16	99	17	70	99	72

Source of Raw Data on Land: Ward 1997: Vol 1, ‘Appendix’, analysed by Pool 2015: Table 11.4.

*Notes: *Often 5 percent is cited for 1910 as the land remaining in Māori hands at the end of the NLC era, but in fact this was later. Ward cites this figure for 1936.*

The Colonial Society and Economy Overall: The Role of Māori Trade

The 1840s saw the implantation of the first elements of a settler economy. Yet, in 1850 perhaps three-quarters of Pākehā families were still dependent to a greater or lesser degree on Māori for fresh food and water, while those too poor to import building materials from Australia (see Chapter 12), bought raupo (native bulrushes), flax and wood for housing from Māori traders. Domestically, the meat, fruit and vegetables consumed by the northern Pākehā colonist settlements, especially Auckland, but also New Plymouth, Whanganui, Wellington and Nelson, was likely to have come from Māori farming, fishing and hunting. Business historian Heather Petrie shows that food costs were lower in Auckland, supplied by Māori, than in Dunedin where there were few potential Māori suppliers. This was because Māori were efficient producers for that day. Using data collected by the colonial official William Swainson, she shows that, to supply this trade, Central North Island and Bay of Plenty natives were bringing into production the equivalent of 1.125 acres per head/per year, whereas 13 years later when conditions would have boosted colonists’

productivity, the settlers were only managing 0.915 acres (Petrie 2006: Tables 2 and 3, 44-45; 2002: 14, 16; Pool 2015:260-64).

At the 1858 census, 74% of Pākehā lived in the North Island, but typically they were not farmers, so Māori were the providers of perishables for much of the settler urban population. Among those early Pākehā colonists, the farm workgroup exceeded 25% of the total labour force only in Hawkes Bay (43%, but just 3% of the entire settler population lived there) and Otago (28%). Auckland, with 31% of the colonists, had a farm labour force of only 15% of its workers, and this held for only 18% of Wellington's workers, where 20% of the settlers lived. The great sheep runs of the 1850s covered large areas but had few workers. The gold rushes of the 1860s briefly pushed the primary sector over 50%, although the distribution was skewed by the presence of troops, so 44% were in the tertiary sector (1864) but this dropped radically to 32%, (1867). Thus, the perception that the earliest settlers were proportionately sturdy pioneer farmers is simply untrue. It was even untrue much later in the Victorian era (1881), when the largest single sector was the primary (42%, 1881, Thompson 1985: v2, Table 257)². But then the farming population still only comprised 28% of the workforce; various other jobs, such as kauri gum digging, bush and timber working, mining (7%) and quarrying added to the figure. That said, the agricultural workforce grew numerically over the period of the Vogel migration inflows, in excess of increases in the size of the settler population (Chapter 12).

Thus, Pākehā were very dependent on Māori traders for food and other basic commodities as shown by Auckland historian, Russell Stone (cited by Belich 1996: 215; Belich 1986: 303). Surgeon-Major Thomson, much mentioned here, recorded for posterity that, in 1852, for example, Māori, using 2,016 canoes, brought the 8,000 or so Auckland residents 13,350 kits of fresh fruit and vegetables, 52 tons of fish, 65 tons of flour, 1,674 bushels of wheat, and 1,771 pigs (plus other animals and poultry). They also provided, 426 kits of flax, 5,797 bundles of 'grass' (probably raupo) and 1,565 tons of wood (Thomson 1858: v 2, Appendix Table XXV). To take another example, in 1855 Māori coastal ships imported into Auckland products valued at Pounds (L) 82,228 for wheat alone, plus L 48,625 worth of flour. Beyond this were the cargoes not registered with the authorities, which reported a total of L 336,000, according to Petrie, 'a severe undercount of the Māori trade...' (Petrie 2006: Tables 2 and 3, 44-45). Moreover, in the 1850s, Māori were also still actively exporting the same perishables, particularly to the Victorian goldfields when local Australian production failed.

In 1850, Māori were still the majority population, probably more than 75%, so, in addition to provisioning North Island Pākehā, they had to nourish their own population. This would have been a major economic activity, but oft overlooked by those attempting to study the 'national economy' while failing to recognise the sheer size and productive contribution to the overall wellbeing of New Zealand of Māori

subsistence. That is why we can assert definitively that the domestic economy, and probably the real national income, was still overwhelmingly generated by Māori, composed of a subsistence sector – they were feeding their own people who exceeded 50% of the total until after 1857, and the provision of retail perishables and building supplies for Pākehā.

What is even less recognised is that, in the 1840s and 1850s, Māori payments underpinned the colony's fiscal position because of the revenues Customs generated from their trade (59% of the total in 1856), and the revenues the Crown gained from sales and leases of land bought from Māori at bargain basement costs, but sold on/leased for a profit by the Crown. The Māori contribution from these two sources was 73% of the domestically generated government income. Additionally, as imperial troop numbers were rising, the government that year received L120,000 from the British Parliament via the 'Commissariat Chest for the Military' (to be discussed in more detail in Chapter 12). Seemingly, this military build-up was in preparation for a need, projected among colonial elites and increasing during the 1850s – to enforce British sovereignty over Māori – 'the British sought first to check, and then to cripple, Māori independence' (Belich 1986: 75-81). The Chest's contribution constituted 39% of the government's total income in 1856, so was not a tiny amount. But it was exceeded by the funds coming directly or indirectly from Māori: L 135,119³. In a sense, then, in those two decades Māori were providing much of the fiscal capacity for Aotearoa's annexation and the carving off of their southern domains (plus some limited areas in the north), and, in advance, for the alienation through war (from 1860) of their northern lands. In short, in a sense they were paying for their own subjugation.

By 1858, as Māori and Pākehā numbers became equal, the colonists were increasingly servicing their own needs and entering into the export trade. Māori were also facing competition from settler farming and more mechanised processing (eg flour mills). But some Pākehā were still not satisfied. In addition to wanting to turn the Waikato, Bay of Plenty and elsewhere into pasture, there were pressures from Pākehā businesses, which felt that Māori traders unfairly excluded European competition (Belich 1996: 213-16; Pool 2015: 265-67).

The blow that definitively ensured the elimination of Māori business came from the invasions and war especially in the Waikato, but also in the Bay of Plenty and Taranaki. The destruction of the bases of Māori trade, the horticulture which underpinned their retailing of perishables to the colonists, came as 1.6 million acres were confiscated in 1863 '[a]s punishment for alleged rebellion,...Māori flour milling and shipping went into decline simultaneously and the "golden age" for Māori business came to an end...' (Petrie 2006: 49). This also, incidentally, was an assault on Māori subsistence farming. For example, Waikato Māori whose land had been confiscated either migrated to live with kinfolk in areas outside direct government

control or subsisted on small allotments around their houses. From the 1870s, there is little evidence of the occurrence of Māori enterprises – so little that the district officials reporting in the *AJHR* make special reference when a business is opened, such as the odd hotel or cartage firm. Māori retail and tourist enterprises around Rotorua went into decay as Arawa tribes people had to spend many months at NLC hearings, thus not being able to attend to their businesses. The Tarawera volcanic eruption in 1886, in which 105 Māori lost their lives and when the famed ‘Pink and White Terraces’ were destroyed, completed the elimination of Māori commercial undertakings. Petrie summarises the end of Māori business: ‘Māori trade that had been expanding, diversifying and “globalising” was involuted’ (Pool 2015: 267-269; Petrie 2002).

Table 10.2: Per Capita Rural Wealth (Assets), Māori and Pākehā, Nationally, and Rural Population Only, 1901

Asset	National Population			Rural Population Only		
	Māori	Pākehā	P/M	Māori	Pākehā	P/M
Improved Land (acres)	2.5	16.3	6.5x	2.5	30.2	12.0x
CBES-U	3.0	8.0	2.7x	3.0	14.9	5.0x

Source: Pool 2015: Table 14.1

Notes: CBES-U = Cattle-beast Equivalent Units (Simon Chapple’s Index, where 1 head of cattle = 4 sheep = 3 pigs). The CBES-U data include pigs, but this grossly over-estimates the relative Māori wealth in stock. They owned 19 percent of the pigs, most semi-feral, but nationwide pigs were only 1 percent of the cattle-equivalents. Moreover, Māori-owned pig herds plummeted between 1901 and 1911. Exclude pigs and the Māori stock numbers decrease, to 1.3 CBES-U per capita, or 1/6th of the Pākehā figure nationally and 1/nineteenth rurally (Pool 2015: Tables 13.2 and 14.2, 288-91). At the 1911 census, no Māori were recorded as living in boroughs or other urban centres. Only a bare majority of Pākehā (54 percent) were still directly dependent on farm assets.

By the end of the Victorian period, Māori had been thoroughly marginalised, their businesses supplying perishable goods to the home and Australian markets had disappeared, and their contribution to these, both through monetised and subsistence sectors had crumbled to next to nothing. For the end of the Victorian era (1901), I made a range of very crude estimates of Māori GDP per capita and compared them with the national GDP per capita (see Pool 2015: 289-90). They were based on a retro-projection for which the regressor, child mortality rates, theoretically reflected the impacts of both subsistence and formal economic activities⁴. If my estimates are at all valid, Māori GDP per capita would have been \$NZ161, whereas the national value computed by Brian Easton was \$1,192 (1896-1901) and \$1,358 (1901-1906). Thus, Māori GDP per capita was only 12%-14%, or 1/8th that of Pākehā. When Māori GDP estimates are compared with figures on improved land and stock-units in Table 10. 2, as indicators of rural wealth, the ratio between Pākehā and Māori GDP estimates does not seem at all unreasonable.

As a survival mechanism Māori adopted a hybrid economic model. At its base was subsistence farming, hunting, gathering and fishing. But pinned on to this was casual or contact work on infrastructural projects such as roadworks and telegraph networks. There was seasonal work on runs, such as shearing and fencing. By the 1890s Māori were working in the seasonal meat works in Hawkes Bay. Additionally, there was casual work such as kauri gum digging. From early on after annexation, human and social capital resources were largely defined by Pākehā in terms fitting with their development needs. By contrast, Māori human and social capital investments were largely ignored, even denigrated, and stayed within their own community. They were not taken seriously into account in national development as this process was perceived by the colonists. There were minor exceptions where Māori human capital was used more widely: ‘Ngati Kahungunu were the midwives of pastoralism in Hawkes Bay....’, and, as shearers or related casual and seasonal jobs, were indeed the Province’s ‘reserve army of workers’. Labour historian John Martin points out ‘It is perhaps less well known...that [Māori] also contributed greatly to many South Island farms and runs’ (Pool 2015: 271-77, citing Belich 1996 226, Wright 1994: 95, and Martin 1990:39). Again, with minor exceptions (eg some access to hospitals), Māori social capital needs were met from their own resources and relied heavily on whanaungatanga, a sense of family connection implying exchanges and reciprocity that underpin social capital and reinforced by whakapapa (genealogical links) (see Appendix A).

Māori were marginalised well into the 20th century. They had lost their capital and had also seen their enterprises destroyed or eroded. As a result, they were isolated from mainstream social and political processes and suffered much deprivation. This situation reached a nadir in the 1890s when they were in an ‘underdevelopment trap’ (Chapter 14, Figure 14.4), and, as will be discussed below, were demographically almost at stationarity (zero growth), with very high mortality but high fertility (Pool 2015: Figure 1.1, 23-27). Furthermore, in retrospect, pastoralism dramatically changed the New Zealand farm-scape in lowland, more fertile humid zones. These regions went through a rapid transition from horticulture, which had underpinned successful Māori trading enterprises, to ovine pastoralism. Then, from the 1880s/1890s – that is, in the next era to be covered in this book – the farm-scape was to change again; it would still depend on grass but used in a far more intensive way.

The Colonial Society and Economy Overall: Conflicting Values

Māori land was seen by the colonists as an economic asset best exploited by settlers ideally using the Natives as a ‘reserve army of labour’ (Binney *et al* 2014; Hill 2004). This fitted a broader imperialist model, which viewed native tenure as inefficient and

standing in the way of ‘real development’ by settlers or planters. On the Great Plains of a westwards expanding United States a similar clash of values was unfolding. Norwegian settlers, for example, themselves fleeing poverty, felt that ‘they were settler colonists and entitled to the land [set aside as a reservation for the Dakota tribe]. In the eyes of the Dakotas their land was stolen...’ (Marklin 2018). Moreover, many Indigenous groups, and certainly Māori, saw land and other physical capital as a communitarian asset, belonging to an extended family or sub-tribe to be exploited in ways regulated by customary practices. Settlers also saw their technologies and agronomy as infinitely superior to those of natives, or Highland crofters or Irish peasants. Thus, by 1900, Māori lacked almost totally the assets on which to build underlying wealth and the capital to develop their limited resources; the opposite was true for the settlers. For colonists, their landholding and the wealth it generated was probably the most important legacy of the Victorian era.

The most essential prerequisite for establishing pastoralism was, thus, to dispossess the Māori owners from their land. That land grab was rationalised by Victorians as some sort of desirable deed – by arguing that displacement would ‘detritalize’ Māori and thus wean them from their primitive ‘communism’ (Sewell 1870, reprinted *NZ Official Year Book* 1990: 414, see Chapter 3). But these actions were in direct conflict with another set of underlying imperialist values that had ultimately driven Aotearoa’s actual colonisation, and Victorian colonial society and development. This was a notion of duty of care for the Aboriginal inhabitants, which was framed in paternalistic tones, replete with Victorian priggishness and feelings of racial superiority, but still with compassionate underpinnings. This notion went further than simply abolishing slavery or convict transportation. With the dominance of Low Church Evangelical Anglicans and Methodists in Westminster, protection of ‘Aborigines’ such as Māori was a decisive underlying principle in the decision to annex the country. In the event, practicalities saw principle brushed partly to one side, but these values persisted among some of the settlers and their descendants and perhaps paved the way for ground-breaking social reforms at the end of the 19th, start of the 20th century, and gain in the period 1935-49.

As a counter to this sense of compassion are the negative views, which are still apparent in the public discourse today; there are still ill-informed public figures who feel Māori were fortunate in gaining the superior culture and technologies brought by Europeans and should even express gratitude for this. Pākehā Victorians, even the more sympathetic, saw Māori culture, economy, society and technology as inferior to European. In the Victorian era, among that minority of Pākehā who were empathetic, there had been concern about the Māori population decline. Others, such as the Rev Wohlers in 1881, without of course having modern epidemiology at his disposal, argued that the ‘coming of the Europeans has nothing to do with the dying out of the race...the Maoris as a race had outlived their time’.

Although inhabiting the same country, Pākehā New Zealanders often constructed a view of Māori, which fitted more with their own experience back in the ‘Mother Country’ than the reality in New Zealand. It is necessary to discuss this issue because this sort of demonisation of Māori was not simply a function of Victorian myth building but has reappeared in the 21st century in the writings of people I have called ‘tabloidists’ (Pool 2015: 119-22). Their writings would not signify alongside those of the vast majority of historians, were it not for the fact that their inaccurate views have flowed into the popular discourse noted last paragraph. In particular, tabloidists misinterpret the Māori sex ratio data in 19th century censuses to write inaccurate accounts of Māori life both before and after contact and in the colonial period, without an understanding of the historic role of sex differentials in mortality, which favoured the survival and longevity of men⁵. Some even go as far as to argue that in the 19th century the British, apparently through a *pax Britannica* – an achievement of the colonists that would be news to most conventional historians (the period saw a major 12 year war and two skirmishes) – and massive inflows of settlers brought Māori wellbeing and peace that together improved the lot of Māori (discussed Pool 2015: 291-300).

The reality was that both Māori women and Māori men in the colonial period lived lives of awful deprivation. Yet, despite this many Māori women also performed acts of instrumental importance – such as signing the Treaty of Waitangi. One might add that that the same British middle-class Victorians, who built up ‘urban myths’ about Māori, were also drawn from the very class which viewed drunkenness, sexual deviance and profligacy as typifying poorer people back ‘home’ in Britain. The same commentators were also beset by moral panics about ‘culturally highly significant’, although never ‘statistically significant’ levels of infanticide purported to be practiced among impoverished, young unmarried women in England and Wales (Szreter 2002: 455).

Demographic Impacts on Māori of Pākehā Peopling

To reiterate, before the Treaty of Waitangi in 1840, Māori population numbers had been gradually declining from about 1805. But, after 1840, this trend accelerated and Māori population size decreased rapidly, from around 80,000 to 59,000 in 1857/58. This decline then decelerated but was still severe until 1874, slowing to very low levels thereafter (Table 7.1). By the 1890s, there were signs that the decline had ceased and slight increases appeared, first identified in 1891, it seems, by James Carroll (*AJHR*, 1891: G-1, xxix).

The transfer of resources from Māori to Pākehā had dramatic downstream consequences. After 1840, for the first time since contact, there were sufficient numbers of Pākehā entering New Zealand and visiting areas where few if any had been before, carrying with them pathogens to which the vast bulk of the Māori people

had no resistance – previous epidemics of diseases prevalent in Europe had been observed in Aotearoa at coastal points of contact but not spread inland as far as can be determined (Chapter 8). Thus, the 1840s and 1850s were years in which major nationwide epidemics of acute infectious diseases occurred, notably influenza over several years in the late 1840s and then measles and its sequelae in the 1850s. By contrast, in the early years of contact a chronic infectious disorder, a highly virulent form of tuberculosis, had been introduced from Europe where this variant was prevalent. By the 1830s or 1840s it had spread well beyond the localities where it had first been encountered, and seems, by all accounts to have been rampant by about 1850. Resistance in that era, without any anti-biotic armoury, could only be achieved bio-socially – well-ventilated, well-heated housing that was not overcrowded, adequate diets, no malnutrition and satisfactory incomes. Obviously, in Victorian New Zealand Māori had none of these advantages; by contrast, by the 1870s compared to their peers in England, Pākehā benefitted from these biosocial advantages, which had increased by the end of the Victorian period. They underwent significant cohort mortality declines in an epoch before the health system could effectively respond to tuberculosis, either pharmacologically or through curative measures. Moreover, until the 1870s/1880s Māori had still not built any degree of resistance to venereal diseases, so birth rates were still in the upper medium range – lower than we would expect for a population not practising family planning. Add to this their high levels of exposure to disease and malnutrition, and it is not surprising that, for biosocial reason it was not until the end of the Victorian era that Māori Total Fertility Rates reached a high level from a medium one. This is normally rated as above 5.0 births per woman, but Māori in 1891, with a TFR of 5.8 were still well below the 7.0 of colonist women in the 1870s (Table 9.2). As a consequence, natural decrease was still occurring – crude death rates outran crude birth rates (Table 9.1; this and the following paragraphs are drawn from Pool 2015: Chapters 11 and 12).

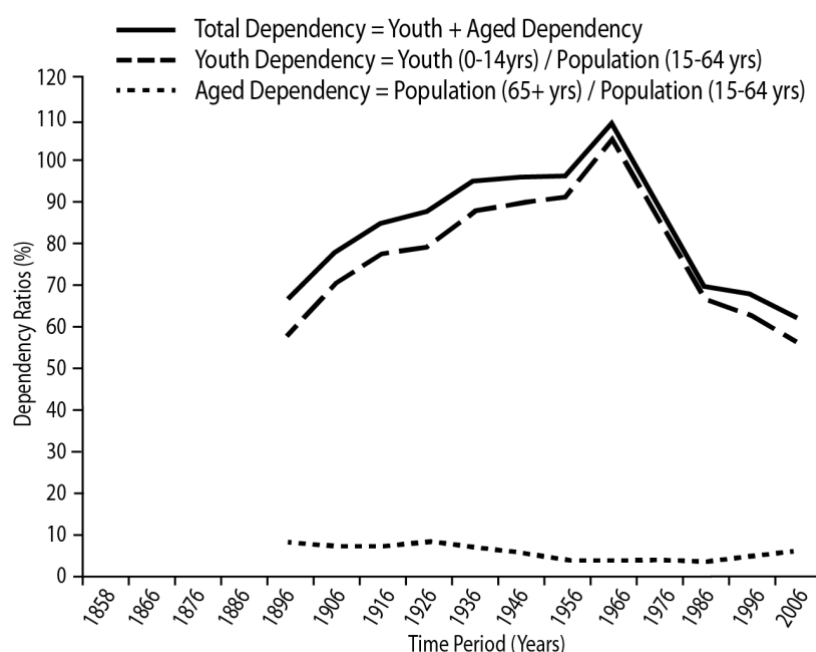
From 1857-58 to 1874, their immunity to introduced communicable and sexually transmitted diseases should have been growing. Death rates should have been dropping off significantly and birth rates going up. But, such gains were stymied because of the negative biosocial effects of the war raging for more than a decade in the 1860s. Directly, there were war fatalities, particularly in the Waikato, but everywhere the war went crops were destroyed and animals wantonly slaughtered. As a result, death, malnutrition and misery followed. Epidemics were regional, including outbreaks reported as influenza, most notably that documented by the historian Judith Binney in the Urewera when the Tuhoe tribe was subject to ‘scorched earth’ military tactics. My estimates, using her data, suggest that the epidemic death rate could have been as high as 10-12% of the entire population. A high death rate is indisputable, as are the military tactics that provoked them, but whether or not the cause of death was influenza is more contentious: the reported symptoms and severity support attributing

them to ‘flu, but the occurrence of this disease in the Urewera and elsewhere at this time does not fit with the known periodicity of ‘flu epidemics in Britain and New Zealand (eg among Pākehā and most Māori) (Binney 2009: 176-77; Pool 2015: 236-38).

Natural decrease occurred for Māori into the 1890s, but at a much slower rate. This suggests that Māori were gaining increased resistance to introduced disease as a result of more frequent exposure. Nevertheless, when Māori are compared with Pākehā – a controlled ‘experiment’ because they were living in the same country, exposed to much the same cocktail of pathogens – their death rates were much higher. In Table 9.3 Māori life-expectation at birth was 23-25 years, below the level achieved prior to contact, and well below the 55-58 years experienced by end of 19th century settlers, which was also higher than their peers in Britain or other settler-colonies. The clue to this quantum gap comes from the child mortality rate, which is very sensitive to health development interactions: the Māori rate was 3.7 times that of the colonists (Table 9.4) (Pool 2015: Chaps 11 and 12). Essentially, the depredations of the NLC had wrought havoc on Māori development, and thus further delayed improvements in health, in an era when most – but not all – determinants were socio-economic rather than biomedical.

The patterns of fertility and mortality experienced by Victorian era Māori affected their age-structures, as is seen by comparing Figures 10.1⁶ below and 11.2 (next chapter). From the early days of settlement until the 21st century, Pākehā and Māori age-structures have generally followed very different, often polar, trends; when one was youthful the other was less so, and *vice-versa*. In the Victorian era the Pākehā population had a very youthful structure, a function of the hyper-fertility of the colonists (see Figure 11.2). In the 1850s and 1870s, their total dependency ratios (Population 0-14+ Population 65+/Population 15-64) were high, and youth dependency (P0-14/P15-64) extremely high, whereas aged dependency (P65+/15-64) was very low indeed. Aged dependency increased gradually, but from the 1870s for another century total dependency was really a function of child dependency. By contrast, Māori in the 1890s had dependency ratios typical of high mortality populations – aged dependency was around 10%, which was a high ratio in modern historical eras, but has since been passed, not because of mortality but because of totally different demographic regimes producing declines in fertility. Pākehā rates at that time were half, about 5% at old ages, and had been even lower in the 1870s (Figure 11.2). This has implications for Māori population dynamics – beyond the general deprivation noted earlier, they also would have faced the burden of caring for a disproportionately old population.

Figure 10.1: Māori Demographic Dependency Ratios, 1896-2006



Source: Censuses, with adjustments by author for earlier years for aged dependency ratios – tables by age did not fit modern classifications

Two Contrasting Economic Systems: 1840 to the 1880s

1956, American Richard Nelson published one of the more inspiring articles of development economics – on ‘low level equilibrium traps’. The absence of suitable data makes it impossible to attempt to replicate his work here for 19th century Māori. Nevertheless, using simple indicators, ‘wealth’ (land still in Māori hands) and demographic survival (population numbers), I have drawn on his basic idea of a ‘trap’, a term used widely elsewhere in demography and economics (Pool 2015: Figure 1.1; reproduced here as Figure 14.4). These core factors of peopling and development converged negatively for Māori over the course of the 19th century; their nadir was to be in a seemingly inescapable ‘underdevelopment trap’ by the 1880s/90s, right at the moment that their fellow citizens were about to perceive, implement, democratise and cement in a development path that would drive New Zealand for almost a century (see Chapters 11 and 12). To add to this, Nelson’s argument that health is an integral element of development is also very appealing when referring to Māori in this era, as I have shown above. Their low levels of longevity would have had negative impacts on the deepening of their human capital base. Data in the next two chapters (and Chapter 9 above) suggest that it is equally relevant when referring to the settlers, but for converse reasons: their human capital both widened and deepened, and they took virtual control of New Zealand’s demographic, economic and social development.

To transition from Māori control to Pākehā hegemony, Victorian New Zealand was thus riven by schisms, not just ideational but in all elements of peopling and development. Chapter 9 portrayed this for factors of peopling; Chapter 10 has looked at how this schism, and the factors altering it, affected Māori life in the Victorian era. There is yet another schism – in time, between the first two decades of British colonisation, and the next decades from 1860. Until the end of the 1850s, New Zealand's demography, economy and society, particularly in the North Island, had been Māori. Until 1857/8 they were the majority population; they not only generated much of the market and subsistence components of GDP, but contributed a significant proportion of the colonial government's revenues derived from domestic sources, such as customs duties; and, in the North Island, Māori society was dominant except around the small colonial settlements and in its southern regions. The South Island, however, was very different, almost a world of its own: in 1857/8 (before the gold rushes), 43% of Pākehā were already found there, but only 5% of Māori.

The next two chapters will further detail the Pākehā side of the dual society and economy that had emerged mainly after annexation. As the colonists increased and strengthened their hegemonic status, their perceptions of the country, society and economy became the driver, almost exclusively, of national peopling and development. This was a very different approach to these goals than had been followed over the previous 600 years prior to the period between 1850 and 1880. In these three decades Aotearoa would adopt strategies that would cause it to transform immutably. The next two chapters look at the emerging Pākehā society and economy that would effect this transformation. Nevertheless, the next two chapters also refer to points of interaction between Māori and settlers.

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¹ The purchase of this area, now prime arbori- and viti-cultural land, was conducted by means that were almost a prototypical example of the NLC at its worst; Rees and Carrol (1891) in their parliamentary report cite it specifically.

² These data on occupations may relate only to the civilian population. Thompson's comments (1985: v2, 117-18) suggest that for some purposes he included the military. He notes, even allowing for this

factor, that the farming sector was low by industrialised economies' standards, a distinction possibly shared with Australia and South Africa, and Britain.

³ Applying data from Governor Gore-Browne cited by Petrie 2002: 16-17, to Thomson 1859: v 2, Table XI. Petrie notes that the Colonial Treasurer, Christopher Richmond, disputed these data, but the Native Minister Donald McLean supported Gore-Browne: '[T]he Māori contribution to Customs would not be an over-estimate...' as much of the trade passed through minor ports without customs' offices.

⁴ They were based on two factors. (i) I retro-projected GDP for that era, with the Child Mortality Rates (CMR) for the 1890s (drawn from Pool and Cheung 2004) as the regressor, and using equations based on UNICEF data on GNIs and CMRs for every country in 2013, the power and inter-linkages with development of which were discussed last chapter. Globally, the CMR correlates very highly with GNI. UNICEF prefers GNI, which for Māori in 1901 would have been almost the same as GDP. The Pākehā GDP, for which I used national estimates, was, of course, far less of an issue – I drew on Brian Easton's series. I thank him for giving me access to his estimates. (ii) I assessed this figure by reference to data denoting rural wealth – improved land (acres) and cattle-beast equivalent stock units (CBES-U), for which 1901 was one of the few censuses recording these data for Māori, providing 'fairly compelling circumstantial evidence...' against which to evaluate the GDP estimate, which at best is a general indicator.

⁵ In Chapter 16, data for 1945, when death registration was nearly complete and certification of cause of death was relatively reliable, are presented on Māori gender differentials in longevity and tuberculosis mortality (a very important cause of death). Male advantage was still strongly evident even in this recent period.

⁶ This graph starts at the very end of the Turbulent period, in 1896, the first date for which one can meaningfully disaggregate the adult Māori population into below and above 65 years of age, although accepting that there is a high likelihood of error. In *Te Iwi Māori* (Pool 1991: Table 5.8) I estimate that the 1857 proportions at old age may have been marginally higher than in 1901 – a factor of mortality at younger ages. Thus, 1896 data probably represent earlier dependency patterns, in general terms although not exactly.

Chapter Eleven – Colonial Social Structure

Settler Regimes: Their Roots

Once regular contact was forged, the change from a Māori Aotearoa to a Pākehā New Zealand did not come about purely by chance. The South Pacific's fate, as much as that of Africa or parts of Asia, was to be determined by the broader geopolitical philosophies current among leaders in Whitehall, on the Quai d'Orsay, in Berlin, once it became the capital of a German federation, and in Washington, although its worldview was shaped by its own westwards expansion. These were underpinned by other societal norms and values, and economic theories that had wide acceptance in England and elsewhere. Even at an operational level, ideational drivers were evident. The processes of peopling, reported earlier, pointed to an inexorable outcome for Aotearoa as a colony: that it would become a settler majority society. Settler numbers expanded very quickly because of immigration, and once colonists landed in Aotearoa many assiduously followed the Old Testament's demographic injunction: 'go ye forth and multiply'.

In the nineteenth century, the British settler-colonies experienced commonalities, especially in the factors of massive migration and rapid natural increase, but New Zealand was not to be an exact replica of Australia or Canada, and even less of the independent United States. The factor that set New Zealand apart was its date of colonisation. The other settler-colonies and the United States had been annexed and settled before the end of the eighteenth century, but, in Aotearoa's case, exchanges between Pākehā and Māori had been very few in number until 1790, and only then started to accelerate. Indeed, the settler presence was not to become overpowering as a driver of what Aotearoa's society would become and how it would develop until almost two decades or so after annexation – at least in the North Island. Much of what can be said about the structure of Pākehā colonial society – at least its broad characteristics – comes from demographic data, on gender, age, education, religion and geographic distribution. These sources must also be turned to in the next chapter when the labour force is analysed. But in the present chapter expository data will also be drawn on to allow its social divisions to be explored, and also the ideational context.

Most of this chapter and the next commences from when annexation had been nominally achieved by the Treaty of Waitangi. The profile of the Pākehā colonial society was to be driven sequentially by its colonial administration and military in the 1840s, by wool in the 1850s. It briefly diverted to gold and war in the 1860s, when the colonial society was disproportionately composed of sojourners, gold seekers and the military. Thereafter, it returned to wool as its economic base, which produced

Pākehā social divisions. These divisions became most marked in the South Island, where 63 percent of Pākehā lived in 1874, and in its extension, the southern North Island. Stratification lines formed around run-holders, small farmers and workers, particularly where it was generated by extensive pastoralism on large estates. Stratification was followed by impacts on the social structure caused by huge inflows of colonists recruited under the Vogel schemes of the 1870s, some of whom would become the North Island landholders who displaced Māori. This version of a colonial society started to end because of the technological revolution of freezing in the 1880s, and the tenurial reforms of the Liberal Government from the 1890s.

The southern landholder grouping, covered in detail in this chapter, was small in number, but this would-be manorial class played a foundational role in establishing pastoralism that became a major part of the economy. As employers they also engaged many of the available workers and itinerants, so had a disproportionate impact on labour market dynamics.

For reasons which are still far from clear, the original Pākehā settlers and their counterparts in other Anglo settler societies had adopted a very different marital and thus reproductive regime from that of their British siblings and other relatives (see Figures 11.1, 14.1). They boarded a sailing ship or steamer in Glasgow, or Liverpool, or London or Plymouth or wherever, with one set of norms, and months later disembarked in Auckland, Port Nicholson, Lyttleton or Port Chalmers, or wherever, and immediately seem to have adopted a different set of values. Moreover, they applied across Aotearoa's settler population without notable levels of variance – regardless of where they lived in New Zealand; regardless of their protestant religious profession – Anglican Presbyterian or Methodist (a small proportion were Catholic); and regardless of their British region of origin. They could emigrate from urban or rural, or low fertility regions, such as Scotland, and London, from whence high proportions of colonists came, or Ireland, or by contrast from those grassy English shires, and mining areas, with higher fertility. To reinforce the colonial hyper-reproductivity, their children's survivorship rates were significantly higher than those of their peers in the 'Mother Country', but again with limited variance within New Zealand Chapter 10).

While demographic destiny was a powerful motor for the society and development, it was not, however, some overriding determinant – it did not drive causal pathways that reached into every part of the land. This was also true elsewhere in the settler world. In each Anglo settler-colony, or state, there were other non-demographic factors that had to be aligned to give them their special identity: date of annexation, the natural environment and resources, the constitutional arrangements, the political manoeuvres and the economic structures, at contact and as each country evolved. The strongest commonality was an ideational underpinning that was the *raison d'être* for their establishment in the first place: all were deemed suitable for

white settlement. This factor became an overriding determinant of their colonial evolution and their economic development, and also was to fashion their linkages to Britain, whether formally as colonies or through trade and social-emotional networking.

A less overriding major idea governing New Zealand's settler development was also shared with the other Anglo settler societies, at least in the nineteenth century. It was one that was to prove a fundamental, recurring and permanent part of New Zealand's value-system: a passion for pastoralism. This started as a pre-industrial form of production – sheep ranching for wool – and later (next section of this book) it transmuted into more intensive grasslands farming. But, to reinforce a point raised earlier, far from being unique to New Zealand, extensive pastoralism, or grain farming, was an activity that, from the mid-eighteenth to the late nineteenth century, was driving white development around the world – in Australasia; in the non-slave, prairie states and West in the United States; in prairie Canada; in the temperate zones of the southern cone of Latin America; in Cape Colony and Natal; eastwards in the Czarist Empire; and, let us not forget it also affected the metropole, through the clearances and evictions back 'home' in Celtic Britain, and even the enclosures in 'Mother England' itself (Weaver 2003).

Sheep ranching started in Aotearoa from the 1840s. Its ramifications went far beyond simply allowing the establishment of some form of hegemonic white settlement but extended to the means by which this was to be done. It required a mode of production that suited the colony's niche in the bigger imperial world, and which in turn shaped colonial society, many aspects of its culture, its political economy, and its population and economic geography. Sometimes, as in Canada, Argentina, Australia and some American prairie regions, and in restricted zones in New Zealand, it was accompanied by grain farming.

In the Victorian era, Australasia and Anglo-America, and the minority white populations of southern Africa, constituted the New World's neo-European Anglo settler-colonies. While their attitudes, norms and behaviours, by chance or design, often mimicked those of the Old World, they also developed their own unique structures. The various Anglo settler colonies/states of this time were characterised by what was an inherent paradox and a potential source of social dysfunction: there was turbulence, even unruliness and some defiance of authority, particularly in pioneer and frontier regions. Yet equally well this was balanced by a level of social order, that saw its resident populations compartmentalised by birthplace, gender, class, occupation, religion and race, and in Canada and South Africa, by European language. In some Anglo settler countries slavery was either a continuing issue over part of the Victorian era, or its inherited imprint was. These various divisions were controlled through different mechanisms, most notably by the geographic dichotomy between the frontier and the more settled regions – the frontier was a different world

located a long way away, with its own priorities and rules. Viewed in this way, perhaps, New Zealand never had a true frontier – settled and pioneering areas were separated but not prohibitively far apart. But there was a commonality. In all Anglo settler colonies, there was a deep chasm between settlers and the indigenous peoples; each country managed it in a unique way, but with sufficient similarities for New Zealand to be a useful case study. This chasm is a recurring theme in this book, even when the prime focus is on the colonists, as in this chapter and the next; interplay with the indigenes was always there, albeit in the background.

Forging a Society, Implementing its Development Strategies

The society that emerged in New Zealand in the colonial period was, like any other imperial outpost, split into two broad groups, colonists and natives, then among the colonists it was stratified into the social orders and occupational groupings seen across the empire. So, among Pākehā, there were officials, some of whom who were in the colony for a set period, the military who came and went, and the civilians. As this was a settler-colony, however, the civilians, the permanent residents, soon became the majority among the Europeans, and this distinguished it from ‘True Empire’ colonies (Chapter 2) where the Europeans came for short periods simply to rule and to exploit the resources. There were other dimensions to the make-up of colonial society – gold seekers, their number inflated in the 1860s, and other sojourners occupied in the extractive industries, lived in makeshift towns and camps, almost outside the orderly parts of colonial society. Some stayed on, often feeding the ranks of the itinerants, in what was a rather mobile population. At the other extreme were ‘run-holders’ and their shepherds moving their flocks onto vast pastoral leases or owned properties, following the model seen already in Australian colonies¹. There were also those people, business owners and their workers, who performed various personal, retail, transport and distributional services. Construction (eg boats, commercial buildings, infrastructure, housing) figured highly. There had to be some light manufacturing industries producing goods that could not be imported; in its early decades the colony was heavily dependent on imports for many goods although until well into the 1850s Māori provided the bulk of the perishable foods and much of the building materials in the North Island and Nelson. Small farms held by settlers supplied Dunedin and Christchurch. Heavy manufacturing was always limited, except for those basic to any society, such as iron foundries, plus, late in the 1860s, quartz gold crushing in the Coromandel.

In the introduction to her thesis on Pākehā wealth in New Zealand from 1870 to 1939, Margaret Galt says, that, to ‘many observers’, Pākehā colonial society seemed ‘to have a level of equality not achieved by the Old World’. To such commentators, this ‘social equality transformed into economic equality by the

absence of poverty...’ As I discuss below, this view may have been rather uncritical, although Galt uses comparative monetised data to argue that New Zealand was less unequal than several other Anglo-settler societies on which she had data. This interpretation, of course, belies the reality of Victorian New Zealand, that, in order to achieve this apparent level of economic equality the settlers were actively impoverishing Māori; there was also the issue of gender inequality, although Stephanie Wyse’s research on wills suggests that New Zealand urban women may have been better-off, relatively, than British (her data series starts in 1890) (Galt 1985: 17; Wyse no date).

With access to comparative data from Thomas Piketty’s work not available to Galt or Wyse (but using Galt’s New Zealand figures), Max Rashbrooke paints a far from egalitarian picture of the era covered in this chapter:

‘...an analysis of estate records from the early 1890s, before the Liberals began “bursting up” the big landholdings... shows that the wealthiest 1% of the population had 55-60% of the wealth, and the wealthiest 10% had 90%. This level of inequality is almost identical to that seen in aristocratic France, and shows to what an extent a relatively small number of Pākehā settlers had amassed large amounts of land’.

I return later in this chapter to this wealthy class (Piketty 2014; Rashbrooke 2015: 55). Aotearoa’s development path as pursued by Pākehā over much of this period was itself tumultuous, involving a series of spikes in some particular sector, only for these to be replaced by some other. At various stages it involved the ‘camp-led’ life of extractive industries, military and pioneering, but shifted to the ‘farm-led’ life emerging by the 1870s (Belich 2001: 30; cited fully, Chapter 6). The broad development path into which Aotearoa moved thus set how the peopling by Pākehā would unfold, and this, in turn, patterned many aspects of the emerging settler-society (eg its age-structures), but also had impacts on Māori population trends and distribution, not the least because displacement of Māori was a major development strategy, but also in less obvious even unintended ways. For example, as already noted, the spread of Pākehā to take up lands newly dispossessed from Māori increased the risks of the introduction of diseases to more isolated areas where Māori had limited immunity to pathogens. Equally well, however, Pākehā ‘peopling strategies’, mainly implemented in the first decade or so after colonisation, then given a huge stimulus by the organised migration of the 1870s and the persistently high colonist fertility rates lasting into the early 1880s, had an impact on New Zealand’s development paths, not the least the swamping of Māori by settlers.

The focus in this chapter is on the emerging colonial society, but to understand its roots it is necessary briefly note the parameters of the economy that the social

system interpenetrated with intimately. To achieve Pākehā economic control, New Zealand shifted itself from the successful Māori economic model of the 1840s, but that continued into the 1850s (see earlier chapters). It did this by implementing, several different approaches shared by Pākehā with their ‘white’ counterparts across ‘settlement empire’ (Chapter 2), often, as in the case of gold and other forms of mining, more a result of hope and circumstance than by planning. This generated competition between the extractive industries, especially gold, and the more sustained development coming from sheep ranching and extensive grain production. For example, would a new arrival from the Orkneys become a shepherd or head for the less certain fate of the goldfields? Aotearoa was not unlike the Australian colony of Victoria in this regard, and Dunedin town gained in the way that Bendigo, Ballarat and Melbourne did. But the spikes in different sectors, noted above, and other factors to be noted later, produced a rocky road, especially in the 1860s. Eventually, New Zealand chose bland pastoral and agricultural ‘husbandry’ over tumultuous ‘quarrying of resources’ to use Phil Briggs’ very apt term (2003:5). After a relatively brief punt in the direction of placing New Zealand’s future fortunes on mining, an endeavour reliant, like elsewhere in the Pacific Basin on both European and Chinese gold prospectors, gold and other extractive pursuits then faded into the background.

One can thus contrast Aotearoa with Johannesburg, where massive quarrying was made possible through untold mineral wealth and a large ‘reserve army’ of forced labour. Across southern and central Africa, the Rand was the hub for capital, labour and infrastructure; workers drawn from as far afield as Nyasaland, were recruited to work on there, involving prolonged migrations on foot. The means used to ensure this were coercion (eg hut-burning) and monetised ‘hut taxes’ (imposed on villages with subsistence economies). Instead, Aotearoa’s destiny lay in its native grasslands and forests that later were burnt or chopped down and sown in English grasses. Māori were not to be physically forced into mines or even coerced into becoming farm labourers. Instead, to make all this happen they had to stand to one side as they saw most of their land alienated.

Thus, by the century’s end, pastoralism, which had been increasing gradually over the entire era, but for different key commodities (wool, meat, dairy products), became the stable core of the new phase of farming. It underwrote Aotearoa’s export trade, and, in the post-Victorian era, much of the country’s economy was based around meat and dairy, with wool a bi-product of sheep-breeding and fattening. This was the economic model that would be dominant in the twentieth century and prominent even into the twenty-first. The stability of this pattern after 1900, to be documented in later chapters, sets it very much apart from the developmental sallies and retreats of Aotearoa in the nineteenth century. In turn, this economic development path played an important role in shaping the colonial society.

Across the Anglo settler societies social inequality, grounded in wealth or the role status of the administrators patterned social interactions among the settlers. But, stratification, and canons of colonial respectability and social order, were sometimes imposed in their most extreme forms in racial and gender laws and regulations, and in exclusive migration policies, directed, above all, against east Asians. Beyond this, in Aotearoa there were broad societal cleavages, stoked by prejudices and thus there was informal discrimination. But Aotearoa's gender stratification generally took its lead in terms of legal codes from 'Mother England', although this was often modified in practice (see below). One can cite the obvious colonial divisions: Settler/Māori; Male/Female, and, out to one side and the worst, the punitive conditions and taxes imposed on the Chinese (Nolan 2009: 374). As noted already, however, New Zealand never had a legally and coercively enforced racial order, such as a 'colour bar' or statutes against 'miscegenation'.

Indeed, ethnic intermarriage, involving both formal and consensual unions, was not uncommon, and occurred at all levels of society. There are no statistical data for most of the Victorian period, but John Harre undertook a fascinating study, using first and family names on marriage registers back as far as 1895, and showed that formal marriages between Pākehā and Māori were not at all uncommon. In some regions, notably in the far south, intermarriage had been very prevalent from as far back as the 1790s. There was even a Victorian school of thought that saw intermarriage as a way of obliterating Māori by 'amalgamating' the races (Pool 2015: 59-61, citing Harre: 1972; Wanhalla 2009, focusing on the southern part of the South Island). The settler-society itself quickly became mobile and as was discussed earlier, with the rapid growth of schooling, distinctions such as the country of origin in the British Isles and even religion broke down.

In some senses, therefore, Aotearoa was a society less rigidly stratified by gender, class and even ethnicity than the 'mother country'. The different ways in which social order unfolded within Pākehā society are outlined in the following sub-sections.

Pākehā Colonial Society: Gender

In many ways the more instrumental component of colonial society was its minority: Pākehā women (see Tables 11.1 and 11.2). Unfortunately, they are often overlooked in the macro-accounts of colonial life, although, through their diaries and letters 'home', they were the most prolific of its chroniclers. We tend from this distance to see them as clones of the women recorded in the British novels of the day, like their 'old country' friends, cousins and sisters – submissive and dependent very much on their husbands. Certainly, the census overwhelmingly classified them in this role by coding them into a 'domestic duties' category (Chapter 7) but forgotten in those statistics were the women who really ran the farms and businesses, especially if

husbands were ill or injured. If we take the migrants, many womenfolk must have acquiesced to this huge undertaking – some may have initiated it, and some families even left behind sickly and other children. Migrating itself was a brave decision, but even more so for the women who came out to New Zealand on their own, ostensibly to become servants, but who may often have married rather soon thereafter. They displayed real initiative and independence in migrating – some at ages as young as 12 years. In this regard, the research of Charlotte Macdonald (1990, see below) is very powerful and, methodologically, a very good model of multi-source analysis.

The newly arrived woman arrived in a colony that was heavily ‘masculine’, demographically and ideationally. Population gender imbalance among colonists is a hallmark of colonial societies, whether in ‘True’ or ‘Settlement’ Empire, and we might assume that this transmitted itself into the systems of values and norms that drove social life. This may have been broadly true, but the actual picture is far more complex than this. Moreover, the demography norms and values varied over time because of differing circumstances.

In the first decade after colonisation, among Pākehā adult males, married men dominated (1841–52, 51 percent), but in the gold rush and Vogel eras they were more likely to arrive as ‘single men’ (married, 40 percent, 45 percent) a trend continuing until World War I (Phillips and Hearn 2008: Table 26). In Table 11.1, I provide data on ‘Masculinity ratios’ (Males/100 Females). These were high in the colony – men significantly outnumbered women – peaking for Pākehā during the gold rushes and when there were large numbers of military (excluded from Table 11.1). As might be expected, rates were highest on the goldfields, increasing dramatically in the 1860s. The colony as a whole had had a more balanced ratio in 1851 and 1858 compared to the total figure for the 1860s (Table 11.1). Otago had had a relatively balanced ratio in 1858 (126 Males/100 Females), but the sex ratios leapt up to high levels (353 M/100 F) as gold was discovered in 1861, then declined as hopes were dashed and many gold seekers raced off to the next find: in 1864 it was already down to 197; and by 1867 to 158. That year, the ratio for the Dunedin boroughs was low, 109, but for what were now the residual Otago Goldfields Towns, masculinity levels were still high: 175.

Table 11.1 : Pākehā Masculinity Ratios (Males per 100 Females) 1851–86

Year	Ratio
1851	129
1858	131
1861	161
1864	162
1867	151
1878	126
1886	117

Sources: 1867 Statistics of New Zealand for 1859–64; remainder Neville, R J W 1985, Tables 22

The next significant gold find was on the West Coast in 1864, when its ratio was 403 in 1867, and 523 for the residual population there in 1871 (Westland County was only promulgated in 1867). In 1867, the ratio in Canterbury (minus Westland) was low (78), suggesting that many men had obviously gone from there to the gold fields across the Southern Alps, leaving behind their families, because, by 1871, the ratio in ranching and farming Canterbury was relatively balanced: 123. But, at the end of 1867, ‘wannabe’ miners rushed to Thames goldfield (North Island). At the 1871 census, Thames Electorate had a ratio of 166, and this was 241 for adults aged 21 years and over. Nationally, males still exceeded females at every census until 1966 (Pākehā) and 1976 (Māori) (Neville 1985: 29-30; for Māori see Chapter 10). The miners were overwhelmingly Pākehā or Chinese, although a few Māori were also among them, as were some intrepid women, Māori and Pākehā. Far more commonly, wives were probably barely subsisting elsewhere while their husbands sought the elusive prize of gold (Brookes 2016: 91-94). Frequently, the wives were deserted and left behind in New Zealand if the husband moved off elsewhere in the colony or overseas to join the next pan-Pacific gold find, and some of these women successfully launched businesses (see below).

Table 11.2: Pākehā Masculinity Ratios (Males per 100 Females), By Age, 1867 and 1886

Age Group	1867	1886
At Birth	106	105
0-14	104	122
15-64	190 (192 if troops incl.)	109
65+	217 (at 55+ years)	136
Total	152	126

Source: Neville (1985): Tables 22 and 23. Excludes military.

Notes: The ratios at birth are normal for most populations. Troops were being withdrawn by 1867. Projecting back to 1864 when far more troops were in Aotearoa gives a rough estimate figure for ages 15-64 years of 220.

For Pākehā in the Victorian period, sex ratios were highest at adult ages, as is shown in Table 11.2. The ratios at birth and 0-14 years are normal, once the higher accident rates of boys than of girls aged 5-14 years are taken into account (Pool 1985: Table 122). As noted last chapter, accidental death rates across childhood decreased for both genders as smaller families saw parents take supervisory roles back from older siblings. But it is the masculinity ratios at older ages that stands out. If we are to believe the raw data, there were no Pākehā women aged 65+ years in the colony in 1867. But surely, there must have been the odd surviving woman from the 1830s (Busby’s count, Chapter 8) or women who had arrived as migrants aged in their late 30s in the early 1840s?² The very high rate is a function of small numbers (only two

percent of Pākehā men and one percent of women were at ages 55) but in 1867 and 1886 they were the survivors of cohort momentum effects: the male survivors of gender-imbalanced migration flows, not yet balanced out by older people who had been born in the colony.

Turning from the basic demography to the social life, retrospectively, we think of Victorian society as rigidly stratified by gender, with women of that era consigned to lowly roles, dominated by their husbands, and having few rights. Yet, both the anecdotal and more macro-level evidence for colonial New Zealand causes one to question whether the gender-bias was as severe as this. Barbara Brookes (2016: 65-70) shows that opportunities for women to open businesses on their own account were also more likely in the colony than in the United Kingdom, while more recently Bishop (2019, see below) has detailed this contribution. In her book, Bishop (2019: *passim*) documents how individual women circumnavigated around the marriage and property laws inherited from Britain, and sexist legislation. Businesswomen, starting in the very first days after colonisation, launched many different sorts of enterprises, or took them over from their father or husband, many of whom were incapacitated or had deserted their wives. As in Britain, their contribution to schooling (see below) was important, but they also were involved with different areas of light manufacturing and associated parts of the retail trade essential to the colony's commerce, such as 'Butchers, Bakers and Cordial Makers'. The 'hospitality' sector also figured, coded as attending to 'offices for men' (Chapter 7) and running from boarding houses and hotels to bars to brothels, all of which Bishop analyses in a chapter sub-titled 'Beds, Booze and Bodies'. Women's businesses employed small work forces (5 or fewer employees), but that was the norm also for male-owned enterprises in New Zealand – then as now. What is surprising in Bishop's case studies (2019: *passim*) are the shops, especially in the haberdashery and related trades, that endured, still trading in 2020 when this genre of store was disappearing across Anglo settler-societies. Some became the colony's iconic department stores, smaller colonial versions of 'Galleries Lafayette', even with an upper-floor restaurant, favoured for lunch by the better-off in colonial, 'post-colonial' and Baby Boom New Zealand.

We do know that norms enforced in areas such as the ownership of property may have deviated from British models, which were governed by complex customs and even laws. In Britain, primogeniture, for example, was enshrined in law, and sustained both patrilineages and patriarchy (Murray 2004: *passim*). By contrast, for the colony, as Jim McAloon has shown, among the well-to-do in Canterbury and Otago, and perhaps elsewhere, 'daughters were likely to inherit equally and without restriction'. His research has recently been extended to urban probate records by Stephanie Wyse who reports a similar trend (McAloon 2002: 88-89; Wyse cited³ in Pool *et al* 2007: 89). This all points to settler women having some degree of control over their family and lifeway decisions, perhaps more so than women in other Anglo

settler colonies, and certainly more so than in the ‘old country’. Belich argues more broadly that ‘there are some signs that [Pākehā settler] women took advantage of changed circumstances, in this case the process of colonisation, to ease, though by no means remove, the constraints on them – a limited “liberty of distance”’ (Belich 2001: 20).

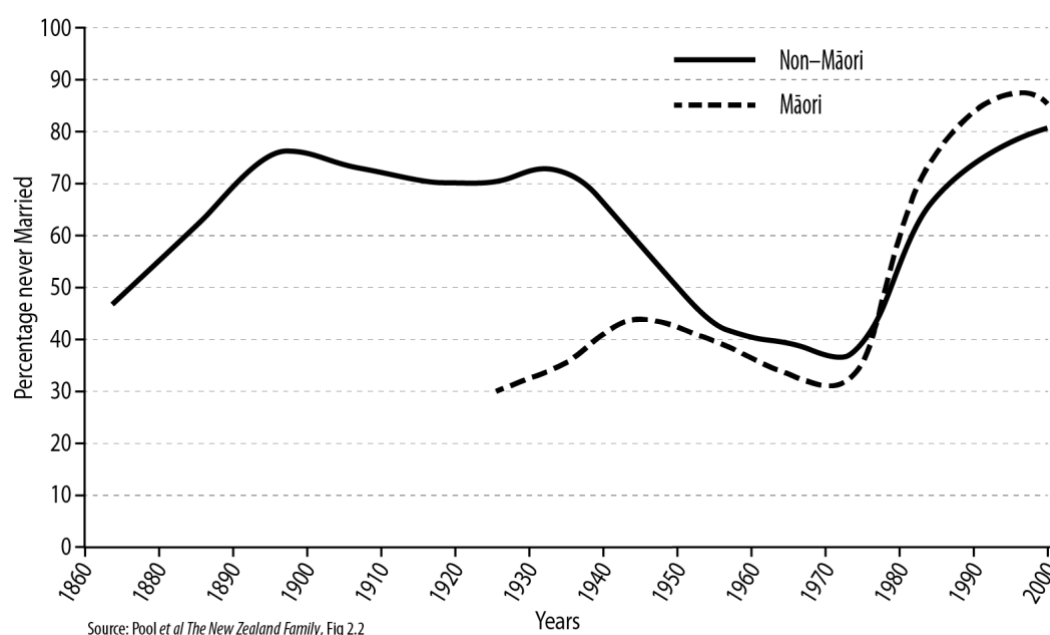
This seems to have extended out beyond matters specific to the household to other spheres of life. I have already discussed how New Zealand was the first country to have a universal franchise (Māori/Pākehā; Male/Female), gained for women after cynical manipulations by Prime Minister Seddon. He allowed it to pass in the lower chamber sure (wrongly) that it would not gain a majority support in the upper house (Sinclair 1959: 181). But it would not have occurred without a successful suffrage campaign and a remarkable petition, signed by both Māori and Pākehā, followed by a brief period for enrolment between passage of the bill and election day. What is less well known is that women who had ‘property’ had already voted in local elections before that. To take another example, some mining claims were held by women⁴.

Beyond this, numbers of women migrated as ‘single’ women’ and some were barely teenagers, as Charlotte Macdonald has reported in the study referred to above. The median and modal ages for migration were notably young – 20.4 years (median) and 20 (mode). It was hoped that most of these girls and women would enter domestic service, which many did, but they then often broke with British protocols against marriage while in service, and married – marriage to an older settler who had a piece of land was probably preferable to the drudgery and inadequate work conditions of service, whether in the colony or ‘back home’. Moreover, given the masculinity rate, the marriage market would have had many pressures coming from men wishing to marry and ‘settle down’, while a search for stability and security, and perhaps financial wellbeing, would have been attractive factors for a new female arrival separated from the normal familial props and supports. Thus, among Macdonald’s sample, first marriage occurred after a rather short interval following embarkation in Britain, especially if allowance is made for the voyage taking months. This led to young median and modal ages of marriage of 22.7 years and 22 among single female migrants, although these were close to the norms for female settlers as a whole.

In the 1870s, Pākehā women were thus marrying at young ages, as is shown in Figure 11.1, at ages well below those of their British peers. Moreover, across the reproductive span, almost all Pākehā women would marry at some time, again a marked difference with British patterns, where celibacy was far more common. At the 1874 census, only a minority (46 percent) of colonist women had not married at least once by age 25 years, as against 66 percent in England and 74 percent in Scotland. Marriage at older ages was even higher in London and the home counties, from which region, with Scotland, the settlers were disproportionately drawn. Thus, the colonist women did not come from areas in Britain with a propensity towards early marriage.

Yet, at the same time, the evidence on early marriage does not suggest undue precocity, because ‘colonist girls’, both New Zealand-born and migrants, were not marrying in disproportional numbers as teenagers. Thus, in spite of the high masculinity ratios, it did not seem that Pākehā women were being pushed unduly into marriage or throwing themselves into unions at adolescence. Perhaps, they and/or their parents (at least those of the New Zealand-born) took some time to check out the field (and the prospects of any groom) and to observe proprieties. In this regard, their nuptiality patterns were notably less precocious than those of their descendants in the Baby Boom, especially in the later Baby Boom (1960s/early 1970s) as is clear in Figure 11.1. There was one other important factor of difference between the two eras: in the 1876 marriage registers, there is a wide age-difference between the spouses, 6.1 years, but in the Baby Boom this was only 2.6 years. Thus, in the 1870s colonial women were definitely marrying older men, who, one assumes, probably had acquired more assets than younger men (see also Table 9.6). (Pool *et al* 2007: 66, 71, 84-85, 142-43).

Figure 11.1: Percentage of Women Never Married at Age 20–24 Years, Pākehā/Non-Māori and Māori, 1876–2001



As Figure 11.1 shows, however, starting in the 1880s this nuptiality pattern changed very quickly, and a peak age for older marriage was reached by the mid-1890s, setting the pattern that was to last until the Baby Boom. Late marriage – more than 80 percent never married by age 25 years – was not to be exceeded until circa 2000.

There have been attempts to correlate Victorian Pākehā marriage patterns with the economy. In his venerable study on prices, James McIlraith (1911; see also Briggs

2003: 45-54; Pool *et al* 2007: 72-73) argues that economic prices produced these changes: the depression of the 1880s, he argued, had depressed marriage rates, but favourable dairy and other farm prices in the early 1900s pushed them up. His argument is intriguing but economically deterministic, seeing a rather limited role for female choice, and thus it requires more refined analysis. Two sets of reasons can be proposed for the shift: (i) a purely mechanistic demographic one; (ii) an ideational shift in colonial society and in gender relations.

First, there are the demographic forces, which require a granular technical analysis. In the 1880s, because of cohort momentum effects, strongly affected by past migration trends, there was a negative marriage market impact – what is called a ‘marriage squeeze’, a disjunction between numbers of potential brides and grooms. In this case, there was actually a shortage of ‘suitable’ available men at the marriageable ages, which may seem a paradox in a society with overall high masculinity ratios. The men available were significantly older migrants of the 1860s and 1870s, and, therefore, perhaps less attractive on marriage markets; assuming that they had arrived for the gold rushes aged in their 20s, they were now in their 30s, 40s or 50s, and thus did not fit even the very wide difference in ages at registered marriage between husbands and their wives noted above (6.1 years). Or, they were less suitable as marriage prospects because many of these men, if still in the colony, were close to poverty, living in gold rush camps or were itinerants. By contrast, in the 1880s, the other males born in the colony, mainly the large birth cohorts produced by the Vogel scheme inflows of young adults, were still too young (adolescents, or at best young adults) to be settled and financially secure. By the 1890s, however, women who had delayed marriage then were able to choose from a larger social and demographic pool. The younger men in their own cohort had now gained financial or other forms of independence and probably were starting to live in more settled areas rather than remote locations, often as urban tradesmen.

The 1880s thus produced a sort of nuptial hiatus, but this showed up as a consistent trend-line. When prices improved about 1895, then, perhaps, those women who had delayed marriage began to reconsider, and improved economic conditions would have helped in this decision. Thus, proportions married before age 25 years in the late 1890s began to increase a little but never regained their 1870s levels until after World War II in the Baby Boom. This leaves a little room for McIlraith’s explanation, so his argument should not be summarily rejected. In fact, there were similar mechanics, a marriage hiatus, in the 1970s, following the Baby Boom. The Boom had been characterised by marriage at very young ages, the youngest in documentable Pākehā history (and well below any post 1750 British levels). Then, following the Baby Boom, there was an extremely important ideational shift favouring formal marriage at significantly older ages, but it was overshadowed by a

massive change from formal marriage to consensual forms for first unions: I return to this in later chapters.

In the late Victorian period, the more mechanistic demographic effects were reinforcing/being reinforced by a major ideational shift, sweeping Pākehā society, and, incidentally, also seen in the other Anglo settler-societies. This was a shift in norms towards the marriage regimes of western Europe, of Britain in New Zealand's case. Such wide-sweeping shifts in mass social-psychological behaviour affecting demographic trends do occur, sometimes quickly, as at the onset of the Baby Boom and also the 1970s Baby Bust. The British themselves had made such a shift, but not as dramatically, between Jane Austen's era and the 1850s (Pool *et al* 2007: 72-73). I will develop this argument in the next section of the book as it is an important element of a set of broader ideational, cultural and normative changes that set New Zealand's course in the twentieth century. Suffice to say, gender dynamics, manifested in behaviours such as age at marriage and levels of celibacy, formed a core element in these transitions, not just for the society but also for its development economically.

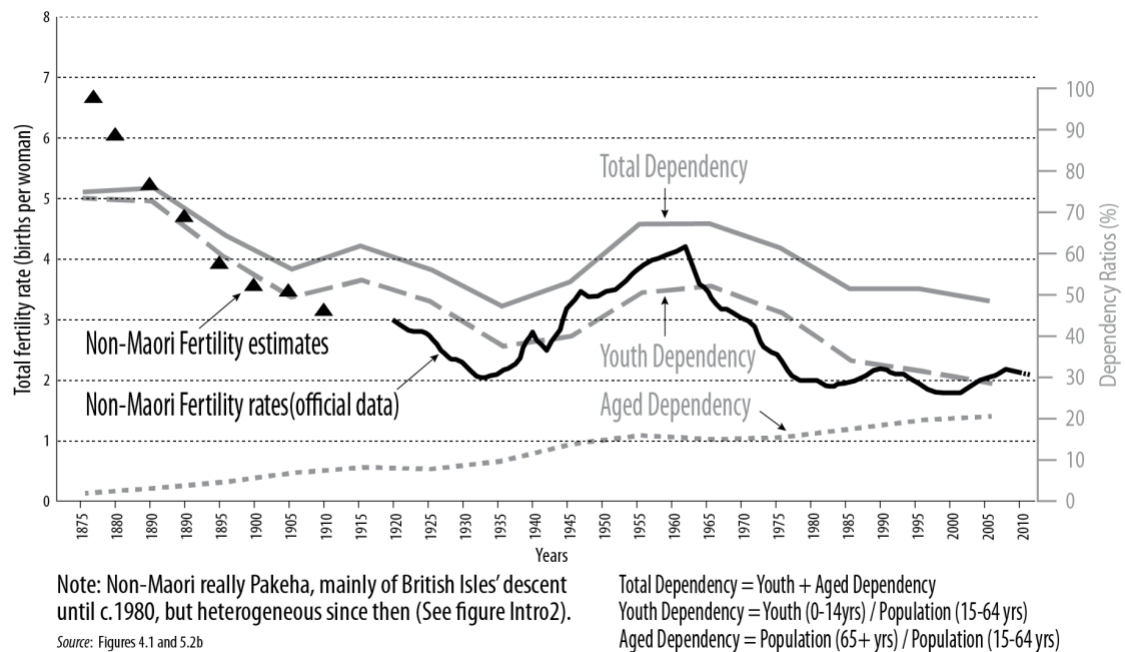
Pākehā Colonial Society: Age-structure

The colonial settler-society was a young one. This was not because of migration selectivity as children were heavily under-represented among immigrants (Phillips and Hearn 2008: Table 27)⁵. As noted in Appendix B, a very high proportion, 17 percent, of all Pākehā in 1881 were under 5 years and 90 percent of them were New Zealand-born. Moreover, 42 percent of all colonists were under 15. At the first colonial Pākehā census (1858), the figure was the same: 42 percent of the population were children, typically born in the colony, and only 57 percent of the total were at working ages (likely to have been immigrants). A tiny percentage were at old age. Transitorily, the gold rush with its inflows of young working males, altered these ratios, with 67 percent at working ages (1864), and most of the rest children. But all this changed, yet again, with the Vogel migration schemes favouring families, who literally went 'forth' to the colony and 'multiplied' – abundantly. Consequently, child or youth dependency became a very important driver of the societal composition and the economy (see Chapter 12), and it was youth dependency that drove total dependency. Furthermore, as is shown in Figure 11.2, from circa 1880 to 1900 youth dependency levels dropped a trend correlated highly with the declining fertility rate. At the same time, there were few elderly migrants or Aotearoa-born to build a geriatric population, so aged dependency rates were very low.

What is particularly striking in Figure 11.2 is the period prior to 1880, when fertility rates were very high (7.0 births per woman), yet child and total dependency was not as closely correlated to reproduction as one might expect. They were well above the elevated levels they would reach in the Baby Boom (4.0), discussed in

Chapter 16, when Pākehā New Zealand had notably high rates for the post-World War II era (Pool *et al* 2007: *passim*; Brookes 2016: 70-77).

Figure 11.2: Pākehā/Non-Māori Demographic Dependency Ratios in Relation to Fertility Rates



Source: *Censuses and Pool et al 2007: Figure 2.1 for fertility data*

This discussion raises a very important issue for this book – and indeed across the world of demography – about the demographic dividend, which I have referred to in earlier chapters. The dividend occurs when GDP per capita and other measures of national income, wealth, savings and investment increase because of age-structural changes: a shift from a high concentration at youth ages to higher proportions at working ages, which generates investment and savings as the pressures coming from servicing a child population decline and can be diverted (Chapter 4). Normally, when fertility is high and youth dependency rates elevated, this places burdens on the working population. Then, as fertility declines, but before ageing sets in, and as the large cohorts born in the past arrive at labour force ages, this burden decreases, yielding the demographic dividend—or at least its potential. For the dividend to be realised it must be proactively engaged with. This issue is taken up in Chapter 12 and again in later chapters. Suffice to say here that, for Pākehā, a dividend of this sort had to wait to the late nineteenth early twentieth century when fertility had decreased and was starting a long-term shift away from the trend-line in Figure 11.2 for Total dependency. In the interwar year years, as will be detailed in Chapter 15, declining to low fertility rates caused total dependency to decrease to its lowest point ever, and may have generated a dividend that helped offset the negative effects of the

Depression. The Baby Boom pushed up Total dependency again to levels nearing those around 1885. Youth dependency follows the same trend, but with something of a lag because it represents the impacts of births and survivorship that have occurred in the past – over the last 15 years.

As can be inferred from Figure 11.2, however, prior to 1885, fertility rates were exceptionally high, yet Pākehā dependency patterns did not fit perfectly with the demographic dividend model but followed an atypical path. Unlike the period that followed (1880-1900), from 1875 to 1885, hyper-fertility and high Total and Youth dependency burdens did not correlate closely (compare fertility rates with Total and Youth dependency ratios left of Figure 11.2). This is because the large cohorts of working age migrants (including gold seekers and military) arriving before 1880 had brought a migration-driven dividend that offset the heavy youth burden of those days, coming from children mainly born in the colony. From the 1880s, the working age population, the migrants of the 1860s and 1870s plus the New Zealand-born cohorts who were entering the working ages, together increasingly countered both youth dependency and total dependency. Thus, the migrant inflows, disproportionately of young adults, had two sets of impact. When they were spiking, they lessened the youth dependency burden due to the high fertility of the colonists, and later they accelerated the decreases in youth dependency as fertility declined, thus reinforcing the reproductive effects on the dividend.

Normally, demographers categorise any population with 35-40 percent or more of its total under 15 years as youthful. Table 11.3 presents comparative data on two Australian colonies to show where New Zealand stood: this comparison shows that it fits a settler-colony norm for white populations. In 1881, all three Australasian territories had young structures, but Pākehā had the highest levels. This was mainly a function of the date of colonisation. The earlier settlement of New South Wales, when convict transportation had peaked (1830s) and ended (1868), and South Australia (independent, convict-free colony from 1834, before New Zealand), gave them marginally less youthful structures for both sexes combined.

In Table 11.3 when differences by gender in the percent below 15 years of age are looked at for all three Australasian colonies, the male percent, as against the female, reflects the effects of high masculinity ratios at adult ages, due to working age migrant men, who inflate the proportions at middle ages. In Australia, some of the men from earlier inflows would even have been at older adult ages by 1881, so the effect is less marked than in New Zealand. In all three colonies, the female proportion is somewhat closer to what would have occurred through natural increase had their populations been more ‘closed’ to migration.

Table 11.3: Percentage of the Population at All Ages, by Gender, under 15 years, Pākehā, 1874–91, and New South Wales and South Australia 1881

Colony	Male	Female	Total
New Zealand	39	47	42
New South Wales	37	44	40
South Australia	37	42	39

Source: New Zealand Historical Census Collection

Pākehā Colonial Society: Education

Even in the early years of colonisation access to basic schooling seemed to have been a norm. The percent of colonists who had achieved basic literacy was reasonably high and increased (Table 11.4). The 1877 *Education Act* ensured schooling for the vast majority by introducing free, compulsory, secular primary education, universally – for Māori and Pākehā, boys and girls. This was early in Aotearoa’s history, before the United Kingdom (1880) and many American states. Already, however, basic literacy was widespread among Pākehā. At the 1878 census, just after the *Act* came into force, 70 percent of colonists of all ages could read and write. Importantly, there was almost no variance between provinces, despite different migration sources among original groups, which went back to the Wakefield schemes and other planned company settlements.

Table 11.4: Literacy and School Attendance 1858–1901

Year	% Population Literate*	% Children at Govt. Schools (+Other)
1858	64	N/A
1871	69	27 (+31 = 58)
1881	71	70 (+11 = 81)
1891	77	74 (+10 = 84)
1901	83	77 (+12 = 89)

Sources: Statistics New Zealand Censuses

*Notes: *Literacy = ability to read and write.*

Figures in Brackets cover pupils in ‘Colleges, High Schools, Grammar [probably secondary] and private denominational schools’, i.e., secondary (a small elite) or private.

Importantly, the idea of universal education was one circulating the Australasian colonies and Britain at this time, so New Zealand was not isolated from this reform movement. The extension of free schooling has been linked to declines in fertility in Australia, but in New Zealand fertility declines seem to have been

correlated more with extensions in general wellbeing and income (Ruzicka and Caldwell 1977; Pool et al 2007: Chapters 3 and 4; Chapter 14 below).

The census statistics are adequate for basic public education (primary) but then have a category that conflates secondary education (which had to be paid for) with private fee-paying denominational schools many of which would have been at the primary level. In 1871, before the *Act*, attendance overall was lower (58 percent) than the level that came with free, compulsory education, and the majority of pupils were in non-government schools of varying quality. The *1877 Act* had a major impact on school attendance overall and in a shift to public provision; it seems that 60 percent of Pākehā aged 5-15 years were attending primary school in 1878 immediately after the Act was passed, and a further 14 percent at secondary and/or private school; by 1881 three years after the act take-up had risen to 74 percent (public) but a slight decline in the other schools, probably in the denominational primary schools. By 1901, the rates were 77 percent and 12 percent, so the goal of universality was close, but not yet complete.

Māori rates also grew, under the supervision of the assiduous James Pope, Inspector of Native Schools, a Victorian Pākehā but with advanced pedagogic ideas. He visited every school, noting the quality of the pupils' work, their achievements, attendance and behaviour: commenting that discipline and 'tone' are rather higher than at European schools [which some Māori and 'half-castes' attended]' (cited Pool 2015: 296, drawing from *AJHRs*, which published his detailed annual reports).

As well as educating Māori, the colony was showing little gender-discrimination in its basic education programmes. At the 1881 census, two-thirds of both girls and boys were attending school (public, private or, for a small minority, at home tuition). Among adults, ability to read and write was similar for men and women and at high levels, albeit not universal. As noted already, public education had the further effect of breaking down differences between settler groups from diverse parts of the British Isles. (Phillips and Hearn 200: 180).

Pākehā Colonial Society: Religion

The proportion of the colonial Pākehā population who were adherents of Christian religions was far higher then, than it is today. Moreover, adherence seemed to be proactive: in the census in 1878, 59 percent of all five- to fifteen-year-olds attended Sunday School and this had risen to 69 percent by 1901. Joanne Young analysed demographic data on adherence showing a long-term trend towards secularisation, a trend that really started in earnest only from the 1920s. She also looked at differences for other demographic factors – in this early period geographic distribution and urbanisation were of interest.

Divisions in the 'Old Country', resulting from the legal status and privilege accorded the Established Church (Anglican), were not introduced into New Zealand.

Consequently, the free, compulsory education introduced in 1877 was secular and unrelated to any particular denomination; this provoked an unresolved debate in the degree to which schools should or can have religion in their curriculum or extra-curricular activities (eg morning assembly).

While the former mission schools continued as state 'Native Schools' with their own inspectorate, Māori could attend other schools, and Pākehā could attend Native Schools. As was mentioned in Chapter 6, the denomination-based settlement system of first settlement, which saw Presbyterians and Anglicans clustered regionally soon withered into a far more inter-denominational geographic distribution. Joanne Young (1997: Figures 6.2 and 6.3) compared the 1858 and 1901 censuses. At the first date, nationally Anglicans were a clear majority of the Pākehā population as a whole. As noted earlier, they were the majority religion in all Provinces except Otago, which was overwhelmingly Presbyterian, and Auckland, where an Anglican minority made up the largest single grouping. But, the early preponderance of Presbyterians in Otago resulting from settlement selectivity gave way in the gold rush, as did the overwhelming dominance of Anglicans among the first Canterbury settlers. In Taranaki in 1858, Methodists had been disproportionately over-represented, albeit a minority, but this strength declined over time; and in Westland a similar situation occurred for Catholics. This is a strong indicator of the way the settler-society integrated across different lines, a theme discussed further below.

Pākehā Colonial Society: Cloning Britain's Class System?

The stratification system inherent in a colony's cadre of officials, with the Governor occupying the top rank, and below him senior officials and army officers, has been alluded to already. The civilians also divided – by income and wealth, and to a lesser degree by education. As in most other countries, entrepreneurs and speculators achieved status, often transitorily. Over the period covered by this chapter, however, there was the makings of one more entrenched, small but influential, genuine class system of a sort that attempted to clone the order existing in Britain of that day, when land was still a major source of wealth and prestige. The proprietors or lessees of the large run-holdings (5,000 or more acres), especially in the South Island but also in the southern parts of the North, came close to becoming a colonial aristocracy – wealthy, powerful and trying to recreate and perpetuate the lifestyles of British landed gentry. Their heyday lasted from the 1860s to the first decades of the twentieth century, and perhaps vestigially even later than this. Their zenith as an 'oligarchy', reported in Stevan Eldreg-Grigg's social history (1980: Chapters 6 and 7) on the *Southern Gentry* was between 1870 and 1890. The term oligarchy was used by him in its traditional sense well before it became popular among commentators on post-Soviet Russia, where, a few people, at limited cost, were able to buy up vast state-owned capital resources. The rise of the 'southern gentry' bore some of the same hallmarks of this:

at very low cost, they bought up or leased vast areas of the South Island and southern North Island (especially Wairarapa/Hawkes Bay). These acreages had been ‘purchased’ by the state (Crown) implementing its interpretation of the Treaty of Waitangi, that the Crown had pre-emptive rights over all land. South Island Māori felt the inverse effects of this land alienation: ‘As early as the 1850s, South Island Māori were effectively condemned to subsistence by wholesale Crown land purchasing’ (Walz 1988). This situation also affected their risks of mortality, so that, at the 1858 census, childhood survivorship levels were at their lowest recorded levels (Monin 2009:125; Pool 2015: Fig 12.1). Nevertheless, the power and wealth of the Southern Gentry never really equalled those of their British or international models (Galt 1985: 181) – and certainly not the post-Soviet Russian billionaires. Also, by comparison with the old country’s landed class, their longevity as a colonial aristocracy was rather short-lived. But, like the upper classes in Britain, whom the colonists aspired to be, they controlled vast acreages of land, and much of the South Island’s graze-able land area. Moreover, their decline in power paralleled in timing the fall of the British aristocracy documented vividly by Cannadine (1992); both sets of gentry probably lambasted Liberal Governments for the travail they went through – land reform in New Zealand, tax in Britain.

The land reforms of the New Zealand Liberals, principally in the 1890s, plus farm management and environmental issues, eventually ended this phase (see below). This preceded the British Liberal government’s 1911 tax reforms that have been seen as a nail in the coffin of the Britain’s aristocracy – the slaughter of young aristocratic ensigns in the trenches of World War I may have had even more terminal impacts on Britain’s landed gentry (Cannadine 1992: 37). The run-holders of the colony also responded by raising and equipping forces, and by serving as volunteers both in colonial regiments and British. ‘New Zealand was the most belligerent of British colonies and the southern pastoral provinces were the most belligerent parts of New Zealand’ (Eldred-Grigg 1980: 143).

The run-holders made a major, though transitory, contribution to New Zealand’s economic and political life, and, briefly, to its Victorian end early twentieth century wealth. But their longer-term achievement was to seal in pastoralism as a core element of development (see below). Their importance went far beyond their lifestyles, which Eldred-Grigg documents, and their impact was magnified far above their mere numbers in the population. The central point is that they controlled much of the South Island’s production and trade, in a period in which the North Island was the weaker economic region as it was reeling from the effects of a prolonged war. In the North, the government was still busy confiscating native land and working out a means of wresting much of the rest from Māori, which was to be achieved gradually over the rest of the Victorian era. Inevitably, there was also a lag between land alienation in the North Island and production, and its flow-on effects into the non-

farm economy, and thus the economic development of the North Island was well behind that of the South.

By contrast, the Crown Purchase strategy implemented in the 1840s and 1850s, had ensured that Māori had been quickly dispossessed of much of their South Island land already by 1860, including the seemingly endless tussock-lands suitable for ranching. From 1874 to 1896, more Pākehā lived in the South Island than in the North, sufficiently so that this counterbalanced the concentration of Māori in the North Island, where they had comprised 63 percent of its population at the 1857/8 census. But, by 1881 a majority of New Zealanders, Māori and Pākehā alike, were South Islanders (Figure 4.3). The South boomed and (Eldred-Grigg 1980: 67):

‘outstripped its rival economically. By 1871 there were 368 factories in the South Island and only 161 in the North. There were 2,306 agricultural machines in the South and a mere 186 in the North. The South Island contained 80% of the country’s sheep and in 1867 earned some 88% of the national export income’.

This situation had far from benign effects on the Māori living there. They were only 11 percent of the South Island Total at the 1857/8 census, but at contact and since, South Island Māori had always constituted a small proportion of Aotearoa’s indigenous population. Contact with Pākehā had been intense, because most southern Māori lived near where Pākehā settlements had formed before and after colonisation, and thus were more likely to be exposed to newly introduced pathogens. In the 1840s and 1850s, their deprivation was marked through rapid land loss. Consequently, at the 1857/8 census South Island Māori had levels of survivorship below New Zealand as a whole, followed by Māori in those North Island regions where similar conditions had occurred: Whanganui-Rangitikei, a run-holding clone of the South Island, plus Taranaki and Manawatu-Wellington where Pākehā numbers were larger and land alienation was more intense. The other run-holding clone of the South Island, Wairarapa-Hawkes Bay, had few Māori living where land alienation had occurred – large numbers lived north of that area. By the 1881 census, however, South Island Māori were gaining resistance to epidemic diseases and were starting to recuperate economically, and thus their survivorship levels were by then the highest among Māori (Pool 2015: 225-26; 1991: Table A.1).

Beyond specific inputs to national development, some southern gentry diversified their wealth into financial sector and other investments, but the rich run-holders also engaged in highly conspicuous consumption. They devoted great attention to the construction of homesteads, ‘big houses’ as they were called. They were built in a British/New Zealand style, but rivalled antebellum southern American cotton plantation mansions, or the plantation houses of the British West Indies’ sugar

holdings. They were surrounded by extensive gardens, very often nostalgically planted in European flora, modified by eucalypts – sometimes even by selected natives. By contrast, the housing conditions of much of the rest of colonial society were far from perfect. The 1871 census data show that 40 percent of New Zealand dwellings were merely one-room, and 17 percent tents or constructed of raupo (*typha angustifolia*, related to the bulrush). Education was also an important expenditure of the Southern Gentry. In 1891, for example, one in twelve sent their sons ‘home’ for an Oxbridge education, because Canterbury and Otago Universities, governed by senates composed of middle-class worthies (eg city merchants, businessmen, lawyers) were deemed an ‘inferior alternative’ (Eldred-Grigg 1980: 87-88, Chapter 9).

But the cardinal issue is that the southern ‘provincial gentry’ led and propelled forward New Zealand’s passion for pastoralism, with early flocks of merinos. These were soon often changed to English crossbreeds that were better adapted to a more humid climate than that in the merino’s native Spain. The wealthy property holders became key figures in the nation’s history until they had to cede place to farmers with smaller holdings engaged in more intensified forms of grasslands’ farming; some of them made this shift themselves, improved their husbandry and often undertook grain farming. From the 1880s, as freezing technologies expanded the range of exports from New Zealand, some started to graze sheep for meat rather than wool, sometimes on a scale that rivalled their wool farming of the earlier years (Eldred-Grigg 1980: 115-17). Between times, they also played instrumental roles in both national and provincial politics.

As the early sheep ranches were established, in the late 1840s/early 1850s, wool was the single most important export for New Zealand, peaking at 70 percent circa 1860. But its place was then far surpassed by gold until the 1870s. Subsequently, wool passed gold but barely reached 50 percent of the total and gradually decreased in significance until just after World War I, by when dairy and meat commodities had become very important. A short but spectacular wool spike occurred circa 1950-51 with the Korean War Wool Boom (Briggs 2003: Figure 29; see also Figure 6.1 above).

The earliest runs were really land grabs by some families in extractive industries, who attempted to set themselves up as ‘landed gentlemen’. In Margaret Galt’s results, the great majority of the wealthy (86 percent) were likely to have arrived in New Zealand between 1836 and 1865; while these data are subject to interpretational issues⁶, this does suggest that the Vogel scheme immigrants had less access to cheap land on a vast scale. The carving out of vast estates came earlier with the colonisation of the South Island and the founding of the settlements of Nelson, Marlborough, Canterbury, and Otago provinces, and its sometime component/sometime separate area, Southland (Eldred-Grigg 1980: 13, 42-42; Galt

1985: Table 13.5). When, in 1867, the South Island (Eldred-Grigg 1980: 42-43) reached a population of 140,000:

[c]lass status and power had set into firm shapes. Landowners were playing croquet, and soup kitchens were being set up in the town...

‘By the late 1860s about 14,500,000 acres of the South Island were in private hands. A few hundred estates took up almost 14,000,000 acres, while several thousand were squeezed into the remainder...

‘The farmlands east of the Alps were divided into two sub-regions. Along the east were small farms and towns. In the interior were open grasslands and great estates....

‘Every few miles on this savannah was an English island – a “big house”, barracks, cottages, gardens and the fenced green fields of an estate homestead’.

Eldred-Grigg has enumerated the wealth of the gentry for the year 1890, just before the Liberal Party land reforms – to which event he devotes a chapter titled ‘Triumph of the bourgeoisie’ (Eldred-Grigg 1980: 109, Chapter 8):

‘the gentry...were only 1% of all South Island landowners, but held 78% of the farmland... There were 9,600,000 sheep in the South Island and more than 6,600,000 were held in flocks of 5,000 or more. The gentry numbered only 6% of flock-owners but controlled almost 70% of the South Island’s sheep’.

By the 1890s, more problems than just political issues were emerging. New Zealand was coming through a long depression, for which the landholders were often blamed, sometimes justly, sometimes not. There were questions about why so much land was locked up in so few hands, and also whether big estates ‘provoked grave managerial and financial problems.’ There were also various sorts of ecological problems. With the 1880s depression, labour was ‘cheap’, so that was not a problem. But, the 1890s/early 1900s almost presaged, in a ‘Piketty-ish fashion’, what was to occur in New Zealand in the 2000s – ‘people who were already rich could thrive’ even in a depression or recession; the large landowners still had access to credit (Eldred-Grigg 1980: 111-12, citing economic historian John Gould 1970). And to push the Piketty analogy a little further, in the 1890s land was still the baseline for wealth, more so in New Zealand than in the old country. By contrast, by the 2000s, whether in New Zealand or in Britain itself, wealth came instead from other sources.

Although the run-holders liked to see themselves as a sort of gentry, and their workers described them as ‘fine, cultured gentlemen’, in reality they were more likely

to have come from a middle-class background, most commonly upper middle-class. This origin was almost a prerequisite if they were to have sufficient means to meet the establishment capital needs for their runs (Belich 1996: 400). In Eldred-Grigg's sample 17 percent could be considered 'upper class', using a fairly loose definition of 'men whose fathers were noblemen, baronets, landowners listed in Burke's Gentry, bishops, admirals and generals'. They were most likely to be English, 67 percent as against 54 percent for all settlers of British origins, while Scots were on par with their contribution to the British population in the colony. Irish and, surprisingly, Australians were represented by merely a few of these ranchers (Eldred-Grigg 1980: 75-76, Galt 1885: Table 13.15; Table 5.4 above). Consequently, they were also most likely to be Anglican or Presbyterian – 81 percent compared with 64 percent at the 1906 census.

There were around 500 large estates between the five Provinces noted above, and for as long as that system of sub-national government existed (1853-76), 'Political power remained comfortably in the hands the landowning elite...' With others in what was 'a ramshackle colonial gentry...', they also played key roles in national politics: 'regional genteel elites networked into a New Zealand-wide elite that dominated big business, big farming and politics' (Belich 2001: 20). In this regard, the southern gentry, relatively few in number, probably played a disproportionately instrumental role grounded in their central established roles and statuses in South Island Provinces. 'South Island electorates which sent landowners to sit on provincial councils also sent similar men to the central parliament' (Eldred-Grigg 1980: 57, 60). The Provinces were small in population, but were remarkably powerful, controlling immigration, education, public works, land policy and 'waste lands' (Sinclair 1959: 105-06). They were also jealous of their rights, to the extent of harbouring strong secessionist sentiments and separatist organisations, which were strongly anti-Auckland in tone. These feelings were engendered in part by the war in the North, for which some large run-holders raised militias of various sorts, and by the real difference in wealth between the North and South Islands, noted above (Eldred-Grigg 1980: 42-43, 57, 60, 67-74).

Labour was a major issue for these large estates and their big house—they needed legions of outside and inside workers, and shepherds who ranged all over the estate. Most were young and single, whether farm workers or domestic servants. Supply varied, so that in the early 1860s (gold rushes) workers were in shorter supply, but by the end of that decade demand was well exceeded by supply. A pattern developed whereby, seasonally, itinerants drawn from small farms in Nelson left their families for the mustering, shearing and similar tasks, and trekked across to Marlborough and Canterbury, while 'swaggers' (Australasian slang for 'tramps', *OED* 1993: v2 3165; hobo in American English) sometimes met these needs (Eldred-Grigg 1980: 50-55). Similar seasonal migrations of Māori, such as from the Urewera

to the east Coast, Hawkes Bay and the Wairarapa serviced the large runs on the North Island's eastern littoral (Pool 2015: 276 citing various sources). The South Island Pākehā 'either ignored the Māori or dismissed them as inferior'. Nevertheless, there were a few Māori in Pākehā households as servants, in the south, working for run-holders and others, as well as the north.

How many, and how well the dynamics of domestic servitude played out for employer and employee is difficult to determine, but in Julia Millen's account the experiences seem to have been mixed for all of Māori, Irish and other single women migrants. There probably never was a fully established domestic serving class in New Zealand as significant as that in, say, England and Wales: in the 1881 census perhaps three percent of all Pākehā were domestic servants (as against innkeepers and like service occupations), whereas eight percent of the English and Welsh were 'indoor servants' (i.e. excluding gardeners, grooms etc). There may, however, have been regional differences in this. Eldred-Grigg (1980: 89) reports that in the South Island 'About 10% of all women over 15 years of age were wage-earning domestics in 1871 – the same percentage as in the United Kingdom'. Interestingly, more than 50 percent of English servants were aged 5-14 years, while this was true for those in New Zealand aged less than 20 years (Millen 1984: Chapter 6 'Rough Queer Servants'; Woollard 1999). Erik Olssen and his team's exhaustive historical research on Caversham, a Dunedin suburb, shows that Pākehā colonial society was more egalitarian than British – lacking the extremes and also permitting social class exogamy (Olssen et al 2011; cited in Woodward and Blakely 2014: 120-21).

Pākehā Colonial Society: Mobility, Integration, 'Atomisation'⁷

Flows of new colonists disembarked in ports and then frequently moved on to other destinations, were a major source of geographical movement. From the outset, therefore, there was turbulence in patterns of Pākehā internal geographic mobility: obviously settlers spread across the land as it became available and, as gold strikes were made hither and yon, localised in the 1860s as would-be gold miners rushed to chase the most recent find, mainly criss-crossing the South Island but with a late spurt to the Coromandel. Beyond this, there was Māori displacement and expulsion that I have already talked about. Finally, at a macro-level, in 1857/58 Māori plus Pākehā in the North Island had far outnumbered the combined population in the South. But by 1874, the gold rushes, the pastoral and grain farming in the South and the fear of hostilities in the North switched the balance, and this lasted until 1891 (even if we include Māori who were clustered in the north). But, as confiscation and the work of the Native Land Court (NLC) wreaked havoc on Māori, effectively dispossessing them of their lands, their places were being taken by settlers.

Because the major land grabs after 1865 took place in the North Island – following a lag period for the NLC to do its job and the tenurial details to be resolved – colonists were once again looking to the North Island where there was cheap land for the offering. Thus, at the very end of the Victorian era the North Island gained ascendancy once again. This lag meant that in different regions there was typically sequential displacement of Māori: first in the most accessible and productive areas, and then in the less desirable, as these were isolated, hilly and less fertile. To take an example, south central Hawkes Bay and the Wairarapa were opened to run-holders under Crown Purchase, affecting both Māori capital resources and health, but central Hawkes Bay (Heretaunga Plains) waited the NLC before it was opened by legally dubious means. Another case is the Bay of Plenty and inland Volcanic Plateau, which first experienced confiscation of prime land along its coastal littoral, some the territory of insurgents but other blocks belonged to Crown supporters; then the NLC moved in on the Arawa tribe's ownership of the Rotorua Lakes and, as noted last chapter, eliminated an emerging Māori tourist industry; finally, by 1891 the further inland areas were being alienated. A third example was the Waikato, where vast areas of land were confiscated and passed on to soldier-settlers (see next Chapter). Many of the Waikato Tainui tribe were forced into the hilly King Country regions to the south which were the home of their close relatives, the Ngāti Maniapoto. By 1891, the NLC had moved south into the King Country itself both to open up land for farming and because of the extension of the main trunk railway line. No region escaped its activities. In all North Island regions, and in many parts of the South Island where there were still residual pockets not taken before 1860 by Crown Purchase, the land mainly farmed today by Pākehā was vested to settlers from Māori by the NLC. All these transfers involved some aspect or another of Pākehā and Māori mobility.

Even at a more micro-level, Pākehā colonial society seems to have been highly mobile. This was truest for the workers in extractive industries: 'They were wanderers or semi-nomadic workers: sailors, soldiers, whalers, sealers, navvies, lumbermen, goldminers and the like. These groups were mobile, male, and prone to binge and hit each other... They did, however, share a loose culture, even a "prefabricated community", which enabled strangers to fit into teams of co-workers' Belich (2001: 18-19). We can rather conclusively document how mobile colonial New Zealand society was because of the research of Fairburn (1989: 130-31). He shows that mobility was 'high being at the top end of the North American scale'. Itinerancy was also referred to as significant by Phillips and Hearn because, in combination with public education, it 'broke up enclaves of migrants from particular groups' (2008: 143, 179-180; Eldred-Grigg 1980: 52). The strength of the forces leading to the socio-cultural and normative integration of Pākehā colonial society and its behavioural patterns has already been shown by three other sets of demographic

indicators: the fertility rates, the child mortality rates, both covered earlier, and the provincial data on religion discussed just above.

Itinerancy was by no means restricted to men. Some women accompanied husbands as they moved around; some went alone; others, including Māori women, travelled abroad – the Tasman Sea seemed no barrier, particularly to links with Melbourne and California was another destination. Haberdasher and feminist Mary Taylor, who through her stay in New Zealand maintained a correspondence with Charlotte Brontë⁸, sold her business and ‘returned to England with enough money to buy her own house and live independently’ (Bishop 2019: 42-46, Chapt 12).

Colonial Pākehā society was also, in Miles Fairburn’s words, ‘atomised’ (1989: 191),

‘a minimally organised society. Although some people lived close to others and interacted with them social isolation was the prevailing tendency. The primary cause arose during the period between the 1850s and 1880s, when the population was swamped by a tide of ...people who had been severed from their associations in metropolitan society and had not dwelt long enough in the colony to replace those that had been lost’.

Of significance, is the fact that, perforce, single colonists and settler families lived neo-locally. Itinerancy just added to this determinant of atomisation. They were typically separated from kin, many of whom would still have been back in Britain. Whether coming to the colony alone as single migrants, or as family units, their wider family supports and props had been ruptured once they sailed. They were often isolated, socially and/or geographically from other settlers, and as in the suburbia that was to sprout after World War II, typically there were no people nearby, or even in the colony, with whom they had family ties. Nevertheless, anecdotal and genealogical evidence suggests that surprising numbers of older family members emigrated from the British Isles to join younger settlers or accompanied them on their voyage.

Once they parented their own children, the networks of kin grew, at first rapidly as families were large, but with fertility declines the growth of this source of network-building slowed. In the twentieth century, there were rural-urban fertility differentials, to be discussed in later sections of this book, so the farm and small-town networks first laid down, often in a fragmented way, in the late Victoria era were often maintained. Increasing urbanisation changed the forms and functions of networking, but by the twentieth century the fundamentals were there.

Pākehā Colonial Society: Combatting Indigence

Undoubtedly most colonists disembarking in New Zealand came with hopes of a better future, or of finding that gold nugget which would make them wealthy. Some came perhaps for other reasons – to escape a marriage, creditors or other circumstances in the ‘Old World’ or Australia. But, as was raised earlier, many of the would-be settlers failed in their ambitions, often because of sickness, accidents, widow(er)hood or just plain bad luck. The lack of wider family support systems noted just above meant that the unfortunate or poor often had to turn to welfare. In the period covered in this chapter welfare was a derivative of systems that had emerged back in the Mother Country. There, the reforming zeal of the pre-Victorian Evangelicals, over global issues such as slavery or the provision at home of care for the indigent suffering misfortune in Parish Poor/Workhouses, became transmuted. In the period leading up to the Victorian era and certainly by mid-nineteenth century and the Indian mutiny, imperialist zeal had replaced protection of Aboriginal people and the abolition of slavery as a driver of colonial expansion, while ‘out there’ in the empire’s colonies firm control of the Natives was often enforced by strict racial orders. Back home in Britain welfare systems became more parsimonious, in part because rapid urbanisation had increased the ranks of the needy.

The British system of welfare relief also had a major Impact on social policy in the colonies. They took their lead from the *Poor Law Amendment Act* (known as the *New Poor Law* – replacing legislation with roots reaching to 1601) that was seminal in reconceptualising charity or local welfare regimes. Underlying it was a change in ideology, which now saw poverty and other forms of disadvantage as dishonourable, a failure on the part of the victim or their parents because of their own irresponsible behaviour, rather than bad luck and/or the social conditions emanating from the industrial revolution and its associated urbanisation, or unrest in various places. Generally, the Victorian response to poverty, disability and other forms of need (eg orphans and a rapidly growing number of street urchins), still took the form of workhouses or poorhouses paid for and administered by parishes, but to limit costs, access was to be far more restricted and available only to those in extreme need. Additionally, some institutions directed towards more specific needs (eg homeless urchins) were funded and managed privately (eg Dr Barnardo’s). This produced a system that was fragmentised, and often paternalistic and frequently punitive. At its best, this charity did help many indigent, sick, orphaned and elderly people. At its worst, the poor and others in need of charity such as pregnant, single women, were seen as shameful, even sinners, and thus, while they might be given of some minimal support, the welfare system should not be expected to pay for their failures/sins; they should be treated parsimoniously. There was an egregious distinction between those deemed to be ‘deserving and undeserving poor’ (Labrum 2009: 399).

One of the more piecemeal and punitive welfare regimes was the Scottish (its *Poor Law Amendment* was 1845). Andrew Blaikie's (1994) introduction to his book on the fates of north-eastern Scottish women who conceived 'illegitimately' – the northeast and southwest Scotland's Presbyterian heartlands had the highest rates of 'bastardy' in the British Isles at this period – is one of the more moving accounts in British social demography (Pool *et al* 2007: 128-129). Unfortunately for colonial New Zealand, the charity model adopted in the Victorian era resembled the Scottish system which Blaikie described, rather than the marginally less pious and paternalistic English approach. Colonial Aotearoa had a different mix of needs, but these still were often pressing. Many a married woman was a widow or had been abandoned. Many a farm family had lost the principal breadwinner because of work accidents. In these cases, there was seldom family support systems closer than six months away by ship. As I noted above, in the main this was an atomised society of individuals and individual nuclear families, often living a distance from the nearest neighbour. Typically, moreover, there were high levels of family child dependency, paralleling the fertility trends in the population as a whole. Bronwyn Labrum summarises the 'system', if one could call it that. She notes that various strategies were attempted through local authorities and Provinces until the passage of the *Hospitals and Charitable Institutions Act, 1885*. Under it, Labrum points out (2009: 396-99: see also Nolan 2009),

'All New Zealand hospital boards were authorised to dispense charitable aid in the form of outdoor relief and run approved institutions. As a locally managed form of assistance, charitable aid operations varied greatly between hospital board areas... Charitable aid was miserly and private forms of charity, where they existed, were dispersed in a similarly piecemeal fashion'.

The Impacts and failures of this welfare 'experiment' have been very well documented by David Thomson, so there is no need to reiterate them here (1998; Pool *et al* 2007: Chapters 3 and 4; also see Appendix A). This changed, however, at a date beyond the end of this chapter once the Liberal Government of the 1890s and 1900s had instituted a more compassionate, and far better managed approach to societal health, welfare and development.

Pākehā Colonial Society: New Zealand's Development Path

What comes out from the analysis in this chapter was that the New Zealand, Victorian, Pākehā colonial society was constantly churning. Extraordinarily high levels of net immigration, though centred on only two of the 10 quinquennia covered in this chapter, produced high and fluctuating levels of growth, which would recur

only after almost a century had passed (1970s on). Many migrants settled where they first alighted, but significant numbers moved on, thereby adding to this churning. Very high rates of reproduction also produced rapid growth. Unlike migration, family formation brought demographic continuity, but fertility levels were starting to decline from about 1880, when Pākehā women were going through a radical shift in nuptiality patterns. Within the colony, the population was highly mobile, and itinerancy was very prevalent. This produced overall macro-trends in population redistribution in this era, first a southwards shift and then a turn back northwards. The trends in peopling, and the shifts in the economic determinants of development (see next chapter), drove both the broader structures of the society, and the changes it underwent in this period.

The society was youthful, but masculinity ratios were higher than in Britain. Arguably gender-biases were less marked than in the ‘motherland’, but, for Pākehā, it was still a ‘man’s country’, trying to turn itself into a ‘white man’s country’. Basic education was introduced at an early stage in a society that was heavily Protestant. Schooling plus the itinerancy of the people allowed integration across lines that were not as rigid as in Britain. An attempt to build a social class system on British lines seem to have withered away but transitorily was associated with high levels of inequality – Victorian New Zealand may not have been quite the more egalitarian Better Britain prized in its national myths. Moreover, those who fell on hard luck or otherwise became indigent had little recourse to a well-ordered welfare system.

Victorian Pākehā – women and men – lived in an atomised society that demanded self-reliance, simply because the normal family props were often missing. Families and individuals had transitory networks dependent on their job at that moment, or which emerged out of adjacent residence rather than the linkages coming from family or being brought up in a particular community. The society became integrated even across the different lines that had divided people in the ‘old country’: birthplace, residence, religion and class – Belich describes social class as ‘mostly “loose”’. Overall, so he argues ‘Colonial Pākehā visions of themselves were often surprisingly self-confident and optimistic... Pākehā collective identity was ... [to be] “Better British” [than the British themselves]’. This was dependent on ‘a frenzied crusade against nature and natives in honour of the nineteenth century god “Progress”’ (Belich 2001: 17, 20-21).

How ‘Progress’ was actually effected in the economy is the subject of the next chapter. The peopling, the temporal ideational context of colonisation and pure chance, such as gold discoveries, determined the form development would take. But, in turn, in this era it was to start to build long-term, enduring foundations, yet also to chase progress in other directions away from these, only to return to what was to become its more permanent trajectory.

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¹ The term run-holder is used here, as against station or property owner, because so much of the grazing land, out of which fortunes were made, was leased, not purchased; grazier, which is used widely in Australia is also not employed here.

² For 1867 in Table 11.2 I have extrapolated from the ratio in 1871 for 55+ years. In 1871 for 55+ years it was 151. Unfortunately, statisticians in 1867 used 55 years as their cut-off point.

³ Personal Communication from her PhD thesis, Kings College, London, 'Gender, Wealth and Margins of Empire: The Economic Participation of Urban New Zealand Women'. I thank her for permission to quote her for that book.

⁴ A female ancestor of my co-author registered a gold mining claim in Thames, recorded to this day in their museum; she had voted in local elections, then enrolled and voted in 1893.

⁵ Phillips and Hearn (2008: Table 27) show that in 1840-52, levels were higher, as 32% were children because of the immigration of colonial administrators and their families and the Wakefield settlements. In 1853-70, the figure was 19% (cf 40% in the colony). In 1871-90, despite the Vogel scheme the it was only 25%, and 11% thereafter.

⁶ Those who came in the 1870s or later were less likely to have died testate before the 'bursting up' of the large estates from 1893.

⁷ The term used by Miles Fairburn (1989) in his remarkable multi-source statistical analysis.

⁸ Taylor had 'felt stultified by convention in her small Yorkshire village of the 1840s...In 1848 [she] escaped to New Zealand' (Bishop 2019: 45).

Chapter Twelve – The ‘Pakeha’ Colonial Economy

From a Mixed Māori / Pākehā Economy to an Imbalanced Dual Economy

In many senses the factors of the economy and the society covered last chapter, and those of the Victorian economy in this, interpenetrate. A major reason for this was that the factors of production and consumption were often located within the household in the one unit – the small family farm or the business where the owner lived on the premises. As economies modernise these functions are instead formally undertaken in plants and offices (production) and households (much of consumption) that are geographically separated.

In conventional economics, this chapter's title, the term ‘Pākehā economy’ would be something of a misnomer. Strictly speaking, I am referring to the entire economy, encompassing both Māori and Pākehā activities, or at least their monetised components. The classical indices of the financial, trade and GDP contributions to economic development relate, in theory, to everybody in a population. It simply, and appropriately, attempts to document fully the sum of economic activities. To add to these difficulties, it is impossible to compute the sectoral contributions to GDP for earlier historical eras, above all because for New Zealand there were inadequate data collected on service sectors¹.

This segues into an important but unsolvable issue for this chapter: the relative contributions of Māori and Pākehā to the colonial economy. From the 1860s, the national, monetised sector became overwhelmingly a creature of Pākehā settler enterprise and productivity and would remain that way until the Waitangi Tribunal Settlements from the 1980s on injected capital into iwi organisations allowing tribal rūnanga (councils) to start to invest and build up their peoples' wealth. Yet, up until the end of the 1850s, half to two-fifths of the period covered by this chapter, Māori dominated the trade economy, both locally or overseas – although less and less so in the 1850s. They supplied perhaps 75 percent of Pākehā settlers with their perishable food and some of their building materials (see earlier chapters). They could be entrepreneurs in their own right, trading potatoes, grain, pork, poultry, beef, kauri gum (a high value/low volume export), fruit, vegetables and other commodities. Or their exports could be through joint ventures with diverse teams of ‘Pākehā’ sojourners and itinerants in work teams in the extractive industries, especially flax, sealing, timber and whaling, as described last chapter. So, at least for the first two decades after colonisation, one cannot talk about the productive economy without discussing the major contribution of Māori. After the 1850s, however, Māori became marginalised and mainly dependent on subsistence, which eventually but gradually

incorporated waged employment elements (seasonal, or casual, or contractual), so that their economy became hybridised. From the end of the era covered in the present chapter virtually until World War II, New Zealand had a dual economy: the ‘Pākehā’, which was really the national, monetised economy, and the Māori, which in 1936 was still hybrid in form. It sustained Māori at a low level of daily living, making a very small contribution to overall GDP, yet in some regions and in some sub-sectors playing a nationally vital role in productive industries that were highly seasonalised (eg shearing and meat slaughtering).

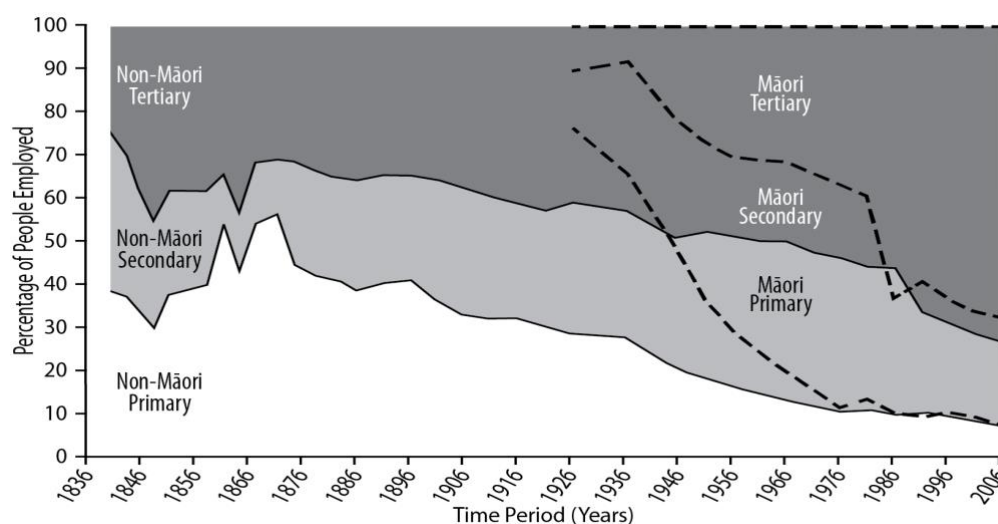
Moreover, up to *circa* 1860, Māori contributed disproportionately to Aotearoa’s exchequer, so also played a central role in the monetised, national economy. Their productive capacity as subsistence providers for their own people, the majority population until 1857/8, suggests that, were Gross Domestic Product (GDP) able to be computed correctly – taking into account all economic activities – Māori would have made the main contribution until the end of the 1850s. The bad days of the 1860s and beyond to the 1880s/90s, saw them survive and not go through a collapse of the sort seen in parts of Oceania. But essentially this was achieved by applying their own traditional knowledge and skills of gardening-hunter-gathering to the remaining vestigial units of land they retained, or the land, riverine and marine resources to which they had access. Their proportional per capita contribution to the national economy had withered by the 1890s to around one-fifth that of Pākehā (Pool 2015a: 267-82, 289-91). Moreover, this strategy was resurrected to allow them to survive years later in the Great Depression of the 1930s. That said, to have survived at all was their great peopling and development achievement. But they survived in what had become a dual, almost but not quite segregated, economy.

The Settler Economy: The Pākehā Labour Force

As noted above, we lack data to throw light on the role of sectoral changes in GDP in New Zealand’s development path. Fortunately, one can turn to population statistics, which are available and presented in Figure 12.1. In many senses they are the hardest data available on the economy until the national accounts systems were implemented well into the twentieth century. They give an insight into the sectoral shift-share in the economy, as well as enhancing the story about Aotearoa’s peopling, especially by colonists. This figure is made possible because Brendan Thompson extended Gary Hawke’s sectoral labour force data in a series back to the earliest period of settlement, reconstituted through painstaking work (Hawke 1979; Thompson 1985). The raw statistics were collected for Victorian Pākehā, but, unfortunately, not for Māori, so we are still left with an incomplete view of the width and depth of the colony’s human capital in this era. From the 1860s, however, all available evidence suggests that the economy had split into two by that stage. This very much differs the later Victorian period from the period up to the 1860s. From then on, the country had two economies,

the Pākehā one that was monetised and the Māori which was mainly subsistence. Moreover, there was little significant interaction between these poles, except for the casual or seasonal pastoral workforce contribution of Māori in some regions, notably the eastern littoral of the North Island.

Figure 12.1: Labour Force by Sector: Pākehā 1839–2006, Māori 1926–2006.



Source: Hawke 1979: Table 4; Thompson 1985: Tables 257 and 263, updated by the present author; for 1839 Thompson estimated that there were 174 primary, 171 secondary and 103 tertiary workers.

Figure 12.1 shows that there was shift-share in the Pākehā labour force industrial distribution. Ignoring the very small numbers for 1839, in the 1840s, not unexpectedly, the tertiary sector dominated – officials, colonisation agents, traders, missionaries and military. Twenty percent of the labour force was in the military alone. There was also a limited secondary sector working in the light manufacturing and construction jobs necessary to establish the colony. The Pākehā primary sector was then employed mainly in extractive industries, although around the nascent settlements small farmers were becoming established. In this and in later periods, the primary sector figure is deflated because a major component of the labour force, wives of farmers in the family workforce, went unpaid and also unrecorded. Similarly missing is the contribution of women in small family-operated urban businesses. The small cadre of higher status workers is recorded in fine detail, in ways that would subject modern government statisticians to severe critiques about their failures to protect confidentiality, but, further down the skill-order, children, unemployed housewives and domestics seem to have been lumped together willy-nilly. Fortunately, Brendan Thompson’s detailed detective work allowed him to allocate the ‘employed’ to broad sectors.

In the 1850s, Pākehā primary sector employment rose and the tertiary sector decreased as sheep ranching increased, and then in the 1860s gold digging drove up

the importance of the primary workforce even further, with this sector reaching over 50 percent of the total in 1861, 1867 and 1871. Looking at specific occupations, in 1861, 25 percent of Pākehā workers were in mining. In 1864 gold mining would have had more impact, but the military numbers, perhaps one-eighth of the labour force, dampened its effect by inflating the tertiary sector figure (Chapter 10). From then on until 1901, however, the primary sector was consistently the largest, at most censuses comprising two-fifths or more of the workforce. But, within that sector, a major shift-share was occurring in 1871, half of primary sector workers were still in mining a figure that had already dropped to one-fifth by 1881. The agricultural and pastoral workforce increased by 264 percent, exceeding the total growth of the Pākehā population over this decade, whereas mining fell by 37 percent. Alongside this, the secondary and tertiary sectors grew both absolutely and relatively. (Thompson 1985: v 2, Table 257, 115-25).

Gold was ‘quarrying’ in the most extreme sense of that term yet, as Easton (2020: 128) argues, it also played a role in sustainability. It ‘helped build the infrastructural and social foundations on which future expansion would rest. It was the provisioning of the goldfields and the accumulation of capital from it that was economically important, not the gold mining itself’².

The Monetised Economy: Traded Commodities, Directions of Merchandise Trade Flows and External Sources of Revenue

The labour force data parallel the information on imports and exports graphed by Phil Briggs (2003: eg 59), who stresses several times the important point that these data relate to ‘merchandise trade only’. Starting in 1850, he shows that, ‘by 1860’, wool had reached 70 percent of the exports by type of commodity with proportionate declines in forestry (timber, spars) and other products (fish, potatoes, wheat and flour, pork, flax, kauri gum and other exports). In passing it is not clear whether Māori-exported food, flax and other goods, traded from ports like Kawhia in the Waikato region were adequately recorded. Petrie argues that (2006: 44-45) ‘many if not most Māori-owned ships did not register their cargos with the Customs House...’, and thus their contribution to the colonial exchequer, as noted earlier, may have been significantly less than it might have been if they had paid all their duties. But, as will be detailed further below, gold then overtook wool (Briggs 2003: 61, Figure 28), and

‘peaked at 72% of goods exports in 1863, but by 1880 its share had dropped to less than 20%... By the early 1870s wool was again the predominant export. ... [F]rom 1882, when refrigerated shipping started, both meat and dairy began to emerge as major export industries. And by 1902 – only 20 years later – the combined value of meat and dairy exports exceeded the value of exported wool’.

Just to reinforce what the data on labour force and commodities just cited show, in the early 1850s when foods like potatoes, wheat and pork were sustaining the miners in the Victoria gold fields, and timber and flax was going to the Australian construction industry, Australia was the key destination for exports. In the late 1850s, in the first wool boom, the prime market was temporarily the United Kingdom, then once again in the 1860s, by value it became Australia, although it was then often transhipped to other final destinations. Prior to the 1880s, therefore, complex supply chains were involved with goods going to, and being imported from, diverse places. But, with wool re-emerging, and even later with meat and dairy exports, the United Kingdom once again became the overwhelming destination (70 percent or more) for exports. This was to be the case for nearly a century, until after World War II – to the 1950s (Briggs, 2003: Figure 31, 64-65). That export trade is the subject of the recolonisation era on which the next section of this book focuses.

In further analysing the settler economy in the colonial era, and by necessity its interactions with Māori production, it is useful to divide the period 1840–1880/90s into three parts, as I do below. A first period is from 1840 to 1859, for much of which time within New Zealand, as noted above, the Māori monetised economy was integrated with the colonists' domestic economy – production and consumption, especially the latter, and with the colonial fiscal system. But, there was also another part to the monetised colonial economy that depended on the British Treasury, mainly to sustain imperial military and naval forces through wars or in preparing for the threat of war, and on investors buying New Zealand colonial debentures. By the 1850s, however, sheep flocks were providing a new source of export income and laying down the foundations for a sustainable domestic and trading settler economy.

Secondly, the 1860s erupted, and seem in retrospect to be a deviant decade in the colonial era, both for the society and the economy. The path of cumulative development emerging in the South Island and the south of the North yielded place to tumult coming from gold finds, yet in southern parts of the country the foundations set out in the 1850s, in sheep ranching, were becoming the bases for a long-term economic direction for Aotearoa. For the North Island, by contrast, the 1860s were consumed by a twelve-year long war.

Thirdly, from *circa* 1870 until the 1880s/1890s the foundations laid down by wool were consolidated, but only in parts of New Zealand. In the North Island land was being dispossessed in huge tranches from Māori, but the ensuing model of development seemed to be inspired by what was happening successfully in the south of the country, from Hawkes Bay and Rangitikei to the Bluff, rather than what was appropriate for the north. By the end of the era, in the south new technologies were adopted and different approaches to pastoralism then spread across the land, north and south. Tenurial reforms at the very end of this epoch turned New Zealand's Pākehā society and economy into a form that would last largely intact for seven decades. But

by then, this was undeniably a Pākehā economy in both name and function – Māori were marginalised, a minor factor of the entire country's society and economy.

The Settler Economy: The Establishment Decades, 1840s and 1850s

In reviewing the peopling and development of settler New Zealand immediately after annexation, we are fortunate that the inveterate compiler of statistics, Surgeon-Major Arthur Thomson, documented these years for us so diligently, publishing his 2-volume work in 1859. I have noted some key population statistics for this period before, but, in order to give a relative perspective for some of the commentary below, it is worth recalling that in this period Pākehā numbers increased 29-fold over the period 1840-58, to 59,305 (1858) (Thomson 1859: v 2, Appendix Table XIII), thereby equalling or exceeding Māori numbers.

Synthesising across his tables shows that, in the 1840s and 1850s, New Zealand had a sort of triple economy, the different parts of which overlapped to a degree and in which Māori had a major role to play, although that declined. The trade and market dimensions of economic activity were thus less segmented than would be the dual economy, that would emerge out of the wars of the 1860s and become entrenched thereafter.

Until about 1850, Aotearoa's real domestic economy was driven by the indigenous majority, although Pākehā in the extractive industries were still exporting commodities such as seal fur, whale oil, timber and flax. Data for *circa* 1850 suggest that a variety of 'forestry products' was then the most important export, perhaps reaching two-fifths of the total, but it is not clear whether or not those data covered Māori trade directly with Australia from ports outside customs control.

For non-perishable goods, by contrast, Pākehā relied more on imports, which outran exports in Pound values. To add to this, both imports and exports fluctuated significantly. In 1842, when the colonial administration was being established, imports outran exports nine-fold but dropped to imports being twice the value of exports in 1844, and 1.5 times in 1845. Strains on the nascent colonial economy came from wars in the mid-1840s, firstly in the north around the Bay of Islands, and then Wellington-Whanganui. Their effects were reflected in the drawings the colony made from the 'Commissariat Chest for Military and Naval Expenditure'. This was a fund managed from Westminster by Treasury Officials, who were civilians, with staff on the ground in New Zealand, or anywhere else in the Empire where the fund was needed. The 'Chest' moved around the colonies provisioning the imperial forces (versus local militias) wherever they were in action, purchasing perishable goods for the troops from local or nearby sources. In some ways the necessary financial flows were invisible imports, often of major significance. Thus, in 1845 during the first British-Māori war, 93 percent of the colony's expenditures were met by revenues

coming from this source; in 1851 it still yielded 56 percent of Aotearoa's government income, then went up again numerically from 1856 as more troops came, but by then was only 36 percent of the total, because revenues from customs, land sales and leasing and sundry domestic sources, much from Māori, had increased (Thomson 1858: v 2, Appendix Table XI). The drawings on the 'Chest' by the New Zealand colonial regime became a politically charged issue in Whitehall in the 1860s (see below).

With the wars the excess of merchandise imports over exports edged up again, to 3.5 in 1847 and fivefold in 1848, but was less than twofold in 1849, when exports suddenly rose, to a degree counterbalancing the import bill. As wool export receipts started to give a better balance of trade in the 1850s, the ratio declined to 1.8 (1853), but rose again to 2.7 (1857), when troop numbers increased in anticipation of another war (see below). Overall, between 1841 and 1857, merchandise export receipts grew twenty-fold although this was less than the increase in Pākehā population numbers, while imports went up by only 595 percent (Briggs 2003: Figure 29; Thomson 1859: v 2, Table XIV, XVIII).

From 1850, the strength of the Pākehā domestic economy was increasing and competing with Māori horticulture, in particular for grain production, as Thomson's data show (1858: v 2, Appendix Tables XI, XVII, XVIII). In Canterbury alone this increased from 386 acres in 1851 to 7,501 in 1858, when the South Island produced 67 percent of the recorded wheat. It is not clear, however, whether or not Thomson's Auckland data include Māori grain farming. At the same time, Pākehā export-driven production increased, and above all wool. Between 1851 and 1858, the national sheep flock increased seven-fold to reach 1.5 million animals, 73 percent of which were in the South Island, 22 percent in Hawkes Bay and Wellington, with a mere five percent in the main part of the upper North Island. This was the debut of extensive run-holding, ranching, in the South Island and southern North Island, the trend that presaged the period when wool was king, that would drive much of New Zealand's development in the 1870s and 1880s (see also Chapter 11). Through domestically collected revenues, including customs, from land sales and leases, and from farming, the colonial and provincial governments gained income. Additionally, there were the external revenue flows from the British Treasury and debentures, noted already. Finally, not mentioned by Thomson was the large Māori subsistence sector.

In the 1840s, New Zealand was similar to prototypical colonies then and later with small white enclaves surrounded by a large native population. But, by the 1850s it was starting to move towards being a settler-colony, both in peopling and development. A debut was being made into the colonial economy that would become the model until the 1880s/1890s. But, first all New Zealanders, Pākehā and Māori, had to live through the 1860s, when this transition would be accelerated brutally, in absolute as well as relative terms.

The Settler Economy: The 1860s, a Deviant Decade

As I noted in previous chapters, over much of the 1860s, national development was really driven from the South Island. It was the South that saw the gold rushes, until miners moved to the Coromandel in the central northeast of the North Island right at the end of the decade. Gold digging produced high levels of demographic turbulence. The first major rush was to Otago's Bruce electorate, where 18,500 were recorded (mainly men) in 1861, in a statistical table that carries a serious caveat, that this figure did not include 3,000 'unenumerated' miners. Thus, there may have been in total, say, 21,000 gold seekers and those servicing them. By 1867, the number in Otago had dropped to around 12,400 (still mainly men). That year, though, Westland's mining areas had almost 26,000 residents, but that figure had halved by 1871, when Thames on the Coromandel ballooned to 12,500. Gold-seeking also produced the exceptionally distorted masculinity ratios noted last chapter.

Gold production, mainly South Island in the 1860s, contributed to a spurt of economic growth, when, in the 1860s GDP per capita reached the highest levels ever, in any decade for which there are data. Graphed on a log scale, over the period 1860-2000, the sharpest growth in real GDP was in the early 1860s. Then gold exports surged, suddenly inflating the effects of wool, causing a brief spike in export prices (including gold). This is shown in Table 12.1, drawn directly from Phil Briggs' monograph (2003: Table 4). Average annual growth in GDP was a staggering 15%. Although per capita growth was much lower (5%) it was still of itself the sort of figure Ministers of Finance would dream about, and was only exceeded, slightly, in the decade 1935-45. Equally well, the 1860s were the only decade in New Zealand's history when the trade economy was so heavily dependent on such a narrow range of commodities. GDP growth then slowed in the late 1860s because export prices, excluding gold, dropped dramatically. But, becoming more evident was the other path of development – of sustainable production through exports of wool. It was, however, mainly a South Island activity. Between them, gold and wool made up well over 90% of the exports still in the 1860s and early 1870s, but by the late 1870s the mix was diversifying, a trend accelerated in the 1880s by the growing contribution of meat, and other commodities. This presaged the gradual disappearance of the 'quarrying' (as defined by Phil Briggs: mining, sealing, whaling and the extractive forestry economy that was so important in the early colonial period). Along with this in the 1880s was a diversification in commodities – meat, wool, dairy – but that was still based on a monoculture (grass), the dependence on which lasted until the late 1970s. The 1870s saw another increase in real GDP, as well as in export prices, but this time it was again wool-driven and mainly South Island³ (Briggs 2003: Table 4, Figure 13, 23, 29).

Table 12.1: Average Annual Growth: (i) in Real GDP, (ii) Population and (iii) Real GDP per Capita (Rates, %)*, 1860–2002

Period	GDP (i)	Population (ii)	GDP per Capita (iii)
1860-1870	14.5	8.6	5.4
1870-1880	7.2	5.8	1.3
1880-1895	2.5	2.5	-0.1
1895-1912	4.8	2.3	2.5
1912-1935	1.2	1.6	-0.5
1935-1945	6.7	0.7	5.9**
1945-1975	3.5	2.1	1.4
1975-2001	1.9	0.9	1.0

Source: Briggs 2003: Table 4, who cites Rankin (1991), Easton (1990) and Statistics New Zealand. The varying durations fit Briggs' narrative (2003: 36-40) which contextualises the statistical data and also illustrate well the more purely economic component of my analysis of development. Statistics New Zealand maintains GDP series as a statutory obligation. The data I present, from Briggs 2003, come from a widely used series, accepted by most economists. David Greasley and Les Oxley have updated and refined the series recently, but I will use Briggs' collation simply because most writers would accept it as broadly valid.

*Notes: * In this and all subsequent tables presenting 'Average Annual Rates' the standard 'compound' interest rate formula is used. ** I return to these data in Chapter 15*

The North Island in this decade was totally different. It was racked by a major war, at different times across most of the land north of the Manawatu up to Auckland and west of the main dividing range, and, occasionally east of it. During their later phases, the wars deteriorated into classical colonial scorched earth campaigns, and Māori guerrilla campaigns. These saw incursions east of the ranges out from the forested, mountainous Urewera, led by the Māori insurgent chief Te Kooti into Poverty Bay (now Turanganui-a-Kiwa), into northern Hawkes Bay, and a desperate sally by him, late in the piece, to attack north of Gisborne. Unfortunately, as typifies that form of warfare, massacres and other treacherous acts were carried out by both sides; (Belich 1986: Part Four). Unfortunately, also, however, the record of the day tended to favour the British and often to vilify the Māori, an imbalance that is only now being rectified where this is possible.

Provisioning this war took a great deal of the energy of the government, purchasing from merchants and farmers, with the Commissariat Chest again playing an instrumental role (Crowe 2015/16). But, by the mid-1860s, Whitehall was taking a negative attitude to funding a war that seemed to benefit settlers but not the British taxpayer. Discussion centred on a loan of 3,000,000 pounds from Westminster to the colony, an issue that even excited negative comments in the English press. In the detailed official correspondence of 1863-64, there was also repeated anxiety among

British officials about the innocuous-sounding *New Zealand Settlements Act, 1863*, which was really a greedy, aggressive land confiscation strategy. To a 21st century reader, the letters and enclosures are a curious mix of the nitty-gritty of accounting, down to the last pound for what this and that cost and what the repayment schedules were to be, alongside far more general principles about governance. The Duke of Newcastle, Secretary of State for the Colonies, entered the dispute expressing concern over the negative effects confiscation might have on Māori. For their part, colonial officials and the New Zealand Agent in London attempted to reassure their British interlocutors that the act would be fairly applied – only to insurgents they claimed. The reality was that the person driving confiscation on the ground was New Zealand's Premier Alfred Domett, who no doubt had populist support among many of the settlers. As Vincent O'Malley notes, 'Even by the standards of mid-nineteenth century colonial politicians, Domett was notably unsympathetic towards Māori...' He felt that the sum owed to the British should be repaid and saw confiscation of land and its on-sale to colonists as a way to raise revenue for this purpose. To Domett the issue was clear, 'Until you get rid of the rank growth of savagery, how can you rear the plants of civilisation? ... Cut down the towering notions of independence so long nursed by the Maoris –...– root up their ill-concealed passion for lawless self-indulgence'. His crusade was such that it is not certain that he had scrupulous regard for whether the confiscations were the lands of kingites (rebels) or kupapa (loyalists). To him, this revenue gathering would also allow the colony to repay the British Government, a step he strongly favoured. The land would be settled by soldiers who would thus maintain control over Māori. (O'Malley 2016: 399-405; General Assembly (New Zealand) 1864: *passim*).

Māori gardens and farms, which had provisioned Pākehā settlements with perishables, were largely eliminated in the campaigns in the Taranaki, Waikato and Bay of Plenty. Moreover, as noted already, there is good evidence to show that the invasions of these regions were pretexts on which first to destroy Māori commercial competition with Auckland businesses, and secondly to open the Waikato to settler pastoralists.

Despite war, that decade saw exports increase by value and reach a converted dollar-value level that remained relatively stable throughout the rest of the era covered in this chapter (Briggs 2003: Figure 26, drawing on Muriel Lloyd Prichard's 1970 work). Nevertheless, this was also the decade, historically, in which imports most exceeded exports, with imports reaching their maximum value in 1863-64. As might be expected, the war, with its Commissariat Chest purchases, and the imports of cattle, grain and flour from Australia – a reverse of the 1850s – saw Auckland's role increase dramatically. Its importance peaked in 1864 when it handled 32% of the incoming trade but then dropped off as quickly as the military started to withdraw. Nevertheless, the economy was not all war-driven: Dunedin, requiring goods to meet

the needs of rapidly growing mining encampments, was, in fact, a far more important port than Auckland throughout the decade, importing almost 50% of the colony's total in 1863. But it saw a decline in its imports by value between 1863 and 1864 and then again by 1867. Nevertheless, Dunedin, handling 35% of the country's imports, still slightly outran Auckland in 1864 when Commissariat driven importing reached its highest level; and Dunedin doubled Auckland in 1867, the next date for which there are data. We must not forget the 'Other' ports, which in 1864 surpassed both Auckland and Dunedin, and in 1867 handled 55% of the colony's imports⁴.

The growth of wool and grain farming in the South Island, as well as the war in the North, made northern New Zealand less attractive to settlers than the South. These factors were reflected in provincial population geographic statistics (exclusive of Māori). Auckland Province, with 35% of the Pākehā population in 1851, saw its per cent decrease to 25% in the census of December 1861, six months after gold fever had swept Otago. Auckland dipped further to 24% (1871). In 1861, 23% of the foreign-born colonists had lived in Auckland; by 1871, this had declined to 19%. In part, Auckland's dynamics were driven by its earlier settlement, so, in 1861, 34% of Auckland Province's settlers had been born in the colony, and 30% of all Pākehā born in New Zealand were living in Auckland, above its proportionate contribution to the total colonist population. By a slight margin, in the period 1861-71 Auckland's settlers were replacing themselves by reproduction rather than net immigration: 50% of the growth in total numbers was among the New Zealand-born; for the colony as a whole this was only 42%. Thus, in a relative sense in the 1860s, many of the new arrivals were either completely by-passing Auckland province, or simply passing through the port on the way to another Province. As Eleanor Catton portrays in her novel *The Luminaries*, the miners who went to Otago or Hokitika entered New Zealand through Dunedin or Lyttelton, but not Auckland – the trip on to Hokitika, Westport or Greymouth must have been extremely frightening, crossing wild west coast river-mouth bars that shifted from tide-to tide, as she vividly records. But Auckland even slipped a little in reproducing its colonist population: in 1861, 30% of Pākehā born in Aotearoa lived in Auckland, but by 1871 this was down to 25%. The dynamism of Auckland suffered until the war had subsided and land could be wrested from Māori, who still occupied significant areas of the province outside the environs of Auckland town and confiscated lands (Map 12.1, below).

In the introduction to this book and in later chapters, I raise the issue of a 'demographic dividend', when fertility and thus youth dependency rates decline but the aged dependency burden is still very low, so that disproportionate numbers are at workforce ages. Theoretically, this gives a 'window of opportunity' for a demographic dividend that should increase national incomes (Bloom *et al* 2003; Malmberg and Lindh 2006; Appendix Two). As was outlined in Chapter 11, settler New Zealand benefitted from a peculiar version of this, which does not fit orthodox

theory. Fertility was very high, which would normally produce extreme youth dependency burdens, yet rates of immigration of young workers were even higher thus injecting large numbers into the young working ages: alluvial gold needed legions of young workers, mainly men, many of whom failed, but some of whom tried their fortunes elsewhere in the colony¹.

Demographically, from the 1860s there were thus more people in the productive sector than there would have been if long-term population growth had mainly come from natural increase. For this, plus other reasons – cohort momentum as people born in the colony moved into middle ages – a window of opportunity for a dividend became the case thereafter at least until World War II. The impacts of this in the 1860s can be seen simply if separate Child/Adult ratios are computed for each sex. The Male Child/ Male Adult ratio was 35 Boys / 100 Men, but the female was 78 Girls / 100 Women. By contrast, the sex ratio at 0-14 years, comprised mainly of children born in the colony, was normal at 104 Males / 100 Females.

There were also large contingents of military and militia – peaking in the 1860s. As they were coming and going, numbers are hard to estimate, but some authors cite figures as high as 12,000 alongside a civilian Pākehā population itself of only 172,000 in December 1864. A caveat is that numbers purported to be above this may have been cumulative rather the size of the forces at any one date. By 1864, the British were withdrawing imperial troops, but there were still 9,100 soldiers in the colony at the ‘census’ that year, giving a firm statistic for this one date; by the 1867 count troop numbers had declined to 918, although among the active military on duty many did stay on. In 1864, because of the goldrush and troops, the proportion of the population at working ages was 67% – a massive, but transitory window of opportunity – only to be rivalled in 1936, but for very different reasons: in 1936 fertility had reached very low levels, whereas in 1864 settler families had truly hyper-fertility rates but were surrounded temporarily by large numbers of young unattached men. In the censuses of the 1870s, residual former gold diggers and soldiers were added to by the major inflows of young adults under the Vogel schemes, together inflating the size of the working age population as per classical demographic dividend theory, carrying forward this effect, although this was not to last (see below).

While the much higher profile gold rush was unfolding in some parts of the South Island, and war was raging in the North, the Southern Gentry were establishing what would become a South Island ‘Oligarchy’ from 1870-90 (Chapter 11). They were re-laying the sustained development track that Pākehā New Zealand was to follow – first laid down in the 1850s – from then on into the next century. This trajectory mutated in form (from ranching to more intensive pastoralism), but functionally became both sustained and sustainable – seemingly until the 1970s.

For the South Island, where the main formal economic activities unfolded, the 1860s have been encapsulated by Eldred-Grigg, who highlights the difference

between a gold boom and sustained development based on wool (Eldred-Grigg 1980: 42),

‘The decade began with wool as the chief export earner and ended that way too. In 1859 the South Island provided 90% of New Zealand’s income. Gold surpassed it in 1861, but the golden fleece recovered quickly. By 1867 Southern gold was providing only 58% of New Zealand’s income with wool at 28%. Wool exceeded gold about 1869 and by 1873 was once again earning 52% of the national income.

‘Gold was a temporary, colourful, but marginal excrescence. Real economic leadership was wielded by those who controlled the land. The gold rushes did not redistribute southern wealth. The poor stayed poor. The rich stayed rich. After the ballyhoo of gold had died away, the large landholders were ready to hold the economic reins for another generation’.

By comparison with the wealthy run-holding regions in the eastern half of the South Island, with its lower rainfall, the North Island was a totally different story and faced many problems. Even in the south there was a downside to this rosy scene for the region’s majority of less privileged southerners, as Eldred-Grigg (1980) points out (Chapter 11).

Further north, the Auckland speculators, such as Thomas Russell who pressured Grey to invade the Waikato, could rejoice as the decade long war with Māori freed much of the North Island to the tender mercies of the Native Land Court (NLC), whose birth was legislated mid-way through the second New Zealand War (Wood *et al* 2008; Belich 1996: 230, 358; O’Malley 2016: 465-69). Now, the more humid areas north of coastal Rangitikei, Whanganui and southern Hawkes Bay, reaching up to Auckland could be alienated from Māori. The dream was to turn them into pasture to replicate the South Island story and make the North Island also a vast wool producing estate. If pastoralism, rather than arable farming, were to be the North Island’s destiny in reality the only choice was wool. But this was easier said than done. Once Māori domains were in settlers’ hands, then, as Michael King states, ‘In the North Island, forest had to be cleared and burnt, and grass sown to make room and food for sheep...[S]heep were by far the most favoured animal for farming: wool was easily transported and exported; meat could not yet be refrigerated; and the grass intake of one cow could feed 8 to 10 sheep’. Thus, the national sheep flock grew from 1.6 million in 1858 to 13.1 million by 1878; whereas cattle numbers went from ‘a mere 1,400 to 5,800’. This balance was to change with refrigeration (King 2003: 195).

The Settler Economy: The Last Two Turbulent Decades, 1870–90

The end of the turbulent segment of the colonial era was transformational, played out by three contrasting themes. First, it saw the end of the most tumultuous episodes of the 1860s. Both had decreased in significance by the early 1870s, but vestiges remained. There were minor skirmishes to come, including the most shameful, when in 1881 the Native Minister led 1,600 armed men in the destruction of Parihaka village, which was founded on peaceful and progressive principles – it had electricity before most Pākehā communities. Elsewhere, gold seekers stayed on, but their contribution to the economy dropped and gradually withered away. New experiences were to perturb the life of the colony, such as a long depression and the peaking of the southward population drift; in 1890 New Zealand was on the cusp of a population geography turnaround and a long-term shift northwards, which continues to this day.

Secondly, however, the baseline for a sustained and sustainable future economy was being laid down. Pastoralism, a continuity from a trend that had started in the late 1840s, was to be the country's primary export sector into the late twentieth century, at first wool, but from the 1880s an increasingly diverse grasslands farming mix – wool, dairy and meat – which still endures.

But, thirdly, this positive story of development and noble pioneering was not achieved easily – not by the colonists, and certainly not by the Māori whose displacement was its prerequisite. Ironically, as Bronwyn Labrum (2009: 393) comments, 'Māori were literally outside the Pākehā welfare economy yet fundamental to it, because settler progress was predicated on the dispossession of Māori land'. This was the most essential backstory to the national narratives on refrigeration and pastoral intensification. A shift to more efficient grasslands farming, for example, was notable in Taranaki that, along with Edendale in Southland, pioneered dairy product processing. A residual effect of this development has been that, until recent decades, Taranaki's farm-scape has been one of distinctly hedged, intensively-grazed dairy farms, on smaller properties, milking fewer cows per herd than say in the Waikato-Bay of Plenty and Southland, and supplying small closely-spaced processing plants; since the 1980s this has all changed dramatically, but the imprint is still there. In fact, much of the Māori land loss occurred in these two decades 1870s–90s, sometimes in coercive ways. The *West Coast Settlement Reserves Act, 1892*, afforded Taranaki's Pākehā farmers leases to perpetuity at peppercorn rents, thereby permitting the pastoral regime just described. As a result, Taranaki, which had seen a fall-off in growth during the New Zealand War in the 1860s, had settler population growth rates exceeding the national figure for the rest of the nineteenth century; conversely, however, Taranaki's Māori population declined by 20 percent between 1874 and 1901.

The notion that colonisation munificently helped Māori, and New Zealand in general, accelerate through the agricultural and industrial revolutions is a misunderstanding of events until the 1880s. Technological advancement was to be achieved, in the main, after the turbulent era, and from then on. Even in the 1870s' much of Pākehā New Zealand and much of its economy was decidedly pre-industrial. A technologically backward 'quarrying' economy persisted in many places across the land, notably marginal regions outside the loci of emerging development, as is seen in Map 12.1⁵.

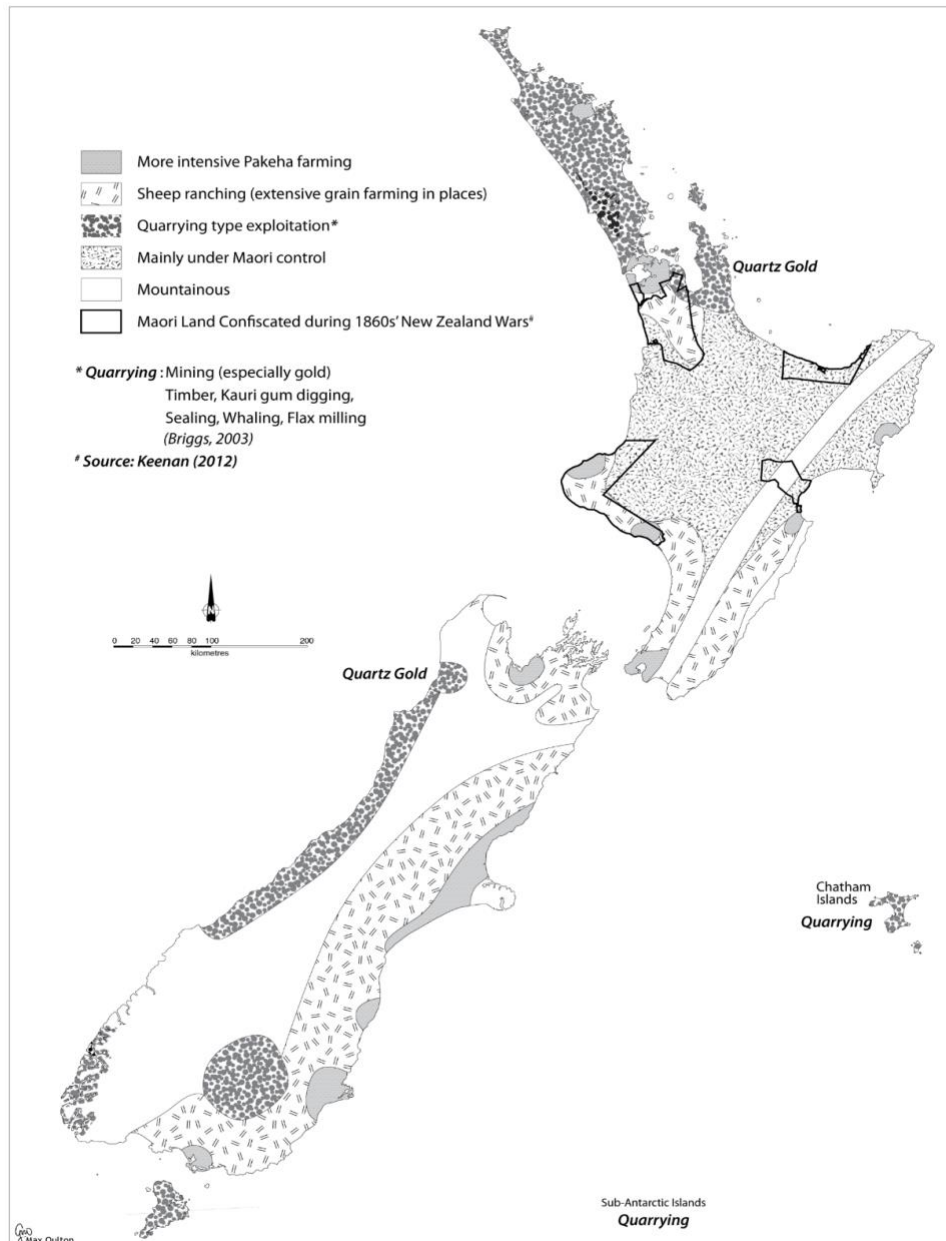
Then, there was run-holding or 'ranching' (sheep farming), which was technologically backward, but exploiting vast areas of the South Island and southern North Island (Map 12.1). Its companion in a few places, extensive grain production, was further along technology's evolutionary path so was 'industrial'. Māori had grown, milled and exported grain (mainly wheat) in the North Island well before annexation and after that – for more than 30 years (1820s–50s), it was an important commodity both in their international trade and domestic retailing. This ended in the 1860s, when the Land War virtually destroyed market production. From the late 1860s, Pākehā moved into extensive grain farming, not in the North Island but above all in South Canterbury, employing industrial methods (eg steam driven machinery, that were more industrial than Māori mills or cropping equipment had been, see last chapter). Run-holdings, where 'wool was king', as described last chapter, and New Zealand's 'bonanza' wheat farms, involved relatively small numbers of workers, but were in the regions that included more than half the Pākehā population but were the very regions that were to undergo the greatest declines as a proportion of the country's total settler population, as is clear in Table 12.2.

Over vast areas of most of the central North Island, including inland Taranaki and the East Coast, Māori still controlled much of the land, but their dispossession was proceeding relentlessly, although at different stages depending on the region. This dispossession would 'open up' a large swathe of the North Island to Pākehā settlers. Māori farming had been a complex mix but now was mainly directed at meeting their subsistence needs. Finally on Map 12.1 there were the Pākehā urban settlements around which small farming occurred, involving varying levels of technology befitting the description 'proto-industrialisation'. It was of greatest extent around South Island centres (Pool 2015a: 260-64, Table 13.1).

In Map 12.1, these different regions fall into various 'zones of exploitation'. The different modes of development produced the Pākehā population geographical distribution of 1874, shown in Table 12.2 below. Then, the demographically dominant regions had all been in the South Island whose smallest (North and West) even exceeded the largest North Island population, in the central part of Auckland where the 'Super-City' is today. But, by 1901, the settler New Zealand population geography of recolonisation was emerging, with the very significant redistribution

north described later in Chapter 14. Relatively, Hawkes Bay-Wairarapa and Taranaki show the effects of Māori dispossession in the late Victorian era. Taranaki was notable for its high General Fertility Rates over much of the late Victorian era (Pool and Tiong 1991: Fig 4).

Map 12.1: Aotearoa 1870s: Cartographic Representation of Zones of Exploitation



Source: Confiscated Māori land Keenan (2012); Remainder compiled by Ian Pool.

The Inter-provincial migratory dimension, *per se*, of this redistribution was slowing by 1901, with reproduction coupled, but with a greater reproductive capacity

– higher fertility, more people at childbearing ages – in some North Island rural regions becoming increasingly important. This had complex roots and also opened up reproductive differentials. First, an historically significant Pākehā fertility decline started incipiently in the South Island in the 1870s, then spread north, last of all reaching the North Island’s pioneer and dairying regions where settlers were farming land recently dispossessed from Māori (Pool and Tiong 1991: Fig 4; Pool et al 2007: 139-48). (Pool and Tiong 1991: Fig 4; Pool et al 2007: 139-48). Secondly, not shown on the table but of importance both economically and demographically, was that it was the young adults who migrated northward, thus adding to the stock of potential workers and young parents in North Island Provinces and depleting those in the south. Therefore, not only were fertility rates higher at this stage in the north, but there were more couples at childbearing ages, and these people were fuelling the workforce and driving that island’s development. The north was now once again moving to become the powerhouse of the economy, the role it would more fully assume in the twentieth century, eventually dominating national development⁶.

Table 12.2: Pākehā Population, Geographic Distribution, by Region (Percentage of Total), 1874–1936

Region	1874	1901	1936
North Island	39	50	64
Northland	3	3	4
Auckland	13	12	16
Waikato/King County/Hauraki/Thames -Coromandel	6	5	8
Bay of Plenty	0.5	1	3
East Coast	0.5	1	3
Hawke’s Bay/Wairarapa	5	8	7
Taranaki	2	5	6
Rangitikei/Whanganui	3	3	3
Manawatu/Horowhenu/ Wellington	6	12	14
South Island	61	50	35
North and West (Nelson, Marlborough, Westland)	14	9	6
Central (Canterbury)	19	19	15
South (Otago– Southland)	28	22	14
Total (% of NZ Pākehā)	100	100	99

Source: 1874 and 1901, Pool 1991: Table 5.4

Thus, by 1901, the standard population geographic pattern that characterised the recolonisation era was becoming evident (Table 12.2). Urbanisation, and the growth of the two North Island metropolises played a significant role. The South Island was starting to see almost the inverse, with the southern and northern parts relatively most affected. Nevertheless, the central region and what really became the South Island's hub – Christchurch – showed less impact.

In the 1870s real GDP growth was adequate, but less than it might have been because of demographic pressures, as is clear when the GDP figure is compared with that on GDP per capita (Table 12.1 above). Obviously, the massive inflows of the early 1870s would have had a major impact on economic growth, but, for the longer term it was the hyper-fertility of the colonists which would be the critical development factor: the Vogel migration schemes saw two-thirds of Pākehā population growth in the early 1870s come from net immigration. But, by the second half of the same decade the situation was reversing with 53 percent due to natural increase. In the next decade's first quinquennium, 70 percent was by natural increase, and in the second part of the 1880s growth was slower: natural increase added 64,000, however net migration was negative, -9,000. In the 1890s, natural increase constituted around 80 percent of growth and subsequently comprised between 60 and 85 percent until 1930.

But demography played an even more powerful yet somewhat covert role in driving development than summary data on natural increase might suggest. As was shown in Chapter 11 (esp. Figure 11.2), in the 1870s, Pākehā Total Dependency burdens (Child + Aged Populations/Working Ages) were among the highest ever in the recorded statistical history of New Zealand – equal to that in 1858 – and this was almost entirely due to the Childhood (0-14 years) component of Total dependency. The ratios seen in 1858 (see Chapter 11), then changed dramatically, but briefly, in the 1860s with the gold rushes and the presence of large numbers of troops. As a consequence, by the 1870s, two forces were playing off against each other when Pākehā fertility was at hyper-levels. Thus, despite the massive immigration of young working age people in the early 1860s and early 1870s, in the 1870s the proportions at working ages were the lowest ever (1874, 57 percent; 1878, 56 percent) into the twenty-first century: in the pre-gold rush era (1858) the figure had been 58 percent, and even in the post-World War II Baby Boom levels were higher, 58-64 percent, with those aged less than 15 years below 40 percent.

The age-structural pattern seen in the 1870s continued, however, into the years of the 'Long Depression' of the 1880s. In 1886, 41 percent of Pākehā were under 15 years of age; in 1896, children were still proportionately 36 percent; but by 1906 the childhood ages had dropped to 31 percent (Neville 1985: Table 30).

Thus, the demographic dividend played out in strange, unconventional ways: it was weak about 1858, strengthened in the gold rushes, then weakened again. It then

regained strength in two ways. First was the passage of 1860s' and 1870s' migrants through their working ages, thus by century's end inflating the denominator for dependency ratios, the working age-group (Youth dependency = Population 0-14/Working Age Population). In the 1880s and 1890s this was reinforced by the rapid decline in settler fertility (later chapters).

There is a strong case to say that fertility declines in the late Victorian era were rapid by the standards of that day when there were no effective fertility regulation technologies as we know them today. Yet, the values and norms of settler Pākehā changed dramatically and they then implemented the fertility regulation strategies into which they were shifting – marrying later and more women remaining single – to tighten down the nuptiality valve to bring them close to the patterns seen in 'Mother England', and then even to drop below England. In quantum terms this was a large shift in reproductive patterns – it took Pākehā women from hyper-fertility to the middle range of rates. This was a decrease between a TFR of 7.0 per woman and one of 3.00 between 1876 to 1901, from the highest level in the industrialised societies to second to lowest, all just in the duration of 25 years.

Economists have focused on the financial and trade aspects of the economy to explain the long depression and the recovery from it. Easton (2020: 157) shows that debt servicing was 'slightly lower' than those for 'British, American and Australian-state levels'. By 1895-1905 output had doubled per head. 'Pākehā New Zealanders at the turn of the century were probably among the best-off people in the world' (Easton 2020: 202). The evidence suggests that price fluctuations 'largely reflected changes in prices in Britain' (Briggs 2003: 71-72). But, when peopling factors are examined, another additional factor can be seen. The hyper-fertility of Pākehā, evident from the first data in the 1830s, but dropping rapidly, especially 1891–1901, had put enormous child dependency burdens on the population. This had been mitigated at a macro-level by the 1860s' and 1870s' inflows of migrants. But, at a micro-level, in households with children who were increasingly likely not to die at childhood ages, there were large families whose consumption levels had to be high simply to meet their basic needs. There would have been little left for extras, for discretionary expenditure, or for household savings; investment would have been a roof on their head and a horse and cart for transport. By the mid- to late-1890s, British prices were improving, but Pākehā households would also have been declining in size and thus had that little extra for discretionary expenditure or savings.

These same children would, of course, also have been unpaid members of the family workforce. This effect would have continued after fertility rates declined until the children reached adulthood. At that stage many would have replaced their parents as farm owners. Others would have worked away from the farm in the expanding secondary and tertiary sectors.

Longevity and survivorship were covered in Chapter 11, but there is a distinctly economic aspect to this trend that better fits the present chapter. The most sensitive indicators of household wellbeing, a central factor of development, comes in the cause-specific childhood mortality data, for they are primarily determined by socio-economic conditions. These included how much income the family had in the Victorian era, what levels of consumption they could maintain, especially of basic needs, the quality of housing and the number of persons/dwelling, and the public health environment of the household. Health is an integral part of the economic system, very much in keeping with modern thinking (Deaton 2013). Overall, urban childhood death rates were higher than rural. Close contact with other people, sanitation and overcrowding – low by comparison with other Anglo societies but still having some impact – would have been factors in towns, whereas farm families were likely to be separated from neighbours and they had the advantage of being able to turn to subsistence production. Table 12.3 looks at causes of death in childhood with definite demonstrable links to economic wellbeing. All these showed radical decreases over the two decades: there was, of course, virtually no medical preventive or cure for these causes in those days, so the explanation lies in the economy in general and improvements in household living conditions in particular. The infectious causes include influenza, which was going through a pandemic phase in the 1890s, so the real underlying decreases would have been greater than the statistics in Table 12.3 might suggest.

Table 12.3: Childhood (0-4 years) Death Rates by Gender, Selected Causes with Socio-economic Determinants, Pākehā, 1876 and 1896 (Rates per 10,000)

Cause	Males		Females	
Infections				
other than Tb*	66	16	84	18
Tuberculosis	15	3	12	3
Respiratory				
other than Tb				
and Flu	56	43	41	33
Accidents and				
Violence	16	12	14	9
Diarrhoea and				
related	86	30	62	28

*Source: Pool 1985: Table 122. * Includes influenza in the classification used then.*

Tuberculosis, which often takes a more virulent form in children, decreased very significantly. It is very much related to overcrowding, levels of nutrition and general wellbeing. The respiratory causes, linked to household overcrowding including shared sleeping, decreased but not as rapidly. Diarrhoea and related diseases are a function of the quality of food supplies, and the reticulation of water as sewage,

which in cities, particularly Auckland, were highly inadequate (see Chapter 14). Finally, accidents and violence are non-communicable but are seen as ‘external causes’. Their links to socio-economic wellbeing are less direct. In the very large families of 1876, younger children often had to be cared for by older siblings, but with lower fertility the parent assumed more and more of this care – one presumes with greater skill. For all these causes there is not only a density factor but also how many mouths there were to feed and clothe. The trends and differentials in childhood mortality from 1876 to 1896 will be taken further in Chapter 14.

Political and Economic Actors in the Last Two Decades of the Turbulent Era (1870–1890)

Two major sets of actors played seminal roles in New Zealand’s development story over the decades 1870–90. The first, described last chapter, were the members of the ‘Southern Gentry’, relatively few in number yet who made a collective contribution to extensive pastoralism and grain farming in the South Island. Their endeavours allowed this sector to become the anchor for New Zealand’s sustained development until the century’s end, the launching pad for more intensive pastoralism later in the Victorian period and in the next century. The second actor was single-handed, the paleo-Keynesian Julius Vogel, introduced to readers earlier in this book, and possibly the most successful purveyor of what Belich calls the ‘progress industry’ (1996: 349ff). His policy initiatives centred on the emblematic *Immigration and Public Works Act 1870*, buttressed by large-scale loans from the City of London. This was the most specific population policy ever in the country’s history and quite probably its most successful. To the dean of post-World War II’s New Zealand historians, Keith Sinclair (1959: 149-50) Vogel made bold proactive moves: ‘Before Lord Keynes was born, Vogel decided that what was needed to dispel a slump was not economy and caution, but liberality and confidence; not retrenchment but increased government expenditure, which would create contracts and jobs, encourage the circulation of money and extend the community’s purchasing power’. His success was possible, however, only because North Island land had been, and was being, secured from Māori for the huge numbers of migrants who flooded in; the South Island was already almost entirely in Crown or colonists’ hands. Vogel’s actions were preceded by the land confiscations from the wars and succeeded by the predations of the NLC. Both Māori (land lost reluctantly) and the City of London (finance) must therefore be seen as the sources of the capital that brought success to the Vogel schemes: the role of the City is normally underscored, but, by contrast, the contribution of Māori, enforced against their will or by corrupt legalities, is often overlooked – it was their former land that the capital was flowing to with the aim of enriching the colonists and their backers. Together they were to shift the development *loci* geographically back to the North Island, but also to lay down the baselines for sustainable development.

In the 1860s, New Zealand had been almost two countries. But in the 1870s/90s, at least for Pākehā, it started to move in the direction of becoming one country again. Politically, a first step was the abolition of the Provinces (1876), although the residual effects of different laws and regulations in areas such as land were not finally eradicated until the 1890s and statistics relating to them and their successor-territories continued to be published until after World War II. ‘Shell’ Provinces lived on as Land Districts until after World War II (McKinnon 2012).

Dispossession from Māori did not necessarily translate into gain for settlers. Many colonists were under-capitalised, and the vast Hawkes Bay, Wairarapa, Rangitikei or South Island runs freely available for purchase or leasing in the first two decades after Waitangi were not again available and thus a memory. Newly available holdings were smaller than those leased or owned by the Southern Gentry. In the North Island, moreover, it was not simply a matter of firing the native tussock grasses and sowing grasses, the South Island inland practice, but involved heavy work clearing, then firing, then sowing, and then the expenditures involved with stocking. Furthermore, much of the North Island that was being alienated from Māori consisted of weak mudstone sub-strata and hill country with intensive local relief (Introductory Map 3). Even in the rolling or swampy Waikato there were difficulties, and a multi-dimensional poignant story emerged. For their part, the dispossessed Māori were barely subsisting on small plots of land, or had been pushed across into the King Country, which was still really outside *de facto* Crown control. As a consequence, their lives had been rendered miserable; similar stories could be told for the Taranaki Māori expelled into hilly, infertile inland Taranaki, or for the Bay of Plenty Māori leveraged off the more fertile coastal strips. Neither was the dream of property-ownership necessarily to come true for the soldier-settlers allotted the land displaced from Māori by confiscation. Many were under-capitalised and often had to sell on their allocations to the very same Auckland speculators who had pushed Grey to invade the Waikato in the first place (Wood *et al* 2008; Belich 1996: 230, 358). Thus, as Vincent O’Malley (2016: 464-69) points out,

‘[C]onfiscation literally did not pay... The confiscation of the Waikato had been of little tangible benefit to the government, at least in financial terms, and the same could be said for the average settler. About the only group to do well out of it was a handful of wealthy Auckland businessmen and “capitalists”.’

In the decades 1870–90, Pākehā were still subject to both national and sub-national demographic turbulence. Around 1876 fertility rates were still at peak levels but fell thereafter. At almost the same time, in the early 1870s, migration inflows reached the second of their bi-modal peaks. Both of these declines presaged

continuing decreases, eventually to reach low levels that lasted, for fertility rates, until the Baby Boom, and, for migration, until the 1970s. As a result of these trends a demographic transition of a more fundamental sort was happening among Pākehā and would determine the structure of their population from that time forward. Although New Zealanders think of their Pākehā ancestors as overseas-born, in reality, by 1886, merely a decade after the Vogel scheme inflows were drying up, they were New Zealanders by birth. At that census, already a bare majority of settlers had, in fact, been born in Aotearoa (52 percent), with a higher proportion (57 percent) for females. Even more fundamentally, but not surprisingly, 90 percent of Pākehā under 15 years of age were born in the colony. Into the interwar years, these birth cohorts of the last part of the nineteenth century, were large and born in New Zealand. They were the factors that were to drive New Zealand's eventual real, sustained demographic dividend through recolonisation (see Chapters 14 and 15), as against the transitory migration-based dividend of the 1860s and 1870s.

At a sub-national level, relatively speaking, Auckland did not benefit as much as some other provinces from the Vogel scheme. Once it had been New Zealand's prime port for immigration and disproportionately the place of residence of the foreign-born and would eventually be so again in the twentieth century. In 1840, almost three-quarters of New Zealanders, then mainly Māori, had lived there; in 1851, 35 percent of Pākehā lived in Auckland Province. We have more data for 1858, when 31 percent of Pākehā were counted there, as were 29 percent of the foreign-born. This was true, incidentally, for two-thirds of Māori, so half of all Aotearoa's people were in that region. After 1858, its settler population dipped to one-fifth of the Pākehā total (1881), and only then started gradually to regain its former position in national settler demography. In 1881, the colony's foreign-born Pākehā in Auckland was still only 19 percent and by 1891 was down to 17 percent, but up significantly to almost a quarter by 1901, and this proportion increased exponentially thereafter as Auckland itself grew overall. In 1881, there were significant differences in the proportions of the overseas-born residing in various Provinces: Otago led, Canterbury was next, then Auckland, Wellington and, finally, all the others combined (Pool 2015b: Table 3).

To sum, the economic data presented above reflected the first two of the themes outlined at the start of this section of the chapter. In the 1870s, GDP grew at seven percent per annum, although per capita growth was much lower (one percent) because of the Vogel scheme migration inflows and the hyper-fertility of the colonists. In the 1880s depression, GDP grew by 2.5 per annum, but per capita GDP declined slightly. As a percent of GDP, exports moved closer to imports in the 1870s, and from the mid-1880s until about 1920 significantly exceeded imports in almost all years. The mix of commodities exported were determined by the shift from products of 'quarrying' to those of more sustained development: thus the extractive industry, gold, decreased in share, while pastoral industry's wool rapidly increased as a percent

of the total in the 1870s. In the 1880s its share of the total was joined by meat, and then in the 1890s by dairy products. By the mid-1870s the United Kingdom was receiving 50 percent of the colony's exports and, from the late 1870s until the mid-1950s this was to be 70-80 percent (Briggs 2003: Table 4, Figures 28, 29, 31). Finally, the Pākehā population distribution started to turn back towards the north as the wars finished, and production increased.

Looking back, colonial life – whether the focus is Māori or Pākehā, and whether the factor is the economy or the society – seems to have had contradictory patterns coursing through it. Although they were a declining marginalised minority, Māori still made the most significant contribution to development – by default, through losing much of their capital, by means that were not of their choosing, and from which process they gained little. Pākehā were the beneficiaries of the Māori displacement and went on to thrive, at least collectively. As Table 10.1 showed, because of the massive losses in the South Island, 65 percent of the area Māori controlled had been taken by 1860, but this displaced only 17 percent of Māori. By contrast, the bulk of the Māori people were affected by the land losses after 1860, 72 percent by 1910.

Māori responded by building a marginalised hybrid economy, largely beyond the purview of the colonial Treasury's accounts. Consequently, much of the conventional story about the colonial economy discussed above has had to underplay a parallel economy of unknown proportions, largely outside the monetised sectors, yet also excluding the massive transfer of capital in the form of land. As Māori population numbers decreased absolutely and they became a tiny minority this economic contribution disappeared even further away from national accounts and out of the view of many Pākehā. There is thus a quantum imbalance in our perceptions about the causes, trends and consequences of turbulence in the pre-1840 and post-1840 periods, although in both cases the situation is seen through a European lens.

For their part, the colonists often turned their backs on 'Mother England' and saw themselves as different from, and 'better' than the folks in the 'home country'. Yet, the settlers were dependent on large flows of imperial military manpower to defeat the Māori. In the event, this was never really achieved by guns but eventually to be realised by 'swamping'. Throughout the period, colonists were also highly reliant on flows of financial capital from London, to annex the colony, fight its wars and then to build its basic infrastructure. For every social and health index, there was a quantum gap between the Pākehā colonists, who for those days were well-off, and the marginalised indigenous people whose very survival was threatened, even in doubt. Pākehā were also advantaged by comparison with their peers in the 'old country'.

The next few chapters document how and why New Zealand moved away, to a degree from these contradictions. They also record the way in which the country

shifted, relatively speaking, from turbulence into stability, both demographically and for its development path. And they analyse how it became more egalitarian, without a British-style aristocracy, or an absentee property-, or estancia-owning class that emerged in parts of Australia and the southern cone of Latin America.

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¹ For this observation, thanks are due to Les Oxley, Economic historian, University of Waikato, personal communication.

² As a side story, Māori in Thames gained revenues from ‘royalties, rents and licenses...’ (Easton 2020: 127).

³ By contrast, from 1890-on right through to 2000 real GDP grew more monotonically, largely free of the extreme peaks and ebbs of the Turbulent Era.

⁴ I am grateful to Phil Briggs, personal communication, for this information on exports and imports by port.

⁵ Because of a lack of period-specific data on all the different modes of production, this map must be accepted as impressionistic rather than precise. A major issue, for example, is that confiscation or sale did not immediately end Māori occupation. Another is that pockets of intensive farming occurred in ‘Quarrying Zones’.

⁶ Later chapters will show that in the 21st century, however, the formerly isolated southern lakes (e.g. Wakatipu) moved the loci of development south again as tourism and leisure centres, but in competition with eastern Northland, the Bay of Plenty-Volcanic Inland Plateau, and the metropolis of Auckland, all of which northern areas combined tourism-leisure with more basic economic functions (e.g. as import-export shipping ports, and in Auckland’s case as the countries major commercial and communications’ hub).

PART FOUR: The 'Comfortable Country' 1880s/1890s–1970s

Chapter Thirteen – ‘The Ideal Society and its Stabilisers’¹: Overview c.1880–c.1980

Interactions Between Population and Development

James Belich (2001: Chapt 14) depicted the era in New Zealand from 1880 to the 1970s/80s as one of ‘recolonisation’, a usage I am happy to adopt here as it identifies, at least for Pākehā, the dominating events and the ethos of the era lasting from the later part of Victoria’s reign until almost halfway through Elizabeth’s. It involved, as his descriptor suggests, the attempt to snuggle up closely to the metropole, and in the process, to valorise all things British.

The present chapter identifies commonalities across the era, divided into three sub-periods: (i) up to and including World War I and the ‘Flu pandemic immediately after; (ii) the interwar years; and (iii) the Baby Boom following World War II. These divisions fit well with the Pākehā experience, but less closely for Māori, whose history was effectively dichotomised into two parts: up to World War II; and from then on until the 1970s. But much of New Zealand’s story in this era was that of Pākehā, who were the dominant partners in a heavily imbalanced bi-cultural settler-society. How Māori population trends challenged this comfortable hegemon became important in the post-World War II period.

The next few chapters will describe an era of *relative* demographic stability, above all in Aotearoa’s basic population geographic and settlement patterns. I cannot stress enough the significance of these socio-spatial structures, which persisted from the end of the nineteenth century until 1970 and underwrote the main factors of social and economic organisation. Spatial organisation provided the glue that held recolonisation together over about 70 years. Effectively, the functions of recolonisation were implemented by how the society and economy were organised geographically. From 1900 this spatial organisation changed gradually but never involved a realignment of the sort seen since 1970. To add to this situation, net immigration rates were low. And apart from the aberrant Baby Boom, which played out for only the latter part of the era, it was a period in which fertility rates were declining or low, presaging the very low levels seen since 1973–76.

The shift from the first *Turbulent Era* into *Recolonisation* seems to have been associated with changes in normative values reflected in demographic changes among Pākehā. This sort of intersection of demographic and other material changes, with values-shifts also recurred in the 1970s at the end of recolonisation. A sort of prelude to recolonisation materialised: first, a radical decline in the sizes of migratory inflows, followed by a brief outflow (Farmer 1985: Fig 14); secondly, and almost simultaneously (but more importantly), ‘family values’ shifted from a colonial marital regime, which had been markedly different from Britain’s, to patterns prevalent at

‘Home’ in Britain (Pool *et al* 2007: Chaps 3 and 4). This swing to British patterns of nuptiality coincided with other values-shifts that Belich identifies (2001: 30):

‘[R]obust and ruthless town- and camp-led progress was written out, steady and farm-led progress was written in... relations with Britain became more deferential...sub-nationalist...[a] permanently junior partnership...’

In the 1880s, recolonisation was ushered in by New Zealand undergoing radical alteration from pre-industrial modes of extensive pastoralism (ranching for wool) to intensive industrial forms (dairying and sheep meat production), facilitated by new technologies and genuine land reform. Throughout its duration as an era, in order to succeed recolonisation remained underpinned economically by pastoralism (Michael King 2003: 237).

Macro-theory does not help explain this shift; micro theory may eventually play a role after a range of qualitative sources, such as personal letters, have been analysed more systematically. A clue may come from a demographic transition in the 1870s. One could also take an economically deterministic position: from the 1870s, higher proportions of New Zealand commodities were exported directly to British ports. But, its antecedents were the Vogel schemes of the early 1870s, which imported the human capital that would drive development and laid down the basic pre-automobile infrastructure that was to facilitate production and export to Britain.

‘Britishness’

In James Belich’s analysis, New Zealand’s recolonisation constituted ‘a renewal and reshaping of the links between colony and metropolis after an earlier period of colonisation’. In many senses, ‘Pākehā-ness’ rooted in ‘Britishness’ was the most defining aspect of the country’s population and development, certainly from 1880 for 100 years.

For Pākehā settlers, Britishness truly permeated the entire life of the country, from main street to farm. Just before Christmas 1922, in the heyday of recolonisation, an Auckland department store, which ‘has been doing Christmas since 1880’ [and is still successfully trading], could proudly proclaim its sourcing policy: ‘ “First of all, the point should be emphasised, to the fullest extent possible, Smith and Caughey’s stocks are of British manufacture” ’ (Knight 2017: 14). A popular toothpaste proclaimed it was British to the ‘t. Eminent French-born artist, Louise Henderson (n/d) commented, ‘When I came [to Aotearoa] in 1925 New Zealand was very tied up in English art really’. The links with ‘Home’ drove development, and also strongly affected demographic patterns and trends. Over almost a century, from the 1880s/90s to the 1970s ‘New Zealand became the town-supply district of London. London became the cultural capital of New Zealand’ (Belich 2001: 29-30).

The Pākehā hegemony seem to have vested on itself not just ‘Britishness’ but in being itself as a clone of ‘Mother England’. New Zealand most certainly placed

itself emotionally as close to ‘England’ as distance across the globe would permit. Brian Easton comments ‘Ironically then, New Zealand became more tied into the ‘mother’ country, even as the population became increasingly less dependent on her immigrants. But the ‘Mother Country’ model was England, not so much other parts of the British Isles. Phillips observes: “The first half of the [twentieth] century also saw strengthened impact of British, or rather ‘English’ culture, on New Zealanders”’ (Easton 2001: 23-24, citing Phillips 2000). In the 1920s, the grandson of an Ulster immigrant, writing about *Home*, said ‘Ulster was a shadowy place. England and English things were always before my eyes’ (Phillips and Hearn 2008: 181-82). Recolonisation was reinforced by hyper-British dependency. For example, there were differences in policy stances between Australia and New Zealand in World War II. To protect its Asia-Pacific front, Australia withdrew its troops from the Middle East and Europe, whereas New Zealand formed a large Division in 1939, that stayed in the Middle East European theatre of war until the very end of the Italian Campaign in 1945, while the ‘home front’ was reliant on American troops.

Throughout much of the era of recolonisation, Māori were, to a large degree, ‘out of sight, out of mind’ or seen in a negative light. In 1897, a leading newspaper, *The New Zealand Herald*, could report, ‘The great body of Europeans throughout the colony now regard Māori with indifference... They look upon them as an obstacle to the spread of settlement, and so far a drawback to the colony’ (Matthews 2018). There is even something of a dearth of data on Māori in some parts of this epoch, especially in the interwar period. Yet, with little recognition, and limited support from the majority of New Zealanders, Māori were laying down their own peopling and development strategies that provided a potential that became manifest, demographically and then economically, after World War II. This Pākehā hegemony, plus Māori ‘recuperation in isolation’ (Pool 1991) ultimately affected the general national development paths as well as their own evolution. Recolonisation is not an apt descriptor for the experiences of Māori in that era. But it is useful as a name for the era for the country as a whole, even though the main events were being shaped by Pākehā. Māori did not have a Baby Boom *per se*, but their opportunity structures were moulded by what Pākehā were doing and thus what was happening in the society as a whole in a period known as the Baby Boom.

Spatial Stability, Slow Growth

It may seem inexact to call recolonisation a stable era, whether for New Zealand or other countries. Nevertheless, the economic geography and its attendant settlement patterns remained intact, not with exactly the same metrics but with the same basic structures. Geographically, these structures were hinged on four major export ports and a number of smaller ones which still played instrumental trading roles directly with Britain until the late 1960s. Together they shipped pastoral commodities to

‘Mother England’, receiving back its manufactured goods. The same bi-directionality was seen further down the settlement hierarchy: urban areas, towns, villages, hamlets and, ultimately the family farm.

The key to settlement patterns was pastoralism that had been intensified from the 1880s, a shift made possible through freezing, dairy processing and milking machine technologies, plus real land reform legislation (Greasley and Oxley 2005, 2009). Together, these factors created and cemented in New Zealand’s iconic regime of family-owned and operated farms in what was probably the country with the highest average standard of living globally – at least as late as World War II. New Zealand’s recolonial industrialisation was based on scientific pastoral production, by the huge advantage that animals did not need to be housed indoors in winter and by the processing of farm products; the next step on in industrialisation – value added by manufacturing – was not then a feature of Aotearoa’s secondary sector. By contrast, the other Anglo settler-societies also established heavy and textile industries alongside relatively advanced farm sectors. Rural New Zealand had a different tenurial system than that found in Australia and some other settler-societies.

During recolonisation, gradualism characterised New Zealand’s population geography. The population redistributed northward, so that over 40 years (1936-76) the former Auckland Province’s share increased, especially its larger urban centres, a driver of the ‘drift north’ being the expansion of the Auckland metropolis. By 1910, it had become evident that the survival of Māori was guaranteed. The inflection point had been largely achieved by Māori themselves, by Māori medical practitioners in the new Department of Health’s ‘Māori Hygiene Division, and by community health programmes (Pool 2016). Their survival probabilities and longevity improved gradually through to mid-century, at the heyday of the Welfare State, when public health projects were embedded into social welfare. It was also the era – 1940s-60s – when Māori urbanised rapidly.

During the recolonisation era there was profligate despoliation of large areas of the national estate. From the 1880s, the destructive extractive industries were no longer of great significance, but pastoral farming was also exploitative of the natural environment, by cutting the ‘bush’ (forest and scrub) and firing it, in a way which was particularly rampant in this era; the ‘bountiful New Zealand ideology’ still reigned, so there was no need to curtail the ‘clearing of the bush’. Charles Crothers (1985: v 2, 170, 180-82) shows that ‘Although there were occasional shocks to this viewpoint, particularly as massive soil erosion spread in some areas, these were easily explained as anomalies arising from the wild, untamed nature of the environment, rather than reflecting deep-seated environmental limitations. ‘Even in the late twentieth century the full extent of this exploitation was still to be appreciated, as further pastoral intensification, especially in the less humid eastern regions of New Zealand, raised new issues of environmental deterioration. The increasing problems of social density

(intensity of use of an area by people) coming from recreational use of the land, as against the low levels of physical density (number of people per km squared), added to this, although this issue would not become really critical until the early twenty-first century, when international tourism inflows rocketed.

For much of the period 1880s to *circa* 1970 demographically Pākehā New Zealand had all the hallmarks of a slow-growth population (by comparison with what had occurred in the Turbulent period): declining and low fertility, and low rates of net immigration. This slow growth was partly offset by low mortality and momentum effects as the migrants of the past and the large birth cohorts of Victorian settler New Zealand moved inexorably up through the various life-cycle stages, on the way bequeathing an ‘imperial’ demographic dividend that aided development, or at least modest economic growth sufficient for New Zealand to be less affected in the 1930s Depression than were other countries. It should be stressed that demographic dividends are not just something that have emerged at the end of the twentieth Century but have always occurred from time to time—although not all have been so well utilised.

Nevertheless, recolonisation was not uniformly stable across all its decades. Above all, out of the blue from the 1940s to early 1970s, the WDCs, including Pākehā, went through a Baby Boom. In fact, Pākehā indulged in the longest, highest and most intense Baby Boom in the WDCs in terms of duration, fertility levels, timing of pregnancies (age at birth), and spacing (interval between births). At that time, fertility was not just the driver of growth, but also of demographic fluctuations. Yet, the basic population geography of recolonisation continued on merely changing gradually alongside this mega-reproductive phenomenon. The Baby Boom is so enigmatic in many different ways that it is accorded a somewhat longer chapter in this book.

Manifest Indicators of Recolonisation

From the late 1870s on, Pākehā New Zealand was searching for factors to induce stability and homogeneity, at least relative to what had gone before. These two objectives were achieved in part as Māori became more or less ‘policed and managed’, and, anyway, had disappeared out of sight as a tiny minority. By 1901, Aotearoa was virtually a settler country comprised of British-descent peoples, although the status and position of Māori was acknowledged occasionally in token and even seminal ways². Recolonising by Pākehā – moving back into Britain’s fold – would complete the picture. The first manifest transitions of this were demographic, as Pākehā reached out to the ‘mother country’ to adopt its reproductive patterns. This was achieved mainly by shifting from almost universal marriage for women, at young ages, the pattern up to the 1880s, to later marriage and increases in celibacy, until the onset of World War II. Why such a profound value-shift occurred is not particularly

clear although later I speculate about changing educational and work patterns. But what is a powerful indicator of major values-shifts away from the norms of colonial life, comes from the fact that this trend was not restricted to Aotearoa's Pākehā, but was seen across the Anglo-settler societies (Chapter 3; Festy 1979). Thus, it seems to have marked a much wider cultural transformation that strongly favoured links to the metropole and, with it, certainly in New Zealand's case, a decidedly deferential attitude to the motherland, but – almost counter-intuitively – buttressed by a shift towards the independence that expanding opportunities afforded women.

The change in reproductive patterns and the attendant wider value-shift emerged, paradoxically, at the very time the migratory links to the United Kingdom were slowing down, and, as a result, the percentage of Pākehā who were foreign-born was diminishing (Figure 4.3). The rates, and even absolute numbers of net migrants, particularly in the quinquennia 1860-65 and 1870-75, were not to be reached again until after the recolonisation era, in 1970-75, 2001-05 and in the 2010s.

Geographically, within New Zealand, there was another demographic shift that ushered in recolonisation. After an initial jump in levels of mobility before the nineteenth century's end, Pākehā internal migration rates (inter-provincial) remained low throughout the era, including during the Baby Boom. Moreover, the broad settlement patterns – rural, small town and urban networks – remained remarkably stable until the end of the Baby Boom and underpinned the way in which recolonial New Zealand was organised socially and economically. These networks allowed the collection of raw products and their processing and exporting to function effectively, and the importing and distributing of British manufactured goods to be achieved. Moreover, urban-rural age-structural and fertility differentials (see next paragraph), generated a 'reserve army' of potential workers in rural New Zealand who, by moving to towns and cities, recharged the workforces – and the parenting age-groups – of urban New Zealand. This was a commonplace trend across the Western Developed Countries (WDCs), as documented for Europe. As a consequence of this shift, there were other population geographic changes gradually evolving that presaged the radical spatial restructuring since 1970, notably the increasing concentration of populations in the north.

Rural New Zealand's demographic structures differed markedly from those seen in its larger urban areas; small town New Zealand was closer to the neighbouring countryside areas. Rural and small-town New Zealand were the prime agents driving its population growth and redistribution. This was also despite the fact that, in the Baby Boom, even metropolitan couples had larger families than they had had earlier in the recolonisation era or have had since. Once rural New Zealand's reproductive capacity decreased, from the 1970s on, national growth rates decreased and in the longer run, at least until the 2010s, declining fertility was not compensated for by high levels of net immigration.

Along with this there was increasing urbanisation and metropolitanisation. During recolonisation, city growth through migratory inflows was mainly New Zealand-sourced, whereas, since the 1970s metropolitan influxes have come from overseas migrants.

From the early 1880s, faster shipping and the freezing of meat carcasses changed New Zealand for ever. Dairying also became export-oriented, taking advantage of chilling to get these perishables to England. Butter and cheese processing factories sprung up across the land. Dairying entered the industrial era in steps. At first, the milk, drawn from the cows by hand by dairy maids, was taken by cart to the factories. But, by the early twentieth century Alfa-Laval machines were replacing the women milkers, who often moved into urban unskilled factory and retail jobs. This technological shift provoked a quiet gender revolution, documented by Melanie Nolan (2000: 15), alongside the higher profile suffragette movement.

New Zealand's domestic arrangements also fitted a bigger imperial picture. From the late Victorian period, until 'Mother England' finally rejected New Zealand to join Europe, the country was embedded with Britain, straining to be one of its most functional, loyal and intimately linked organs. English-speaking white South Africa and the overwhelming majority of Australians were also still attached to 'home', although perhaps not as inter-dependently as New Zealanders. Canada was geographically much closer, and English speakers saw England in this way, it was less tightly tied to the 'Home Country'.

Throughout recolonisation, Pākehā implemented a rather different economic agenda from that which had characterised the colonial era. The macro-trends that New Zealand followed during recolonisation are parameterised superbly in three figures in Phil Briggs' short but very focussed economic history. He demonstrates the overwhelming importance of pastoral products in New Zealand's exports over all the years of recolonisation, in contrast with the 1860s and before. The dominance of grazing as the base of the economy, started briefly with wool first in the 1850s, but was superseded in the 1860s by gold. Then in the 1870s, wool once again nudged out the heavy dependence on gold. From the 1880s, meat and dairy products joined the grasslands' product trade mix, which at times almost reached 90 percent of total exports. But, by the 1990s after recolonisation, forestry and fishing had come back into the picture, a reprise of the reliance on forest and maritime products that had been important at the start of the turbulent era (until the early 1850s) (Briggs 2003: Figure 29, & p.5).

The dominance, then decline, of grasslands' exports almost correlated in time with the trends shown in what is arguably Briggs' most spectacular graph: the destinations for goods, which from 1870 until the start of the 1970s – that is throughout the recolonisation period – was overwhelmingly the United Kingdom. It often topped 70 and 80 percent and even touched 90 percent (Briggs 2003: Figure 31).

Before recolonisation, Australia had been the preferred destination, although Briggs notes that some of this may have been trans-shipped.

Recolonisation as a Descriptor for the Period 1880s–1970s

The word recolonisation does not apply to Māori. It is a bit like the descriptor given to the period 1944–73 – the Baby Boom. Māori lived through the recolonisation and Baby Boom epochs, were tangentially affected by them, but, in essence, they were really Pākehā experiences. But is ‘recolonisation’ even an appropriate term for the evolution of Pākehā society over the century 1880–1980? Is my argument that this was a period of relative stability between two eras of turbulence justified?

In looking at this era, one confronts something of a paradox. It is a period of slow change verging on stability – not perfectly so, but comparatively so, at least relative to the turbulence which went before and since. Nevertheless, as was noted above, during recolonisation New Zealand was hit by truly major ‘shocks’ mainly coming from overseas. These were wars, none of which (unlike the 1860s) involved campaigns in New Zealand itself. The Great War (1914–18), followed by the ‘flu pandemic, then the second major twentieth century War, produced the ‘American Invasion’ from 1942–44 – the quartering in New Zealand of large numbers of American servicemen. At its peak this was equivalent to three percent of the total New Zealand population, and was heavily clustered around Wellington and Auckland. Not all ‘shocks’, however, were provoked by external forces. Entirely home-grown were the post-war acceleration in Māori rates of natural increase to reach almost biological maxima, over four percent per annum, plus the rapid influx of Māori into cities.

Although ‘stability’³ has some appeal to describe this period, the more apt term is recolonisation. This is because it fits more with the ethos and life-ways that characterised the period, incorporating as a given, as it were, the spatial factors just noted. The term was first used, it seems, in James Belich’s *Paradise Reforged*, defined as ‘a renewal and reshaping of links between colony and metropolis after an earlier period of colonisation.’ In a more recent book, *Replenishing the Earth*, he refines his definition to see recolonisation as a process that followed “‘explosive colonization”, which compressed time and supercharged growth, allowing cities like Chicago or Melbourne to sprout in a single lifetime...’ He contrasts this with “‘re-colonization”, which compressed space and reintegrated settler-colony and metropolis, giving London and New York the extra hinterlands they needed to grow into mega-cities so early’. Recolonisation was not unique to Aotearoa. Belich shows that recolonisation was a feature of all the Anglo settler countries, albeit varying in detail. Even South Africa, while it was culturally dichotomised because of its white ethnic make-up and its establishment of an extreme, highly formalised racial order,

was still linked economically to the metropole. ‘In 1913, 88 percent of South African exports went to Britain’. Moreover, what I have termed the ‘turbulent period’ until about 1880–90 could be seen as a local variant of the preceding epoch, ‘explosive colonisation’, which was also experienced in various ways across the other Anglo settler countries (Belich 2001: 29; 2009: 9, 386 & *passim*).

The later years of the Baby Boom are pivotal in how recolonisation ended. As I have noted, in one sense the Baby Boom, certainly its reproductive manifestations, was aberrant, albeit rendered possible by the carry-over of recolonisation’s gender-biased patterns of family organisation. Yet, in another sense, the Baby Boom, viewed instead as a self-contained epoch, was the bridge between ‘recolonisation and the onset of a ‘neo-turbulent’ period. Finally, and lest we forget, the major ‘game-changer’, the Pill, was introduced at the beginning of the 1960s, at the time of the first peak of the Baby Boom, and was very rapidly adopted by Pākehā (Figure 4.1). As I will note later, it was far more than simply a technology, but provoked multi-dimensional cultural and values-shifts.

Value-shifts Precipitating and Reinforcing Recolonisation

Recolonisation would not have been possible without a major ideational shift at the end of the turbulent era. I have already argued above that radical changes to the colonial reproductive regime were part of, and indicators of, the transformation in values occurring among settlers in the last 20 years of Victoria’s reign. Belich (2001: 27-31) shows how, for example, earlier there had been some dissonance between colonists and the metropole, such as Prime Minister Ballance’s refusal to send a New Zealand contingent to the 1885 Sudanese campaign. But, by the end of Victoria’s reign this had transmuted into deep loyalty and almost unquestioning obedience to British rule, witnessed by Aotearoa’s enthusiastic participation in Queen Victoria’s jubilee and in both the Boer War, and World War I, not long thereafter, and again in World War II.

Once the transitions in values from ‘colonial’ to ‘recolonial’ had been realised, New Zealand became a society buttressed ideationally by seeing itself as very much an integral part of Empire, a cog in the imperial machine that pivoted on London, but spread across the globe, portrayed by enormous splashes of red on world maps. Curiously, Pākehā New Zealanders were more likely to hold independent ideas and even to behave differently from their peers at ‘home’ in the colonial period than during recolonisation (Belich 2001: Prologue, Introduction). In the recolonial era, loyalty to the Crown and Empire were paramount and had been imbibed since first attending school, which was the cradle for the acculturation of British values. Moreover, the Empire’s ruler was evident to everyone as her/his head was on New Zealand’s stamps and coins, and no function was complete without either a heartfelt toast to the monarch, or by singing ‘God Save the Queen/King’. England was seen as

‘home’ despite disproportionate numbers of the original settlers coming from Scotland and Armagh. Moreover, this was even more peculiar when we realise that most of the people living in Aotearoa in the twentieth century had been born in New Zealand, and many of whom would never ever see the ‘Mother country’. New Zealand’s self-identity was so grounded in and subsumed by ‘Mother England’ that it delayed attaining constitutional independence until 1947, after the other ‘White Dominions’. ‘Empire Preferences’, later to become ‘Commonwealth Preferences’, were an important aspect of its ‘foreign policy’ (Sinclair 1959).

Anglophilia was also reflected in the way Aotearoa’s religious beliefs were concentrated into a few denominations carried across from the ‘old country’, but in part modified by the over-representation of Presbyterian Scots in New Zealand. In a comprehensive study from first colonisation until 1991, Joanne Young showed that Anglicans continued to be just under 40 percent of the population throughout the recolonisation era; 70 percent of people were in the protestant ‘mainstream’ religions (Anglican, Presbyterian and Methodist) and about 15 percent were Catholic (far below Australia or Canada). Persons with non-Christian beliefs or belonging to Christian evangelical or charismatic religions were few in number, and small proportions had no religious affiliation. But, from the end of the 1960s this comfortable pattern of religious adherence was challenged: secularisation, non-belief and proportions of adherents who were outside the traditional mainstream Christian religions (affiliated to emerging evangelical or charismatic faiths), grew significantly (Young 1997: Figure 4.2). In 1966 at the end of recolonisation, 80 percent of New Zealanders had reported that they belonged to one of the four traditional mainstream religions noted above or were Baptists, 10 percent to other religions and 10 percent had no religion; in 2001 only 50 percent were mainstream, and 30 percent reported that they had no religious beliefs.

More recent ideational strands have also had currency in New Zealand. They had their roots in early Fabianism, or the Welfare State legislation of the first Labour Government, informed by Keynesianism, socialism, humanitarianism and a dash of social credit as Keith Sinclair has documented (1959: Chaps ‘State Experiments’ and ‘Social Security’).

Material Ramifications of Values-Shifts

Recolonisation saw changes in the distribution of wealth: '[O]ver the period [until 1939] as a whole, there is a reduction in inequality, most of which came in the 1930s, after a slight tendency for inequality to rise in the 1920s'. Margaret Gault says that, on average, New Zealanders were better-off in the 1920s and 1930s than their fathers had been in the 1880s until 1893. By the early 1900s, a tenurial system that prevailed right up to the 1970s was firmly implanted due to a 'bursting up' in 1893 of the large estates. In 1893, the top 0.1 percent of New Zealand's wealthy (mainly landholders) had controlled 30 percent of the country's wealth (Table 13.1 below); by 1894, immediately following the *Land for Settlements Act* passed that year, this had dropped to 16 percent. In 1882 0.1 percent of landholders had held 16 percent of New Zealand's farmed and residential land, and probably closer to 20-25 percent of the areas into which Pākehā run-holders had moved. By 1911 this was down to eight percent, although this comparison is not entirely appropriate as, by 1911, Māori had been dispossessed of further large areas of the North Island onto which settlers moved (Galt 1985: 19, 27, Tables 3.3 and 11.1). The shift in ownership and wealth was reinforced by the more efficient land-use practices permitted by new technologies. Family farms that were large by global standards, but far smaller than the estates of the gentry, were rendered efficient, operable and productive by the newly available technology. It is to the credit of those landholders that they so quickly took advantage of these possibilities. Of course, ultimately this was possible only because Māori had been displaced from these lands.

Table 13.1: Percentage Share of New Zealand's Wealth held by Each Wealth Group (Selected Years)

Wealth Group	1893	1910	1920	1930	1939	1956	1966
Top 0.1%	30	5	4	3	3	n/d	n/d
Top 1%	65	37	37	28	25	23	21
Top 5%	89	65	62	55	50	51	50

Sources: 1893-1939 Galt, 1985; 1956-66, Easton 1983

Fundamental to farming was tenure, but this is haunted by differences in the way, in a bi-cultural society, each culture viewed property, particularly land. Perhaps, the worst enduring ideational chasm between Māori and Pākehā, with major consequences for the nation has been the area of property rights, an issue that still haunts the public discourse. The 1862 and 1865 *Native Land Act*, which implanted European notions of property, virtually usurping Māori concepts, set the course for

Māori dispossession, described earlier, and allowed the major population and development trends, described across much of the rest of this book (Pool 2015).

The decline in wealth inequalities during recolonisation is also shown by Table 13.1. They show three sets of changes. Most rapid were the agrarian policies of the Liberals having their greatest impact between 1893 and 1910. In Galt's study, covering 1870-1939, 66 percent of the wealthy were landholders, higher proportions than in New South Wales, and far above Britain. By the twentieth century, sources of wealth were far more diversified in the 'Old Europe' as documented by Piketty than the farming that characterised New Zealand's capitalism.

Secondly, the bottom 30 percent of New Zealanders in terms of wealth benefitted from the growth in home ownership, especially in urban areas in the 1920s. In 1926, 61 percent of urban households lived in a dwelling owned with/without a mortgage, although, not surprisingly, this dropped in the Great Depression; rural rates had been higher in 1916, but lower thereafter. Ownership picked up again after World War II, reaching 67 percent in 1956 and 70 percent in 1966. As in other Anglo settler societies – probably more so in New Zealand – households typically lived in fully detached dwellings, increasingly in suburbia, the scene for neo-local residence (young couples living as a nuclear family unit separately from family). Even ordinary householders now needed wills, Galt's source of raw data.

Thirdly, there was a relative loss of equity by the wealthy in the depression, that 'appears to have hit the rich particularly hard...' Easton's data showed that in the welfare state era, which spanned the last phase of recolonisation, there were further reductions in the proportions of the wealth held by the very well-off top one percent (Galt 1985: Tables 3.3, 13.8, 13.11; Easton, 1983: Table 7.3; Pool *et al* 2007: 134-35).

The land reforms are an aspect of recolonisation that represent a marked departure from an uncritical acceptance of all things British. Unlike Britain, the land the vast majority of colonial farmers worked was owner-operated, even before the reforms. With the exception of the era of the 'Southern gentry, who were few in number but briefly controlled huge acreages, Aotearoa's farms were not the vast landholdings of the gentry, nor the 'capitalist' farms of south-eastern England. Many rural-origin migrants came from these areas and arriving as immigrants aspired to a property of their own. By contrast, fewer colonists actually came from the real small 'family farm' regions such as in the Pennines (Shaw-Taylor 2005). The Liberal government's agrarianism also ensured that farm families had reasonable incomes. The family farm was also almost unique internationally in its levels of production per worker/hectare, its adoption of advanced technologies and the investment of profits into cooperative ventures that operated right up the food-chain, even at its endpoint such as the Smithfield Market in London. In turn, cooperatives' profits were also

channelled into other areas of investment, so that eventually agencies that had been established for farm-servicing became more diversified.

In the ‘Motherland’ by contrast, huge estates were still extant. Nevertheless, as Piketty notes, from the early twentieth century British land-based wealth rapidly diminished in significance. To add to this was the loss of power there of the landed classes (Piketty 2014; Cannadine 1990). But, much of their previously land-based wealth had also been diverted to manufacturing, mining and other investment, including plantations overseas. In a peculiar way, this diversion reinforced Aotearoa’s ‘recolonisation’. Britain was now a great industrial nation, and global investor, needing export markets for its factory-produced goods; it also needed cheap and more nutritious basic foodstuffs, meat and dairy products, for its urban working and middle classes. Thus, unlike Britain, New Zealand’s capital assets remained in land and pastoral products, making its wealthier citizens still dependent on farming, on processing farm products or on exporting these, overwhelmingly to the British Isles. Another group of entrepreneurs arose, building their incomes on importing and retailing trade goods predominantly from Britain (Easton 1997; Briggs 2003: Figure 29).

Two ‘game-changer’ events (Figure 5.1) allowed Pākehā New Zealand not only to develop intensive pastoralism out of ranching, but to do so in a rather unique way. In passing, I must stress that this is a Pākehā story, simply because, as Adrienne Puckey (2011: *passim*) shows, with the exception of farming schemes on the East Coast, Māori were largely excluded from either ranching or intensified pastoralism. Māori were, however, disproportionately represented in the ‘reserve army of labour’ that filled the seasonal and unskilled jobs of farming and processing, typically in shearing gangs and as meatworkers even in the South Island. But, for dairying there was less need for Māori labour. As commented on already, at first dairy farmers were reliant on Pākehā milkmaids, but once they had been replaced by the almost ubiquitous Alfa-Laval milking machinery, most intensive pastoralism was carried out on family farms employing their own family members, perhaps also contracting seasonal workers.

A first ‘game-changer’ identified already was refrigeration technology, which allowed the export to Britain of frozen meat, mainly hogget and mutton, and, increasingly, of dairy products. The second, also already noted, was land reform under the Liberals, which ‘dismantled the great estates...’ and set New Zealand somewhat apart from other land-abundant Neo-Europes. Together these ‘game-changers’ established the lowland farming patterns of much of New Zealand – dairying and the fattening of sheep bred in the hilly zones; the major exceptions were the less humid eastern areas of both main islands, and the foothills of the Southern Alps. The drive to intensive pastoralism, and all that this entailed, is an enduring idea that is essential even to an understanding of contemporary twenty-first century New

Zealand's development. More importantly, it facilitated the basic economic and social trajectories that, for better or for worse, have patterned much of New Zealand's development and population geography since. 'Higher farm productivity made possible by closer settlement...' made New Zealand a 'remarkably prosperous economy' (1913 highest HDI, and highest GDP on record in 1938). In addition to New Zealand becoming 'London's town-supply district', dairy and meat exports replaced wool (Greasely and Oxley 2009; Belich 2001: 30). Accompanying this were high levels of urbanisation at a remarkably early stage by comparison with other countries, except for other neo-Europes; of metropolitanisation, and of the increasing dominance of Auckland.

In a sense this was a variant of globalisation, which is an enduring developmental strategy, but that has changed its form. It was evident in the early years of contact in the form of paleo-globalisation, and during the first few decades of colonisation almost as an accidental, highly variable (dependent on commodity and market destination) by-product of the settlement process. Then true globalisation was almost submerged into the 'bi-directionalism' – Periphery $\leftrightarrow$ Metropole – that characterised New Zealand's development over almost the entire period of 'recolonisation'.

The overall levels of mobility and itinerancy that had characterised colonial New Zealand seems to have declined during recolonisation, at least as far as can be judged from inter-provincial migration. Briefly, rates were high in 1891–96, when the 'drift south' reversed somewhat abruptly, when Dunedin was the primate city, as is seen in Table 13.2. But internal migration never reached those levels again until 100 years later, after recolonisation in 1991–96 (Brosnan 1986; updated Pool 2002: 10). The late Victorian brief upsurge in internal migration had, however, initiated what was to be a long-term redistribution: turning the population's epicentre around, northward again. It brought to an end the three decades' movement southwards in regional distribution that had unfolded from the 1860s until the 1890s (Figure 4.3). Associated with this was increasing urbanisation and later metropolitanisation, but, as Table 13.2 shows, this entailed a switch to Auckland as the leading city.

During recolonisation there were also two waves of suburbanisation, the first based on the limits of public transport (trams, ferries, in the interwar years), and then post-war extensions to this made possible because of car ownership. Regionally, the dominance of Auckland Province and its subsequent equivalent areas emerged gradually (Figure 4.3). The spread of population across smaller cities and boroughs, especially secondary seaports, was more even than it was to become from the 1970s on. Thereafter, the population increasingly concentrated in the north around Auckland, whereas centres that had made showy starts, such as Nelson, fell by as others flourished through the twentieth century.

Table 13.2: Increasing Metropolitan Primacy of Auckland: Ratios of Other Metropoli to Auckland (=100), 1891–2013, Selected Years

Year	Primate City		Second City		Third City	
	City	Ratio	City	Ratio	City	Ratio
1891	Dunedin	100	Auckland	92	Wellington	72
1921	Auckland	100	Wellington	68	Christchurch	67
1951	Auckland	100	Wellington	63	Christchurch	53
1981	Auckland	100	Christchurch	42	Wellington	42
2013	Auckland	100	Wellington	27	Christchurch	24

Source: Watson 1985: v 1, Table 64, updated to 2013

Over recolonisation New Zealand was indeed a ‘comfortable country’, at least in terms of the dynamics within Aotearoa itself for the 92 percent of people who were Pākehā, most of the rest being Māori plus a small smattering of others. It did tend to be emotionally subservient to English values and England itself, summarised in the phrase ‘colonial cringe’, coined in post-war Australia. Paradoxically, recolonising New Zealanders could also be a tad smug, seeing themselves as superior to ‘Poms/Pommies’ (Australasian slang for English people – etymology disputed), sometimes for valid reasons. As a country, New Zealand was among the most well-off economically; life expectation was among the highest anywhere, but even so improved gradually. This trend was reinforced by the combination of the almost (but not quite) universal free health care, the plethora of health and social welfare regulations introduced in the 1940s and 1950s, and the post-World War II chemotherapeutic revolution⁴. To add to this, the welfare state, first laid down by the Liberals at the start of the era and extended in the 1920s, then becoming very comprehensive from the 1938 *Social Security Act*, gave its citizens among the best forms of protection against sickness, poverty, inadequate shelter and unemployment anywhere – at that time. By 1913, New Zealand was one of the most heavily unionised countries, with compulsory membership legislated in 1936.

The Underbelly of Recolonisation

There were, however, downsides in the ‘comfortable country’. Until the 1938 *Social Security Act*, Māori were markedly deprived and marginalised. There was never the degree of discriminatory legislation and statutes seen in South Africa, many United States’ states and even federally, or Australia, or Canada. There were, however, significant levels of intermarriage, as John Harre showed, and, in some regions, frequent interactions at a personal level, such as in sports’ teams. Aroha Harris reviews the complexities of these interactions, especially as manifested through sport (Harre 1966; Harris 2014: 358-67). However, there were some measures that were

highly discriminatory: Māori were not covered in the pensions legislated by the Liberal government; Māori returned servicemen were not eligible for state support after World War I, nor access to ‘rehab’ farms; unemployed Māori men – and all women – initially were not eligible for unemployment relief for part of the depression (Harris 2014: 270); and other services, notably in the finance sector were outside the reach of Māori, and may be still problematic in the twenty-first century.

Despite entering this period as the beneficiary of a true universal franchise, recolonising Aotearoa was a gender-segregated society, a social feature that, if anything, became even more entrenched in the Baby Boom, when women were bound as young mothers to the suburban housing estates of the day. It almost seems as if recolonisation involved the re-adoption of what were assumed to be British family couple relationships as well as family formation norms. The sort of ‘recolonial’ ideal was a British middle-class family as portrayed by the stereotypes held in New Zealand. But the fact that couples and the wider society attempted to match that stereotype provided one of the stabilisers in this period. As King (2003: 374) says, ‘New Zealand society continued to believe that a woman’s place was in the home’.

At the 1911 census, 43 percent of young women aged less than 25 years were in the labour force, but this was true for only 20 percent of all women aged 25-64 years. Lisa Davies in her *Women’s Suffrage Centenary* project showed that, from the first available data until the 1970s, Pākehā female labour force participation followed an ‘J-shaped curve with labour force activity being most common among teenage women and women in their twenties. ‘Re-entry’ to the labour market after marriage and childbearing was infrequent at this time’. Participation ‘was most common among women aged 15-24 years and was limited to unmarried women’. As observed in all Anglo societies, an ‘M-shaped’ curve was to develop in the 1970s. Māori women had similar patterns, but with much lower levels (Davies 1993:69).

Looking back, Pākehā society then seems narrow-minded and smug. There was a great deal of informal and formal social control, and prejudice against those who breached Pākehā moral standards. Belich looks at the paradox that ‘first wave feminists’, who led the female suffrage movement, were also very prominent in the moral crusades of the period. Fertility was central to ‘moral harmony’ (Belich 2001: Chapt 5). Ex-nuptial conception, unless followed by a precipitated marriage (and a surprisingly robust, heavy, ‘premature baby’ a few months thereafter), was deemed almost a cardinal sin, yet, as ‘Peter’ (E G) Jacoby showed (1961), it was far from rare. To add to this, ‘moral panics’, typically surrounding sex, were not infrequent phenomena. They ranged from anxiety about the fertility declines around the dawn of the twentieth century, to crusades addressing exaggerated claims about abortion rates (1937, the McMillan Committee, Sceats and Pool 1985: 187-88), to a virulent debate, in the absence of hard data, about abortion in the 1970s. The 1937 Committee came out with interesting recommendations, seeing a need to increase fertility rates (TFRs

at that time were right on replacement, 2.1 births per woman) and suggesting a universal family benefit as an incentive. No panic, however, achieved as much as the *Report of the Special Committee on Moral Delinquency in Children and Adolescents* (1954), detailed in Chapter 17 (Sceats 1988: *passim*; Pool *et al* 2007: *passim*).

Recolonisation also effectively altered New Zealand's patterns of outreach overseas which had dated from the paleo-globalisation that had characterised Māori trade. There was also the odd non-British settlement, often resulting from Vogel's recruitment of migrants from Northern Europe (Farmer... 1985: 70-71). In the recolonisation era trade flows and many other less tangible exchanges became narrowed by guiding principles that were almost the opposite of globalisation. It was bi-directionally protectionist, an exchange between 'metropole' and 'periphery'.

Beyond abstract concepts such as loyalty to the monarch, there were deeply embedded substantive, even vestigial mercantilist dimensions. These revolved around 'Empire Trade' and 'Empire Preferences', in New Zealand's case almost entirely involving exchanges between the Dominion and Britain. In the latter days of recolonisation these became 'Commonwealth preferences' until Britain itself rejected Aotearoa, its most loyal dependency. Linkages also involved the bi-directional passage of services as well as goods, even the recycling of lesser British aristocrats to serve as Governors' General. Not surprisingly, migration policy in the recolonisation era favoured migration, particularly from the United Kingdom (Farmer 1985: 60-63).

The unfolding of a form of imperial supra-domain still today has its partisans. Niall Fergusson (2003: 371) revisits imperial history to allow him to conclude 'the British Empire proved that Empire is a form of international government that can work...'

Māori Survival & Growth; Pākehā Cohort Momentum Effects

The higher profile Pākehā population and development wave, both in the later years of colonisation and the start of recolonisation, evolved against a backdrop of a seemingly doomed Māori population. Accelerated Pākehā population growth was associated with the more rapid decline of the Māori population, because immigrants were the unintentional vectors for the more rapid spread of introduced diseases to regions and eventually to every remote corner of Aotearoa, which had seen few Pākehā up until then. As Māori resistance to disease grew, the loss of their land, almost complete by 1910, impoverished them and thus they were still highly susceptible to malnutrition and infection. Their very low levels of life-expectation were maintained into the 1890s at exactly the time that Pākehā led the world in terms of longevity, while by then, Māori were in an underdevelopment trap.

For Māori, the dawn of the twentieth century brought the first real reprieves from this trap. At first this reprieve was very primal: improving longevity – the very

‘survival of the race’ – the first and most vital change in their situation. From the perspective of Victorians like the Rev Wohlers, or his contemporary Dr Alfred Newman, Māori would die off peacefully through vital processes or by ‘amalgamation’. This notion was elaborated and reified in through pseudo-scientific anthropology, with a surge of orations to the colony’s learned bodies *circa* 1880, but then endured internationally for an astonishingly long time – until after World War II (eg Price 1949). But, in the event, Māori did not die off, as ethnologist Te Rangi Hiroa (1924) triumphantly reminded the nascent Royal Society (Chapter 5). He was very perceptive – survival was fundamental to all of Māori subsequent development (Binney, with O’Malley and Ward 2014: Chapt 10). Gains in life expectation would increase gradually until mid-century and then accelerate even more rapidly (1945-61). Māori also made improvements in social wellbeing and wage incomes over the decades, particularly after World War II when gaps between them and Pākehā diminished, but never disappeared (Harris with Williams 2014: Chaps 12 and 13; Pool 1991: Chaps 6 and 7). In large part ‘closing the gaps’ was achieved by extremely rapid urbanisation, a transition Māori initiated and undertook themselves, but which benefited from props afforded by the welfare state of the period. An even more fundamental form of economic development for them had to wait for wealth accumulation that came beyond the period covered in the present chapter, in the last decades to be analysed in this book.

Demographic changes generate further population consequences that flow-on sometimes for decades. Age and other factors of composition shifted, including through momentum effects: for example, if more children survive to adulthood this means that the work force age-groups will see their numbers expand. Thus, the Māori turnaround in survival as a people, dating from around 1900, generated its own demographic momenta as life-table survivorship rates improved and more and more children reached labour force ages. After a burst of health gains in the early 1900s with the community health programmes directed by Maui Pomare, life-table survivorship gradually improved. *The Social Security Act* (1938) meant that Māori could benefit equally from the health care system, and this was reinforced by the antibiotic and chemotherapeutic revolution dating from World War II (Lange 1999; Woodward and Blakely 2014; Dunstan et al 2006; Pool and Cheung 2004, 2005). The net result was that the health gap between Māori and Pākehā was partially closed in the post-war period. More and more Māori reached adult ages, producing larger parenting cohorts, and thus there were secondary momentum effect as more and more babies were born and went on to become adults. But, in the era of structural adjustments, dating from 1984 (Kelsey 1995), these gaps were not closed for once and forever; instead, Māori made gains, but Pākehā gains were more systematic. Gains in disease resistance affected fertility as well as mortality rates. By 1900, Māori were gaining natural immunity to the introduced venereal diseases, so, until about 1970,

fertility levels were high, reaching their highest levels just after World War II. In the 1970s Māori rates dropped dramatically and have been a little above replacement (defined as 2.1 births per woman) ever since.

Pākehā mortality rates also declined, but from a much lower level, and thus more gradually than for Māori. Pākehā declines have, however, also produced long lasting momenta that positively affected crude death rates and also inflated numbers at working ages through much of this era. These operated through the rapid declines in childhood mortality in the late nineteenth century, almost entirely because of demographic and socio-economic changes affecting family incomes, housing and wellbeing. The decline in fertility, noted above, was a major factor in these childhood mortality decreases, affecting the spread of disease, cross-sibling infection, childcare and the wellbeing of the children. The children born both when fertility was still high, and as it was declining, in the early- to mid-twentieth century then went on to survive into the ages at which risks of mortality were least (working ages) and thus more and more of each cohort reached retirement (Pool and Cheung 2004, 2005). Essentially, the recolonisation era saw Pākehā death rates decrease down to low levels across successive major life-cycle phases: the rapid decreases at childhood in the late Victorian period that ushered in recolonisation, yielded place to improved survivorship at adult ages, that continued after World War II until much of the ‘force’ of mortality was sited at the oldest ages. I pick up this theme in later chapters. But a key point is that these composition shifts provided the window of opportunity for a demographic dividend referred to in earlier chapters.

In passing, not all decreases in death rates came from disease. Accidental death rates at working ages, an oft neglected factor of mortality, also dropped dramatically as the occupational structure shifted away from manual jobs, reinforcing the cohort survival trends.

The large migration inflows of 1860–65 and 1870–75 had also produced momentum effects that had an impact on development during the recolonisation era. Pākehā fertility rates had been so high then, and, as already discussed, child survivorship probabilities elevated relative to those of other populations, that dependency levels were also raised. Yet, by the recolonisation era, this effect was being partly countered by the men left behind from the gold rushes, and by the migrants of the Vogel period, often accompanied by families, plus children born in the colony reaching adulthood. By 1881, the working age group had heavy total and child dependency burdens (mainly the latter as age dependency was very low), but, against this, the labour force age-composition was weighted heavily towards young adults (lowering the ratio, Figure 11.2) and this trend continued on into the interwar years. Moreover, the effects of migration were being increasingly counterbalanced by declines in fertility.

The adult colonist populations in the Victorian era up until the early years of recolonisation were mainly migrants who carried with them the negative morbidity experiences of their homeland. Consequently, their death rates were higher than those for a statistically robust comparator I have used in the past: middle-aged Norwegian adults (Pool 1985: Figures 29 and 30; Table 117). By contrast, Pākehā children, most of whom were born in the colony, had lower mortality rates than those in any other recorded population at that time (Appendix B, Table B.1), a factor of their high standards of living. This actuarial division shows up if we compare (i) figures on life expectancy at birth, reflecting survivorship patterns across all ages, but for Pākehā disproportionately affected by high childhood survival rates, with (ii) life-expectation at age 20 years, a function of adult mortality only. Expectancy at adult years was less favourable to the colonists because of the health risks they had imported from the 'Motherland'. Getting to the colony had given them lower death risk profiles than their British peers, but not quite matching those of Norwegians; their offspring had lower risks than either the British or the Norwegians.

Unlike Pākehā, at the start of the recolonial period Māori had far lower proportions at child ages, but, when data by more refined age-groups become available (eg 1901), there were relatively high proportions at old age. Paradoxically, this is a function of high childhood mortality; in very high mortality populations such as Māori were in 1901, where significant proportions of births fail to reach five years of age, there are thus lower percentages at childhood and, conversely disproportionately inflated numbers at older ages. As mortality declines, however, the greatest decreases occur at childhood ages on which the highest force of mortality falls. Consequently, the proportions at youngest ages increase as more and more children survive.

Until recolonisation there were marked inequalities in the rural sector: there were the proprietors of large estates, the small farmers and a class which lived hand to mouth, was often composed of itinerants, and which represented almost a nineteenth century version of a 'precariat' engaged in a 'gig' economy. These are terms we use to describe post-millennial inequality and work patterns, yet the 2000s may have had antecedents a century or so earlier. There is nothing radical in the suggestion – essentially it fits closely to the Piketty (2014) model. What might set New Zealand a little apart was that marked inequality and a shift to egalitarianism were both land-based, and that the late Victorian shift happened so quickly. By 1894, the tenurial system had changed radically, and throughout recolonisation most New Zealand farmers were landholders, not tenants, who also earned a reasonable household income by global standards⁵.

Stability was manifested most in the broad architecture of New Zealand's population and economic geography over this period, which were intimately interlinked. Corporate management structures were located in the big cities of the era,

including Dunedin, although they gradually relocated further north. From 1938 to 1968, this tidy arrangement was reinforced by what was a ‘controlled economy’ (Hawke 1985). By contrast, heavy manufacturing of the British classical industrial revolution sort – steel and textiles on a mass scale – even occurred in Australia, but never really became established in New Zealand. It grew the wool, exported it raw to Britain and imported the processed textiles; it processed the butter and cheese; and it slaughtered and froze the meat. Thus, this era reinforced an existing tendency – the export of commodities at the expense of highly processed goods.

A post-war Dutch migration inflow seemed to portend the later non-British diversification of Aotearoa; in fact, from the 1840s small clusters of other ethnic groups had settled from place to place, but all together they were tiny groups numbering in the 1000s, not the 100,000s⁶. These pockets of diversity were largely obscured in the bland Britishness that defined New Zealand society, in which Māori were the largest different grouping, and others simply tiny communities. The reality was that, throughout recolonisation, the nation still remained remarkably homogeneous, overwhelmingly Pākehā of British-descent and Māori.

Data Availability and Quality

Before returning to the substantive story, it is necessary to look briefly at the data available for population and development research in this period. Census data improved in scope and quality, and by the end of the era New Zealand was, more or less, abiding by the protocols established by the Population and Statistical Divisions of the United Nations. This body is charged with helping countries establish the collection and analysis of data sets that are standard in content, have a complete coverage and are of high quality. As demographic data form the basic collections for most social and economic analysis and comprise the denominators for many statistical series used in varying sectors, this is a very important function. Moreover, demographic, economic and social data that are directly then comparable with those for comparable jurisdictions overseas, are an essential tool if New Zealand is to evaluate its comparative progress towards development goals. By the 1960s, New Zealand more or less conformed to these standards with two notable exceptions: data on education, and information on children ever born alive to mothers enumerated in the census were not collected. Data on incomes and some labour market questions became available or improved in quality after World War II.

For Māori enumerations, there was a vast improvement between the 1921 and 1926 censuses, so much so that it is difficult to compare the two years. The 1926 Māori census questionnaire was close to the general census form, was taken on the one night, was self-enumerated and was available in English and Māori. But, the Māori census was fully integrated into the general count only in the 1950s. Adjustments have been made by me to the census of 1926 to allow for under-counts

and to vital data in the interwar period. Life Tables for 1926 are based on direct computation from the raw data, adjusted by indirect estimation to allow for incomplete registration.

Vital data counts for Pākehā were complete from the 1870s, but the fertility data lacked detail⁷. Moreover, sub-national studies on vital trends can be carried out until 1921, using General Fertility Rates that have been estimated from Child-Woman Ratios (CWR), a major, complex task achieved by Fred Tiong (1988). After that, even CWR series are less systematic, and until recently, births and death data were assigned to registry offices, and not classified by place of normal residence. The information collected on parity were woefully inadequate throughout this period, and still are in the twenty-first century. This is a major missing statistic in New Zealand's armoury and one that is a critical lacuna for projections in this era when delayed childbearing has separated parity from its former close association with age-specific fertility – in the past a women having a birth in her late twenties was probably at parity two or three, whereas now women who are having births in their thirties will typically be *prima-gravidae*, not the multiparous mothers at this age in past decades in history. Pākehā, marriage registration data were available from the late Victorian period, but, except for very specific purposes, will not be used here, whereas census data will be, even though they represent self-declaration as to marital status, and thus are probably imperfect (overcounts). By contrast, mortality data were very detailed, although many of their sets of information (eg certification of cause of death) would not meet present-day standards. Moreover, in a cross-national study by Vaino Kannisto (1994) on quality of age-reporting of geriatric deaths, Pākehā data were well below the standard seen in the Nordic countries. It is certain that age-reporting for Māori would have been worse because of the absence of birth certificates for some Māori born before 1946.

Compulsory registration of Māori births, deaths and marriages was enacted in 1913, but as late as 1946 the birth data were incomplete. Māori marriage registrations were definitely an undercount in 1951⁸. As *tangi* (mourning and burials) play an important role in Māori social organisation, death for all but perinatal ages was a publicly acknowledged event and registration became more or less universal by 1936⁹. Late foetal and early neonatal deaths were more problematic because of the shortfalls in birth reporting. Māori birth registrations remained incomplete until after World War II. We can be very definite about this because the 1946-47 Māori birth rate was artefactually inflated because of the late registration that year of births reaching back into the 1930s. This was to make children eligible for the Family Benefit (legislated 1946 as Universal on production of a birth certificate). Birth rates back to 1932 were also adjusted both from this source and by indirect estimation (Pool 1977, 1991; Pool and Cheung 2004).

Cause of death is another problem. With more and more births occurring in hospital and given the necessity of providing a birth certificate before receiving a universal family benefit, post-war perinatal death certification coverage became complete and was improved for causes of infant and foetal mortality. Similarly, increased access to hospitals and doctors improved certification of causes at older ages. Detailed data quality analyses, intercensal balancing-equation exercises, comparisons with stable population models, and many other diagnoses undertaken by me since the 1960s, have allowed a reasonably comprehensive picture to be built about the completeness of censuses and vital registration over the recolonisation period.

Māori data on age-composition were problematic until well into the twentieth century. A technical study by Jeremy Lowe (1989) of Māori age-structures at the end of the nineteenth century has provided a useful analysis, showing that ages 0-4 years were underreported, not because of a failure to record the child, but because four-year olds were often rounded to five years, inflating age-group 5-9, a classical problem in many societies across the globe. His work was also a prerequisite to my drawing on stable population models to estimate vital rates. But, data at older ages was probably an issue, and for the few very old Māori (born before 1932) this may have persisted into the twenty-first century¹⁰.

The creation of systems of National Accounts, initiated between the wars, has improved the run of economic data, and Statistics New Zealand and similar agencies abroad are constantly searching for means to improve these very important series. As they relate to the formal monetised economy, there are major problems involved in documenting the Māori economy between the wars, as many were dependent on subsistence. In any case, many of the constituent variables for National Accounts are at a macro-level and thus do not yield ethnic data *per se*. There are also problems inherent in comparing. One is never sure whether or not New Zealand's rank for a given statistic, particularly those on various social pathologies much drawn upon by the media – New Zealand is the 'best' or the 'worst' in the world for x, y, z – are really comparable or of little utility. This problem is exacerbated by a tendency to use ranking, when rates or absolute differences are minimal, and anyway may be due to a difference in years (last year's as against this year's).

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¹ This is a play on the title of a seminal New Zealand history by Miles Fairburn (1989) *The Ideal Society and its Enemies*, which in turn played on the title of Popper's most influential book *The Open Society and its Enemies*, written while he was living in New Zealand.

² One to which I will also refer was arguably the decision not to federate with the other Australasian colonies in 1901. Given its seminal significance, it seems remarkable that the historiography of this event is so murky. But, the evidence I have seen, including W H Oliver's oral intervention at the 'Building the Constitution Conference', April 2000, seems to suggest that the desire of the other Australasians to deny Māori equal citizenship in the Commonwealth of Australia, although allowing them citizenship in the 'State of New Zealand,' may have caused the New Zealand negotiators not to join the Commonwealth.

³ As a descriptor the word 'stable' has resonance for demographers, and also has a technical meaning – when birth and death rates remain constant (increasing, decreasing, or remaining stationary) producing over time a similar or gradually changing (quasi-stable) or stable age distribution. Throughout the twentieth century until the late 1940s, Māori age distributions were indeed 'quasi-stable', even though growth was accelerating, but they were destabilised by a sudden mortality decline between 1945 and 1961 (Pool 1977: Appendix). Pākehā age-specific death and birth rates gently declined until 1945, then their age-structure, which had never been even quasi-stable because of migration, cohort momenta and other effects, was further destabilised. In the Pākehā case this came from the sudden increase in fertility rates in the Baby Boom.

⁴ I want to emphasise that it was not, as is often alleged, just Māori who benefited from these changes. Māori started from a much lower level, so benefited more relatively, but not absolutely as they never caught up with Pākehā (Pool 1982).

⁵ I have already referred to the fact that an irony of New Zealand history is that one of the tenurial reform's main architects, Gaelic-speaking John McKenzie, who had witnessed the Highland Clearances first-hand and was deplored by them, saw little irony in displacing Māori from their lands (Brooking 1993).

⁶ There were already small settlements, mainly of Germans, coming from diverse, often peripheral parts of that realm (e.g. Bohemia, Mecklenburg, who have all but been submerged into the dominant culture; German Jews, especially those fleeing Nazism, made a very positive, identifiable contribution to New Zealand's development, far in excess of their small numbers, which were limited despite the fact that they were fleeing the holocaust. Also noteworthy were the Croatians and Bosnians, first from Austro-Hungary's southern provinces, and later Yugoslavia, who played a disproportionately large, positive role, especially in developing northern New Zealand. There were small numbers of Chinese, coming in the 1860s, who stayed on, discriminated against and surviving precariously, yet again contributing to national development and to local government to a degree that far exceeds their numbers. Also, from the late 19th century a small stream of Gujarati and Punjabis entered New Zealand and have made significant inroads into Aotearoa's commercial and public life despite the history of their treatment. Their numbers have recently been swollen by Indian migrants (including from Fiji and South Africa). The stories of these small minorities and their contributions in Aotearoa all parallel the Australian and Anglo-American experience of Jewish and Asian diasporas (Bade 2005; Leckie 2001; Levine 2005; Walrond 2005; Ip 2005). The Croatian one is paralleled in California and West Australia, where they have also played a role in the wine industries. The diverse Germans communities other than Jews became so subsumed into the wider Pākehā society, particularly because of hostility towards them during World War I, that their contribution has often been ignored. The Dutch are also highly integrated, with minor exceptions such as the retirement homes they have established. Moreover, their contributions to cuisine and dairy farming are increasingly being forgotten. Dutch families who farmed

adjacent properties began to operate them as one larger property, presaging the wider tenurial changes that moved New Zealand from the family-owned and operated farm as the basic unit of production, to agri-business (last section of book). See also Borrie 1994; Farmer 1985.

⁷ Analyses of vital data quality are available, for example, in Pool 1977 & 1991; Pool and Sceats 1981; Pool, I and Cheung 2004, 2005; Dunstan *et al* 2006; Pool *et al* 2007; Jain 1972.

⁸ The only test possible is for Māori data for the 1951 census, carried out by the author, and which showed a major difference between reported status ‘married’ and the number expected from surviving brides from vital registration to the census, Pool and Sceats 1981:45, fn 4.23.

⁹ Directly computed life tables are close to those based on indirect estimation.

¹⁰ For the purely demographic rates, and many other derived rates (e.g. for criminology) there is yet a further problem which may be ultimately insoluble: a disjunction between numerators and denominators. For example, a death rate may include numerator data that are affected by inadequate age-reporting – by self-declaration – at the census. But, an absence of a birth certificate may introduce inaccuracies in denominator data that are collected second-hand, not directly from the deceased. In later chapters I will show how definitional differences between numerator and denominator data also introduce inaccuracies in a very wide range of social and economic statistics – even in the 21st century.

Chapter Fourteen – A Clone of the ‘Mother Country’ 1880s/1980s–1919

New Zealand ‘Recolonises’

As described in previous chapters, the onset of ‘recolonisation’ had antecedents in the ‘Turbulent era’. Above all, the massive inflows of migrants in the 1860s and 1870s had widened the Pākehā human capital baseline. The immigration was due to both ‘push’ and ‘pull’ factors. Parts of the rural British Isles faced turmoil: the Land Wars and famine of south-western Ireland, the continuing clearances in the Highlands and elsewhere in Scotland with military interventions, enclosures in England and Wales and agrarian unrest in Oxfordshire and Gloucestershire. Urban Lancashire, the northeast and the Midlands were the home of the ‘dark satanic mills’.

The ‘pull’ had come from gold, but from 1870 from the Vogel schemes. Arriving colonists worked on infrastructural projects or attempted to obtain land, but an appreciable number took up mechanical crafts thus deepening the human capital base. Their workshops, common to many hamlets, provided the support services for the new technologies of the 1880s. They repaired equipment, built it and even invented it: patent applications were very common (Les Oxley, personal communication). This was the basis for New Zealanders seeing themselves as a DIY society, the ‘Number eight wire’ perception. Thus, a semi-skilled farmworker from the Cotswolds could end up contributing to New Zealand’s technical sector.

By about 1880, New Zealand was on the cusp of significant changes that were to determine its direction over the next century. Over the next 40 years until 1919, Pākehā New Zealand went through a major transformation in most aspects of its peopling and development, which ushered in the remainder of recolonisation that played out until the early 1970s. At the same time, but mostly at the nation’s margins, Māori faced their nadir but then achieved a turnaround for the most basic condition of peopling and development: by 1910 their survival seemed more certain and they would now enter into a period of gradual recuperation, demographically and economically.

I use this chapter to elaborate the onset of recolonisation, ending it with the ‘flu pandemic of 1918 that brutally punctuated the shift from a pre-1914 world, when recolonisation had become firmly established, and the interwar years when New Zealand seems to have drifted along, and was recolonised in arguably its most extreme form: dependency of a peripheral Dominion on its Imperial metropole. In the process it attempted to become a clone of ‘England’, and, far more successfully, to feed the ‘Mother Country’ and send it wool for its textile mills.

I use 1919 as the cut-off simply because the pandemic, occurring over a few weeks in November 1918, had residual impacts in 1919. For reasons of convenience, I also cite data for 1921 and 1926, and retrospectively back to the 1870s.

The Pākehā transformation from turbulent colony to recolonisation seems to have unfolded in two steps, each over roughly a 25-year duration: the first stage initiated in the period 1876 to 1901, was the triggering – mainly demographic but the introduction of new pivotal technologies – produced recolonisation; and the second from 1901 to 1926, through economic, ideational, political and social changes cemented it in place. Recolonisation came from peopling trends; the cementing-in because of development. Settler population growth rates had reached almost 12% per annum in the quarter century 1851-1876, when massive inflows were the main driver. In that period, 80% of the demographic change came from this source, but was reinforced by the hyper-fertility of the new arrivals. Average annual increases then dropped to 3% per annum, 1876-1901, still high and carried along by the momentum coming from earlier peak inflows of migration, that finished about 1876, and from elevated levels of natural increase and its momentum effects. Natality levels had begun to drop by 1880, but adult age-groups were still being inflated by large birth cohorts coming from the migration surges. By the early 1900s, per annum growth rates were much lower, 2.2% (1901-26), as the settlers had already shifted from hyper-fertility to low birth rates – among the lowest in the industrialised countries of that day. Rates of natural increase (RNI = Births minus Deaths, per 1,000), had exceeded 30 in 1878. This was close to a maximum for a population that still had only medium levels of life expectancy – albeit the highest recorded in the world at that time. This RNI was a function of high crude birth rates (CBR = 42) and low crude death rates (CDR = 11); but, by 1891, the RNI had plummeted to 19 per 1,000 (CBR, 29), then 16 in 1901, and slid gradually down further by the end of period covered in this chapter. Net immigration rates had not only dropped from the late 1870s, but they then remained relatively low with minor spikes. It contributed 30% or less to the stock of New Zealand's population, for almost a century, and picking up again years later only after recolonisation had ended (1970s).

By the 1900s, New Zealand was becoming an urban society, passing 50% in 1911. From the 1890s, its population systematically moved northwards, occasioned first by a short-run burst of inter-provincial mobility that then declined in volume. In part, redistribution was also aided by shifts in the geographic dispersion of the overseas-born across the country. Furthermore, from 1896 Pākehā New Zealand had an age distribution that was disproportionately clustered at working ages, so demographic dependency rates were low.

The maintenance of strong links with 'Mother England' were manifested most of all by trade: export and import flows overwhelmingly to/from Britain. In the last days of Victoria's reign and the opening decades of the 20th century, New Zealand

went through a somewhat unique industrial revolution: centred in the paddock and in food processing plants rather than in textile mills or steel foundries. This was a total transition, however, from what had occurred previously. Phil Briggs' (2003: 5) description of the New Zealand economy until the 1880s, as 'quarrying' – that is a pre-industrial economy – is very apt: the extractive industries, sheep ranching and mining, save for quartz crushing, were all pre-industrial. There were minor exceptions to the 'quarrying' economy: Māori land use described in earlier chapters, and that of the settler small mixed farms were both relatively more complex and somewhat more advanced than the extensive sheep runs that occupied the bulk of the settler-controlled regions. Moreover, grain production used steam power both in the field and the flourmill, an industrial-era technology.

From the 1880s into the 1900s, New Zealand industrialised rapidly in a multitude of ways, albeit mainly linked to pastoral farming: its pastoral production techniques, its processing of raw commodities, its tenurial system, its adoption of cooperative ventures and the use of the most efficient modes of refrigerated shipping to get its product to Britain. For her part, 'Mother England' gained threefold from this. It received protein foods, at a lower cost, to feed her middle and lower classes, thereby providing them with a better diet. It built and owned the shipping that brought sheep meat, cheese, butter and wool to its ports. It then profited from the manufacturing and shipping back of textiles and other goods to be purchased by the colonists.

In New Zealand, the small efficient family-owned and operated farm – large by European standards for family-operated businesses – was the modal form of pastoralism in most regions. This reflected both the adoption of the best of pastoral farming and processing technologies, and the absence of latifundia and absentee landholding found in Latin America's southern cone pastoral nations, or even in Australia. In New Zealand intensification was further realised when dairying and meat exports challenged and then exceeded wool. The economic and population geography, including its urban and seaport hierarchies, fitted this rural intensification. The change phase covered in this chapter had mainly played out by the end of World War I and had been particularly marked between 1880 and 1900.

Paradoxically in this era of rapid innovation, Pākehā New Zealand settled down ideationally into a dependence on 'Mother England'. At home, after a period of radical reform (1890s-1900s) it became conservative, not only in terms of its loyalty to the metropole but for domestic issues.

Cutting across this was the Great War, 1914-18, which disproportionately involved New Zealand despite Aotearoa being on the other side of the world from where most of the hostilities occurred. The equivalent of ten per cent of all of its people served overseas at some time during that war, so it was a very significant event. Nevertheless, I will not discuss it in detail in this book as it is somewhat

tangential to my major themes. Moreover, it has been analysed professionally by general and military historians, so there is a well-developed corpus of solid research available to which I can add nothing of significance. This chapter ends the year after World War I. This is to allow the inclusion of the great pandemic of influenza that hit New Zealand in late 1918, the most extensive worldwide epidemic in recorded history and which was intimately linked to the war. Arguably its virulence, and certainly its diffusion by repatriating troops to lands across the globe, as far away as 18,000 km from the theatres of battle, was a function of the horrors and aftermath of that conflagration.

For Māori, by contrast, the second half of the 19th century was their grimmest hour. Their numbers declined, and by the end of the Victorian period there had been further alienation of large tracts of their land. But, with the exception of the ‘Dog Tax War’ (1898)¹ and the arrest for sedition of the prophet Rua Kenana at Maungapohatu (found not guilty) in 1916, there was finally peace in the North Island. In the North, however, the last major alienation of Māori land tracts was taking place even in remote regions such as the Urewera and King Country. Although loss continued in a smaller way across the 20th century, by 1910 almost all significant tranches had been transferred from Māori to Pākehā hands. The focus of development had shifted north again and, by 1896, the majority of Aotearoa’s people, Māori and Pākehā, were living in the North Island, a pattern of dominance that would continue and increase into the 21st century. In terms of longevity, Māori had reached their nadir probably about the time of Fenton’s census (1857/8), but levels had only slightly improved by the 1890s, for which we have the first more serious estimates: a figure in the low 20s (years), with female levels below male. More definitively, we can say that Māori were in a demographic and developmental ‘underdevelopment trap’ in the 1890s: they had lost the wealth they had had, and their very survival as a people was in doubt (Binney and O’Malley 2014: 341-42). The first two decades of the 20th century saw their population decline stalled and a modest turnaround commence. Above all, Māori longevity improved.

In Figure 5.1 the shocks, game-changers and enduring trends in New Zealand’s post-contact history were set out. In the period covered by this present chapter there were many different events that piled on top of each other. Generally speaking, they can be seen as markers signalling the end of the turbulent era and the onset of recolonisation. They are listed in a timeline (Appendix C). In the turbulent period there had been peaks and ebbs and marked turmoil. But, by contrast, from *circa* 1880 these events all trend in the one direction. They indicate the onset and then the early evolution and embedding of recolonisation. The exceptions are the two wars and the ‘flu pandemic, all of which deflected New Zealand from its path of progressive development. Most manifestly, the Timeline really sets out a Pākehā story, as the peopling and development in this period were mainly driven by them.

Nevertheless, as I will document below, the first decade of the 20th century was also a key inflection point for Māori; their narrative was a more latent part of the national story, but it was no less fundamental. It laid down a more vibrant future for Māori and thus sealed their place in New Zealand's identity.

Reproduction and Recolonisation

By the dawn of the 20th century Pākehā New Zealand had transformed immutably, but now was settling down for a long period of relative stability – culturally, demographically, economically and socially. The problem of exact demarcation for the onset of this epoch still remains, but one can suggest approximations. Brendan Thompson (1985, V 2: 120) argues that 'Although most historians date [economic] expansion from the improvement in the British market in 1896, the census year of 1886 marks a more important turning point for the industrial structure of New Zealand'. Certainly, however, population changes demarcated Aotearoa's transformation. Fertility was to be the key factor in Pākehā population change and generated its major long-term growth fluctuations for more than 100 years. It was also to be the first, and arguably one of the most important, social manifestations of recolonisation, and thus has critical significance for the period we are looking at in this chapter.

Yet, too often reproduction is covered as an issue tangential to the central story of recolonisation, be that intensification of pastoralism or the unfolding social structures. In fact, the transitions in the Pākehā reproductive regime were much more seminal. They were linked to rapid improvements in health and to wider development patterns. In turn, these affected the age and labour force structures (and as a result the productive economy). Thus, it is worth spending time on attempting to unravel what happened to reproduction. This tends to be an area where evidence of trends is reasonably documented, but verifiable information on mechanisms and underlying determinants unclear, and often subject to loose claims, in particular about levels of induced abortion. I will look first at trends, then their more proximate causes, and then the underlying determinants.

Before that, however, it is necessary to raise some epistemological issues. The question 'how' fertility rates change can be analysed by looking at what were termed the 'intermediate variables' by Kingsley Davis and Judith Blake (1956) in one of demography's notable classical studies. They formulated a framework by which to link fertility *per se* (live births), with biosocial factors and social organisation. They identified three sets of intermediate variables which transmitted social behaviours into reproductive patterns: (i) those factors that regulate exposure to intercourse (sexual relations, including their frequency, marriage or entry into unions, separations during unions and abstention); (ii) those that prevent or lower risks of conception when intercourse is taking place – contraception, amenorrhoea (accompanying lactation,

poor nutritional status or other factors) and natural sterility; and (iii) abortion, whether spontaneous or induced plus late fetal death from say 28 weeks of gestation (applied to New Zealand, Pool and Sceats: 1981; see also Pool *et al* 2007) ².

Contraception – or, alternatively, the absence of efficient techniques – plays a major role in this story. In this chapter the alternative situation was still the rule, so that fertility control came either through attempts to use the primitive available contraceptive methods, or by abortion, also primitive and under appalling conditions, or marriage patterns that regulate exposure to intercourse³. The history of contraception *per se* in New Zealand splits into several periods – until the early 20th century techniques were inefficient, and then in the interwar years barrier techniques improved, became more widely used. By then low fertility was clearly a major objective of Pākehā society – at least its urbanites. Post-World War II, the barrier methods still predominated through the Baby Boom, but a second contraceptive revolution suddenly erupted *circa* 1960, near the end of recolonisation, with the invention of the Pill. At first attempts were made to restrict its use to married women providing the means, initially, for these couples to space their births and to limit family size efficiently. Later, its use was extended to all women and thus increasingly also became a means of controlling the timing of first pregnancies. It also ushered in a further contraceptive revolution that will be discussed in the last era covered in this book. Until the 1910s at least, the nuptiality valve was the prime operative factor, as I will show below (Pool *et al* 1999).

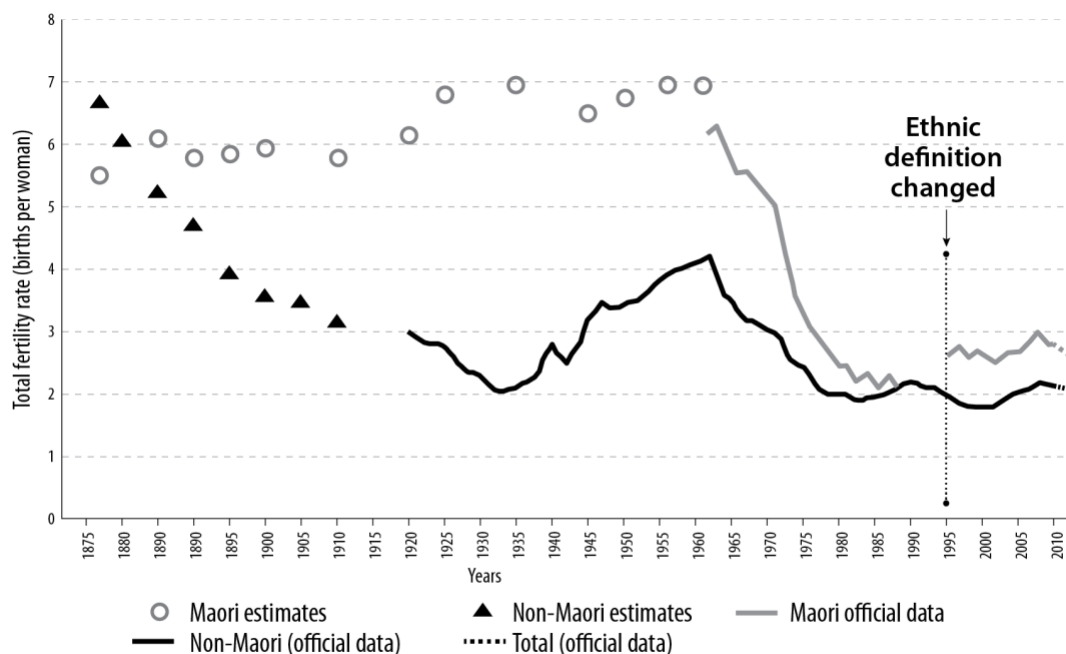
Twenty-first century perceptions about the historical roles of conception and contraception are clouded by the fact that we live in an era of impressive reproductive technologies. There is limited appreciation of the roles of biosocial factors, notably the curve of fecundability, the capacity of women to conceive (defined as the probability of conception in any inter-menstrum in the absence of fertility regulation)⁴. When we attempt to look at what happened historically, we are not just affected by our experiences of efficient means of fertility regulation in a modern period, but also by historically unprecedented rates of sub-replacement reproduction that are now prevalent. Today this is seen not just in Western Developed Countries but also in many industrialising countries (eg across Eastern Asia). Moreover, today there is limited childbearing among couples under 25 years.

Above all, today we find it difficult to believe that late marriage or an increase in the proportions of women not marrying, in the absence of the Pill and similarly powerful contraceptives, can be potent factors in fertility regulation. We are frequently confronting its inverse – that these technologies are overwhelmingly efficient and that the average delays in decisions to bear children affect the chances of conceiving. We turn to other recently developed reproductive technologies to increase the likelihood of parenting. For virtually the first time in history, WDCs find themselves now in a situation when first childbearing is at advanced reproductive

ages and fertility rates for women in their 30s exceed those for women at peak fecundable ages: historically there were always elderly mothers, but typically they were multiparous women, not the nulliparous maternity cases of today. I said ‘virtually’ for good reason: we have the compelling counterfactual case of Ireland discussed earlier (Chapter 3).

The broad trends in Pākehā reproduction in this period are fairly clear, as is shown in Figure 14.1. From 1876 to 1901, the colonists moved from having the highest level of fertility recorded in the industrialised countries, to the second lowest. From then until the years covered by the end of this chapter the decrease was much slower, a pattern that then continued until the Second World War. But, in the last days of Victoria’s reign, their reproduction had shifted dramatically from a Total Fertility Rate (TFR) of almost 7.0 live births per woman to just over 3.0 by 1901, in an era, as I will show below, in which contraception was still technologically very primitive. If we look at legitimate births to married women (Marital TFR) the emblematic importance of this shift is even clearer. They started at a very high peak: the MTFR in the 1870s approached 9.0, close to biological maxima seen anywhere. That is why my colleagues and I have labelled settler colonial reproductive patterns as ‘hyper-fertility’ (Pool *et al* 2007). The velocity with which this decrease occurred is shown in Table 14.1 for General Fertility Rates (GFR = Births/Women 15-44) and MGFRs (for New Zealand computed as MGFR = Nuptial Births/ Married Women 16-44 years). In quantum terms the late Victorian era saw a very significant shift in family building patterns with implications not just for the peopling of New Zealand.

Figure 14.1 Pākehā/Non-Māori and Māori Total Fertility Rates (Births per Woman), 1875-2012



Source: Pool, I, Dharmalingam, A and Sceats, J (2007) *The New Zealand Family: A Demographic History*, Auckland: Fig 2.1, updated to 2012

Table 14.1: Pākehā, General Fertility Rate and Marital General Fertility Rate per 1,000, 1878–1901, Selected Years, Indexed to 1878 (= 1.00)

Year	General Fertility Rate (GFR)		Marital General Fertility Rate (MGFR)	
	Rate	Index	Rate	Index
1878	221	1.00	341	1.00
1891	139	.63	279	.82
1901	112	.51	246	.72

Source: Pool et al 2007: Table 3.3

*Notes: GFR = (Births/Women aged 15-44) * 1,000; MGFR = (Nuptial Births/Married Women 16-44) * 1,000*

The reproductive performance (live births) of colonial couples and women was indeed something to behold. The GFRs and MGFRs in Table 14.1 imply that, in the 1870s, in each and every single year, more than 20% of all Pākehā women would have had a live birth; and this would have been true for 34% of married women. But, by the early 1900s only 11% of all women would have had a live birth per year, but this would have been true still for almost 25% of married women. These fertility rates for all, and for married women only in 1878, and for married women in 1901 are extremely high, challenging almost every biosocial constraint. Consider the curve of fecundability, discussed above, and recognise that some women were young and not yet at menarche or with irregular menstrual cycles, and others were older, and thus menopausal or premenopausal. Then some women would have had a birth late in the previous year and thus might be abstaining, and probably lactating and amenorrhoeic for that or for other reasons (ie subject to cycles in which menstruation did not occur, including because of poor health or nutrition). Others would be trying to become pregnant, while some would become pregnant and have a birth in the following year. Then it is necessary to add in spontaneous abortion and much higher rates of late fetal death than today. Beyond this, because of itinerancy noted for that period (Chapter 11), many husbands would have been absent for prolonged periods working elsewhere. Finally, some married women would have been abandoned – regretfully a not unheard-of downside to colonial life. For all women, some would be 15-24 years, or even older, and not yet married and exposed to intercourse or at least not on a regular basis, and some would be widows or, rarely, divorcees. Even in 1901, the fertility of married women was noteworthy – by then, they were pushing their effective reproductive span up to a later age, although not as much as their Irish counterparts. As was shown in Figure 11.1, in the 1870s, levels of spinsterhood among 20–24-year-old Pākehā women were very low, at levels that were exceeded only in the Baby Boom. But by the 1890s, the per cent never married at those ages

had risen very rapidly, to almost three-quarters, and rates remained at more than two-thirds until the 1940s.

Explaining Recolonisation's Reproductive Trends

To a very large degree, the Pākehā decrease in the years 1878-1901 was achieved by the application of the opening out and then turning down of a 'nuptiality valve' (Engelen and Kok 2003): a major transition in ages at marriage and in the proportions of Pākehā women ever-marrying, which compressed the per cent of women exposed to intercourse and thus risk of conception, plus the duration of time over the reproductive span when regular intercourse might occur: most colonist women in 1876 had married and done so in their early 20s, but the next generation say by 1896, not only postponed marriage into their late twenties, but a significant minority remained single. The net effect was that, in place of the colonial reproductive regime of the 1870s (see Chapter 11), by 1901 settlers had more or less the conjugal patterns of 'Mother England' (which had higher rates of marriage than the rest of British Isles) but with rates now below the English. The greater impact of the shifts in marital patterns than contraception and abortions is why, in Table 14.1, the GFR drops more sharply than the MGFR.

While the shift from hyper-fertility came about primarily because of changes in the nuptiality valve, this is not to discount entirely the control of reproduction within marriage by older women. By the late 19th century, some more motivated and experienced English may have become more efficient at practising fertility control within marriage. By then Pākehā were becoming aware of the growth and spread among British couples of very primitive contraceptive techniques. In part these practices became publicised because of the high-profile trials of birth control pioneers (Pool et al 2007: Chaps 3 and 4; Gibson 1971; O'Neill 1977), as I will discuss below. Qualifying this, marked percentage decreases in birth rates at older ages make a lower contribution to trends in the number of births simply because fecundability is lower for older women than for women in their 20s.

This is seen in a detailed modelling exercise, summarised in Table 14.2. It disaggregates the effects of the different intermediate variables/proximate determinants for the period of the most fundamental shift: from 1878 to 1901 (Sceats and Pool 1985)⁵. This exercise demonstrated that 64% of the decline was due to 'shutting down' the nuptiality valve. This most affected women at peak fecundable ages: 60% of the decline in the numbers of births came to women in their 20s, overwhelmingly because of delayed marriage and celibacy. Percentage decreases among older married women were impressive and came about, undoubtedly, from fertility control within marriage by whatever means: inefficient techniques or abstention. But the absolute contribution of this to declines in birth numbers was limited. For all women at older ages two factors operated: control within marriage by

those in unions, and celibacy for others. Even at 30-34 years the nuptiality valve produced 45% of the decline.

Table 14.2: Age-Specific Fertility Rates for All Women and Married Women, between 1878 and 1901, Trends and Component factors in Changes

Age	15-19	20-24	25-29	30-34	35-39	40-44	TFR
Decrease (% , 1878-1901)							
All							
Women	-67	-58	-49	-42	-40	-35	-47
Married							
Women	+4	-15	-24	-29	-32	-30	-28
Components of Change in Fertility							
% due to nuptiality only	*	90	66	45	29	20	64
% of nuptiality change by age	*	44	33	15	6	2	100
% of total decrease by age	*	30	31	20	14	6	100

Source: Sceats and Pool 1985: v 1, Table 92; its notes describe the methodology used.

*Notes: * Decrease in percentage ever-married from 8% to 2% but increases in marital age-specific fertility.*

There was undoubtedly some resort to illegal abortion by Pākehā but less than some writers have suggested. We know this because of a detailed analysis of maternal mortality rates; the Victorians had a morbid fascination with death and sickness so collected these data with much detail, and with relative levels of completeness overall (although not matching modern certification of cause of death). Maternal mortality ratios are heavily affected by illegal abortion, which by its very clandestine nature is likely to be carried out under insanitary conditions, as would certainly have been true until the post-World War II era, when antibiotics were available to combat infection. Yet, these ratios remained consistently around 5.0 per 1,000 live births between 1872 and 1901, and slightly below that from then on – they dropped dramatically only from the 1920s on, following reforms in midwifery and obstetrical practice (Maclean 1964: Chapter XII; Sceats and Pool 1985: 186). If reporting had improved over time, or, alternatively, if resort to abortion had produced the rapid fertility declines seen in Table 14.1 and 14.2, then ratios would have increased dramatically in the late Victorian years.

At the start of the 20th century the developed world, including New Zealand, was still passing through its ‘first contraceptive revolution’. This involved a shift to

more advanced barrier methods from inefficient folk techniques, only one of which, abstinence (when willpower permitted and it was used consistently), was truly effective. Undoubtedly, it was employed widely especially by older couples wanting to limit their family sizes. ‘Barrier’ methods of one sort and another had been employed throughout human history – the ingenuity involved in some of these methods almost defies imagination (crocodile dung pessaries used by Ancient Egyptians have to be among the more eclectic). But, the vulcanisation of rubber in the 19th century changed all this, allowing the mass manufacture of condoms, that became more readily available in the early 20th century. Condoms, on sale in New Zealand, so it seems, from the early 1900s, were likely to have been adopted by couples in stable unions with more motivation, with knowledge about barrier methods, with the financial means to pay for them, and able to gain access to them. It was not, however, until the 1970s, when a new generation of condoms became available, that use became popular. In earlier decades they also gained a negative image when they were issued to troops to reduce sexually transmitted disease infection. Moreover, shipping them from Britain across the equator also often caused perishing, thus reducing their reliability (Pool *et al* 1999: Chapt 1, 86; Belich 2001: 183). Vulcanisation also was used for diaphragms and cervical caps, but their more widespread adoption and effectiveness occurred more in the interwar years (see next chapter). Intra-uterine devices were also invented about this time but were used mainly in Germany. Thus, adopting contraception faced not insignificant odds, ranging from combatting a more muted view that contraception was contrary to the natural order of things, to marked hostility. Even suffragettes and the powerful Women’s Christian Temperance Movement, which fought vainly for prohibition – almost succeeding – were often opposed to contraception, particularly condoms, because they could allow men to control sexual acts and thus it made them ‘animals’ (Brookes 2016: Chapt 5; Daley 2009).

In more conservative traditional societies, not being married meant that there was limited exposure to intercourse and thus to risks of conception. For Pākehā women, we can document this effect because of the seminal papers of ‘Peter’ Jacoby (1958, 1961). He traced fertility rates of three sorts: (i) ex-nuptial births (historically termed ‘illegitimacy’, but since 1969 not a status in New Zealand law)⁶; (ii) ex-nuptial conceptions ‘legitimised’ by nuptial birth (within the first seven months of marriage – he assumed that those born from eight months on were premature births from marital conceptions); and (iii) marital conception and nuptial birth. Jacoby showed that ex-nuptial rates were low – levels were well below those in England and Wales – and marital conception and birth the most prevalent pattern. When hyper-fertility prevailed and marriage was almost universal and at young ages, low rates might be expected, but this pattern continued when the proportions ever-marrying dropped – theoretically this should have been associated with increased levels of ex-

nuptial fertility (Pool *et al* 2007: Figures 4.1 and 4.2, inspired by Woods 2000: Chapt 3). In part, ex-nuptiality (conception and/or birth prior to marriage) was avoided by the significant but fluctuating rate (eg somewhat higher in the 1920s) for births occurring within marriage but conceived ex-nuptially.

The practice of precipitated marriage after an ex-nuptial conception had its origins in Britain, but diffused to Pākehā society to become a part of recolonisation's values package. In Britain, according to a leading British historical demographer, Tony Wrigley, the Anglican church, initially the settlers' most important religion, had long deemed children born within marriage to be legitimate, regardless of when in the last nine months they had been conceived. This acceptance may not be linked to seeing marriage as a social-emotional contract, but rather as a means to protect lineages and property. The need to marry formally was far less important for the lower classes where 'bastardy' had fewer material implications: George Bernard Shaw, through his character Alfred Doolittle in *Pygmalion*, satirised this and the prescription of this and other aspects of 'middle class morality' for the poor. Robert Woods comments: 'The most likely reason for this peculiarity is the widespread acceptance of bridal pregnancy as a means of legitimising the illegitimate. Disregard for virginity [in some periods] should not be confused with acceptance of bastardy' (Wrigley 1981: 161; Woods 2000: 106). In many New Zealand Pākehā families in the past, there existed a guilty secret, sheltered from the ears of the impressionable young, that a family member had not really been prematurely born after their parents' wedding, but had been pre-maritally conceived, precipitating matrimony so that the 'decencies were observed'.

These sorts of ideas were certainly not borrowed from Māori, who tolerated pre-marital intercourse, except among high status puhi (virgins), and, if anything, saw it as a way of testing if a woman was fecund. Like other colonialists across the Empire, especially their womenfolk, Pākehā attributed sexual licentiousness to natives, thereby attempting to bolster their own feelings of moral propriety. This shaded off into prejudices against mixed-unions, whether formalised or not, further into formulating 'colour bars' and the legislation of other racial orders. In this period these views also produced the international eugenics' movement and fears of white 'racial deterioration'. Racial orders were more formalised in other parts of the Empire, such as India and British eastern, central and southern Africa, but racism was present in New Zealand in complex ways (Mazumdar 2003; Paxman 2011:130, 143-45; Belich 1996: 251-54; 2001: 161-63).

The Impacts of Fertility Trends and Differentials

Earlier, Figure 11.2 showed that the dependency burdens imposed by very high fertility at the end of the turbulent era had decreased significantly by the close of the 19th century. A classical 'window of opportunity' thus existed for 'demographic

dividends': in 1906, 32% of Pākehā were children, down from 42% (1870s), yet in the early 20th century only 5% of the population were at retirement (ages (depending on data recording, 60 or 65 years) the other dependent categories (Neville 1985: v 1, Table 30). Among older adults, this represented momentum coming from the earlier elevated levels of net immigration of younger adults. Far more importantly, at younger adult ages (then increasingly older) momentum came from the large birth cohorts of the late Victorian years as seen in these data on the working ages: In 1886, only 57% of Pākehā were aged 15-64, but this figure increased steadily – 61% (1896), 64% (1906), 65% (1926).

Fertility had declined but the TFR was still at 3.0 births per woman. At the start of the 1900s, there was also a modest increase in net immigration maintained over 10 years (Farmer 1985: Figure 14). But, these momentum effects, generated by changes in levels of fertility and net migration, produced proportionate increases at the working ages, and inversely decreases at childhood ages, and thus the way in which the per capita element of GDP per capita was now composed. The drivers of declining, but still relatively rapid population growth, had an impact that affected the productive rather than the social sectors. The dynamics of peopling-development interactions had changed very significantly.

The fertility transition can also be seen as a propellant of recolonisation, intimately intertwined with the material and ideational dimensions of societal transformation. A first-order confirmation of this link is geographic. Its general trends were identified by Campbell Gibson in his Berkeley PhD, who documented the rapidity of the decrease 1878-1901, and then the marked deceleration of declines thereafter. From a reproductive standpoint the shift to recolonisation had been virtually completed by 1900. Fred Tiong in his MSocSci thesis further refined this analysis by identifying important regional and rural-urban dimensions. It is also clear from Tiong's work, that the decline was associated with development patterns, as the decrease started in the most settled areas of Pākehā New Zealand, Canterbury and Otago, and in the urban areas. By 1901, urban levels of reproduction had gone down far more rapidly than rural: urban rates by 48%, peri-urban by 42%, but rural by only 30%. In 1881, rural rates had been merely 19% higher than urban, but in 1901 they were 61% above. The absolute difference had been limited in 1881, 34 births per 1,000 women, whereas despite decreases in both geographic zones, in 1901 each 1,000 rural women were producing 57 more births than their urban counterparts (Gibson 1971, on Non-Māori only; Tiong 1988; Pool and Tiong 1991; Pool *et al* 2007; Zodgekar 1980, who also emphasised the significance of conjugal patterns).

The trend launched between 1881 and 1901 continued on, but far more modestly. Between 1901 and 1921 urban rates went down by 11%, peri-urban by 15% but rural by just 3%. Nevertheless, as a result, while the overall national levels became significantly lower, the relative differentials within Pākehā New Zealand

were far more marked than they had been in 1881 – in 1921 there was a 69% difference between rural and urban, or, in absolute terms, 62 births per 1,000 women.

Turning to more causally remote determinants, at an individual level, declines were made possible in part because changes in participation in the formal labour force gave women choices: more independence, not to marry young, or never to marry, and money in their hand. As dairying grew, opportunities to be employed as milk maids boomed. By contrast, the wife and children were typically unremunerated members of the farm workforce. But, as milking machines and cream separators were introduced, first with manual pumps, and then from early 1900s using combustion engines, milk maids shifted into working in manufacturing, especially clothing and textiles, clerical jobs from the 1890s, and others into professions in the early 20th century. In the latter case this did not represent a growth in the per cent of women in the tertiary sector, but really a shift-share away from domestic service, levels of which had peaked in 1881. In a monograph published for the centennial of women's suffrage, Lisa Davies analysed 100 years of female employment, in particular focusing on participation rates and the curves for rates by age over time. She showed that low fertility was not associated with high levels of female labour force participation. The age-specific rates looked like an inverted hockey stick – high around twenty years as women left school, then decreasing as they married and had children. This was because many occupations in the public sector forced women to resign once they married (Watson 2008; Pool *et al* 2007, citing Melanie Nolan; Thompson 1985: V 2, 123, Table 262; Brookes 2016: 161-70 & 176-82; Davies 1993). The turn of the 20th century saw a major percentage-point shift in the distribution of women's occupations. Between the 1881 and 1911 censuses, domestic service decreased dramatically by more than half, from 56% to 24%, in the provision of board and lodging went up fourfold to 13%, agriculture doubled to 8% and 'other' (which would have included manufacturing) went from 7% to 23%; dressmaking and retail employment stayed exactly where it was, as a major employer (21%). As I have noted earlier income data, as against wealth, are difficult to generate for this period, but Galt has estimated that real incomes rose between 1874 and 1911, especially in the first decade of the new century. The incomes of women also seem to have drawn closer to those of men, from 50% of the male income to 60% (Galt 1985: 288, Tables 15.4 and 15.5).

But, what the infusion of values that drove these trends at first to, and then away from hyper-fertility? And as a corollary, why did these apparently significant values-shifts occur? Other settler-societies went through fertility declines at this time, although none as rapidly as Pākehā New Zealand's⁷. In New South Wales the decline produced a moral panic that spread to New Zealand, which had sent observers to their Royal Commission (Festy 1979; Pool *et al* 2007: 112-16; *Royal Commission...New South Wales* 1904). Changes in reproductive regimes to patterns closer to those of western Europe can thus be seen as a correlate, or perhaps even a trigger for wider

values changes that produced renewed links to metropolises in Europe, or even to the north-eastern seaboard of Anglo-America: old imperial capitals such as London now had an emerging competitor in New York.

This and earlier brief comparisons with other recolonising settler-societies points to that factor as a significant co-variate of fertility and other changes, but still begs the wider question of why recolonisation, why a ‘settler revolution’? James Belich’s description of the process itself and its wider ramifications is powerful and intuitively appealing but is rather less definitive in explaining its genesis (Chapt 1; Belich 2009: 9). I can go no further than this, so must leave explanation to geopolitical historians; for my purposes it is sufficient to recognise recolonisation as an important explanatory factor. Nevertheless, thanks to Belich, we know that it was a well-documented wave that was prevalent across several continents (Anglo-America, Australasia, ‘white’ South Africa), and thus can be invoked with certainty as a correlate, perhaps even an underlying determinant, of demographic and social changes in late Victorian New Zealand.

The industrial revolution was the generator of new technologies that enabled the unfolding of the particular form of recolonisation in New Zealand. But, the ‘Joker in the pack’ was a New Zealand government, that implemented real tenurial restructuring that permitted intensification to occur efficiently. Backing this was a swathe of social reforms ranging from votes for all women, to industrial conciliation and arbitration, housing, pensions and health, among others. In health, particular attention was paid maternal and infant welfare by the establishment in 1907 by (Dr) Truby King of the Plunket Society, a not-for-profit foundation, named after the Governor’s wife (Nolan 2009: 373; Labrum 2009: 402; Woodward and Blakely 2014: 112-17). Such political actions were still so rare globally that the leading European social democrats travelled to the country to see for themselves what was happening.

Earlier I referred to the momentum effects of large cohorts born in the dying days of colonialism and the early days of recolonisation. These cohorts flowed into the work force ages generating low total dependency rates from the 1890s to the 1940s: a window of opportunity for demographic dividends, if managed properly. But, the earlier analysis of the fertility transition, and particularly the opening up of rural-urban differentials, indicates that there is another dimension to this. The gap between rural and urban TFRs had become entrenched by 1901 and then continued for a long time with only modest changes, raising another issue that I will expand on in the next and later chapters – the cohort momenta effects, built up through rural reproduction, and then the out-migration of young working age people. The in-migrants to metropoli reduced Pākehā urban dependency rates, an effect that had an impact on national levels. Natalie Jackson (2011, 2016) has coined the term, ‘potential collateral dividend’ but for a very different situation. She notes that, in the near future in New Zealand as Māori and Pasifika numbers swell the size of the

national workforce age-group, this could counter the effects of ageing. The notion of ‘collateral’ is because ageing is mainly a Pākehā phenomenon at present and thus they would benefit from Māori and Pasifika population trends. During recolonisation, from the 1890s until the 1940s, there was also another ‘collateral dividend’ but of a different sort. Its genesis was the reproductive capacity of the rural population, which, through an age-selective rural outflow and urban influx, endowed urban labour force age-groups and other factors of their population dynamics with a ‘demographic’ dividend.

Longevity and Survivorship

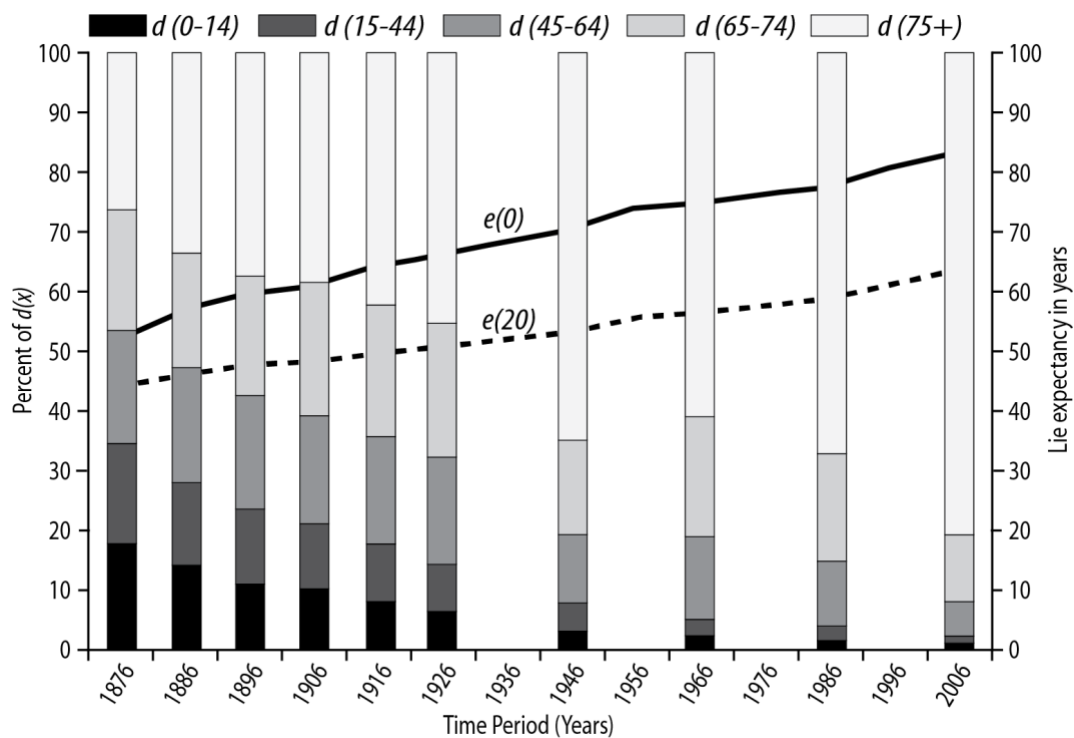
Reproduction is just one component of natural population replacement and change. Not only did Pākehā have high fertility rates in 1876, but female levels of life-expectation, were the highest in the world (Tables 9.3, 9.4). Here, I use females as an example, but male trends paralleled theirs. The improvements in life-expectation and survivorship, and thus in health for Pākehā, both male and female, must be seen alongside the very high death rates of Māori. The main conclusions of recent research are summarised here (Woodward and Blakely 2014, Dunstan *et al* 2006; Pool and Cheung 2004, 2005).

Nevertheless, as is seen in Figure 14.2, until 1926 the ‘force’ of mortality ($d(x)$, the number of deaths at any age in the life-table itself) still fell disproportionately on the childhood ages (0-14 yrs); unlike the deaths recorded in vital statistics, life table $d(x)$ are not affected by age-distributional factors that have little directly to do with mortality. They are purely the distribution of the deaths affected by how the force of mortality falls on any age-group, so are a very powerful tool to compare the mortality experiences of different populations. The force at young ages was the reason why in the 1870s Pākehā life-expectation after surviving to age 20 years was closer to life expectation at birth than became the case in the 20th century; if I had graphed $e(0)$ and $e(1)$ then it would have been seen that expectancy at birth was less than at age 1, because of the severity of infant mortality. In fact, this pattern finally disappeared only in 1971 for Pākehā females and later for Pākehā males and Māori. This is a normal pattern in all but populations with very low death rates. Pākehā in the 1870s were definitely privileged in terms of health by the standards of the day, but they were still not yet a low mortality population.

For the settlers, this was a period of very rapid decline in mortality, especially in the quarter century 1876-1901. In New Zealand’s history of life-expectation, the only periods that saw more accelerated decreases were not for Pākehā but for Māori – in the first decade of the 20th century, and after World War II, when, in both cases, Māori went through very significant improvements in longevity. The Māori mortality declines after World War II came, of course, in a very different epoch of antibiotics, of advances in medical technology and of a cradle-to-grave welfare system as a prop

for these, so are just not comparable. But the Māori decline in the early 20th century has some echoes of what I am about to discuss here for Pākehā in the late Victorian era – the determining role of living standards on health statuses. For Māori this was the outcome of aggressive community health programmes, affecting the environment in which Māori lived, as will be discussed below, whereas, for Victorian Pākehā gains in longevity came from their superior socio-economic conditions and wealth. This was already evident in 1876 but were reinforced further over the next 25 years. New Zealand – really Pākehā – ‘started from a high level relative to other countries and maintained a high level...’ (Hawke 1985: 77).

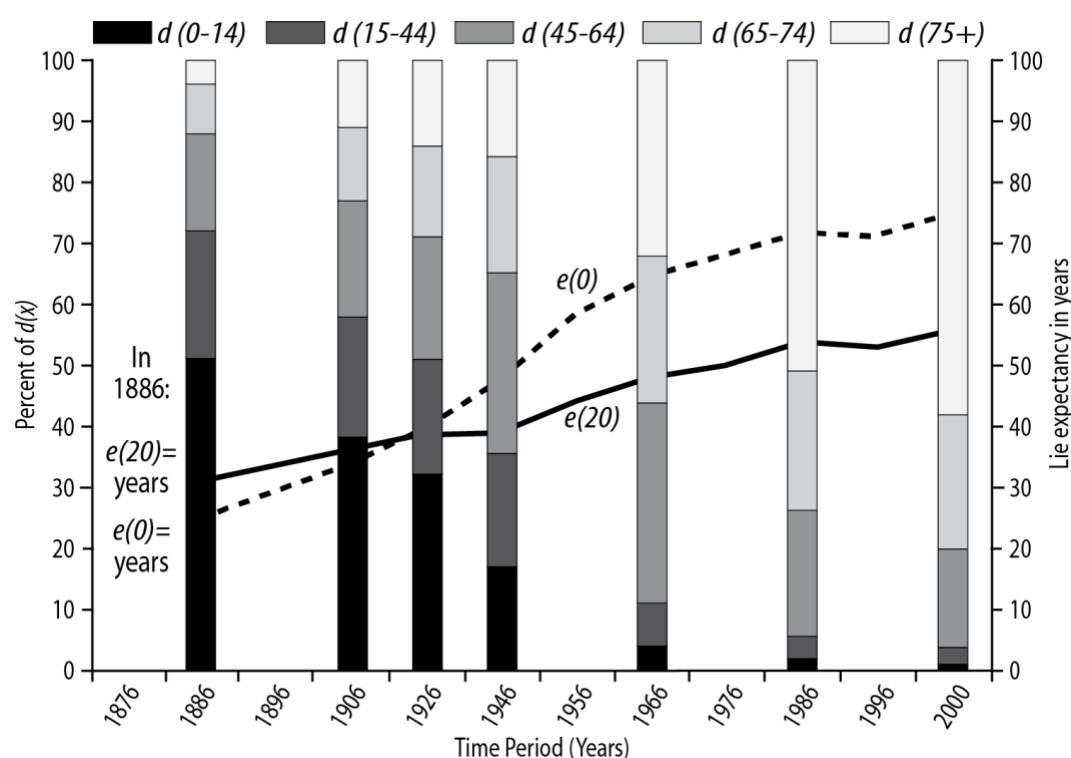
Figure 14.2: Pākehā/Non-Māori Females, Percentage of all Life Table Deaths, $d(x)$, Occurring in Age-Groups 0-14, 15-44, 45-64, 65-74, 75+; Life Expectancies (years) at Birth, $e(0)$, and at Exact Age 20 Years $e(20)$.



This last point is so important it needs underlining – the improved life expectancies of Pākehā between 1876 and 1901 for Pākehā, and for Māori over 1901-1910 occurred in an era in which the health sciences and medical technology were at a very primitive stage. Smallpox vaccination was the one relatively effective tool against disease. Health services were fragmented and inefficient until the *Public Health Act, 1900* that established a Department of Public Health, described by Francis Maclean as ‘a turning point in public health...’, and also a key agent for the Māori community health programme. In 1900 public health measures such as the reticulation of potable drinking water were being just being introduced. For example, Maclean’s

description of Auckland city's water supply at Western Springs, citing a 1900 *Medical Journal* report, is horrifying: 'An open sewer choked up with filth encircles more than half of the catchment area. Draining into this creek was a considerable number of piggeries and houses'. Auckland's sewerage was certainly no better: 'The sewers in lower Queen St were below high-tide level, and when heavy rainfall coincided with a high tide many of the cellars on business premises were flooded with sewage. Some of these cellars were used for food storage, including that of oysters, fruit and vegetables'. Conditions were somewhat better, but still appalling, in the other major cities (Maclean 1964: 15-16; 67, Chapter III).

Figure 14.3: Māori Females, Percentage of all Life Table Deaths, $d(x)$, Occurring in Age-Groups 0-14, 15-44, 45-64, 65-74, 75+, and Life Expectancies (years) at Birth $e(0)$ and at Exact Age 20 Years $e(20)$.



Yet, despite such insanitary conditions in this period, Pākehā led the world for life expectancy; colonist women were the first anywhere to achieve 50 years expectation at birth, and then 60 years. To reiterate, in the 1870s (see Tables 9.3, 9.4 and 9.7), Pākehā already were leaders in longevity, but then, as Table 14.3 shows, they went through a further rapid decrease. In that table, data on increases a century later (1976-2001) are included as a comparison. That was when major breakthroughs had been made technologically, not just in pharmacology and across many different relevant domains. Despite these advantages, after World War II they achieved a

slower set of improvements than had happened a century earlier when almost none of those conditions applied. The late Victorian gains came from the favourable overall living conditions, by comparison for example with the metropole, in 1876 (Chapter 9). These were further enhanced, by the significant serendipitous factor of fertility declines in the last decades of the 19th century that affected child and maternal mortality. Moreover, it is clear that this was not because of selective inflows from overseas favouring healthy migrants – it was an in-country determinant.

Table 14.3: Gains in Life-Expectation at Birth (Years to be Lived), Pākehā/Non-Māori by Gender, 1876–1901, 1901–26, 1976–2001

	Males	Females
1876-1901	7.6	7.1
1901-1926	6.1	6.4
1976-2001	5.5	5.0

Source: See Table 9.3

The relationships between childhood mortality and development, and then the interventions in public health are particularly apparent at a sub-national level. In Table 14.4, this is best indicated by the fact that rural childhood death rates were lower than urban even in 1921. The Victorians public health experts’ dream of ‘healthy districts’, bucolic rural areas, certainly seems to have played out in the New Zealand countryside. In reality, the immediate surrounds of farm families – most notably the ‘long-drop’ toilet’ or careless burying of the family’s ‘night-soil’, overcrowded sleeping areas and mud everywhere – were probably little better than for householders in cities. Dairy farmers tended to invest more in their milking sheds, machines and separators than in their dwellings. A major difference was, however, that farmhouses were well separated from neighbours, not in nucleated settlements, and also had home-produced the protein (meat, eggs, milk and butter) and garden foods immediately available, ensuring high levels of nutrition for the day; many a dairy farm had ‘pet’ lambs that became the family’s meat when needed.

Among the urban centres, Auckland generally tended to have the worst death rates, which, given Maclean’s comments cited earlier, was not surprising. But, Auckland, with an early childhood mortality rate of 210 per 1,000 births dying before age 5 years in 1881, was nonetheless favoured by British standards as it had levels below any in Britain (Table 9.4), except for rural England (but English data are for all of the 1880s), while Scotland (1880s) was a little worse than Auckland. By the early 20th century, with the turnaround northward in geographic population distribution (see below), Auckland was entering a period of more rapid growth putting pressure on services. The city was also handicapped by being composed of a maze of smaller units of local government – 19 in 1900 – each of which zealously guarded its rights.

Thus, cooperation on major projects, including public health infrastructure (Maclean 1964: 61), was a major block to health development – and continued to be until the 2010s, when a super-city was created.

Nationally, the most rapid improvements in child survivorship came in the last two decades of the 19th century (Table 14.4), when socio-economic factors would have been paramount. Given the lack of medical technology, it is remarkable that, over a mere 20 years (1876-96), communicable disease mortality – in so far as the statistics are reliable – dropped from almost half the causes of death to a third. In passing, the counter-effects of socio-economic factors also are seen in New Zealand. Māori had to wait until the 1950s for communicable causes of death to drop to a third (Pool 1985: v 1, Tables 115 and 122; Pool 1991: Table 6.7). The bio-technological revolution that we know today had to wait until the 1930s to be launched and really got underway during and after World War II. Thus, in the late 19th century, medical science and public health played a minor role in mortality supporting the more general argument here about how much health is an integral component of social and economic development.

Table 14.4: Pākehā Urban and Rural Childhood Mortality: Probability of Dying Between Birth and Exact Age Five

Year	New Zealand	Urban [Auckland]	Rural
1881	.132	.185 [.210]	.110
1901	.094	.135 [.148]	.085
1921	.063	.076 [.083]	.059

Source: Tiong 1988: Appendix C. Urban = Boroughs surrounding the CBD borough/city (Auckland, Wellington, Christchurch and Dunedin); in Auckland by 1901 this includes Birkenhead and by 1921 also Northcote. Rural = Remainder of Province

Notes: Probability of dying between birth and exact age 5 = (5)q(0)

In the first decades of the 20th century there were public health breakthroughs that affected Pākehā occurring for important services such as urban water reticulation and sewerage. In the 25 years 1901-26, other lower profile but important changes to the health system were also underway (eg registration of nurses). The New Zealand-wide rate of decline in childhood mortality then slowed and rural-urban differentials also decreased in absolute terms. Against this, however, the decreases in urban, and Auckland's, rate accelerated. This reflects the way that urban public health reforms were now playing an increasing role in guarding the health and welfare of city dwellers (Pool 1982).

In sum, rapid and then decelerating decreases in death rates occurred in this period for settlers, especially in the period 1876-1901. The privileged living standards of Pākehā and the effects of fertility decline on mortality trends were of paramount

importance, particularly in the final years of Victoria's reign. Nevertheless, from the establishment of a Department of Public Health (1900), the control of biomedical factors became an increasingly important part of the story. Age-structures reflected these changes (Neville 1985: v 1, Table 30).

It would be gratifying to end the mortality part of this era's story on an upbeat. Unfortunately, however, it finished with what historian Geoffrey Rice calls 'New Zealand's greatest public health disaster': the great 'flu pandemic of 1918-19. He has assiduously studied this pandemic, updating it for new research in a series of books (eg Rice 2018; Pool 1973a). It produced an annual average Crude Death Rate for 1918 of 15 (cf 9 in 1921), which was the highest ever, by a long way, since 1878, and, since records became more complete, only surpassed by the 1875 measles epidemic year. Its origin is disputed, but certainly the Great War and conditions in the trenches on the Western Front, from where it might have been introduced from the United States, played a major role. Above all two things stand out – its virulence by comparison with epidemics before (eg flu in the 1890s) or since, and its age- and gender-specificity, which reflected the way that the War provided an almost perfect incubator for germs to spread, thrive, mutate in terms of specificity, and increase their pathogenicity. The troops were marched out of this toxic environment and bundled into overcrowded ships to be sent back to their home countries. India was probably the worst victim of this, but New Zealand was also severely affected, Māori more severely than Pākehā. Quarantining may have limited positive impacts, and certainly Māori soldiers in Narrow Neck Camp had lower death rates than other Māori. The key point Rice makes was its severe impact over just a few weeks, a death rate which was roughly half that of the fatalities in the entire First World War. Its impact was so severe, and 'flu such a complex organism, that monitoring worldwide is now maintained and centralised so that some advanced warning of a pandemic might be able to be given. The Covid-19 virus pandemic of 2020, occurring as I write my last words for this book, is a severe test of such monitoring.

Recolonisation's Bread and Butter: Economic Development

At the start the period 1880-1919, the Colony of New Zealand put in place what was to be its base function until *circa* 1970: growing the grass to produce the protein – butter, cheese and sheep meat – that fed the 'Motherland', plus the wool, a natural fibre also mainly composed of proteins, that contributed to the British textile industries. In many senses, the story about how development happened, across its economic and social dimensions, has been well documented, so much so that it has overshadowed the peopling narrative for this period, outlined above. In sum, the economy was to be transformed dramatically once the sailing ship *Dunedin* had left Port Chalmers in February 1882 with a cargo of frozen sheep carcasses. The meat

survived crossing the equator and arrived in London in good condition. Add to this the fact that, from the mid-1880s, dairy products could also be processed from raw milk at the factories that quickly sprang up, and then also exported to Britain as processed cheese and butter (Stringleman and Scrimgeour 2008). Freezing is thus seen as a seminal and essential milestone in nation-building; technological breakthroughs allowed a different development path for New Zealand.

In detailed economic history papers, David Greasley and Les Oxley (2005, 2009) have analysed the metrics that reconfirm the importance of this event. But, they have also cited another qualitative prerequisite: the cardinal significance of the Liberal government cabinet minister McKenzie's legislation that 'dismantled the large estates' and made the family-owned and -operated unit such an economically viable means of intensive advanced, mechanised pastoralism. These authors have gone even further by quantitatively demonstrating the role of this intensification in determining much of New Zealand's life: its trade patterns, its rural landscape and even the forms and functions of its towns. Effectively, the emergence of intensive pastoralism as the dominant *genre de vie* for Pākehā precluded plantation agriculture, even for temperate zone crops like tobacco and tea. Together, technology and tenurial reform created New Zealand's regime of family-owned and operated farms. For eight decades they were to provide most farmers with a comfortable living in the nation with the highest average GDP/capita globally – at least as late as 1938.

The earlier analysis here has added in another dimension to this analysis, over and above technological and tenurial changes. These are the implications of demographic transitions for GDP and GDP per capita growth in the period 1895-1912 (Table 12.1 above drawn from Briggs 2003: 35-38). Population growth was still strong at the time, but was declining, and as noted above, was affected by momentum at working ages as well as natural increase and net immigration. Thus, both GDP and per capita GDP growth were strong at least until just before World War I.

Greasley and Oxley's analysis thus shows the profound effects of the intensification of grasslands farming from the 1880s, a shift made possible through freezing, dairy processing and milking machine technologies. Taking as an example, farmers in Taranaki and Southland – later their counterparts in other regions – started processing cream and milk into butter and cheese, which could be shipped in refrigerated vessels, thereby defining the long-term direction Aotearoa would take. Sheep farming increasingly became a matter of fattening animals for meat production on lowland pastures rather than relying on extensive runs for wool. Southland exemplifies the revolution that took place. In 1881, 69% of exports from Southland ports were still wool; rabbit skins and oats made up much of the rest, while processed meats were merely 1% of the total and dairy products were not reported. But, in the 1880s the tussock grasses of the great sheep runs were giving way to sown grass pastures on which sheep could be fattened, while cheese and other dairy factories

were being built in lowland hamlets. Moreover, this affected Aotearoa's population geography, and, despite a dependence on farming, there were high levels of urbanisation early in the 20th century (Greasley and Oxley 2005, 2009; Kellaway 1970: Chapters 3 and 4). But this was an urban system underpinned not by heavy or textile manufacturing but linked to the processing and export of pastoral produce, and the import of manufactured goods from the 'Mother country'. Coastal secondary cities like Gisborne, Invercargill, Napier and New Plymouth exported directly to Britain, and during the Baby Boom grew at rates above New Zealand's as a whole: but following recolonisation, from 1976, their growth dropped well below national levels.

By the early 1900s, Aotearoa's morphology was not too different – rawer, but with the basics in place – from how Kenneth Cumberland and James Fox (1959) described it in their post-war regional geographies, school texts for a couple of generations of New Zealand children. A major exception was the North Island's Volcanic Plateau, the last pioneer region, which opened to development only after World War I and continued to be a pioneering area even after World War II. Dairying was found everywhere, but especially in Taranaki, Southland and with smaller cooperative factories wherever there were flatter lands and more humid climates. This activity was also dispersed across Northland and the coastal Bay of Plenty, with larger factories typifying south Auckland-Bay of Plenty, but a close network of small factories in the western half of Taranaki right around the mountain. In Northland and the Coromandel cows grazed pockets of beachside land, and farmers shipped the cream out to local factories in small scows and barges. It was also a significant land-use through the Manawatu and in Southland. In many places, such as Southland and the Waikato, it was combined with fattening sheep and, to a far lesser degree, cattle. Ayrshires and especially Jerseys, producing creamier milk, were more common than the milk breeds such as Friesians, which dominate today in the 21st century dairy boom. Starting around the 1890s-early 1900s and enduring over long periods of the 20th century until after World War II, the rural-scape of much of humid lowland New Zealand had become established: a milking shed set aside from the house, with its dangerous drive-belts and motor-engines that generated electric light, contrasted with the candle/lantern-lit house. The hillier regions of the North Island and much of the South Island were given over to sheep and larger farms. Some more mountainous regions, especially those bordering the Southern Alps, still grazed merinos and their crossbreeds for wool.

In the North Island, drovers, often Māori on the East Coast and elsewhere, or sometimes the ageing bachelor Pākehā survivors of late nineteenth century immigration flows, moved huge flocks of Romneys, Southdowns and their crossbreeds from the hill country, where they had been raised and their wool shorn, down to lowland areas. There, as hoggets or older, they were to be fattened for

slaughter, an activity that was highly seasonal. Many areas also had smaller herds of beef cattle for the domestic market: beef exporting came only in the 1950s (Nicol and Saunders 2008). Māori shearing gangs travelled over much of the eastern parts of the country, and also were the abattoir workers especially in the east, and down as far as Bluff in the far south of the South Island: a seasonal movement by Ngati Porou and northern Ngati Kahungunu to the Heretaunga Plains was a model that had been established in Hawkes Bay, for example, even before 1900. For everyone engaged in rural industries, the regime was highly seasonal, spread over spring (lambling and calving), summer and autumn; this was also true for related industries such as the 'wharfies' (waterside workers), who loaded the ships with butter, cheese and sheep carcasses. Large sheep meat-works, often British-owned, as was also the case for beef in Argentina or Uruguay, were typically sited near ports, killing and dressing the mutton, and exporting the carcasses, and also dairy products, straight to Britain. The land reforms of the Liberals and the new technologies allowed this model of the economically viable owner-operated farm, based on outdoor grazing, an almost unique and cost-effective combination. Most importantly, there were no feedlots or winter barn-feeding, the model employed on the American Great Plains or in Europe.

Structural Consequences of Economic Trends

Accompanying the improved efficiency of farming at the end of the nineteenth century was a shift of Pākehā into the secondary and tertiary industrial sectors. In 1881, 42% of workers were still in primary industries, 23% secondary and 35% tertiary; by 1906, workers in manufacturing and other secondary industrial occupations had increased in number, so that the three sectors were much closer: respectively, 33, 29 and 38 per cent, and were to fluctuate around this level until World War II. A signal for the new 'recolonial' era was the opening of other forms of tertiary sector employment. This allowed women an alternative to marrying and procreating, by remaining celibate, and, as marriage and reproduction were closely associated, interacted with the factor of declining fertility (Thompson 1985: esp Fig 48, p 123).

The emerging sectoral structures enhanced the perception of stability, in this case of economic activities, that characterised the 'recolonial' era. There was an almost seamless exchange between farm production, processing of pastoral products, and their export to British consumers, and the counterbalance of imports, mainly goods manufactured in Britain, and their distribution to New Zealand consumers. The fulcrum was a network of major and secondary ports, from Whangarei to the Bluff.

This was definitively not globalisation as we now know it, but a set of simple, deterministic, bi-directional flows of goods. The complex supply chains of today between, say, Eire and Northern Ireland, or Canada and the United States, where, during production, the same item may have crossed a border five or six times, did not

appear until after recolonisation. Instead, in Aotearoa drovers moved sheep off the farm to holding paddocks around meat works – one of New Zealand’s stellar wine areas, the Gimblett Gravels, once had such a lowly status. From the meat works the carcasses were freighted to a ship and off to Britain. Alternatively, the dairy farmer carted their cream cans to the cooperative factory, or (later) out to the road to be picked up by the ‘cream lorry’, then off to be churned and processed, freighted to the wharves, and thence to Britain. From the ‘Motherland’s’ textile mill in the north, or engineering factory in the Black Country, manufactured goods came to a port for export to New Zealand, thence to a secondary distribution centre and on to a retail store in a small town. Retail goods may even have been delivered to the farm by the multi-tasking cream lorry, along with perishable and other foods and groceries stocked at the dairy factory store. Regardless of where they left from, or where the imports arrived in an Aotearoa port, New Zealand’s trade lines bypassed Australia en route to the Suez canal and on to England; or from 1914 went from New Zealand, but in the opposite direction through the Panama Canal, thus obviating the more difficult alternative around Cape Horn. That said, this was not entirely a centre-periphery exchange. As Ian Hunter (2010: *Manufacturing Boom 1880s and 1890s*) records, despite the ‘long depression’ of the 1880s, manufacturing, and with it import substitution, also grew independently in the 1880s and 1890s, spurred on sometimes by New Zealand innovations.

Associated with industrial sectoral shifts was urbanisation. By 1911, the Pākehā urban population still did not quite equal the rural, even if we add in the limited numbers of Māori in towns. By 1916, the reverse was true as New Zealand was no longer predominantly rural, and one city, Auckland, had passed 100,000 to become the first metropolis as we are defining this settlement form here. In 1891, 55 per cent of the urbanites were in the South Island, but by 1901, a bare majority were now in the North Island. In 1891, Dunedin had been NZ’s largest urban centre, but, by 1901, Auckland was the prime-city, with Christchurch second as Dunedin’s growth slowed (Table 13.2, based on Watson 1985: v 1, Table 64).

The net effects of these changes on Aotearoa’s population distribution are shown by Peter Brosnan for inter-provincial migration, 1886-1966. He used the classical Everett Lee methodology, which provides robust results for historical movements (eg it was tested on African American historical data). Between 1886 and World War I, the transformation from a settler-colony to recolonisation involved changes identified earlier: the development of mechanised, scientific (for its day) farming, the industrial sectoral shift-shares of the era, an acceleration in urbanisation and even nascent metropolitanisation, and the return to North Island and Auckland Provincial (and metropolitan) demographic dominance. All of these were associated with, and often a function of, increased levels of inter-provincial mobility. But, this had reached a peak in 1891-96, when 28 per cent of the 1896 population had been net

in- or out-migrants (we cannot estimate gross movements) of the previous intercensal quinquennium. One should also note that there was actually net international emigration in this period, as New Zealand went through its ‘long depression’, ending in the 1890s. Most importantly for my narrative, however, the internal mobility of the period 1891-96 was not approached until the 1970s (ie as Pākehā New Zealand ended the Baby Boom), and the proportion of all people moving in the 1890s was not surpassed until exactly 100 years later (1991-96), which saw even higher rates, 34 per cent of the 1996 population (versus 28% 1896, Brosnan 1986, updated by Pool 2002; Farmer 1985: v 1, Fig 14).

This is compelling evidence of the stability of New Zealand’s population geography in the era of ‘recolonisation’, in all but its initial years from 1901 on. While the colonial period had seen high levels of transience in the Pākehā population as reported earlier, the twentieth century ushered in a period of significantly lower mobility, at least for longer distances – undoubtedly there were intra-provincial and intra-urban movements that Brosnan’s data do not capture. Nevertheless, the comparisons across the period of ‘recolonisation’, from its earliest days and into the latest part of the twentieth century, indicate that there was definitely a lull in internal migration in New Zealand for some seventy years; a major exception was the Māori rural exodus after World War II but discussion of this will await a later chapter.

In the period covered in this chapter, rates of net international migration had dropped off, but it should not be inferred that it was of little significance. In the case of internal population geography, its impact was very important. The overseas-born were more evenly spread than was true either at the onset of, and following, recolonisation. Comparing Table 14.5 with Figure 6.3, it will be seen that in 1881 the overseas-born in Auckland were below the proportion of the national population in that region. In 1921 and 1961, the per cent of overseas-born who resided in the region equivalent to the old Auckland ‘Province’ were slightly above Auckland’s contribution to the national total population, but overseas-born were still spread up and down the country, something that was to change dramatically after the Baby Boom. Recalling (Chapter 5) that British migrants far outnumbered all others until the end of the 1970s, the overseas-born who moved to different parts of the country would have been of British-origin thus reinforcing the links to the ‘Mother Country’. By 2001, this was no longer true – the overseas-born were disproportionately living in the north of the North Island, and by then came from diverse origins.

Table 14.5: Percentage Distribution of the Overseas-Born by Region and Gender (excluding Māori 1881 and 1921), 1881-2001

Gender/ Census	Region					Total
	Auckland	Wellington	Canterbury	Otago	Other	
Males						
1881	19	11	23	29	18	100
1921	34	22	15	10	19	101
1961	43	24	13	6	15	101
2001	60	15	9	3	12	99
Females						
1881	20	12	25	29	14	100
1921	33	22	16	11	19	100
1961	43	23	12	6	16	99
2001	60	15	9	3	12	99

Source: Pool 2015a

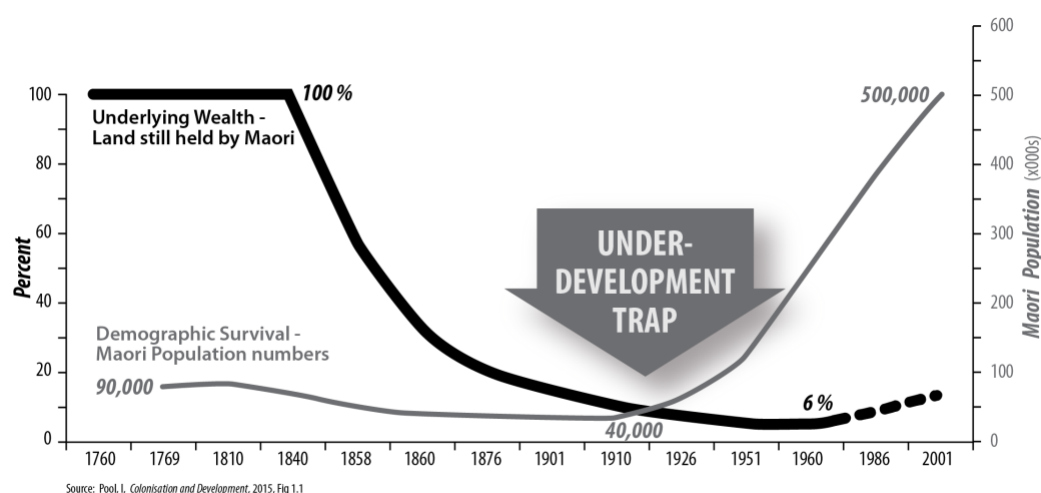
Māori Peopling and Life, from *circa* 1880 to *circa* 1919

The story of recolonisation had another less obvious side. In general, over the period from the 1880s to 1919 Māori were almost in a different world. At the dawn of the 20th century Māori were in an ‘underdevelopment trap’ (Figure 14.4), defined in terms of their falling numbers, continuing loss of wealth, which for them was land, and low levels of survivorship (Figure 14.3). Their most evident defence mechanism was to seek wage employment, and earlier I noted this was most frequently where Māori life intersected with Pākehā society and the monetised economy in this period. Typically, it was in the strategically important areas of casual and seasonal labour associated with sheep farming, and in meat works. For Māori these jobs were an important part of their hybrid economy (defined Chapter 6). There were also attempts to improve Māori land-use, notably in Apirana Ngata’s schemes dating from the *1909 Native Land Act* (Harris 2014: 367-68). These initiatives became more important in the period covered in the next chapter.

For Māori in the new century, the most primal aspect of development began to unfold positively: by 1911 their demographic survival now seemed assured. By contrast, apart from a few trial schemes very little was done for Māori for the other aspects of development. Their own attempts at development were often unsuccessful, particularly as they lacked financial capital, and their major physical capital, land, was often not farmable. Either, it was in such pockets, and with many co-owners, a result of the individualisation of titles in the Acts of the 1860s, or it was in areas with

intense local relief. Māori had almost no wealth and incomes were derived from casual or seasonal labour. An issue that was to become a major point of contention in the 21st century was also already in evidence in the early twentieth century: Māori were concerned about the quality of their waterways. There was also the fact that exotic fish species, introduced for recreational fishing were supplanting Indigenous species on which Māori relied for food (Binney with O'Malley. 2014: 335-36).

Figure 14.4: Schematic Diagram of Underlying Wealth and Demographic Survival: Trends in Māori Population and Development, 1760-2000



The effects of Māori demographic and economic experiences in the colonial era had resulted in multi-faceted underdevelopment. By the end of the Victorian era, Māori were in an ‘underdevelopment trap’, as measured by major demographic and economic indicators. This is shown diagrammatically in Figure 14.4. It takes its inspiration from the work of Richard Nelson (1956)⁸ on low level development traps and uses two indicators of development – land under their control and population numbers. Others, such as longevity, could have been used, but the results would have been similar. In sum the figure shows that, by becoming colonial subjects, Māori had suffered what Marxist sociologists call the ‘development of underdevelopment’ (Hoogvelt 1978: Chapt 4).

Clearly, at the ‘dawn’ of the new century Māori survival was the most important pre-condition for all development. In 1901, following the *Public Health Act* (1900), a Department of Health was established. It set up a Māori Health Unit staffed by Māori medical specialists, with the *Māori Councils Act* (1900) as enabling legislation. These practitioners initiated the first serious attempts to improve Māori survivorship and longevity, and, by my estimates of life-expectation, were rather successful. They did this through *Community Health Strategies* (this is my label to distinguish that programme from later *Public Health Strategies*), focusing on improving village sanitation and living conditions. Raeburn Lange discusses the

socio-political context that facilitated these health reforms. A key factor was that the medical practitioners who implemented the programme were Māori themselves, versed in Māoritanga (Māori culture). Consequently, their health education campaigns were not preaching to communities, but working through kaumatua and kuia (elders), often going back to oral tradition, to get village leaders themselves to propose sanitary reforms. These ideas about development had been formulated and rehearsed years before when they were members of the Te Aute College Students' Association, whose patron was the cabinet minister James Carroll. Out of this grew the Young Māori Party dedicated to improving Māori health and welfare. Among its members were doctors Pomare and Te Rangi Hiroa (Buck), who later became an internationally eminent anthropologist, the lawyer Ngata, and Tomoana one of New Zealand's most respected lyricists (Pool 2016; Lange 1999; Woodward and Blakely 2014: 138-42)⁹. This community approach, pioneered in Aotearoa, was independently 're-invented' – as it were – by the World Health Organisation at its Alma Ata Declaration at the 1978 World Health Assembly in Almaty, Kazakhstan.

These strategies were successful but unfortunately they were short-lived. As the *1990 Official Year Book* notes, from 1909 on and especially in World War I, health development was not given the priority it had had in the first decade of the new century under the Liberals, for neither Māori nor Pākehā, so Aotearoa was ill-equipped to deal with epidemics. Nevertheless, a first significant epidemic, smallpox in 1913, the first time the disease came ashore and mainly among Māori, was successfully contained; NZ's first modern epidemiological paper (a case/control analysis, using case-fatality rates for the previously vaccinated/unvaccinated) by Te Rangi Hiroa (1913), provides fascinating details. The second and far more severe outbreak was the flu pandemic described earlier. In Aotearoa, the impact on Māori mortality was perhaps 10 times higher than for Pākehā. As the highest death rates were age- and gender-specific (especially young adult males), for Pākehā and Māori combined, this had impacts that reinforced the wartime fatalities to cause discernible cohort momentum effects for decades to come, as documented by Statistics New Zealand in a very careful study. For Māori, the effects on fertility (deaths of either or both spouses) through the dissolution of unions lasted until the early 1920s (Pool (1973a, b; Pool, I and Cheung J 2004; Pool, I and Cheung, J 2005; Dunstan et al 2006).

Demographic, Economic and Social Transformation

In the period covered in this chapter Aotearoa New Zealand went through a remarkable transformation, affecting both the settlers and the indigenous minority, but transitions in parallel, almost as independent populations. What is most remarkable is that, in both cases, the speed of change was rather rapid. In the early 1900s, the demographic fate of Māori was sealed; over a few short years their survival as a

people became definitively assured. Their material wellbeing, however, was far from satisfactory, contrasting markedly with the standards of living enjoyed by the Pākehā majority. From the late 1870s, the settlers had shifted from being a turbulent society with hyper-fertility and massive migratory inflows, with an economy based on ‘quarrying’, and, associated with this, the conquest and swamping of the native people, allowing the dispossession of their lands. The resultant availability of areas for settlement in the North Island was a major factor in turning a drift southwards, northwards once again. By the early 1900s, Pākehā were a ‘low’ fertility population, yet were no longer reliant on migratory surges for stocking their numbers. Instead, for the next few decades momentum effects would contribute a part of the population growth. Momentum also endowed the country with a ‘window of opportunity’ for a demographic dividend. On becoming a Dominion (1907), New Zealand could have sought true social-emotional independence from its metropole, but it did not. Even the emerging Pākehā reproductive regime was a clone of the metropole’s, and very distinct from the colonial model followed until 1880.

At the same time, technological breakthroughs related to the grasslands industries opened up New Zealand’s industrial revolution – but on farms and in dairy factories rather than in ‘dark satanic mills’. This revolution occurred very quickly – by 1901 – yet in the 1900s and 1910s was becoming even more entrenched. Linked to the intensification of pastoralism was the setting in place of the main lineaments of New Zealand’s population and economic demography. It became a country that was dependent on pastoralism, yet surprisingly urbanised, with a network of centres linked into underwriting the centre-periphery exchange between Britain’s urbanites and New Zealand’s farms. Once this was established the population geography changed gradually and rates of internal mobility decreased. In this chapter, the second part, 1901-19, saw this structure bunker down.

There is no definitive explanation of why New Zealand ‘recolonised’ in the dying days of Victoria’s reign, and remained so dependent thereafter on Britain for another seven decades. British fervour surrounding imperialism and the Queen’s Diamond Jubilee (1897), then her death, and jingoism in the Boer and Great Wars was transmitted across the Empire. Historian Michael King (2003: 266) cites ‘heightened feelings of imperialism – at the very least that “double patriotism” engendered by World War I – and by Britain’s continuing role as a receiver of New Zealand’s exports and provider of its imports’. He has explained some of the cultural dimensions of re-colonization. He is also probably correct in citing the economic direction of trade in pastoral products which was overwhelmingly towards Britain which sustained the trend.

The next chapter covers the period between the wars. In those decades the trends emerging in the years covered by this chapter reached their peak.

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¹ In 1898, to subdue 20 Māori 'rebelling over a 2s.6d tax applied to dogs owned by Māori, the Crown sent in a massive force (a naval ship, machine and field guns, 120 men). By then, the rebels had already gone back to their homes – at the suggestion of a local pub-keeper who broke the law by serving them beers on a Sunday. Several shots were however fired. This policing was reminiscent of popular fiction of the early 20th century: the Edgar Wallace's *Sanders of the River* series, ostensibly set in West Africa.

² John Bongaarts (1982) developed a more formalised model in wide use in demography relating to what he calls 'proximate determinants', but, because the Davis-Blake framework has been operationalised for New Zealand, I use it here.

³ Who was 'ever-married' (here the index proportion still never married by a given age is used) and the age at which they married. This operates more in societies in which sexual relations occur mainly within formal marriage.

⁴ Distinguished mathematical demographers have plotted this for us, plus an inverse factor awkwardly termed 'efficiency' – because of its application to measuring family planning (efficiency = probability of conceiving when practising fertility regulation). Fecundability peaks from the late teens depending on levels of nutrition, and then declines from about 30 years on. In all probability, for reasons of health and diet, among settler women menarche was later and menopause earlier than today, and thus the fecundable span shorter (summarised and fitted to the New Zealand context in Pool and Sceats 1981: Chapt 3).

⁵ The Age-specific fertility Rates were estimates by C J Gibson in his PhD thesis (Berkeley, supervised by Kingsley Davis), applying age-legitimacy-specific distributions from New South Wales historical data to Pākehā births to estimate numerators; denominators come from New Zealand census data. The modeling by Janet Sceats and Ian Pool uses direct standardisation. Its methodology is detailed in a peer reviewed book chapter, Sceats and Pool 1985: Table 92, and its adjacent text.

⁶ *The Status of Children Act, 1969*, saw illegitimacy removed as a legal status.

⁷ As I noted in Chapter 13, Belich has shown that recolonisation was also unfolding in other settler-societies.

⁸ Because of a lack of data, it does not have the precision of his work (discussed Pool 2015b: 23-27).

⁹ The New Zealand programme is documented authoritatively by Lange 1999, who, most appropriately, uses the concept of 'health development'. Te Rangi Hiroa (1952 410-12, cited Pool 1977: 110) recounts an example in Whanganui, where acceptance of improved latrines was gained by prompting elders to invoke oral tradition about pre-contact village architecture and the importance of separate, properly constructed latrines.

Chapter Fifteen – ‘A Pause for a Cup of Tea’: New Zealand 1920–1940s

‘More British than their Kin...’

(Historian Michael King 2003: 365)

Among the numerous witticisms attributed to David Lange (Prime minister 1984-89) one came when his cabinet was riven by internal dispute, so he called for ‘a pause for a cup of tea’. This seems an appropriate label for the interwar period – ‘a pause’ after the demographic and other turbulence of the colonial period, and the changes associated with the triggering of recolonisation (Chapter 14), but before the neo-turbulence of the period since 1970. The historian, Keith Sinclair (1959: 238, 240), even views the ‘roaring twenties’ as anything but ebullient: ‘Wherever one looks at life in New Zealand during the 1920s there is evidence of a loss of confidence, hesitancy, ... The Government adopted an attitude of passive regret towards the creation of the modern Commonwealth...the New Zealanders suffered from a “mother complex” ...’. This was most forcefully expressed by a Labour Prime Minister, Michael Joseph Savage, when declaring war, 3 Sept 1939: ‘We range ourselves without fear beside Britain. Where she goes, we go’.

The Statute of Westminster may or may not have been a game-changing constitutional milestone, or merely something which passed by largely unnoticed outside the halls of parliament, but that is outside the scope of my book. What is relevant here, however, is the feeling of ‘passive regret’ over the statute – that, by ratifying it, the country would somehow reject empire and the monarchy. This symbolises just how loyally ‘British’ New Zealanders were during recolonisation, an ideational issue that does fall within my mandate. As the chronicler of Aotearoa’s national identity, Michael King (2003: 365-67) says, ‘One symptom of the intensity of British feeling was the continuing lack of interest in ratifying the 1931 Statute of Westminster...’ This had latent as well as manifest consequences for New Zealand’s peopling. ‘Miriam Soljak, a New Zealander of Irish descent who had married a Dalmatian immigrant...’ was affected by the British *Nationality and Status of Aliens Act 1914*, which had been adopted by the Dominion: a woman marrying an alien lost her British citizenship¹. When the Statute was finally ratified in 1947, this came only after a bitter political battle. King notes that one National MP probably spoke for many New Zealanders: ‘he declared his opposition to the Statute and said he would rather be “a British subject” than a national of the British Commonwealth”.’

The period covered by this is ‘war-bound’: it starts as World War I finished, and it came to an end as World War II finished. As noted last Chapter, New Zealand

invested heavily in the first of these conflagrations, in terms of military numbers, fatalities, loyalty to Empire and emotional toll. It did so not in its own right, or to serve its own political-economic interests, but almost out of deference to the 'Motherland'. This was the 'colonial cringe' noted earlier – almost as if 'Mother England' was generous in allowing New Zealand the privilege of sending its soldiers off to the other end of the earth. Whitehall responded by having 'colonials' serve under British staff officers, by memorialising New Zealand service in its war museums under the vague rubric 'British' troops and by trying to relegate Māori to pioneer service because 'coloured infantry' should not be pitched against 'white soldiers'. Māori themselves manipulated their role at Gallipoli (World War I), and were soon in front-line service there and on the Western Front: beyond his peace-time contribution to politics, health and the social sciences, (Dr) Peter Buck, Te Rangi Hiroa, DSO, ended up as a high-ranking army medical officer. Then at the War's end, New Zealand had first to deal with 'flu, the pathogenicity and spread of which were war-related, and then to repatriate returning servicemen. One major option was land settlement but this was bedevilled by soldier-settlers being allotted difficult land tracts (hilly or on soil with trace element deficiencies), which were severely under-capitalised.

In the interwar years, in large centres and hamlets, ANZAC Day (April 25th) became a day of national remembrance and eventually a statutory holiday. Services were held before the local war memorial; Gallipoli and the landing that initiated that campaign was so powerful an image that the fatalities on the Dardanelles came to overshadow the greater losses on the Western Front. Yet, it was not until the 1980s, and the impact of the Australian film '*Gallipoli*', that World War I as a totality began to play a major critical role in building national awareness – the recognition that New Zealand did have a Great War history beyond storming Turkish cliffs, and, with this, came far greater acknowledgement of battles like the Somme. By contrast, in the interwar years Gallipoli and the Western Front were remembered, yet in ways that strengthened the '“mother complex”' cited above, but which did less to reinforce New Zealand's own identity.

World War II was longer than World War I, but for New Zealanders fatality rates were lower. It was also fought in Europe, the Middle East (New Zealanders were even involved in campaigns against the Vichy French in the Levant), Asia and the Pacific – on land as far south as the Solomon Islands, and in the air and on the sea to the edges of northern Australia². A New Zealand division was involved in the Pacific, but the main theatre of war for Aotearoa was Greece, Crete, North Africa and Italy. When Australia pulled its troops out of that theatre to protect their homeland, New Zealand chose to leave their largest contingents in the Mediterranean. As New Zealand was vulnerable to a Japanese incursion, it was reinforced between 1942 and 1944 by the American military, in what was popularly called 'the American

Invasion', with 15,000-45,000 well-paid 'Yanks' in the country at any one time (equivalent to 3% of the entire population). It became a staging and training post, a centre for military hospitalisation, and the site for rest and recreation for them. Although generally not a negative experience, tensions came from the fact that New Zealand's own 'men' were overseas, mainly in the North African and Italian sectors.

For reasons of statistical convenience, I will generally use 1945 as a cut-off for this chapter. The 1946 census was brought forward and conducted late in 1945.

A Hiatus Between Wars

The term 'pause' certainly applies to Pākehā peopling in this period, as neither natural increase nor net immigration rates were high. Instead, the interwar period was one of gradual change in Pākehā population growth, although even this trend decelerated or reversed for some factors during the Depression of the 1930s and the War of 1939-45. The country's Pākehā population geography also was sufficiently unchanging to comply with the appellation of 'pause'. The patterns seen in the period 1901-19 were repeated. But underneath all this stability there were two new Pākehā elements – the more manifest, because it involved all the infrastructure of urban expansion, was suburbanisation for the cities. More latent, but perhaps more potent in the long run, was an age-structural shift-share between the countryside and the urban areas. In a sense, therefore, while change was slow, nationally and even in terms of geographic redistribution, a quiet revolution was occurring between the wars in the form of an age- and geographic-structural redistribution that was to have major long-term consequence for both peopling and development in Aotearoa.

Development took the form of more and more, ever-so-gradual, consolidation. New Zealand kept its rank among the wealthiest countries and hit top position in 1938. Its base functions interwar, laid down at the end of the Victorian period, were summarised by Melanie Nolan (2009: 358):

'New Zealand did not become a complex industrial society... [It] had emerged as a major market-oriented agricultural economy, reliant to a large extent on export markets... While it lived on the sheep's back, at the same time a modern urban occupational profile developed. New Zealand was a service rather than a classic industrial economy'.

But there was a backstory to this stability. What also becomes evident retrospectively but much later, in the light of new population-economics paradigms, is that New Zealand could take this 'pause' simply because it benefitted from a 'window of opportunity' for a 'demographic dividend' in this period, coming from the last larger birth cohorts born before and just after World War I (see below). They produced strong flows into the working ages because of demographic momentum, as

birth cohorts left childhood and entered adult ages. Linked to this was also a latent element – a shift-share geographically in the regions where working age people were living; urban New Zealand benefitted from higher fertility in rural New Zealand and the outflow of young workers from farms and small towns to cities.

The nascent welfare state initiated by the turn-of-the-century Liberals was tampered with, but until 1938 nothing radical occurred in the domain of welfare. A possible exception to this was the world's first family allowance, introduced in 1926, a means-tested benefit. An underlying motivation for this legislation was eugenicist (Labrum 2009: 404-05, citing Michael Belgrave):

‘The concept of “race protection” based on a population ideology was a key aspect of the allowance. It was a major turning point in terms of social policy, as it was “the first time that financial support was aimed at a general outcome rather than responding reluctantly to individual needs”... [T] here was an incredibly large take-up by Māori families...’.

The notion of using child allowances as an incentive for women/couples to take their pregnancies to full-term was to reappear in a report addressing abortion in the late 1930s (Pool *et al* 2007: 122, citing Nolan 2000: Chapt 5; and Sceats and Pool 1985 187-99).

The ‘Great Depression’ of the 1930s crosscut development and welfare trends, although Melanie Nolan shows that New Zealand seems to have ‘had an “easier” Depression than many places elsewhere, even when women, Māori and young people’s unemployment is estimated and these marginalised and overlooked unemployed are added to the official figures’. Women and Māori were excluded from relief programmes on the spurious grounds that they had material props, whereas a Pākehā man needed to support a family. There was not a comprehensive welfare net until the Labour government introduced measures in the late 1930s, especially the 1938 *Social Security Act*. Not surprisingly, friendly societies flourished in this era a trend that started to change when Labour ‘won the election in 1935...’ Easton argues that by 1935 the economy was ‘in strong expansion’ (Nolan 2009: 374-75; Easton 2020: 23; Brookes 2016: 213).

For Māori these years certainly saw a ‘pause’, a very long pause, in which they had to face major obstacles to reasonable participation in national life. Māori remained rural, ‘out of sight and out of mind’ to a remarkable degree. Even their broad regional patterns of residence were very different, as I will elaborate below, and this reflected much of New Zealand life in the interwar period. Māori were briefly showcased for Royal visits or at the time of New Zealand’s Centennial (1940, from the date of annexation as a British colony) in that case in a flurry of books and articles. These writings provide an interesting and at times frank inventory of Māori

life, especially those written by liberals sympathetic to Māori, such as the philosopher and ethnologist Ivan Sutherland (1940). The accelerating growth rates of Māori would, however, soon see a need to challenge assumptions about the future for Māori and above all their geographic distribution, which itself was a function of other factors: availability of means of economic and social support, and deep cultural ties linked to place and genealogical networks. The exploits of the Māori infantry battalion in World War II, and the VC awarded to Moana-Nui-A-Kiwa Ngarimu gave them a boost in public recognition. Then, post-war, ordinary Māori themselves took matters into their own hands with their radical rural exodus to be discussed next chapter, a shift that met some material needs but raised non-material issues of belonging.

Over this period Māori population vitality became more and more secure, but development was stunted as they had neither the viable land-based capital nor access to financial capital to accumulate real wealth. Moreover, their incomes were dependent on what would be called a ‘gig’ economy today – casual and seasonal work. Many were in situations of dire poverty. Most were still dependent to a significant degree on their hybrid economy, although in the Depression this may have been a valuable survival mechanism. Population growth came from continuing high fertility rates, and gradually declining mortality. As a consequence, their age-structure had changed from 1901, mainly as a function of decreasing mortality and improving child survivorship in the face of high fertility. By 1926, it was youthful with over 40 per cent at child ages, but only 5 per cent or less at 65+ years. This structure had both good and bad implications. It was positive in the sense that demographically Māori seemed more ‘vibrant’ than low fertility Pākehā. But, the high levels of child dependency also left low proportions of Māori at working ages, and thus no window of opportunity for a demographic dividend. This problem became more acute and obvious after World War II.

The Māori-Pākehā reproductive differential was so evident a trend that it stimulated negative eugenic outbursts, as exemplified by the publication of a book that expressed fears about ‘whether Pākehā or Māori shall predominate numerically’ (Sinclair (H I) 1940:91). In one form or another eugenicist ideologies were widespread across the developed world, directed at ‘breeding stronger races’, directed against non-whites and Jews, and those with physical and psychological disabilities. In Europe, and in the Anglo settler states and societies many actions and discriminatory legislation – in fields such as mental health, migration and ‘miscegenation’ – flowed on from this. Most extreme, of course, was the Nazi holocaust conducted against Jews, Gypsies, gays, the ‘mentally defective, and other ‘lesser beings’.

In New Zealand. these anxieties were stoked by a lack of understanding in the popular media of the under-registration of Māori births and an artefactual increase in

their birth rate as counts improved³). In reality, as noted already, Māori Total Fertility Rates remained consistently high throughout the 20th century, until the 1970s. A more exact idea of their TFRs can only be based on estimates. But, the robustness of these computations is easily confirmed – no population ‘closed to migration’ could have had as young a structure as the Māori had at the 1936 census without having also had very high fertility rates. Additionally, high childhood mortality rates in that period had to be countered by elevated fertility. Nevertheless, as is often the case with demographic trends, data, the inexact as well as the exact, fed ‘political arithmetick’ as the badly flawed Māori vital registration information generated concern that high Māori rates could imbalance population numbers in what should have been a ‘white man’s country as completely British as possible’. The finger of blame in all this was pointed at the ‘selfishness’ of Pākehā women who were limiting ‘motherhood’ – their TFRs were barely above replacement – using the barrier contraceptive techniques available at that time. This morphed, irrationally, into panic about ‘miscegenation’ with Chinese, particularly by Māori women working on Chinese market gardens (Brookes 2016: 193-98, 201, Chapt 7 *passim*).

This period saw one outstanding development initiative, however, which had far-reaching consequences for the economy and society, as well as more immediately for family welfare: *The Social Security Act, 1938*, that ushered in a Nordic style welfare state. Although the Act itself was the instrumental event, it was followed by the promulgation of a plethora of statutes and regulations, notably in health, that refined and expanded the legislation. Of singular importance was the introduction of the universal family benefit in 1946 in place of means-tested payments. The notion of welfare in both New Zealand and Australia had long been based on a working man having a ‘family wage’ to sustain him and his dependents. Thus, there is an implicit link to development in Australasia – rather than seeing welfare as purely a ‘safety net’. The *1938 Act* and the 1946 family benefits extension reinforced that precept (Baker 2011; also see Appendix A). On a more material plane, the construction of state houses under Michael Joseph Savage’s Labour Government, elected 1935, saw 5,000 built by 1939. This was a powerful tangible demonstration of a development orientation, but there were less tangible but also significant development impacts; the family benefit gave mothers spending power – most went on basic needs for their households and was spent in their own locale. ‘It gave Māori and Pākehā women a reliable means to pay for groceries and clothing when the family income might vary greatly from week to week’ (Brookes 2016: 275). In a Keynesian world, welfare was not just a burden to the economy, but equally well one of its stimuli.

Pākehā Peopling: Population Dynamics

Population growth briefly accelerated as the troops came home after World War I (they were excluded from the 1916 census), and then rates decreased to reach historically low levels in the Depression and World War II. Of the components of growth, levels of natural increase were low, but so too were rates of net immigration. Consequently, migratory inflows made limited contributions to increases in the stock of population. Yet, paradoxically, relatively high percentages of the total population were overseas-born in the 1920s and the 1930s, decreasing in the latter decade. It was not until around 2001 that proportions similar to those in the interwar years were to be seen: in 1936, 20% and in 2001, 19%. But in the 1920s and 1930s, this was a function of the momentum effects of high levels of immigration in the 19th century. In 1936 the median age of the foreign-born was 50 years, but in 2001 it had become much younger – 41 years. Yet, the total population in 1936 was younger, an average age of 28 years versus 35 years in 2001. This interwar trend was a factor of Total Fertility Rates in excess of 3.0 births per woman two and more decades earlier at the start of the 20th century. By contrast, the 2001 composition was affected by the fall in natality during the Baby Bust from the mid-1970s.

Immigration spiked modestly early in the 1920s then dropped off and there was net emigration briefly in the Depression. In the early 1930s numbers coming from natural increase were so low, and migration rates negative, so that population growth in *absolute* numbers fell below the level for any quinquennium since 1886-1890, yet population size had more than doubled over the years 1886-1936. Taken alongside population geographic trends (see below), the interwar period can be seen as one of consolidation, by contrast with the more rapid change in the period up until World War I when ‘Recolonisation of New Zealand’ had first been evolving (Papps 1985a: Table 8; Farmer 1985: Figure 14).

At the start of this period, Pākehā already had relatively low mortality and declining fertility. Levels of reproduction had declined slowly between 1901 and 1920-21 when Total Fertility Rates ((TFRs) were just above 3.0 births per woman to below 3.0. They had briefly plummeted during the ‘flu, then recuperated because of the twin effects of the epidemic itself and then recovery from its impact (marital dissolution /disruption because of the death/severe illness of one or both spouses), plus the repatriation of troops still overseas when the main wave of ‘flu had hit. Pākehā had moved from the third into the last stage of demographic transition, with both low mortality and low fertility. Then, both mortality and fertility rates gradually dropped further, and, in 1935, the TFR even briefly touched slightly below replacement. Demographers take 2.05 - 2.10 births per woman as an approximation of replacement – 2.0 for the couple, with an allowance for the risk of childhood loss, or 1.05 for the Gross Reproduction Rate, GRR, of female births per woman (see Table

15.2). But the TFR, the rate used most often to assess fertility levels, is a ‘synthetic rate’ that combines the experience, both quantum and tempo, of all maternal cohorts occurring over just one calendar year. As noted last chapter, some women are trying to conceive, some truly avoiding pregnancy, others delaying it, or increasing spacing since their last birth. For some of these women, the departure of their spouse, or boyfriend for the war and/or their return increased risks of conception, and thus the actual cohort fertility, above what the synthetic annual rate suggested. Consequently, as demographer Mansoor Khawaja has demonstrated, at the real end of their reproductive spans the equivalent group of women had achieved above replacement fertility; the cohorts immediately following them were even higher (Khawaja 1985: Figure 21). Although the below-replacement rate for 1935 was statistically correct, it did not truly reflect the long-term contribution of cohorts of women to building the stock of Pākehā population.

There is another dimension to this. Trends in natural increase in the inter-war years were still largely determined by socio-economic change, not medical/contraceptive technology; medical science made advances in microbiology during the 1930s, but it was World War II that spurred this on. When we look at death rates, New Zealand in the interwar period provides an almost perfect experiment that allow us to examine this hypothesis. Pākehā New Zealand was a wealthy society, reflected in low mortality levels by world standards (see below). By then, formal public health – eg improved water supplies, hospital reforms – was also making an impact, despite blockages coming from the parochial and self-important stances of the plethora of local bodies managing this infrastructure. There was also an ideological debate over whether health was a public good, and thus should be the obligation of the government, or whether it should be delivered by private agencies and doctors. The Government was about to take on this battle against powerful interest groups, notably the New Zealand branch of the British Medical Association (BMA, lasting until the 1970s); the perpetuation of being a BMA ‘branch-plant’ is another example of how recolonisation held Aotearoa closely to so many British institutions.

In the 1920s and 1930s, medical science was still vastly different from that available to the health system to which we have become accustomed from the late 1940s on. After World War II, Pākehā, as well as Māori, were to benefit both from the post-war welfare state that afforded them almost free access to medical services (government never achieved 100% public delivery), plus a chemotherapeutic revolution that expanded rapidly after the war. By contrast, in the interwar era Pākehā were dependent on paying for health care, or charity, and Māori on nursing and other services provided by the Department of Health. Nevertheless, because of their advanced level of social development, Pākehā were entering the last phase of an epidemiologic transition, with communicable disease mortality a minor component of the death rate (16%, 1936; below 50% already by 1876). For Māori, who were far less

able to pay for health services and were in a situation of social deprivation and were still at an earlier phase of their epidemiological transition – 57% of their deaths came from communicable diseases, and still remained at 54% in 1945 (Pool 1985: v 1, Tables 115, 122; Pool 1991: Table 6.7). Pākehā had passed the period when they were battered by pandemics, but Māori were still in a phase when mortality levels, relative to Pākehā, were very high (Figures 14.2 & 14.3). In part, a degree of protection for Māori came the fact that the majority Pākehā population was less susceptible to communicable diseases and thus were no longer a powerful vector for the spread of pathogens and also, in their own interests, enforced border controls to avoid the introduction of pandemic diseases. Finally, no population in New Zealand was exposed to the great apocalyptic diseases such as malaria, typhus, plague, cholera, yellow fever or smallpox, although there was still the vivid recent memory of the havoc that an ‘everyday’ disease, ‘flu, could inflict on a society.

Table 15.1: Percentage of Pākehā Women Never Married, by Age, 1936 and 1971

Age-group	1936	1971
20-24 yrs	72	35
25-29 yrs	38	11
30-34 yrs	23	6

Source Pool, Dharmalingam and Sceats (2007), Online Appendix Tables: Table 2.1

In the interwar period, the reproductive regime was also still controlled to a very significant degree for Pākehā couples by a tightly compressed ‘nuptiality valve’ cited in earlier chapters. To reiterate, it comprises any behaviours that block exposure to intercourse, of which cultural norms relating to age at marriage and rates of celibacy among women are globally the most important. In this regard, Pākehā could not equal the Irish women, 55% per cent of whom aged 25-34 years were single in the 1930s. The Irish truly outranked other Europeans (even those across the border in Ulster); England’s rates, not surprisingly, resembled those of their recolonialised imitators in New Zealand (Kennedy 1973: 48)⁴. In Table 15.1, the differences between the interwar years and the second peak of the Baby Boom (1971) for these factors show up starkly. In 1936, almost one-quarter of women had remained celibate in their early 30s; in the Baby Boom such women were a small minority. Delaying marriage into the mid- to late-20s also typically excluded exposure to intercourse and determined the timing of the first birth; pre-marital sex did occur, but, if it resulted in pregnancy, it was frequently legitimised by a precipitated wedding and a birth in the first seven months of marriage. Barrier methods, abstention, withdrawal and, in extreme cases, illegal induced abortion were employed to regulate fertility – but typically by multiparous older women to limit family size, and, as shown earlier they

would, anyway, have contributed only a minority of the births. In the next chapter I will return to the ‘releasing’ of the nuptiality valve that came in the Baby Boom.

In the interwar period, replacement, even sub-replacement, fertility was an issue of concern across the industrialised countries, and New Zealand was not free of this. This is shown by Gross Reproduction Rates (GRRs) in Table 15.2 for Western Developed Countries (WDCs). Australasia fell below the other Anglo settler societies, but around or above the European examples.

When almost touching exact replacement in the mid-1930s, Aotearoa went into a moral panic, in which abortion, often conflated with contraception, was blamed. This was addressed by a government inquiry that made some relatively extravagant claims about abortion levels, but ended suggesting useful neutral policies, akin to those that had informed the 1926 *Family Allowances Act* discussed above. It called for a family benefit to obviate need to resort to fertility regulation (Sceats and Pool 1985: 188). There was a fertility spike about 1939/40 as troops married and said their goodbyes before going overseas. Troops returning, from 1944, resumed these relationships, or, if still bachelors, married their pre-enlistment or embarkation sweetheart, who was probably in her mid-twenties. These events set off a sort of phony Baby Boom (Pool *et al* 2007: 105-07) – it was to be the marriages and parenting of the ‘younger sisters’ and their friends aged closer to 20 years which brought the real Baby Boom into full flight from about 1946-47. These twin events, a mini-spike in fertility and war, then the end of the war and the ‘phony Baby Boom’ at that time before the real one commenced, brought the ‘Pause for a cup of tea’ to an end.

Table 15.2: Gross Reproduction Rates, 1930–34, Selected WDCs

Australia: 1.1	Canada: 1.5	NZ (Pāk): 1.1	US: 1.2
Denmark: 1.1	Eng & Wales: 0.9	France: 1.1	Sweden: 0.9

Source: Gille 1960: Table 3.

Notes: The GRR (= Female Births per Woman), is computed in the same way as the TFR, but with the sex ratio at birth incorporated; a further refinement, the Net Reproduction Rate, builds in an allowance for mortality. The GRR and NRR were popular in the 1930s and immediately post-war – thus Gille’s use of it – but are now used infrequently. The NRR also has applications in theoretical mathematical demography.

Pākehā Peopling: Age-Structures

In the interwar years, Pākehā dependency ratios were low, with peak proportions at 15-64 years, at levels they would not reach again until the 2000s (Figure 11.2). This was a period in which a ‘window of opportunity’ for a demographic dividend was evident, although such effects were overshadowed by the Great Depression and price factors to which reference will be made below. Notwithstanding this, New Zealand retained its relative status, of having one of the highest GDPs/capita for any country (Greasely and Oxley: 2005, 2009). I would also argue that this was related to the advantages, albeit muted, of the ‘demographic dividend’. In 1936, 28 per cent of Pākehā were at ages 0-14 years, the lowest New Zealand had had from the 1874 census on (before that migratory inflows grossly affected age-sex-structures), while the per cent at old ages was still very low (5 per cent). Moreover, the proportions at working ages (67 per cent) were very high, a function of the low fertility of the period (fewer children) bolstered by large birth cohorts born in the 1870s to 1910s who were now at adult ages (Neville 1985: v 1 Table 30). A similar peaking would not occur until 2001, but then as a function of the Baby Boom spikes.

In short, New Zealand had high proportions at the productive working ages and low percentages at dependent ages when social sector expenditures are highest. This carried across to the sub-national level: the proportions of the urban and rural populations at young (15-34 years) and later (35-64) working ages were almost the same: in both cases the ratio between the younger and older labour force ages were at parity just over 100. But here the similarity ends – rural working age persons were likely to be born there; urban far less so.

In Chapter 14, reference was made to the opening up of rural-urban fertility differentials between the 1890s and 1970s, a trend that has wider ramifications for the peopling of New Zealand. These differentials probably continued throughout the interwar period but cannot be analysed directly as vital data were coded by registry office and thus collated data on residents of both boroughs and counties. Instead, the index used in Table 15.3 is the child-woman ratio, that is affected not only by fertility, but also by child survivorship, and, to a lesser degree by passive migration of young children, but neither of which would have been major factors. Nationally, however, this ratio correlates very closely with the General Fertility Rate and the Total Fertility rate for the two dates at which there are comparisons (1926, 1966). So, while it is an imperfect measure of reproduction, it is useful as an indicator of replacement. Furthermore, it provides a simple statistic that is available at a sub-national level over time.

Table 15.3: Child-Woman Ratios, 1881-2001, for different Sub-National Settlement Groupings (excluding Māori 1926)

Settlement Type	1926	1966	2001
Counties	557	734	N/D
[Rest of NZ]*	N/R	N/R	379
Minor Urban**	396	558	N/D
Major Urban***	388	499	291
NZ Total	429	584	329

Notes: Child-Woman Ratio = Children 0-4 yrs/1000 Women 15-44 Years

Total minus major urban. **Boroughs < 20,000, town districts, etc that were neither major urban nor rural. In 1881 a number of the settlements in this category would still have been large mining communities such as Thames. * Population > 20,000*

When ‘hyper-fertility’ had been the norm (1881), replacement levels were high everywhere across Aotearoa’s settler population, but by 1926 a definite rural-urban and a major urban/rest of New Zealand differential in replacement had emerged becoming more marked in the Baby Boom, as is shown in Table 15.3. In 1926, only 33% of young children lived in New Zealand’s larger urban areas, which had 38% of the people of all ages. In short, the incubator of growth by natural increase was disproportionately outside the larger urban areas of New Zealand until *circa* 1970 – as I will show in later chapters, this function then decreased significantly. But, in the interwar decades, larger urban areas were also not contributing proportionately to the nation’s births as their CWRs were low – despite those at parenting ages being disproportionately concentrated there. Although fertility was declining overall, there were marked rural-urban replacement differentials. This was because Pākehā women on farms and in smaller centres married earlier than their urban counterparts, even in the depression years when, nationally, marriages were typically delayed. In 1936, at 25-34 years 26% of farm women were still single, but in larger urban areas this was true for 34% of women at those ages. One is tempted to attribute reluctance towards ‘motherhood’ to the new era of consumerism appearing in the cities in the 1920s. For many women, ‘The urban experience was... “central to modernity”. A wage packet gave women a new degree of independence and created opportunities for businesses’ (Brookes 2016: 229, citing Charlotte Macdonald 2011:18).

In short, the incubation of growth by natural increase came from rural and small centre New Zealand until *circa* 1970, but then their disproportionate contribution decreased significantly. Such a history is common in the WDCs, extremely so in Italy’s Mezzogiorno as Harvey Franklin showed, and a major feature of France’s rural history documented by Pierre Merlin. In part the diminution of this growth-motor is because rural age-structures had been affected historically by outflows at the key reproductive ages (15-34 years), and almost no increases at the

ages into which later child-bearers were now moving (35-64) . Ultimately, this leads to rural natural decrease, and more complex urban geographical dynamics to be returned to in a later chapter (Franklin 1969; Merlin 1971, 2009; Jackson and Brabyn 2017). But the major urban areas were also not contributing to natality as their CWRs were low (Table 15.3). Not only were persons at young parenting ages clustering there by 1926, but women were over-represented. In 1936, 56% of Pākehā females aged 15-34 years lived in major urban areas, but only 49% of Pākehā female children.

Pākehā Peopling: Gender, Feminism, Equality and Temperance

The days of high masculinity ratios had now passed except when troops were overseas (Neville 1985: Table 22). Thus, I am less interested here in the biosocial factor of sex, but in gender and particularly its ideational dimensions. As befits a ‘pause’, this period saw gradual change in gender relations, more of the same rather than radical shifts. An exception to this occurred in the values-system in what was to be a significant area for the entire society. In 1893, women in New Zealand had gained the vote – a uniquely ground-breaking piece of legislation, only occasionally recognised internationally, and, until recently, ranked fairly low down among the reference points for national pride even within Aotearoa itself. Over most of the 20th century, Kate Sheppard, who led the campaign, and the other seminal, constitutional event – the Treaty of Waitangi – seem to have been relegated to being backdrops. Both are now being increasingly being seen as important front-stage props in the national drama.

The reason for this long-lasting lacuna is not clear but seems to have come from an intersection between suffragism, making its grand successful gesture in the 1880s/early 90s, and temperance. Gaining the vote was overridden subsequently by the assertive calls of some feminists for temperance, and even the prohibition of alcohol. Feminism and temperance are not mutually exclusive, although there are also probably disjunctions. Perhaps suffragism, and some of the other policy initiatives of the Liberal Government at the turn of the 20th century, were the last gasps of an independent, un-recolonised New Zealand, while temperance represented a swing in the other direction, a strengthening of recolonisation – a bid to show ‘Mother England’ that the colony had adopted the more puritanical Victorian values of the metropole and was no longer an unruly place on the margins of empire. Early advocates of temperance turned their attention to electoral reform, but according to Megan Cook (2011) these ‘groups became more socially respectable and politically conservative in the early decades of the 20th century’. This led up to a vote in 1916, in which prohibition was just averted by a few 1,000 votes, so that temperance seems to have headed off issues of equality, of which the gaining of the franchise constituted merely the first step. There is circumstantial evidence, moreover, that in the interwar

years the movement towards fuller gender equality seems to have slowed: a law allowing women to stand for parliament was not passed until 1919, 26 years after the vote had been gained, but the first woman MP, Elizabeth McCombs, was not actually elected until 1933. Paradoxically, in Britain, the first woman could not take her seat because of her Sinn Féin activities, but the second, Lady Astor, did so very soon after their vote was partially extended to women, as late as 1918 – fully extended only in 1928. To take other examples, Mrs Soljak's case referred to above, symbolising many factors of systemic gender inequality, was not solved until after the Second World War, yet this citizenship gender anomaly had been debated years before. In an expanding public service sector, qualification at job entry was a critical determinant of career opportunities, and in this period sex differentiation was formally imposed: '[F]rom 1913 to 1946 girls were not allowed to sit examinations. Instead, Public Service Examinations for Shorthand Typists were inaugurated for which only women were ever eligible'. For most jobs, if not all, women were paid much less than men. For example, 'Women teachers were generally kept at a lower level than men and denied opportunity for advancement' (Nolan 2009: 360; Brookes 2016: 246-70). Thus, gaining the vote, while a noteworthy achievement, was not necessarily, nor immediately, a determinant of gender equality.

The high profile given to prohibitionism was not restricted, of course, to New Zealand. It was seen in all the Anglo-settler societies, most extremely in America's disastrous experiment. In Canada, and various American states after prohibition was lifted, states/provinces controlled the sale of liquor, administered with different levels of form-filling and bureaucracy – even Quebec had a 'Regie des Alcools', that also was responsible for 'des courses et des jeux' (racing and lotteries), all the evils under one management. New Zealand introduced its infamous '6 pm closing' (1919-1960), designed to limit drinking, but that instead produced a sordid 'beer swill' before drinkers – mainly men, only men in 'public bars' – weaved their way home. The country had trusts governing 'dry areas' without legal pubs (often the suburbs); and, as an ancillary component of national elections, a strange vote, on three alternatives that were not mutually exclusive, relating to alcohol sales (prohibition, state control or other). Across Anglo settler societies, bizarre regulations also ensued: at pub bars in Ontario patrons had to be served sitting, but they had to stand in New Zealand, both generating perverse reactions favouring drunkenness. Australia, Ontario and New Zealand all seem to have adopted the worst aspects of Irish pub architecture, ugly swill-palaces, rather than following the model of the far more agreeable British 'local'. This seems to have been one area in which recolonisation did not mean slavishly copying England. But even the 'Motherland' was not immune from liquor control, with varied 'opening hours' (dockside and produce market pubs opened at daybreak), and licensed and off-licence sales. An interwar observer would have seen France as more cosmopolitan and liberated. Apparently, temperance had some effect

as alcohol consumption did drop in the interwar period (Phillips 2013). The easing of liquor regulations went to opposite libertarian extremes – in New Zealand, today many bars are open to the early hours of the morning.

Temperance, therefore, produced an odd ideational interlude that seemed to turn Aotearoa off its social development path, a movement driven by values sweeping much of the Anglo-world. Its major effect was to divert the momentum coming from female franchise in 1893 (New Zealand) away from other issues of fundamental gender equality. Why this happened – by accident, or design by malign conservative forces – does not seem to be clear, but it seems to have stalled the onset of some more fundamental reforms to the social order until the last period to be covered by this book. The first wave of recent feminism, hippies, Woodstock and other icons of the 1960s notwithstanding, real changes to the gender order, affecting both the heterosexual and LGBT communities, remained on the back burner, becoming issues of protest and reform only at the very end of the 20th century.

Pākehā Peopling: Geographic Distribution

As I noted earlier in this chapter, the Pākehā population geography interwar was very different from Māori. This is shown in Table 15.4; the ‘Total population’ distribution can be a proxy for Pākehā, simply because they made up 95% of the population. I will return to the Māori geographic distribution *per se* later in this chapter, but Table 15.4 vividly shows how very polarised were the two different ethnic patterns of population geography. Regions in which Māori were a significant proportion were generally also those in which few Pākehā lived, most extremely Northland, the Bay of Plenty and the East Coast. The Waikato-King Country-Hauraki-Thames-Coromandel had larger numbers of Pākehā and higher percentages Māori, but within all of which were marked sub-regional and local differences (Appendix D). Across the country, 71% of Māori lived in areas in which only 20% of the entire population was located – essentially the former Auckland Province minus the metropolitan Auckland region⁵. By contrast, very few Māori lived in Auckland, in the southern part of the North Island including Wellington urban area, in the South Island, or in other major urban centres.

The Pākehā population distribution in this the heyday of recolonisation (1936) was very different from how it had been in 1874, or in the early days of recolonisation (for 1874-1936, see Table 12.2). The major urban areas in Table 15.4 were the cities (in New Zealand statistical usage at that time, 20,000 or more people), only a few of which were metropoli (100,000+)⁶.

Regional data are notoriously difficult to analyse, even from printed tabulations, which are the only record until the 1980s. Essentially, the would-be analyst is entirely at the whim of decisions made by statisticians in the past, and some of those, especially around 1970, have major impacts on the consistency of time-

series. For this reason, Figure 6.3 uses the Auckland Province (or more recent approximations), the remaining North Island Provinces, and the South Island as the regions to follow over time. Expanding on that figure, the South Island had a greater population than the North Island in 1891 but was only 49 per cent of the total by 1896. This had dropped to 38 per cent by 1921, and then decreased slowly thereafter, until and during the Baby Boom. Within the North Island, Auckland Province accrued gradually while the rest of the North Island varied by only two-percentage points. Table 15.4 shows the importance of Auckland region, which dominated that province, and towards which a gradual drift continued during the recolonisation period (see Figure 6.3). Again, the modest changes from 1921 into the Baby Boom give a perception of regional population geographical stability in this period. It was as if Aotearoa was taking a breather after 'redistributing' southward during the 1860s until the 1874 census, and then from the 1890s turning around⁷. In 1921, 30% of New Zealanders were in the former Auckland Province; in 1936 it was just over 35%; in 1961 reaching 41%, but today well over 50%.

Table 15.4: Regional Distributions (%) of the Māori and Total Populations, and Percentage of Total Regional Population who were Māori, 1936

Region	% Māori (a)	% of NZ Total Pop. (b)	Māori as % of Regional Pop. (a/b)
Northland	22	5	28
Auckland	5	16	2
Waikato/King Country/ Hauraki/Thames-Coromandel	17	9	11
Bay of Plenty	17	3	31
[East]	[9]	[2]	[26]
[West]	[8]	[1]	[39]
East Coast	15	3	28
Hawke's Bay/Wairarapa	6	7	5
Taranaki	5	6	5
Rangitikei/Whanganui	5	3	8
Manawatu/Horowhenua/Wellington*	4	14 (10)	1
All South Island	4	35	0.6
[Nelson, Marlborough, Westland]	1	6	1
[Canterbury]	2	15	0.5
[Otago/Southland]	1	14	0.3
Major Urban Centres	6	49	0.7
NZ Total	100	101	5

Sources: Statistics New Zealand Censuses and New Zealand Official Yearbook.

Note: * Figures in parentheses () are for Wellington Urban Centre, including Hutt and Makara counties.

A useful indicator of population geographic trends is metropolitanisation. By implication, it encapsulates all the shifts in sectoral patterns of production and residence. These came from pastoral intensification and declining farm populations, counterbalanced by urban growth and expanding service and manufacturing sectors. In the former Auckland Province, the Auckland metropolitan region was already a powerful demographic force in Victorian-era New Zealand but had not reached primacy to quite the degree that it would realise after recolonisation, as was clear in Table 13.2. Dunedin had outrun competitors in 1891, but then lost this rank. The rankings established by 1896 continued through the interwar years. So, by 1901 Auckland had primacy – consistently so thereafter – over Wellington and Christchurch, which remained similar in size, coming second or third, while Dunedin gradually slid away⁸.

At the 1911 census, for the first time the ‘urban population’ had outnumbered the ‘rural’ (see Table 9.8), but this long-term trend in urbanisation went on to gather strength in the form of metropolitanisation (Table 13.2). The numbers in metropoli had jumped significantly between 1891 and 1921, by 3.4 per cent per annum versus 2.2% for the population as a whole. But, of paramount importance for the present chapter is that this trend then slowed in the interwar period, barely outrunning total growth, which had also slowed (to 1.8 per cent per annum, for the metropoli, and 1.6 for the national population). Moreover, while the majority of Pākehā were urban, that proportion changed to only a limited degree over the period (two-percentage points, between 1921 and 1940) and actually declined one-percentage point 1930-40, for Māori and Pākehā combined (Watson 1985: v 1, Table 59).

There was even relative stability in the proportion of the urban population living in metropoli (centres of 100,000 +) (as against the numbers discussed last paragraph). This figure is, of course, dependent on re-categorising centres from pre-metropolitan to metropolitan⁹ – in 1916, there was only one such place, Auckland. But with growth in numbers the metropoli became more complex urban places with a wider range of services and networks within New Zealand and overseas. Through the interwar and Baby Boom years from 1926 to 1961 only the three same centres, Auckland, Christchurch and Wellington merited being called metropolitan; Dunedin joined the club in 1966; Hamilton, Napier-Hastings¹⁰ and Tauranga later. But, metropolitan or not, the settlement network in this period underwrote the simple bi-directional supply-chain of the period, to ‘home’ and back. Attempts at import substitution were made, but too often they failed, in part because of a sentiment that favoured goods from ‘Mother England’. Locally manufactured goods were seen as inferior.

Other long-term future dynamics of urban New Zealand were, however, being laid down at this time: above all, the rather misnamed ‘shift north. This is suggestive of migration and a rural exodus, but in reality it was as much – typically more – a

function of natural increase within cities and boroughs than inflows. The ‘shift north’ was in part due to Auckland’s growing role as a prime-city, attracting young adults, and so it had more potential parents and thus babies. In short, the interwar years and the Baby Boom had some degree of stability in terms of metropolitan dominance, and were not extreme, but, as later chapters will show, this changed significantly after 1970.

For the majority of Pākehā, urban living was their norm. Proportionately, more than in the past were working in manufacturing, much of it in small and medium-sized enterprises, in the ‘footloose’ industries rather than heavy manufacturing. At the same time the rudiments of suburbanisation that would dominate post-WWII life were being set down, illustrated in a paper by Mary Watson (1985: v 1, Table 67). In Auckland in 1921, 79% of people lived close to the Central Business District and the Inner Core of the isthmus that today is Central Auckland Urban Area; in 1951 this was still 72%, but by 1976 had dropped to only 39%. In the interwar period, Auckland’s limits were mainly determined by public transport: most importantly trams and ferries – buses and trains to a lesser degree. Until the post-World War II period, Auckland suburbia, for example, ended at the outer tram or ferry terminals, plus the few 100 metres beyond that which commuters could cover on foot; or at nodes close to extra-suburban rail lines, south to Papakura and northwest to Henderson; or where land transport carried on ferry passengers to Takapuna beach and even beyond; Tamaki Drive, built in the 1930s, then opened up the Eastern suburbs such as Mission Bay, previously served by ferry. Auckland was, however, still somewhat ‘raw: in a close-in ‘suburb’, Mt Eden, in the 1920s, basic services were still not fully reticulated: sewage collection was by the ‘night-cart’ for those properties without septic tanks.

Taking geographical mobility (internal migration) as a criterion, this period represented one of relative quiescence for Pākehā population geography. The country really did take ‘a pause for a cup of tea’, in order to recuperate from the turbulence of the Victorian period, and especially of the early 1890s, and before it entered an epoch of even rapid regional realignment especially after 1970. This form of mobility was at low levels from World War I until the end of the Baby Boom. This reinforces the argument that redistribution can be a function of reproductive capacity as much as, or more than, internal migration. The impacts of international migration are harder to assess but judging from the proportions of the population per region who were born overseas (Table 14.5) from 1921 to 1961, there was noticeable regional stability by comparison with the changes before or since. Effectively, the key factor was the velocity with which Auckland became more and more favoured as a destination for immigrants. Standardising durations by taking forty-year intervals, from 1881 to 1921 Auckland showed a 15 percentage-point increase (males) and 13 (females) as a favoured place of residence among immigrants. This dropped to a change of only 9

and 10 percentage-point gains respectively from 1921 to 1961, the inter-war and Baby Boom years, but jumped up to 17 percentage-points for each sex from 1961 to 2001. For Wellington, Canterbury and Otago, changes were also limited in this period – Otago declined dramatically with the onset of recolonisation and the associated ‘drift north’. By 1961, Otago was a minor destination whose fortunes declined relatively, by 50%, over the next 40 years, although absolutely only by 3 percentage-points.

Pākehā Economic Development

For Pākehā, the basic demographic and development morphology outlined last chapter continued in this period. Pockets of the remaining Māori land were still being sold off, frequently under public works or Native/Māori Trustee ordinances that were inherently unfair or even illegal. But overall the loss of Māori land wealth decelerated. Attempts were made in the interwar period to ‘break-in’ rural land that had not been farmed, and notably to settle Pākehā World War I returned servicemen, particularly on the Volcanic Plateau and the King Country-inland Whanganui. Often, however, these initiatives were under-capitalised and were in areas that were not easily farmed, so in many places the settlers literally walked off the land. The pumice lands of the Volcanic Plateau (central North Island) also frequently suffered trace element deficiencies, despite seeming to early travellers to be potentially a natural area for pastoralism. They were covered in tussock grasses like the inland South Island that became the land of wealthy run-holders. Once antidotes to these deficiencies became available the farming areas of the central North Island expanded. It was also the area in which very extensive radiata pine planting occurred, especially as make-work schemes for the unemployed during the Depression. In a sense, outside its tourist areas, the Volcanic Plateau was New Zealand’s last pioneer region, and this ambience remained in the 1950s and into the 1960s (Ministry of Works 1960; Hodges 1971; Roche 2008).

Between 1891 and 1921, the Pākehā workforce had shifted from 40 per cent in the primary sector (1891) to 30 per cent in 1921. But, in the interwar years the distribution between sectors remained fairly stable, as is seen in Table 15.5 (also Figure 12.1). The 1966 data on the secondary sector reflect import substitution policies in manufacturing and construction booms. Declines in the proportions in the primary sector reflected the further intensification of pastoral farming over what had occurred in the interwar years; farming needed fewer workers, but manufacturing, including motor vehicle assembly required labour. The tertiary sector employed consistently high numbers of Pākehā.

Table 15.5: Industrial Sectoral Structure of the Workforce (% of Total Workforce), Māori and Pākehā, by Gender, Selected Years

Year	Māori			Pākehā		
	Primary	Sec.	Tertiary	Primary	Sec.	Tertiary
Males						
1926	76	17	18	33	32	34
1936	65	31	5	33	31	36
1966	23	53	24	17	42	42
Females						
1926	80	1	19	11	25	63
1936	74	2	24	8	19	73
1966	10	36	54	5	23	72

Source: Jackson 1998: Table 8.1.1. Tertiary from 1935

Māori patterns were rather different. Throughout the interwar period they had high proportions in the primary sector, but these fell dramatically after the War. Manufacturing increased significantly. The higher tertiary figure in 1926 may have been Māori in ‘communications’, involved in jobs such as installing telegraph systems.

For Pākehā, minimum and real wages increased between 1914 and 1929, but dropped during the Great Depression. During World War I, male incomes had not kept up with inflation – the 1914 level was not reached again until 1928. But, with the onset of the Depression, wages then decreased until 1934, perhaps by 10-20%. Census data show that median incomes reached their nadir in 1936. Wages then increased significantly until 1939, and by 52% between 1938/39 and 1945. By 1951, median incomes were twice as high as they had been in 1936: for example, for ‘all men’ they decreased in the Depression (in 1991-dollar values) from \$11,139 to \$8337 in 1936, a not surprising trend. By 1945, the median had almost doubled to \$15,738, and gone up further to \$17,965 in 1951, when job participation rates were very high.

The evidence about inequality trends during the period is confounded by data problems in Margaret Galt’s data (discussed earlier) and in the census data used by Barry Martin, particularly the income intervals. Looking first at percentile distributions, there was a reduction in inequality during the depression. In the 1920s, the lower 90% of earners had gained only 40% of the income, but by the 1930s this had risen to 60%. Additionally, the proportion of the incomes received by the top 10% decreased. But, against this, the per cents going to those in the top 1% declined only after 1937 and variance¹¹ in 1936 was much higher than in 1926, 1945 or 1951. It must not be forgotten that computations for women were affected by their lack of income – 60+ % had nil income, and this dropped below 50% only at the 1966 census (Galt 1985: 256-60, 289-90; Martin 1998: 94-95, esp Table 6.1, n.1).

The economic indices of the period 1920-45, particularly up to 1935, seem enigmatic. Neither real GDP nor real GDP per capita growth were strong. Price fluctuations seem to play a major dampening role in this trend, rising briefly in World War I, with a fall thereafter, a slight decline during the 1920s and then a steep decline in the early 1930s. Population growth from both natural increase and net migration was slow, but the economy was still being protected by the age-structures producing a weak demographic dividend – the very low fertility of the period reinforced by momentum effects. Together they produced high proportions at working ages, and low per cents at dependent ages (Figure 11.2).

From 1935, however, New Zealand entered a boom with high real GDP and real GDP per capita growth. It was stimulated by the Keynesian policies of the newly elected Labour Government and a steady rise in prices from the late Depression, through the Second World War and beyond. Yet, Pākehā population growth through natural increase and net migration still remained very slow until the end of the War. Clearly, the low demographic dependency effects just noted were an important demographic stimulus. The proportions at working ages reached a very high level, 67%, in 1936, and, even in 1945, 64% were at those ages despite troops overseas not being included in the counts: the three percentage-points difference between those two censuses probably gives a rough approximation of the loss in demographic dividend because of overseas war service. But, during the War another demographic dividend was also granted to the economy – it came unexpectedly from the demographic trends of Māori (see below) (Briggs 2003: Figure 24 and pp 37, 56: Neville 1985: V 1, Table 30).

Pākehā Regional Differentials in the Factors of Production

Earlier, reference was made to two changes that may seem unrelated, but that are in fact closely interlinked: (i) the high Child-Woman Ratios of rural New Zealand that was the Pākehā ‘people incubator’ (see above); and (ii) a demographic dividend coming from momentum effects. The latter were due to higher fertility until 1920 and the subsequent passage of these birth cohorts up into the working ages, thereby producing low demographic dependency ratios. But, because of the marked differentials in CWRs (Table 15.3), this driver of development was not equally spread. The children born in the regions of New Zealand outside larger urban areas faced three choices on completing their education: become farm workers, move to a smaller urban area, or migrate to a larger urban area; in that era few went overseas. In 1926, the CWR for small urban centres resembled that for large urban areas, far below that for rural Pākehā New Zealand, so small-town Aotearoa was not as much of a people incubator as was farm New Zealand. Nevertheless, as motorised transport

networks increased, small-town New Zealand's basic functions came under increasing competition from larger centres and thus it lost jobs.

The per cent of all Pākehā/New Zealanders living in metropoli always fell below the proportion of the young working age-group living there, and the gap grew after World War II. The differential was in an opposite direction at older working ages, and in the recolonisation period, especially after World War II, when older workers were disproportionately represented in the minor urban areas. This supports the argument that older workers went into industries more directly related to processing pastoral products or retail jobs that were located in smaller centres, while younger workers moved to larger centres to manufacturing, or to the warehousing and tertiary services expanding there.

Table 15. 6 looks at average annual rates of change by major working age group. From 1926, metropolitan New Zealand was growing more rapidly at working ages than was New Zealand as a whole. In particular, counties modestly increased their proportion of young workers, then lost them after 1966. In making these assessments, we are beset by definitional changes, especially for minor urban areas. They include much of peri-urban and 'rurban' New Zealand: previously small towns with limited services that become functionally metropolitan (Merlin 2009)¹².

Associated with the shifts in age-structures at working ages in different settlement types have been transformations in the sex ratio at these ages. In 1881, rural New Zealand had been overwhelmingly a male domain by comparison with its polar opposite, the towns that later became metropoli: 141 men at young working ages per 100 women at the same ages in rural New Zealand, as against 94 in larger urban areas: minor urban areas were closer to rural. In 1926, the difference in ratios was still 123 to 90, as single women moved into domestic service, new tertiary sector industries and light manufacturing jobs. In the Baby Boom, the differential dropped more (116 to 100), and in 2001 it still existed but was slightly less again: 107 to 92.

Table 15.6: Average Annual Growth (% Per Annum) in different Settlement Types*, at Major Working Age-Groups, 1926–66 and 1966–2001

	Growth per annum (%)			
	15-34 Years		35-54 Years	
	1926-66	1966-2001	1926-66	1966-2001
Counties/Rural	1.5	-0.3	0.4	0.8
Minor Urban*	0.3	2.8	1.9	1.7
Metropolitan	1.8	2.2	1.9	1.7
NZ Total	1.4	1.9	1.6	1.5

Note: * See notes Table 15.3

This transition is not unique to New Zealand. In France the classical studies by Pierre Merlin and other analysts show that there were rural-urban differences too, with marked sex imbalances in the countryside, particularly more isolated areas (Merlin, 2009: 18-19; also 2000). Clearly, traditional agricultural jobs were more likely to be done by men, although tempering this increasingly in New Zealand is the fact that rural-resident women are very likely to have off-farm jobs, such as teaching or nursing, typically involving commuting, and that complement the earnings of men. But, in spite of this sex ratio, traditionally rural New Zealand disproportionately produced and raised the country's children: in 1926, for example, with only 62% of the nation's total population, non-metropolitan New Zealand was raising 67% of its young children, whereas by 2001 non-metropolitan New Zealand proportionately had slightly fewer children than its contribution to the national population. By 2001, the incubator function had disappeared from rural New Zealand, but this role had not been assumed by metropolitan couples.

How Were Māori Faring 1920–45, and How Can We Find Out?

Recolonisation was the modern era in which ethnic stratification, using the concept as applied by Natalie Jackson (1998), was probably at its highest. This was not because of a highly formalised racial order but operated geographically (Table 15.4) and in other ways. Socially, as I have already stressed, Māori were largely out of sight and thus out of mind. There was some intermarriage and interactions between Māori and Pākehā, particularly through such activities as sport, but, by and large, the distinct patterns of geographic clustering created informal barriers.

In the interwar years, demographically and epidemiologically Māori were still at an early stage of transition with continuing high fertility and gradually declining death rates. As longevity increased, so too was there a mounting acceleration in their population growth, presaging the very high rates of natural increase after the war when mortality rates were to drop very rapidly. Yet, in other ways, Māori also seem to have taken 'a pause for a cup of tea' – a build up before launching their rapid demographic changes after World War II. These wartime and post-war trends were to include a radical geographic redistribution that was to tear apart their society (see Chapt 16). As noted above, through the interwar years their fertility rates were high, while mortality was gradually decreasing, but the force of mortality was still at the younger ages and the majority of deaths came from communicable disease mortality.

Much of what we know about Māori at this time comes from three censuses: 1926, 1936 and 1945. Māori vital registration was improving by 1936, but still had severe shortfalls. From 1926, however, the Māori enumeration was closer technically to the Non-Māori census, but the Depression saw cancellation of both enumerations until 1936, and in 1941 in the War a second cancellation was made until August 1945,

six months earlier than that scheduled for March 1946. For most purposes, we can count the 1945 census as if it had been in 1946, but that still means that the enumerations from 1926-46 were decennial. To add to these data problems, intercensal analysis of the quinquennial interval 1921-26 is confounded for Māori by the use of a very different schedule from the Non-Māori in 1921 (and thus also very different from that for Māori in 1926), and for Māori in 1921 there was a severe undercount, which I have documented elsewhere. For this reason, it is more appropriate to do analyses for the decennium 1916-26. This is, however, only a partial solution as the 1916 census itself was confounded by the absence of troops. In earlier work, I have also statistically analysed the quality of Māori vital rates in the interwar period and made adjustments to allow for this (Pool 1977: 60-70, esp. Table 3.2).

When is a Māori a ‘Māori’?

At this point there is a need to make what may seem something of a methodological and philosophical digression, but which is fundamental for this and succeeding chapters. The question is this, as I wrote in a very early paper: ‘When is a Māori a “Māori”?’ It is a major problem for analysts, not just in the interwar period, but for the rest of the narrative in this book. Its significance has been incisively underscored by Tahu Kukutai, who has updated and refined my exegesis, siting it in a 21st century dialogue on culture and on segmentation with Māori society, authoritatively expanding our understanding of its epistemological contexts and also showing its significance for both demography and public policy debates (Pool 1963; Kukutai 2011).

Until 1921, the answer to this question had been, superficially at least, rather easy. An enumerator, albeit typically a Pākehā official, collected the data – one assumes from ‘principal informants’ – and recorded data on those respondents whom the enumerator or the informant deemed to be ‘Māori’ – most often it was simply their residence in a hamlet that was believed to be mainly Māori. This, of course, involved some degree of pre-selectivity, as some census takers undertook the Pākehā census, while, so it seems, other officials separately interviewed Māori (Papps 1985b: v 2, Annex). As noted in Chapter 1, there was also a fascination about ‘half-castes, who were divided into ‘those living as Māori’ and ‘those living as Europeans’. The criteria for dichotomising the half-caste population were never particularly clear, but the underlying philosophy of searching for the peaceful extinction of Māori through ‘amalgamation’ was very evident – the more who could be made European half-castes, the more rapidly this might be achieved. In the event, disappointment must have abounded for the ‘one-nationers’ of the day as the numbers reported as ‘half-castes’, whichever way they ‘lived’, were rather small. The information this count provided is far from robust and must be analysed carefully.

From 1926, two important changes were introduced: the Māori enumeration followed the Pākehā precedent of self-reporting and being conducted on the one night, and was comprised within the main census; until recently, this differed New Zealand practice from that of Australia or Canada (Papps 1985b: v 2, Annex). Self-reported ‘degrees of Māori blood’ became the criterion for ethnic classification with respondents designating their own ‘fraction’ or those of dependent children: ‘Full Māori’, ‘ $\frac{3}{4}$ and, $\frac{1}{2}$ ’ Māori, who were all counted as ‘Māori’; ‘ $\frac{1}{4}$ Māori’ and ‘Full European’ (or whatever), who were classified as Non-Māori. Thus, all ‘half-caste’ Māori-Europeans were now Māori, which eliminated one ambiguity, but then another was added: ‘Māori and ‘other races’ (eg Japanese, Chinese, Syrian, American Indian) regardless of fractions of Māori blood were counted in the ‘European Population’. Judging by genealogical and anthropological surveys preceding this, the categories produced entirely fictive results. In Te Rangi Hiroa’s surveys of children and soldiers in World War I, 50% of respondents were less than ‘full Māori’, a statistic that, incidentally, bore no relation with the 1921 census data on ‘half-castes’.

With self-reporting, however, Māori gained the right to determine their own ethnicity, albeit that the question posed was biological rather than cultural. They addressed this, most appropriately, not by reporting exact biological fractions (assuming that they knew them), but where they thought they were on some cultural-affiliation spectrum from ‘Māori’ to ‘Non-Māori’. The majority of ‘Māori’ said that they were ‘full-Māori’: 68% at the 1936 census, as did most of those of Māori descent (60%). Some Māori noted that, while they were ‘Māori’, their affiliations were weaker ($\frac{1}{2}$ or $\frac{3}{4}$), and others noted their links with Māoridom, but saw themselves as predominantly Non-Māori in affiliation (less than half-Māori). The proportion ‘quarter-Māori’ was not inconsiderable, 12% in 1936, and a further 0.2% were Māori and something else, mainly Māori-Polynesian (*Census 1936*: vol III, ‘Introductory Notes: iii’). It must be stressed that this was not ‘passing’ in the American meaning of that term (where ancestry is hidden), as respondents who were $\frac{3}{4}$ European and $\frac{1}{4}$ Māori were still actively reporting their Māori ancestry. In effect, by attempting to describe their cultural affiliation(s) to the best of their ability, Māori and other respondents were providing useful, meaningful responses to what was an absurd question based on the unreal assumption that biological fraction equated with cultural belonging. Thus, despite the intentions and false-precision of the question-framers, the culturally-determined answers probably gave a reasonable picture of the settler-society of the period from 1926-on; perhaps even a reasonably valid enumeration of cultural affiliation (Pool 1977: 41-48; Te Rangi Hiroa 1924). Over recent decades since 1986 in attempting to provide a more refined count on cultural affiliation in a society in which a person may have two or more ethnic origins, complications have been introduced which pose new problems for analysts. I will return to this in later chapters but leave off here by saying that the ‘degrees of blood’ in the past did not

provide a solution, but new approaches have not satisfactorily solved the dilemma either.

Until 1981, there were also observable inter- response shifts back and forth between the Māori and Pākehā populations, as seen from the ‘degrees of blood’ data. This led to limited degrees of intercensal attrition from the Māori collectivity (eg 4-5%, 1926-36), due to what I have called ‘inter-ethnic mobility’. Earlier analyses could only be at a macro-level, but recently this work was confirmed by intercensal, individual record-linkage of ethnicity (and other questions), undertaken under conditions of strict anonymity enforced by the Department of Statistics, allowing micro-level tracing of response-consistency (Pool 1977: Table 3.1; Brown 1983, updated by Department of Statistics 1988; Pool 1991: 22-25; Moore 1989).

For the demographer-statistician, inter-ethnic mobility is a methodological headache; but for a citizen of a democracy, it is a superb indicator of the fluidity of the society and culture. In this, professional convenience is far less important than the nation’s cultural harmony. Unfortunately, there is another dimension to this. The debate in New Zealand’s own local version of ‘culture wars’ often takes a different turn when ethnic data are discussed by latter-day ‘one-nationers’ – the intellectual descendants of the Victorian ‘amalgamators’. Some argue that they are so unreliable that ethnic statistics should be dropped. In this context, it is also suggested that ethnicity is a sensitive question, offensive to minorities – typically the nay-sayers are Pākehā who assume it is their right to speak on behalf of Māori. Māori demographer Kukutai provides very compelling reasons for maintaining the ethnic question in official data sets (2011: 56): ‘Māori continue to generally seek inclusion in official statistics, both to address long-standing inequalities and self-determining aspirations, and to cement their position in the national imagination’.

Moreover, it is totally wrong to assume that ethnic statistics are subject to more response error – I prefer the term ‘elasticity’ – than most others. They are less subject to intercensal response shifts than religion (Moore 1989), and are probably less unreliable than for those statistics bandied around by denizens of the major public policy debates as if they are unimpeachably ‘hard’ data – say hours worked or income¹³. To take one case, statistical agencies work hard at verifying income data by, for example, linking censuses and surveys to tax returns, and by limiting observations to well defined, short durations, but, in the end, response effects are not eliminated perfectly. This is not to accuse the people responding to questions on hours worked or income, or on ethnicity and religion, as being devious, nor am I criticising official statisticians. Very often, however, respondents face a reality that is difficult to pin down exactly, because their feelings about ethnic belonging, or an exact assessment of your income flows (eg if you are a commission salesperson), vary from time to time. For their part, official statisticians have the unenviable burden of recording reality about what are often complex life-ways.

To return to this present chapter, there also seems a surprising dearth of archived data tabulated in meaningful ways for this period. We would not know much of what we do know about interwar Māori and their marginalised living conditions by comparison with Pākehā, were it not for the limited census statistics collected in that period¹⁴.

Māori Population Trends in the Interwar Years

The ‘pause’ saw Māori survival definitively assured, giving them that most primal of developmental baselines. Their population growth, entirely through natural increase, was well above Pākehā levels. Māori demographic growth even accelerated over the period, as is shown in Table 15.7. Population recuperation was thus the good news of the era.

Table 15.7: Māori and Pākehā, Average Annual Rates of Population Growth (%), 1926–36 and 1936–45

Decade	Māori	Pākehā
1926-36	1.6	1.1
1936-45*	2.1	0.8

*Sources: Māori estimates from Pool 1991: Table 6.2; Pākehā imputed from Khawaja 1985: Figure 21. *Māori Troops were still overseas affecting the 1945 rates.*

Growth was driven by consistently high total fertility rates (TFRs) shown in Table 15.8. Māori levels were well above 6.0 births per woman, more than double those for Pākehā even when their ‘phony Baby Boom’ of 1945 had commenced. Most Māori women entered unions, normally at young ages (Figure 11.1), and there was very little resort to fertility regulation.

Table 15.8: Māori and Pākehā, Total Fertility Rates (Births Per Woman), 1926, 1936, 1945

Year	Māori (Estimates)	Pākehā (Registrations)
1926	6.7	2.5
1936	6.9	2.1
1945*	6.5 (6.5–6.7)	3.1

Source: Pool 1991: Table 2.1 and Gibson 1971

*Notes: *The Māori figures in parentheses are from a 1945 census question on children ever born, asked only of ‘currently married Māori women’ There are no comparable data for Pākehā. The census data support the validity of the estimate.*

The bad news was that Māori health levels remained much lower than Pākehā. This is shown in Table 15.9 for two indices used earlier in this book – life-expectation

at birth ($e(0)$) and the under-fives' life-table mortality rate ($(5)q(0)$). Māori life expectation climbed gradually, but was still below 50 years, a level that had been reached by Pākehā women in the 1870s. Māori expectancies were similar to those in better-off countries in much of the Third World – Asia was at 42 years in 1950 – but Māori were free of the great apocalyptic diseases, which ravaged those other populations. In a wealthy country, the determinants of health differentials were thus mainly a combination of socio-economic disadvantage (see below) and a failure of the health system to address Māori health problems. These did decrease systematically but were still unacceptable in a country whose majority had some of the best survivorship levels in the world. In 1945, more than 10% of Māori children would not reach their 5th birthday (near 20% in the 1920s), yet well below 5% for Pākehā. Changes in the force of mortality by age that had produced the shifts in expectation are shown in Figures 14.2 and 14.3.

Table 15.9: Life-Expectation at Birth, and Child Mortality by Exact Age Five, Māori and Pākehā, by Gender, 1926, 1936 and 1945

	Māori				Pākehā			
	Males		Females		Females		Males	
Year	$e(0)$	$(5)q(0)$	$e(0)$	$(5)q(0)$	$e(0)$	$(5)q(0)$	$e(0)$	$(5)q(0)$
1926	47	.17	45	.18	64	.06	66	.05
1936	46	.18	46	.15	65	.05	68	.04
1945	49	.15	48	.13	67	.04	70	.03

Source: Tables Prepared by Jit Cheung and Pool for Pool and Cheung 2003

Notes: $e(0)$ = Life Expectation at Birth in Years; $(5)q(0)$ = Child Mortality (Probability of dying between birth and exact age 5). Notice also the gender patterns in $e(0)$ for Māori, an issue raised earlier in this book.

True socio-economic deprivation in what was otherwise a wealthy country was reflected in the high levels of tuberculosis mortality among Māori. It was a powerful indicator of the poor health status and loss of life, but also the markedly disadvantaged levels of wellbeing of Māori. Tuberculosis was thus a quintessential indicator of what this book is about: peopling and development. In the days before adequate chemotherapeutics, tuberculosis morbidity rates were determined to a very large degree by the living conditions and socio-economic status of groups. In a remarkable epidemiological study on the East Coast in the 1930s, the medical researcher Harold Turbott (1935) showed statistical associations between tuberculosis mortality and morbidity, and a wide range of socio-economic factors: malnutrition (levels seen in the 1980s in African countries with life expectancies not unlike those of Māori in the 1930s), housing (numerous factors) and contact with others suffering from the disease. Two-thirds of those with tuberculosis had not been able to seek medical attention (summarised Pool 1991: 120).

Māori Social and Economic Development in the Interwar Years

Socially, in other ways there was progress to a limited degree between 1920 and 1945. As Aroha Harris shows, Māori entered increasingly into mainstream New Zealand activities such as in sport, art, music and voluntary organisations. But, as she goes on to note, there was a paradox: the ‘verve of the decades following the First World War sat uneasily with telling social and economic differences that saw Māori standards of living languish well below those of Pākehā’. Even for welfare, eligibility was spotty by comparison with Pākehā, sometimes for statutory reasons, sometimes because of bureaucratic prejudices, and this was not eliminated until after World War II (Harris with Williams 2014: 352; Labrum 2009: 405-06).

During this period, most Māori were living in rural areas or small towns outside the quotidian experience of most Pākehā. In 1926, only 16% of Māori were urban; only 10% were in larger centres; in 1945, the figures were still only 26% and 17%. By contrast, in 1976, after the mass rural exodus to be discussed next chapter, 76% were urban and 56% in large centres.

In rural New Zealand in the interwar period, the degree of clustering by Māori – or their virtual absence – was far more extreme than can be inferred from Table 15.4. In 1936, in the North Island, they were scattered across peripheral hilly regions, with intense local relief and thus not attractive for more intensive pastoralism, yet virtually absent in urban settlements (see Appendix D).

From the 1926 and 1936 censuses and from a range of other sources, particularly Harold Turbott’s (1935) health research on the East Coast and Judith Binney’s (1983) analysis of social conditions in Maungapohatu (Urewera), plus some other studies (summarised Pool 1991: 120), we can build up a partial picture of rural Māori life in this period. As Table 15.5 shows, both men and women were concentrated in farming sector jobs, with a very different industrial sectoral distribution from Pākehā. But, this belies the reality of those primary sector jobs: not only were they clustered in the more isolated peripheral parts of the North Island where cash jobs were scarce, but Māori pursued a hybrid economy (subsistence and casual/seasonal wage labour, defined Chapter 4). Living conditions, including factors such as malnutrition and poor sanitation, contrasted with those of both urban and many rural Pākehā, although some Pākehā farmers, especially those breaking in land for dairying, experienced pioneer living conditions not too different from those of Māori.

The studies on Māori mobility in the interwar period show that migrations were temporary and took the form of circular movements – from the Central North Island, for example, to seek work kauri gum digging (Kukutai *et al* 2002: Chapter 8). An exception seems to have been the movement into Hawkes Bay for processing industries, and in places, notably on the East Coast, where the Ngata land schemes

(see below), such as consolidation of multi-ownership parcels of land, had been relatively successful. As Aroha Harris shows, Apirana Ngata favoured these schemes, and on cultural revitalisation, and felt that the future of Māori was to be on the land (Harris with Williams 2014: 367-72; Pool 1977: 28). There is also a tendency to see the schemes as having ‘mixed success’, a judgement was perhaps clouded by the fact that there were whiffs of scandal around them. Belich comments that ‘The allegation that he preferred to focus resources on his own people contributed to his political downfall in 1934’. Perhaps, instead, the underlying factor was his successes in the wider political arena, where, as Belich reports, ‘Ngata had prised Pounds 1.6 million for Māori land development from one of the stingiest governments in New Zealand history’. Moreover, by 1935 the farms were supporting about 12,000 Māori, equivalent to 15% of the population at that time (82,000 in total) (Belich 2001: Chapt 6, esp 202-03; see also King 2003: Chapt 21, esp 336-37). In the longer run, given accelerating Māori population growth, land settlement would have been unrealistic for many Māori. This became recognised by government and consequently, in the post-World War II period, the emphases in Māori development changed significantly.

In the interwar years, Apirana Ngata, Native Affairs Minister, played a major role in Māori land development and in national politics, and was thus a major New Zealand political actor. His land schemes were probably most successful in his own rohe (tribal area, East Coast) but also achieved some success elsewhere. Not surprisingly, much of the national Māori legal historical record relates to his work¹⁵, as does the existing historiography of Māori between the wars. To Pākehā, his career perhaps overshadows that of other notable Māori of the time. Maui Pomare, for example, is well known for his work on Māori health early in the 20th century (see Chapt 14). But, almost overlooked was his tenure as Minister of Health (1923-26), when reforms affecting maternity care were effected – mainly benefitting Pākehā as Māori births typically occurred outside hospital. Another instrumental Māori figure was ‘Princess’ Te Puea, who, in the interwar years, not only played a role in re-forging the Tainui tribes’ ‘Kingitanga’ (King movement), which plays a major part in Māori and New Zealand politics, but in laying down the infrastructure necessary for their development trajectories. She protected, or bought back, strategic pockets of Tainui land, and then built the marae (community centre) infrastructure across Waikato-King Country that is a critical element in both material and cultural development in the 21st century (Parsonson *et al* 1996).

While the per cent of Māori of all ages living in urban areas in 1945 was still small, it reflected what had been a seminal change both for Māori themselves and for the country’s development. During World War II, Māori were recruited into war industries, presaging the far greater urban-ward movement after the war. Wartime immigration to cities propelled Māori, particularly women, into waged sector employment (Brookes 2016: 267), away from the hybrid economy they had existed on

until the War. In this sense, the country as a whole was drawing on a ‘reserve army of workers’, who until then had been largely outside the main productive sectors.

Recolonisation’s ‘Belle Époque’?

The factors that epitomised recolonisation – its form, function and underlying values – were probably played out most fully in the years covered in this chapter. Before that, from 1880 to 1919, Aotearoa had been taking the necessary steps to gird itself for this phenomenon. Getting out of the turbulence of colonialism required its own upheavals, so New Zealand could only observe France’s real *Belle Époque* (1871–1914) from a distance. But, a Belle –Époque can also be defined more generically (*Collins Dictionary*), as a period of comfortable and settled life. That describes the interwar years in Aotearoa – at least for many Pākehā. From the onset World War II, however, this secure little world started to be perturbed although many of its features remained intact, changed slowly or intensified, more or less along the lines that had occurred until 1945. This continuity can be seen, for example, in significant factors of national development: the export-import supply chains, the commodities or manufactured products exchanged between New Zealand and the ‘motherland’, the GDP-sectoral and industrial workforce structures, and the settlement patterns that sustained this economic system. Yet, paradoxically and without warning, in that same post-war era, Pākehā also threw themselves into the Baby Boom and Māori moved *en masse* into the cities, at a far faster rate than during the war years. And, more latently, the population incubator effects of rural New Zealand, outlined earlier, were becoming corroded. Between recolonisation’s onset from the 1880s, and its post-war transformations (then its dramatic implosion in the 1970s and the 1980s), came the interwar years covered in this chapter.

The interwar period also has its enigmatic side, as low dependency rates, and thus decreased burdens coming from social sector expenditures, should have stimulated investment in institutions and infrastructure, and household savings and investment. Instead, the factor of prices seemed to have thrown something of a wet blanket over development. Price fluctuations in the metropole dampened down those in the periphery, a factor that seems to have been important in determining low real GDP and GDP per capita growth.

This raises a political-economic issue beyond the scope of the present study. The centre-periphery relations of the period seem to have given the metropole dominant financial-economic drivers that had flow-on effects in its former colony. Aotearoa was umbilically bound to the metropole’s markets, and thus development in the peripheral Dominion was artifactually stunted by Britain’s hegemonic position: Britain was virtually Aotearoa’s only market, but New Zealand was merely one of a number for Britain. Viewed this way, empire preference, the governing geopolitical instrument in New Zealand’s development, bestowed an ‘advantage receiver’, as in

tennis, to the destination of Aotearoa's commodities, rather than being a balanced bi-directional exchange. Emotional feelings in the 'Motherland' about the ex-colony may have been more than mere superiority towards a dependent child, but were probably outrun by financial objectives for the City, and as a result the game's 'server', the Dominion of New Zealand, seems to have lost out. Making this relationship even more enigmatic is the fact that in the early 1930s, exports from New Zealand significantly exceeded imports as a per cent of GDP (Briggs 2003: Figure 28).

To return New Zealand to a more positive development path required a different Keynesian approach that could be built on domestic capacities, but this breakthrough came only at the end of the depression under the newly elected Labour government. Its strategy, whether intentional or not, was to exploit twin demographic dividends. The first was from Pākehā low fertility and demographic momentum effects that produced high proportions at working ages, although this factor's impact was somewhat muted by the War service of young men. The second, however, could be a substitute for these absentees. It came from a migratory inflow to cities, not of arrivals coming from abroad, but of Māori from the deprived, marginal regions of the North Island – from the Dominion's own peripheries. In Natalie Jackson's terms, this was a wartime 'collateral demographic dividend' (Jackson 2016).

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¹ Despite such negative experiences, the Soljak family has made a major contribution to the development of New Zealand’s wine industry.

² In World War II, Māori formed a volunteer infantry battalion that saw distinguished service in the Middle East and Italy. Māori were also in every unit and all services, in every theatre.

³ Brookes 2016: 191 cites the *Evening Post* 18 Jan 1932: 8, as evidence of such an increase.

⁴ Comparisons are a little difficult to make as Kennedy’s table uses the range 25-34 years. England and Wales are 33% and Ireland 55%. Irish women of all conjugal statuses had low fertility, but their marital age-specific rates were very high (as in Table 3.1, cf Table 15.2). At 25-34, the Pākehā rate was 31% (also see text).

⁵ In Table 15.4, the East Coast region includes Wairoa County, in northern Hawkes Bay, separated by a low-density area from the rest of that province, where most of its people lived. Wairoa’s main Māori iwi are Ngati Kahungunu, the major tribe in Hawkes Bay-Wairarapa, with some links westward into the Urewera. This re-allotment makes next to no difference to the general conclusions.

⁶ Several have grown since to become metropolises.

⁷ It must be reiterated that the forces of geographical redistribution are all of (i) internal migration, (ii) international inflows and outflows, and (iii) natural increase, of which the latter was most important.

⁸ In 1901, Christchurch was 85% of Auckland (100); in 1921 Wellington was 68% of Auckland and the ratio remained around 100:60 through the interwar years to 1961. A brief departure from this was Wellington's rise in 1940 to 73% of Auckland – clearly a factor of war driven public sector growth and troop movements (typically the contingents sailed from Wellington after training in Trentham army camp near the capital, and/or returned there from overseas). From 1971, however, Auckland's lead increased rapidly – almost exponentially (Watson 1985: v 1, Table 59).

⁹ In this case using as a reference the 5 largest urban settlements of 1976, Auckland, Hamilton, Wellington, Christchurch and Dunedin. Hamilton was, in fact, only 8th in rank in 1940, following Invercargill (5th 1940, but 7th 1976); Whanganui (6th, down to 14th); and Palmerston North (7th, up to 6th, but down to 8th in 2013).

¹⁰ Hastings and Napier defiantly maintain separate administrative statuses, yet are really one conurbation, and together exceed 100,000 people. Here, I choose the factor of agglomeration over a statutory definition.

¹¹ Measured by coefficients of variation, a mean-based index.

¹² 'Rurban' Tauranga, growing from 2,000 in 1936 to 97,000 in 2001, and Napier-Hastings were about to become metropolitan nodes in the early 2000s.

¹³ I know the unreliabilities of all these variables as I have experienced the severe problems involved in collecting them in field research, in New Zealand, Canada and elsewhere.

¹⁴ For those Māori data archived in the census publication there seem to have been peculiar emphases: for example, for the *1936 Census* there are limited data on social and economic variables, yet six detailed tables on Religious Professions (to the 'Town District' level). Only age data are paid more attention. In the period there was concern about housing, so data 'dwellings' are reasonably detailed. The legal historian Richard Boast (personal communication) drew my attention to a similar limitation on some of the sources on which he relies.

¹⁵ The legal historian, Richard Boast is advanced in writing a major book on Māori land issues of this era.

Chapter Sixteen – The Baby Boom 1940s–c.1973: A Short-Lived Mega-Phenomenon

Out of Depression and War

The three decades from the end of World War II have gathered around them powerful images and almost mythical properties. Most familiarly, this period is known as the ‘Baby Boom’, but also can be called the ‘Welfare State Era’¹. To its denizens, and retrospectively, it was paradoxical: New Zealand was deemed ‘dull’ (Matthew 2019), yet it went through a dramatic fertility surge (at least Pākehā did), plus a radical Māori rural exodus. To disentangle myth from reality, as I signalled in Chapters 1 and 5, I will have to pay more attention to this enigmatic period than I do for any other 30-year span.

In reality, the Baby Boom epoch was very brief, started suddenly and ended even more abruptly. Its most iconic demographic trend (an inflated wave of Pākehā births – or their European-descent equivalents in other Western Developed Countries (WDCs)²) was highly aberrant – differing markedly from what went immediately before and what followed immediately after. This also held true for an associated economic boom in the WDCs. This means that in the three chapters covering the Baby Boom, the periods preceding and following it will often need to be referred to as comparators in order to show how much the Boom deviated from long-term patterns and trends.

The birth spike momentarily sped up population growth but left behind badly distorted age-structures that will affect peopling and development until the mid-21st century. Its economic boom was also largely depleted by consumption and by meeting the urgent social sector demands at the time. So, this totemic period left little of substance behind except age-composition effects and some much-needed basic infrastructure, and, as a by-play, the rapid urbanisation of Māori and Pasifika. Yet, alongside this was the steadfast maintenance of an economic-population-geography, which was similar to that of the interwar years and underpinned the period’s essential and basic economic functions.

The chronicler of the Baby Boom is faced with the grave problem that its abiding memory is shrouded in urban myth, much of which sees it as a ‘golden period’ for family and community life, and the economy. There is, however, a powerful counter-narrative: the ‘Baby Boomers’ (seen as the births of those three decades) are blamed as being responsible for a projected “tsunami of ageing” that will generate an increasing burden, fiscally for the state and within families. The potential impacts are real, but their causes are totally different: the ‘Baby Bust’s’ fertility decline of the 1970s, which rapidly reduced child numbers and proportions of the

total below 15 years of age, is the determinant of structural ageing (the per cent aged 65+ years, on which this fear is based). To add to this, generations of policy makers have failed, as I will show, to manage the education, training and employment of Baby Boom birth cohorts, as they reached adult ages, as a strategy to strengthen the nation's human capital. Moreover, there is widespread misinformation about when the tsunami will occur – later in Aotearoa than in some other countries. And to add to this significant misunderstanding, many analysts and politicians conflate structural ageing with numeric: an increase in the numbers at elderly ages. A surge in numeric ageing during the height of the Douglas-Richardson restructuring (1984 into 1990s) was inaccurately³ seen as the onset of structural ageing and cited as a reason for eliminating the welfare state. In fact, the brief spike came from the arrival at 60-75 years of age of the last larger birth cohorts, born prior to World War I and immediately thereafter (Chapters 14 and 15). The birth cohorts that followed, born 1923 to 1938 were smaller.

'Baby Boom' Era, 'Baby Boom' Births: Common Misunderstandings

In New Zealand, the Baby Boom era, as indicated by an upsurge in numbers and rates of Pākehā births, appeared suddenly near the end of World War II, only to finish abruptly between 1971 and 1973. Accompanying it was a rise in GDP per capita, also called a 'boom', which had preceded the Baby Boom, having been initiated by the Keynesian policies of the Labour Government elected in 1935, and which was more intense than the post-war economic boom (Chapt 15). The great unsolved puzzles are (i) why did the Baby Boom appear almost from nowhere⁴, and (ii) why did it occur in one way or another in every WDC, most of which had populations similar to Pākehā in Aotearoa, but also including Japan, whose causal path was very different⁵. Across other WDCs, it was also associated with economic booms of varying durations and magnitudes.

Measuring the Baby Boom's rise and fall is obfuscated by the fact that demographers and other analysts focus on the rates, which provide an elegant picture of the tempo of the Boom. But for policymakers the rates are far less important than the quantum, the number of births each year, as it determined familial and fiscal demands at the time. It is also the quantum that will have a very profound effect on the society and economy in the future as the Baby Boom birth cohorts proceed through their life cycles and eventually age (the very earliest Boom cohorts, born 1943 to 1949, are now in their 70s years (Pool 2007).

To add to this, a major problem for a researcher is that the 'Baby Boom' seems familiar to most, certainly older, readers who will have lived through at least part of it and feel that they know what it was. But, as I will explain here, events in this era are typically misunderstood, or at least misinterpreted, in ways that create

problems that render difficult what should be the simple task of describing the events that took place in the period. Popular culture, particularly American, that has had a dominant impact on moulding public perceptions across the Western Developed Countries (WDCs), has created a simplistic Baby Boom phenomenon that just does not fit with the realities of the era. Moreover, extrapolation of the American experience to other WDCs has produced perceptions about their own trends that do not fit with their experiences, and that may have negative connotations for planning. This is certainly the case for New Zealand and elsewhere, where the Baby Boom was an exceedingly complex set of events – not consisting of one cultural phenomenon but of many different demographic and social phenomena that also affected development, and will affect it into the long-term. For such a recent phenomenon which had had a high media profile the Baby Boom is surrounded by misunderstandings and urban myths. This extends to the ‘Baby Boomers’ themselves.

First, typically the Baby Boom and ‘Baby Boomers’ are imprecisely perceived as one socially homogeneous collectivity or generation born, or reproducing, all at the same time. This was most evident in the press frenzy when the first cohorts born in the Baby Boom (born *circa* 1945-47) reached pensionable ages around January 1st, 2010. The popular media saw the Boom as one huge wave suddenly hitting old age and all immediately needing geriatric care and financial support – they did not seem to be aware that the ‘Boomers’ – both the parents and their children (see next para) were multi-generational. Other Baby Boom cohorts were much younger and would be crossing the line into retirement ages for many, many years to come, the last (born 1970-73) as far off as 2035-38.

There is also confusion between the Baby Boomers as progeny – those who reach retirement, say, between 2010 and 2038 – and Baby Boom parents, those who begat the Boom’s babies between *circa* 1943 and *circa* 1973 in New Zealand’s case. The oldest of the Baby Boom mothers, say a woman, born as far off as around 1905, who had been married in the interwar years, reuniting with her returning serviceman husband as he arrived home in 1945, could have conceived a first pregnancy, or more likely a higher parity ‘catch-up’ baby, at the start of the Baby Boom era. By contrast, the youngest of the Baby Boom mothers, say a 16-year-old becoming pregnant in 1972, would herself have been born at mid-point in the Baby Boom (*circa* 1958). In this chapter the focus is on the parents, whose provenance spanned almost six decades. Clearly the social values and norms of the first parenting cohorts were vastly different from those of their successors – many of whom would also have been their children.

This was compounded by the dynamics of the Boom itself, especially those earlier on as the Boom got underway in a period that could be called a ‘phoney’ boom, just as 1939-40 saw the ‘phoney’ war in Europe. To add to this temporal difference, there was the ground-breaking, revolutionary shift in contraceptive

technology when the Pill was marketed, at mid-point in the Pākehā New Zealand Boom (but not the American see below). Furthermore, by comparison with the early Boom, by the late Boom, by *circa* 1970, family formation dynamics had intensified (age of mothers at first birth became even younger and spaces between births shorter). In later chapters, however, the accent will shift to the Baby Boom progeny, whose numbers and structures have had a major effect on peopling and development ever since the 1970s (see Chapt 19 ff).

Secondly, at a popular level and even among economists and policy analysts, the ‘Baby Boom’ has bestowed its name on a game-changing era and much that happened during it. This is truly a mega-nomenclature as it encompasses an enormous range of phenomena – demographic, economic and social, and in mass culture and communications – occurring in New Zealand, to both Māori and Pākehā, and in all the other WDCs between the end of World War II until *circa* 1970. In this broad cultural sense, all people who lived through this era experienced the ‘Baby Boom’ phenomenon. Yet, more narrowly defined, the ‘Baby Boom’ was purely a reproductive trend that saw crude birth rates and Total Fertility Rates (TFRs) increase, often, as in New Zealand, to their highest levels in the 20th century and beyond. The Pākehā TFR *circa* 1960 (4.0+ births per woman) was the ***highest recorded*** over the entire 122-year span between 1886 and 2018. The force of Boom natality may have seemed overwhelming, certainly to those in maternity services, but it pales into insignificance alongside the rate achieved by the Pākehā great grandmothers of the ‘Baby Boomers’ at over 7.0 births per woman in 1876 – or indeed the Māori rate during the Baby Boom period itself (6.0).

Thirdly, and following on from the last point, in New Zealand the dominant fertility trends – a sudden rise after World War II and high levels until after 1970 – ***were mainly a Pākehā phenomenon***. What occurred then, and that will have an effect on the age-structure and thus on the economy until the mid-21st century was due therefore, to these Pākehā birth rates. I say ‘in the main’, because Māori fertility levels were also very high in that period, well above Pākehā (Māori 6.0 births per woman; Pākehā 4.0 at the peak of their ‘boom’), but, unlike the Pākehā rates this was not a sudden trend; there was no Māori ‘Baby Boom’ in rates, but a continuing trend. High Māori levels in the 1950s followed on from their elevated fertility rates in the interwar years⁶, in a period when Pākehā rates, by contrast, had almost dropped to exact replacement (2.0 births per woman *circa* 1936; Chapt 15). For the long-term future effects, moreover, Māori ageing birth cohorts will have less impact on issues of public policy, simply because their births constituted only about 10-12% of the Baby Boom total.

Fourthly, American commentators and media have captured popular notions about the Baby Boom – their experience, and above all the termination of the United States Baby Boom’ in the 1960s, is typically perceived to be WDC norm. In fact, the

Americans were the deviant population among WDCs, as most others underwent their declines later in the early 1970s, often after a second spike in 1970 (Pool 2007). As I will argue, this has marked confounding impacts on some of New Zealand's most important policy discourses. The American experience, which too often is adopted as the policy model, and for markets, is just not appropriate to follow when projecting the ageing of the Baby Boomers in Aotearoa, the demographic trend that will set New Zealand's peopling and development parameters at least until the middle of the 21st century. American media are also responsible, to a significant degree, for constructing the Baby Boom as a popular cultural phenomenon and developing the generational labels that are now inherent in marketing and related fields.

Fifthly, when it comes to explaining peopling and development interactions in the Baby Boom one encounters yet another problem. Among economists it is justifiably seen as the years of a 'long [economic] boom', which it was, certainly in terms of demand-driven growth, and for consumption and the related infrastructure. Some economists see positive economic growth starting pre-war with New Zealand's *Social Security Act, 1938*. Keynesian policies of this sort, which aimed at rescuing economies from the Depression, were not unique to New Zealand; the Roosevelt 'New Deal' in the United States was a classic example. Yet, for Aotearoa the post-war economy may not have been a boom in another way: there was a lack of investment in innovative projects that, if they had been initiated, might have contributed to sustained and sustainable economic growth. One cannot fault the policy makers of the day – they had to spend money in social sectors just to catch up with each year's new crop of births. To their credit, leading economists of the day were aware of the tensions between meeting that day's urgent needs for services, institutions and infrastructure, and investing in longer-term technologically innovative programmes. And, to their credit, successive governments did create much of the infrastructure that is still playing a role in New Zealand's development: upgrading ports and roads and building innumerable hydro-electric dams.

Sixthly, there is a technical question, which I will explore later, as to whether the Baby Boom was really, instead, a 'Marriage Boom' that drove a 'birth boom'. In earlier chapters I have discussed the 'nuptiality valve', which historically governed fertility levels (the age at marriage and the proportions of women marrying, a phenomenon operating where pre-marital sex is less common). We forget that contraception in the 1950s still did not provide the efficient protection it does today, yet this was in an era when popular culture favoured teenage 'dating' with all that that might imply, while contradictorily espousing strong norms condemning ex-nuptial conception, and placing severe sanctions on the girl or young woman who fell into this trap – or was coerced into it. That is, unless, of course, she precipitately married, when, as the saying goes 'everybody lived happily thereafter'; unfortunately, as I will show later, too frequently it all 'ended in tears'.

Finally, despite its enormously high profile the ‘Baby Boom’ era was actually rather short. Its maximum duration was three decades, if 1943 is taken as its starting point, from when the ‘phoney’ Baby Boom set in presaging the real one about 1947, and 1973-76 is taken as an outer limit (or shorter if its limits are seen as 1947 and 1973). It lasted a far shorter time (26-33 years) than the Neo-turbulent period (depending on when you see its starting point, around 50 years, 1970-2020 and still going on). Perhaps, the most stable factor since the mid-1970s for New Zealand has been that its fertility rates have remained consistently around replacement. Furthermore, the Boom’s signature tune – high fertility – is best seen as a brief and aberrant blast in a long interlude, featuring declining or low fertility that started *circa* 1880 and has remained in the basso range since 1900 (TFR below 4.0, and from 1911 around 3.0 or lower). Of those 120 or more years, the Baby Boom occupied far less than a quarter of the time, whereas lower fertility (3.0 or less) almost three-quarters of the period 1900-2020. As I mentioned in earlier chapters, the memory of ‘large’ families around 1920 is highly selective: differentials were marked at that time, so that many women had small families or were celibate and childless. It is an arithmetic truism that more people are likely to be descended from larger than from smaller families, whereas smaller units may have been the modal size at that time: thus the majority of families were small, but the majority of children were born to large families (Pool *et al* 2007: 162-63). To add to this, since the Baby Boom, sub-replacement fertility has been fairly consistent, fluctuating modestly around 2.0 births per woman in New Zealand, after restarting in 1976 (after reaching this level briefly in the 1930s). Virtual sub-replacement childbearing has endured far longer than the higher fertility ‘Baby Boom’ with 3.0-4.0+ births per woman.

The ‘Baby Boom’ as a Game-changing Event

Nationally, during the post-1945 years one trend – a demographic change due to natural increase (births minus deaths) – overshadowed all other peopling and development factors. Birth numbers increased from 50,000 (1951) to 65,000, dipped but reached 64,000 in 1971, but were back down to 51,000 in 1981. Over this time, the total population increased quickly at first by 26%, from 1.9 million in 1951 to 2.4 million in 1961, then to 2.9 million 1971 (growing 21%), but growth slowed, up to just 7% to 3.1 million in 1981.

The demographic stability recorded last chapter for the interwar years gave way to a singular, aberrant mega-phenomenon – the surge in Pākehā Baby Boom births. The effects of this were reinforced by low and declining childhood mortality (Figure 14.2), as the ‘force’ of Pākehā mortality moved up the life-cycle to older and older ages, exactly as expected in a normal epidemiological transition. This Pākehā trend of high-medium birth rates and low death rates was responsible for population

growth, whereas, contrary to the public image of the Baby Boom period, net migration remained a relatively minor factor. More importantly, the Boom, and the subsequent Bust, induced major age-compositional shifts that will affect peopling and development policy at least until the 2050s. Compounding this sudden Pākehā reproductive blowout, Māori birth rates remained high, and their death rates dropped rapidly. In 1961, Pākehā Baby Boom Rates of Natural Increase peaked at 18 per 1,000 of the total population, which was high for a WDC society, but at 38 per 1,000 Māori far outstripped this so that their rates of natural increase approached biological maxima (40+ per 1,000).

There had been continuity with the patterns of peopling in the interwar years, as seen in the country's geographical structures that were fundamental to its entire functioning as an economy and society. New Zealand's economic and population geography maintained many of the features seen in the 1920s and 1930s, and this was also true for national core economic functions. Give or take a bit, until the 1970s, there was a continuation of the gradual changes in sub-national demography that had already unfolded from 1920 to 1945, but sub-national New Zealand still had the settlement patterns, and food processing, exchange and distribution networks that had served it well until then. Thus, regional population structures, mutating slowly, intimately intermeshed with the factors of development that had also been seen between the wars, with few sudden shifts in pattern or direction. The exceptions to the continuation of these geographic patterns were the rural exodus of Māori (1945-66), and, within cities, the rapid expansion of suburbs as car ownership increased. At first, suburbanisation was mainly a Pākehā phenomenon, Baby Boom driven, but subsequently these areas also housed Māori in-migrants and their families, and, even later, Pasifika as they started to immigrate to New Zealand lured by manufacturing and other jobs.

A time-traveller, projected from 1926 (or 1936) to 1956 (or 1966), would have found much that was familiar in Aotearoa's base functions: the directionality and goods exchanged in the supply chains on which the country was so heavily dependent; the settlement patterns that facilitated them – the collection, processing and export of commodities and the unloading and distribution of imported manufactured goods; the ongoing intensification of pastoralism; and the industrial sectoral distribution of the workforce. It is true that farming became increasingly efficient, as intensification was achieved by means such as electrification of shearing and milking, much greater resort to bulk fertilisers and the use of trucks and aircraft to spread these and sow grasses. As a result of these innovations, the workforce in primary industry declined (see Table 15.5), while pastoral production increased. Beyond this, the supply-chain dynamics and a burgeoning welfare state required transport and service workers, in both the public and private sectors, who filled the wholesale, retail and government jobs. This could be in hamlets (eg teachers),

townships (eg postmasters), boroughs and cities. The dynamics of New Zealand's demography, society, economy, and transport and communications systems were thus dictated by rural production, and the processing, assembly and export of commodities⁷. The four major cities of the Baby Boom were really just bigger somewhat more diversified, export-import ports, with the add-on of serving entrepot roles for the vibrant coastal shipping trade that serviced much of provincial New Zealand – with a smidgen of cosmopolitanism modifying their otherwise sober images⁸.

There were also political and constitutional events, which had some impact on the population and development (Figure 5.1). These included New Zealand's participation in the post-war occupation of Japan, ratification in 1947 of the *Statute of Westminster, 1931* (Chapt 2) granting full sovereignty to New Zealand, and its involvement in the various Asian wars of the period – Korea, Malaya and Vietnam. But it was the waterfront strike in 1951, which can also be seen as a lockout, that was most traumatic. It had some immediate effects on exporting, although its impact on employer-employee relations was much longer lasting.

The 1951 waterfront strike has had a powerful impact on the historiography of post-war New Zealand, sitting alongside the Springbok Tour demonstrations of 1981, but for this book it is the 1951 strike that is the more germane⁹. The immediate lead up to 1951 was due in part to factors outside the realm of this book: different levels and patterns of militancy within the union movement. This was symptomatic of an underlying change that is relevant – the shift-shares occurring in the labour force away from the 'blue-collar', typically manual occupations, such as waterside workers, coal miners and freezing workers, to the 'white collar' tertiary industries, especially those in the public sector. But, driving this industrial conflict were other forces identified in the title of Anna Green's (2001: 293-307) book *British Capital, Antipodean Labour*. At its core was the validity of the centre-periphery relations that underpinned the entire fabric of recolonisation for New Zealand. It occurred on the most sensitive part of recolonisation's anatomy, the wharves, thereby affecting the export of grasslands' commodities to Britain. It was thus a quintessential example of the continuation of recolonial New Zealand into the post-war period. Beyond this, but not directly relevant for the present story, were wider geo-strategic pressures, especially from the United States, contingent upon 'cold-war' fears. New Zealand was starting to shift its allegiance from an old imperium, London, to the new one, Washington, so American geopolitical concerns came into play. The last political-economic game-changing event of the period to corrode recolonisation was the entry of Britain into the European Economic Community (EEC) (Figure 5.1). It had a direct effect on the New Zealand economy, particularly in the mid-1970s.

Recolonisation was being eroded, but it still was the most powerful driver of the country's population geography: the collection and export of products to Britain,

and the importing and distribution of British goods still dominated its settlement patterns (Chapter 17). Culturally, Aotearoa was still recolonial. As writer Ian Cross put it, perhaps unfairly blaming the politicians, who probably really reflected popular opinions ‘[they] had by the 1960s created a safe dull country for a “lethargic colonial people”’. He saw New Zealanders as strait-laced, mediocre and uncertain, deferential to British products over our own’ (Matthews 2019, citing Cross’s *The Unlikely Bureaucrat*). These words about the fundamentals of Pākehā society in particular still echo what I have quoted for the interwar years (Chapter 15).

But, the quotidian story, for most New Zealanders, was less newsworthy – it comprised what happened frequently in weekends. Over most Friday, Saturday and Sunday nights, from cottage hospitals to major metropolitan institutions, obstetrics reigned as a function of the Baby Boom’s upsurge in the number of births. The couple’s dramatic race to the hospital, her bag packed for a 14-day stay, would be followed by the doctor’s flustered arrival from his – most were ‘his’ – dinner-party or slumbers. This prescribed the routines of the overwhelming majority of general practitioners, who, in those days, also delivered babies. There was also marked seasonality: obstetrics often required a call-out in the cold nights of August–September – a sort of down-the-line effect of the previous summer’s holiday.

This human seasonal reproductive pattern merely paralleled the way the whole country worked, particularly farming; I cannot overstress this point. It was very seasonal, with rural work patterns, underpinned by regimes of evapo-transpiration, dominating all the rhythms of the nation, as the geographer Leslie Curry recorded (1958, 1962)¹⁰. Calving and lambing coincided with the peak human birth months, that was followed by peak pasture grasslands’ growth. By early summer, cows were flush with grazing, their distended udders full of milk. Summer and early autumn saw the meat-killing works in full production, drawing on an army of seasonal workers, Māori and students. The post-office, with legions of casual labourers, worked night and day to get out the last delivery before nightfall on December 24th. Hours later, over Christmas and January, much of the country – other than seasonal processing works and farms – closed down for a holiday, almost as sacred as the French August break. In mid-January, Dad went back to work and to tend the home garden, leaving Mum and the kids – from better-endowed families at the bach or crib (holiday house), but the less endowed in the back-garden or tenting in a campground.

The Effects on Development of Three Unforeseen Demographic Trends

What set the post-war decades apart from the interwar years were three major unforeseen population changes, all of which had long-term impacts, perhaps only as once-offs, but certainly as game-changers. One, already identified, was the Baby Boom, which, I must reiterate, was almost entirely a Pākehā phenomenon; the others

were both Māori. But, as Pākehā comprised 91% of the population (1966), the Boom was the trend of overwhelming national significance, impinging on the lives of both Māori and Pākehā.

The other two game-changing demographic trends were phenomena entirely restricted to Māori. First, they achieved elevated rates of natural increase that accelerated to reach very high levels, well above Pākehā levels. Secondly, there was a rapid Māori urban influx (Figure 5.1). This rapid, urban-ward migration, *en masse*, reinforced by their high population growth and almost Malthusian pressures in rural regions, had a great impact on Māori society. Although Māori were still below 10% of the total population in 1966, this influx also had a significant effect on Pākehā life and attitudes, more than mere numbers might have suggested. As noted last chapter the first large-scale Māori urban migration, increasing during the War, may have endowed New Zealand as a whole with demographic dividends: young Māori workers met the labour shortages of the War years. At first, the main inflow after the War was also of young Māori adults, who moved into the processing and manufacturing industries, construction and other labouring jobs opening up at that time. Once again, as in the War, Māori provided a ‘collateral demographic dividend’ (Jackson 2016; see also Chapt 15).

It is impossible to divorce the population trends from their economic consequences. High birth rates generated what some economists call the ‘long boom’, a notion that is reflected in gross economic indicators, such as real GDP. The ‘long boom’ really started in the late 1930s when the Labour Government introduced Keynesian policies such as state house construction. But, the immediate drivers of the post-war part of the ‘long boom’, say from 1945 to 1966, were demographic. Because of the Pākehā Baby Boom and the Māori urban-ward migration, hospitals and schools had to be constructed, the young families had to be housed in large new suburbs and their houses heated and lit electrically (see below); teachers, nurses and service workers, who were also Baby Boom parents, had to be trained and employed by the welfare state as well as by commercial sectors. At a local level, this produced almost classical momentum effects, as for example in the education sector: a typical suburb would see a rush to construct primary schools as young couples took up their houses and had babies, who soon became primary-entry pupils; a few short years later intermediate schools would be needed; and then high schools, while the original primary schools could face falling rolls, until the next generation of parents delivered their 5-year olds to the school. There was also a downside as the Baby Boom, and its associated building and construction, and its staffing of institutions, diverted investment away from productive sectors.

The prescient calls, for example, of Bill Sutch and similar ‘nation-builders’ (Sutch 1966: 412-30; Easton 2001)¹¹, arguing for technology-driven industrial development, import substitution and a more diversified economy to reduce

dependency, were never addressed satisfactorily. Instead, in the quotidian debates of parliament, there were much more pressing issues for MPs, such as getting permanent classrooms for schools, new and old, in their electorate, most with rolls rapidly inflating. There was also a sub-plot emerging: despite the muted moves away from the United Kingdom as its sole market, New Zealand was unprepared in its economic bases for Britain's entry into the EEC. A corollary to this, the establishment of a sovereign investment fund to provide the capital for development and to cocoon New Zealand against the potential long-term costs of ageing, was achieved, briefly, by a Labour Government in the early 1970s, only to have it summarily abolished by National's Robert Muldoon coming to power in 1975.

The investments in infrastructure and in institutions were a combination of the housing, schooling and paediatric services necessary to cater for the demand-effects of the greatly inflated birth cohorts before the Baby Bust occurred. Additionally, there was a perceived need to improve general wellbeing including those aspects affected by the physical infrastructure. New Zealand and the other Anglo settler-societies were fortunate that, unlike Britain, they did not have to replace war-destroyed housing and infrastructure. But, their much stronger Baby Booms than in Europe resulted in some of the same pressures, especially for housing (see below).

An example of an infrastructural need was electrification plus regular, reliable services, providing access for which was a major policy goal for all governments; power cuts were a normal factor of life in post-war New Zealand. It had an energy sector that required upgrading to meet demands that the government had assessed during the war. By improving its volume and reticulation, this also served to improve the efficiency of the industries that were contributing to the country's longer-term development trajectory. A case in point was dairy farming that shifted its mechanised milking sheds from dependence on diesel motors to electricity reticulated from the national grid. This objective, in turn, came out of a general sense that the recent war had been fought to make lives better – materially and in other ways. Successive governments set about responding to this powerful set of needs, by investing, in particular, in various major infrastructural projects. A side-benefit of this was that the labour market featured almost full employment and labour shortages in some fields. Paralleling these initiatives was the continuation, however, of New Zealand's export economy, carrying on in much the same ways as it had in the past, although more productively.

The Baby Boom, that essentially Pākehā phenomenon, materially and symbolically took up most of the oxygen between World War II and the beginning of the 1970s, thereby squeezing out other phenomena and skewing the economy and public policy: by default these were both Pākehā-driven. The basic framework for New Zealand's population geography, carried across from the interwar period, was dominated by the spatial distribution of Pākehā and designed to meet their needs. To a

very large degree, Pākehā controlled both the productive and service sectors of the economy. Thus, the spatial structures sustained the factors of production, which were centred on grasslands' products and their export, and on the tertiary sector – the delivery and sale of imported goods, plus the provision of social and other services – all of which were primarily furnished by Pākehā for Pākehā. Smaller urban areas flourished, and were mainly inhabited by Pākehā, as were the secondary urban areas (small cities), especially in the more southern regions.

The population distribution overall was also relatively even between regions, something that was to change later (Figure 6.3). This balanced spatial spread applied particularly to the secondary urban areas, which played seminal roles in the economy, both in its productive and service sectors. In 1956, the 11 cities in this grouping varied in size to a limited degree, between just 22,000 (Nelson) and 41,000 (Hamilton). By 2001, however, the distribution had been changed very significantly, in ranges of sizes, both absolutely and relatively, from Timaru (27,000) to Hamilton (166, 000), which had grown far faster than others that had been in the group in 1956¹².

Finally, migration inflows, small by comparison with those that came later, were designed to bolster the size of the Pākehā population's British-origin component, with a little nod to the labour force demands of the huge infrastructure projects of the day. To a significant degree, Baby Boom era immigrant inflows also reinforced the urban and rural geographic distribution of the Pākehā population, as had been the case in the interwar years¹³. In the turbulent era this was to be a reinforcement of urban, especially metropolitan, settlements.

So far, I have focused on Pākehā simply because of their hegemonic role in peopling and development. Nevertheless, this was still a settler-society that was bipolarised in an imbalanced way, and its duality obscured by the cultural, demographic, economic and social ethos of the day. In the 1940s, in the eyes of most Pākehā, New Zealand was a Euro-descent society and still a clone of Mother England; Māori were an afterthought. But, what few Pākehā foresaw was that Māori were waiting in the wings, in ever-increasing numbers, and during this period took their opportunity to make a dramatic entrance on-stage by urbanising very rapidly. Reinforcing this was the fact noted above that, about 1960, government recognised that the Māori population, was highly concentrated in remote rural areas and this had the potential for building ethnic strife, yet Māori were also a potential source for migration that could build labour force capacities. Noel Woods (1960: 2), a Department of Labour researcher put these two issues in apposition,

‘We could be committing a supreme folly if we pursued overseas migration to the point of creating a racial problem of under-employed Maoris pent up in “Maori” areas while immigrant labour filled the vacancies for labour in other areas... It would seem imperative that overseas migration

should not hinder or substitute for Māori migration' [to areas with employment opportunities]'.

Officials then also turned to tropical Polynesia, in part for migrant recruits and, in part, because of a growing concern about 'Malthusian' population pressures in these small-island territories. Urbanisation of Māori, or the passage of Pasifika from Oceanic countries, was often a traumatic experience for those concerned, but for Māori, and then Pasifika, it also brought windfalls in terms of wellbeing (eg incomes, Chapt 17). In-migration threw settlers and Indigenous people, plus Pasifika, into face-to-face contact, changing inter-ethnic dynamics for ever.

As if to underline the fact of high Māori fertility and their rural exodus, for example, the social ecology of urban maternity units, so long almost the exclusive preserve of Pākehā mothers and neonates, underwent a quantum change. Suddenly, there was an explosion of Māori deliveries, free and universal under the provisions of the *Social Security Act 1938* and its subsequent regulations and statutes. This was reinforced in Auckland and a few other localities by Pasifika parturitions. Birth was then followed by hospital visits of the family, whanau or aiga, for Pākehā the husband and perhaps his mother-in-law, but for Māori and Pasifika the husband plus uncles, aunts, grandparents, siblings and cousins, relatives and friends, something obstetrics had never experienced before. Hospital visitors often had to return to housing areas, which, as I will show later, although not ghettoised as much as their American counterparts, housed residents who were disproportionately Māori and Pasifika. This was a new world, as much for Pākehā (Palagi in Pasifika languages) as for the migrants. The same thing was happening on the floor of the manufacturing plant, the sector that had reached its peak workforce size in the Baby Boom (Figure 12.1), in new housing estates, and in a wide range of social situations. The Māori experience is so important, and its drivers and mechanisms so different from Pākehā that I devote the last section of Chapt 17 to them.

In many senses, in 1945 New Zealand was still comprised of two parallel societies with limited levels of interaction. By 1970, however, these two streams had come together far more. 'Thrown together more' might be a better phrase, as the fit was still extremely awkward and far from perfect. It is also important to remember that it had been Māori who, backstage and then increasingly on-stage in the Baby Boom, had made most of the transitions and compromises. Regardless, from the 1970s New Zealand became something resembling a bi-cultural society, rather than two polar ethnicities. Just as this was emerging, immigration took off, not just in quantum terms but in its levels of diversification according to place of origin.

Above all the Baby Boom was a 'peopling' phenomenon, so, before I leave it I must first describe what actually happened to reproductive and other demographic trends (Chapt 17). Beyond this, the Baby Boom generated consequences that will

endure to the mid-21st century. Chapter 18 goes back to the settler-society as an entity and looks at some of these impacts, both material and ideational.

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¹ In their *New Zealand Encyclopedia* entry on the post-war welfare state period, 1946-69, Maureen Baker and Rosemary du Plessis (2011) report that, 'In the 1950s the International Labour Organization labelled New Zealand a model welfare state'.

² Defined earlier as Anglo-America; Australasia; Mediterranean, Nordic and Western Europe, including Austria; and Japan. The Baby Boom was most intense in Anglo settler-societies, and Japan.

³ One hopes that this was simply bad diagnosis due to the use of gross age ranges, as against more refined cohorts in the modeling used by analysts.

⁴ Not quite from nowhere, as fertility had risen modestly in the late 1930s in New Zealand and other WDCs, often being attributed to newly introduced benefit systems.

⁵ See Chapter 17.

⁶ And before, from when Māori had moved to 5.0+ births per woman in their recovery.

⁷ I benefited greatly from discussions about this period with political-sociologist economists, Bill Cochrane and David Neilson, Societies and Cultures, University of Waikato. I wish to thank them.

⁸ A highlight for diplomats stationed in the capital, Wellington, was to witness drovers, with their horses and packs of sheepdogs herding transhumant sheep through the main streets to, and back from, the narrow, rugged littoral westwards between Wellington and the Tasman Sea.

⁹ Belich (2001: 299-307) allocates a long section to it, arguing, however, that, though it was a major conflict, it was less significant than the strike of 1913 and the 1932 unemployed riots.

¹⁰ Curry was a disciple of the climatologist C Warren Thornthwaite who played a major role in interrelating the factors of evaporation and transpiration into one composite index. I thank Lex Chalmers, Geographer, University of Waikato for helping me source Curry's work, to which I had been

exposed and influenced by in the 1950s. It was the way Curry demonstrated how natural and human farming regimes interpenetrated that was so fascinating.

¹¹ In June 1960, for example, an Industrial Development Conference was held under government and industry auspices.

¹² In rank size in 1956, Palmerston North (38,000), Invercargill (35,000) and Whanganui (32,000) closely followed Hamilton. By 2001, there were exploding newcomers: Tauranga (96,000) second only to Hamilton in size, and Whangarei (47,000). Local body restructuring in 1989 altered sizes, the growth of Tauranga and Whangarei being in part an artefact of incorporating neighbouring rural zones. Nevertheless, both had also grown in a real sense. By contrast, Whanganui, Gisborne and Timaru grew very slightly.

¹³ By contrast, after 1970 immigrants were far more likely to cluster in metropoli, especially Auckland (see Table 14.7). 'Auckland-isation' had increased gradually between 1921 and 1961 but greatly accelerated over the next 40 years.

Chapter Seventeen – The Baby Boom 1940s–c.1973: Demographic Dimensions

The Baby Boom and Other Demographic Events

The eponymous Baby Boom was the crowning event of this period both in New Zealand and across the other Western Developed Countries (WDCs)¹. The Pākehā population threw itself very enthusiastically into this birth boom, more so than any other European-descent WDC.

No one has ever satisfactorily explained how and why the Baby Boom occurred. It was a macro- – collective-level – phenomenon erupting at War's end across the WDCs. As a mega-‘fad’, it inexplicably gripped all the WDCs simultaneously after World War II, less intensely in Europe, more so in the Neo-Europes, and intensively (but quickly curtailed) in Japan. In WDC after WDC, patterns of family formation (eg early childbearing) followed the same broad norms, although levels varied² (Pool 2007). It was almost as if the WDCs wanted a ‘last fling’ stimulated by coming out of the War, and before entering a subsequent, long, continuing period of sub-replacement fertility. Yet, paradoxically, although it was a collective social movement, it could occur only through the actions of individual women and couples. Millions of them, whether in Auckland, Texas, Amsterdam, Birmingham, Toronto, Adelaide or wherever in the WDCs, more or less simultaneously but separately made extremely personal decisions about family formation and adopted reproductive regimes that were radically different from what had occurred just a few years before. To add to the mystery, the 1940s were still a period when most people were somewhat reluctant to discuss sexual matters in public, and there was nothing equivalent to today's social media to transmit norms and values in nanoseconds. Then *circa* 1970, again individually, a younger generation of couples collectively across the WDCs decided, more or less simultaneously, to change family building strategies dramatically, and this time in a way that has had no historic precedent (see Chapt 19ff). For New Zealand, there was yet another quandary – Māori living in the same country and exposed to many of the same media, were simply not caught up in this collective wave, so did not join in the Boom, but kept their fertility rates at the same high levels they had been at throughout the 20th century.

In Aotearoa, there were other lower profile but significant demographic patterns and trends that characterised this epoch, but all were obscured by the demographic phenomenon of Pākehā reproduction. Thus, Māori fertility rates were high, but their births never contributed much more than 10-12% of the total, so that the Pākehā Baby Boom was the main driver of birth numbers and rates in this era. Moreover, as I will show below, it was Pākehā natality that overwhelmingly drove

population replacement – net immigration was a very minor player. There were other population changes occurring in this period, which will be discussed later in this chapter, above all Māori natural increase and their urban-ward migration. Structurally, a fundamental factor was the fact that, in contrast to fertility or Māori urbanisation, the population geography of Aotearoa's Pākehā majority changed gradually, and essentially underpinned Aotearoa's economic functioning.

Pākehā fertility trends have left an indelible imprint on Aotearoa's peopling and development in that era *per se*, and since then, and will do so into the future, mainly through their impact on age-composition, Chapter 18 and Chapters 19 ff will return to that theme. But first, because the Baby Boom's over-arching role in affecting peopling and development in this way, a more forensic review of it is necessary, and the focus in the next part of the chapter will be almost entirely on Pākehā (drawing on Pool *et al* 2007: Chapt 5).

The Dynamics of the Pākehā Baby Boom

Table 17.1 presents crude birth rates (CBRs) for selected years³, and demonstrates the sudden rise from the Depression to the Boom. The bi-modal peaks noted later are more evident in the sizes of cohorts born in 1961 and 1971 (Table 17.2) than in rates. By the mid-1970s the Baby Boom was over, with birth rates back down to Depression levels (cf 1935 and 1973).

Table 17.1: New Zealand, Crude Birth Rates (CBR) and Comment, Selected Years

Year	CBR	Comment
1935	17	Depression Low
1943	21	Incipient Boom
1947	28	Start of 'true' Boom + troop-return effects
1961	27	1 st Bi-modal Peak (N Births)*
1971	23	2 nd Bi-modal Peak (N Births)*
1973	18	Two years into the Baby Bust

*Notes: Crude Birth Rate = Births Per 1,000 Population; * Māori and Pākehā combined. Bi-modality shows up in the birth numbers, in Table 17.2, but not in the rates.*

The data in Table 17.1 show that the New Zealand Pākehā Baby Boom started incipiently in 1943-44's 'phoney boom', which got underway more fully after 1946, following a larger return movements of troops from the war, who reunited with wives or hastened to get married. Older sisters, whose weddings had been delayed, married their Depression or soldier sweethearts, and women already married in the 1930s had that delayed extra birth they had not been able to afford before. The figure for the

total population in 1946-47 was also swollen artefactually by the late registrations of a significant number of Māori births.

From the late 1940s the ‘Boom’ proper erupted and set in place what was to be its *modus operandi* until 1971-73: its constituents were higher Total Fertility Rates, a younger age for first childbearing and short intervals between births. Its motor was a release of the nuptiality valve, referred to in earlier chapters. This was in an era in which contraception was still less certain until the Pill became available (from 1960), but as timing of marriage (and exposure to risk of pregnancy) decreased to younger and younger ages. Think of a hypothetical late 1940s family with three daughters: over a short span the father might have walked his 28-year-old down the aisle, then shortly thereafter his 23-year-old, followed soon by seeing his 20 year old wed. A very young age for marriage set the tone for the rest of the Baby Boom, above all during the second peak around 1970, when marriage and childbearing were centred on the later teenage years and young adult ages.

The Baby Boom regime that evolved in New Zealand was also due to compressed childbearing, by couples starting young, and then with short birth intervals until two to four births had occurred (Sceats 1981, 1988). A mother with three toddlers under age 4 was not a rare sight and a popular sentiment was ‘to get it over and done as quickly as possible’. Sometimes, however, the last birth(s) would be delayed for a number of years and would come as a ‘surprise’, almost a second family. Elsewhere in the WDCs these were called ‘caboose babies’ or ‘late lambs’. It was also bi-modal: birth cohort sizes, shown in Table 17.2 rose to 65,000 at its first spike in 1961, back down to 60,000 in the mid-1960s, then up again to almost 65,000 at its second peak in 1971. But, by 1973, it was very suddenly all over. The birth cohort of 1976 numbered only 55,000, and numbers of births were still fewer than 60,000 in 2006 when the population itself had grown by 29 per cent since the Baby Boom. If the increase in birth cohort size had equalled population growth, there would have been 70,000 births in 2006. By contrast, during the early Baby Boom Māori birth numbers were a function of their increasing proportions in the population overall, then peaked at around 8,000 before their Baby Bust began. The twin spikes of the Pākehā Boom have implications for policy as I will discuss later; the Māori fertility trend was unimodal (Table 17.2).

Table 17.2: Total and Māori Births, Numbers (000s), Selected Years 1951–81

Year	1951	1956	1961	1966	1971	1976	1981
Total (incl. Māori)	50	57	65	60	64	55	51
Māori	5	6	7	8	8	7	7

Source: Statistics New Zealand/Infoshare (2020), *Births*, Table VSB036AA

New Zealand (Pākehā) fertility rates in the Baby Boom, shown in Figure 14.1, rose significantly, although still in the global medium range at that time (a TFR below 5.0). Nevertheless, rates exceeded those in all other European-descent WDCs⁴, except Iceland and Ireland, which were close to the Pākehā level. The Pākehā Total fertility Rate exceeded 4.0 births per woman in 1961; Māori births pushed the national TFR up further, to 4.2. At the same time, everyone was becoming a parent, so Pākehā reproductive polarisation declined by comparison with the patterns in pre-World War I and interwar years (Chapts 14 and 15). The most significant differences in Aotearoa, however, were not within or between various groups of Pākehā, categorised by criteria such as rural or urban residence, or religion, Catholic and Protestant, but the wide gaps between Pākehā and Māori. There was a difference of more than 2.0 births per woman, between Pākehā, the quintessential Baby Boomers, and Māori whose fertility was higher but simply continuing at a century-long elevated rate.

In terms of the tempo (timing) of family formation, the Baby Boom was historically unique, with women marrying and conceiving – or, as held true for a significant minority, conceiving then marrying – at exceptionally young ages. In the pioneer period of the 1870s, marriage had most frequently preceded childbearing, whereas in the Baby Boom pregnancy increasingly became a reason for marriage.

Reproduction was so compressed into the early adult ages that, for Pākehā in 1971 in the last throes of the Baby Boom, 51 per cent of all births were to women aged less than 25 years, up from 45 per cent in 1966, and far above the Depression era (1934) level, of 10 per cent, or the level in the post Baby Boom period – 28 per cent (1986), and 24 per cent in the 2000s (2006). The level was still at 50 per cent in 1976, but the dynamics of family formation in the early-mid-1970s were very complex. Essentially, fertility was dropping rapidly as more and more women were moving to delayed childbearing, thereby giving the early starting child-bearers greater weight disproportionately among all mothers. Many women who might previously have become pregnant at a younger age were now delaying and having their first birth at an older age, thereby producing a sort of reproductive hiatus that had more than merely reproductive implications – the shift in timing of first birth also invoked an entire new set of social values, to which I will return below.

New Zealand's Baby Boom (1943/4-73) far outran the British 'Boom' both in terms of quantum and tempo (Pākehā, 4.0 births per woman; United Kingdom below 3.0). New Zealand's European-descent majority were closer to the 'club' composed of similar groups in the other 'white Dominions' Australia and Canada, and in the mainly 'white' former colony of the United States. Pākehā average annual TFRs over the period 1955-65 went well above 3.0; as noted only Ireland and Iceland (for different reasons) and the Netherlands (just at 3.0) equalled or exceeded 3.0 (Pool 2007: Table 2). Pākehā fertility rates rose significantly, while Māori levels remained high (6.0). The proportions of women never married at 20-24 years in the Baby Boom

were even lower than they had been in the 1870s and became particularly marked around 1970 (see Figure 11.1). First births occurred at younger ages than had been achieved in the period of hyper-fertility of the 1870s. Durations between births were closer, and those spans notably shorter than in Canada or America (Sceats 1981; Morgan *et al* 2001).

For Pākehā family life, the Baby Boom was a distinctly aberrant period. While it seemed to lift the country's reproductive capacity and to leave the impression that New Zealand was young and vibrant, it reinforced aspects of family life, particularly gender-divisions, that were echoes of the past. These family dynamics were, reinforced, by comparison with previous decades, by the new suburbanisation in neo-local households (defined as away from the couples' own parents, see Chapt 13), typically reliant on public transport, or, in those days, on one family-owned car⁵.

In 1960, around the first peak of the Boom, the Pill was first marketed, but use restricted to 'married couples'. This served to help women who had several children already limit their family size (decide how many children they wanted in total when they stopped childbearing), rather than the Pill affecting timing (age at first pregnancy) and spacing of births (intervals between them). But, by the end of that decade all couples were gaining access to the Pill and it was playing a role in all of timing, spacing and limitation. The diffusion of information about the Pill seems to have been very quick as Pākehā women were rapid and early adopters, with very high levels of use early on (by comparison with the United States). For both the quantitative and ideational aspects of family planning there are detailed analyses, based on the only large nationwide, random sample, based on face-to-face interviews, conducted in New Zealand (Dharmalingam *et al* 2004; Johnstone *et al* 2001; Marsault *et al* 1997; Pool *et al* 1999)⁶, and some other data mainly qualitative.

When the changes that transpired while the Baby Boom was running its course are looked at, there were very significant cohort differences among Pākehā women. Older cohorts, regardless of age at first intercourse, were far less likely to have used an efficient method of contraception at first intercourse than younger women. But, in all cohorts, the older the age at first intercourse the higher the percentage use of efficient contraception. The proportions of women who had ever-used contraception, and ever-used the Pill⁷, differed similarly, with a very marked difference between those born prior to 1949 (lower) and those born from 1950 on (higher). For partner-use of the new condom technologies, which only became available in the 1970s, there was a difference between the youngest cohort and the others. The Māori cohort probabilities were similar in pattern to Pākehā, but adoption of contraception tended to be at older ages.

Not surprisingly, contraceptive use paralleled fertility overall, so there were no marked geographical differentials. Nevertheless, levels of efficient contraceptive use were highest in the South Island, southern North Island and in Auckland. There was a

slightly lower frequency in the region south of Auckland, but north of Palmerston North (Pool *et al* 1999: Figures 3.1, 7.1-3, 8.1; Table 3.3, *passim*).

The Pill was not a determinant of changing attitudes to family size. We can say this definitively because fertility rates had declined over a long period, since the 1880s, when the major factor had been the ‘nuptiality valve’, already discussed, plus withdrawal and abortion, then increasingly resort to various sorts of barrier methods. By the 1930s, Pākehā couples had already achieved replacement levels. The arrival of the Pill gave them an efficient and reliable mechanism by which to achieve desired family size while still being exposed to intercourse – only total abstinence, and thus no intercourse at all, or sterilisation (traditionally hysterectomies for ‘medical counter-indications’) had allowed this degree of confidence in the past. Widespread use of sterilisation with new techniques was only to come later in the ‘Baby Bust’.

The Pill was more than a marker of mere technological change, but also a factor that totally changed socio-cultural perspectives on the interrelations between marriage and childbearing; that is, the balance between its biblically ordained roles in procreation, and to counteract ‘concupiscence’. For the first time in human history, this balance could be achieved effectively. It is not surprising that at the end of the millennium the Pill was voted the most important technology of the twentieth century (*Economist* 1999). Beyond this, the contraceptive revolution spurred on by the Pill ushered in radical shifts in attitudes, norms and expectations about the use and efficacy of contraception in all its forms. So, adoption of the Pill in 1960s and early 1970s was followed in New Zealand in the Baby Bust by the very widespread use of sterilisation – tubal ligation and vasectomies for the limitation of family sizes.

The technology brought by the Pill was also associated with a new sort of ethos about sexual relations that made exposure to intercourse more spontaneous and less regular – whether or not more frequent is less clear. The new generation of condoms marketed from the 1970s on met the requirements of couples engaging in more casual contacts, and also provided a response to the threats posed by HIV-AIDS (Pool *et al* 1999). By contrast, the Pill allowed women and couples in relationships in which exposure to intercourse was regular to ensure that risk of conception could be minimised and that they could now maintain the career and leisure schedules they planned and desired. This changed the reproductive lives of couples and family-work inter-linkages. Above all, the Pill delayed first conception to older ages at which ‘fecundability’⁸ was lower, as will be discussed in later chapters. For the first time in history, apart from rare societies like the Irish, discussed earlier, where delayed marriage and chaperonage was the rule, women in their late 30s and even in the 40s were now likely to be having a first pregnancy. A new question then arose: the key factor governing interpersonal relations was no longer ‘can pregnancy be avoided’? It had switched to ‘if conception is delayed will it still be possible to conceive’? Infertility became a concern – ‘leaving it too late’.

Pākehā Family and Community in the Baby Boom⁹

The name ‘Baby Boom’ is itself something of a misnomer – in many ways it was really a marriage, or nuptiality, boom, as James O’Neill (1985: 132) and others have argued: ‘Between 1945 and 1971 the proportion of ever-married females at 15-19 more than doubled, those at 20-24 increased by 73% and at 25-29 by 17%’. The lower increase at 25-29 years would have been because of a ‘marriage squeeze’: the marriages that had occurred up to 10 years earlier (from 16 years of age on) would have left far fewer eligible spinsters in their late 20s. The Boom could thus be seen as the last, perhaps the greatest, manifestation of nuptiality valve effects. This took the form of traditional formal marriage, usually with a ‘white wedding’, with the family muttering if the bride were pregnant, but often expressing pleasure when a ‘bonny premature baby’ was born after a few months, consigning the story of its conception into the trove of deep family secrets. The popular culture of the day – ‘high school queens, sweet sixteens’ – painted a picture that saw no problems in an adolescent girl passing rapidly through several life-stages: leaving school, taking up a job, dating, becoming engaged, marrying, conceiving, moving with her husband into her own house and leaving her job – all before reaching 21 years (Pool and Crawford 1980).

If a woman or teenage girl, as she frequently was, became pregnant, but did not marry and the baby had to be given up for adoption, often at the behest of the girl/woman’s parents, the nuptiality valve effect could also produce an episode of heart break. In the Baby Boom, this process was often undertaken in the most punitive of ways – the pregnant single woman was shunted off to a secret locale out of sight, often having to undertake unpaid or poorly remunerated domestic work (in New Zealand nothing like the treatment meted out to single mothers in Ireland’s Magdelene or Mother and Child homes). The baby was typically whisked away quickly from the mother, lest ‘she become attached to it’ – sometimes before she had ever seen it – and adopted by a ‘worthy married couple’.

We have no data series providing statistical frequencies on the social dynamics of this process, although there is a wealth of anecdotal evidence. The whole aim was to make the process as secret as possible, and the mother seldom knew the names of the adopters. In more extreme cases there was an element of punishment for the young mother, for falling pregnant and then not managing to marry the father of the baby. Many of the fathers were also wounded emotionally by this process, and usually were given little say in the events involved. It is important to stress, of course, that many, perhaps most, adopting couples were sympathetic and compassionate, and grateful to be able to have a child. Many, perhaps most, adopted children grew up in loving families, so for them the experience was positive. Nevertheless, even for these people, there could be unanswered questions that would haunt them into adulthood, arising often as they formed families themselves.

It should also be recognised that many of those involved in caring for the pregnant girls and women and arranging the adoptions were acting according to the standards of those days, many, perhaps most, with what they thought was a compassionate approach to the social ‘shame’ of ex-nuptial conception and birth. Looking back though the Baby Boom processes enforced on young, pregnant, single women, on adoptive parents and on adoptees, and even on the fathers of the babies, seem oppressive and this was a rather dark era in the country’s history. The popular culture was geared towards pressuring early sex and marriage yet came down heavily on the pregnant girl who had not married, for whatever reason. This was not New Zealand’s experience alone but was a response across the Anglo-world including Ireland, and perhaps elsewhere in the non-Anglo WDCs, to conceptions and births that did not fit with the era’s smug dream of married domesticity.

For many if not most Pākehā parents there was a deep dread that their daughter(s) might conceive and not marry, and along with this a fear about pre-marital sex. In fact, they may have had some causes for their angsts because under the surface of suburban domestic bliss and contentment all was not well. There is no way of measuring if social problems were greater or less then than subsequently. But, if appearances count, then the early part of the era was punctuated by what was undoubtedly New Zealand’s most extreme moral panic ever. It was generated by the apparently louche behaviour of adolescents in a Wellington suburb. Whether their actions were sufficiently dramatic to have justified the public outcry and subsequent official concern seems a moot point. The response of officialdom and members of the general public may have reflected a last desperate attempt by older and conservative New Zealand to extend the dying vestiges of the comfortable society and its social orders that had existed up until World War II. Whatever the underlying cause, New Zealand became transfixed on an extraordinarily minor set of events: in 1954 teenagers would congregate in the Hutt Valley at a milk bar (where milkshakes and sundaes were sold, and there were jukeboxes)¹⁰. This was allegedly in order to go off for sexual encounters with older motor cyclists. Confronted with this apparently existential threat to social order, the conservative government of the day went into action and a Commission was established under Queen’s Counsel Oswald Mazengarb. It very quickly thereafter tabled a report (Brookes 2016: 322), that was immediately published and mailed to every single household in the country. This threw the nation’s parents into deep fear over twin spectres that then dominated the popular discourse of the day: ‘juvenile delinquency’, and its perpetrators, ‘teenagers’, both additions to the vocabulary of most parents. The nation’s worst anxieties were even more forcefully confirmed when the film *Rebel without a Cause* starring James Dean hit cinemas a few months later.

The contradictions between norms favouring very young ages at marriage and the societal response to those young people who, from rigid adoption procedures to

the panic about sexuality which led to the Mazengarb Report, might have represented a desire to retighten the nuptiality valve. If that were the case the attempt had no success: sexuality, marriage and childbirth, in whatever sequence, occurred at younger and younger ages as the Boom preceded. Within a year or so of the second Baby Boom peak being reached about 1970, all the rules and norms governing cohabitation (formally married or not) and child-rearing changed radically. The end of recolonisation came quickly and was marked, most immediately, by socio-demographic changes of which fertility and nuptiality were the key-pins, simply because they were the Baby Boom's drivers of peopling trends. In the Baby Bust of the 1970s, the whole ethos shifted away from Baby Boom conventions, so that the fact of 'getting married' became a ritual in itself, quite distinct from living together and parenthood. The formal sequence – courtship, wedding, pregnancy – as dictated by custom and enforced by laws (eg around matrimonial property and spousal rights) mutated radically and rapidly, as will be discussed in later chapters. In the Baby Bust (1970s), people were still entering unions, so this factor did not change, but the forms and even functions of those unions did change. In the Baby Boom the key feature dictating the formation of unions had been childbearing and then child-rearing; in the Baby Bust it focused instead on couple interactions and satisfaction, which could mature into a strong desire to have children. Pre-Pill, the timing of the first conception, which had always been unpredictable (even in the era of improved barrier methods of contraception), was the determinant of family formation; but post-Pill this changed totally.

In the Baby Boom, nuptiality – still very much formal marriage – was the key governing factor. In the Boom's earlier phase, 1945-61, the nuptiality valve was released, after decades of being tightly screwed down. Then came a modest clamping down of the valve in the 1960s, but a re-opening to its fullest flush around 1970, in New Zealand's late Baby Boom (1960-73).

The sheer force of nuptiality in the Baby Boom had more than immediate demographic impacts – in the minds of conservative or nostalgic commentators it has remained 'A Golden Era' in which everyone married and there was little divorce, so, by deduction, families must have been stable, warm, loving units. What is forgotten is that the marriages of the Baby Boom, especially those between younger couples, above all if the bride were pregnant, were the seedbeds of the high levels of marital breakdown in the 1970s and 1980s. Those later decades got the blame for events that had really been planted out in the Baby Boom. Various amendments to family law in the 1970s and 1980s, associated in time with the Baby Bust (see later chapters), sought to bring jurisprudence closer to social reality, and to ease the way for couples, and their children, caught in toxic relationships. But, the law did not cause marital breakdown, it just tried to make its effects less harmful.

The nuclear families of the Baby Boom were most likely to be young couples in neo-local residences (a couple and child(ren) household), a near universal pattern across the Anglo settler-societies. Typically, they lived in huge suburban estates, composed of single, fully detached dwellings, that, in Bronwyn Labrum's words (2004: 163), 'produced raw monotonous and sprawling instant communities... Social problems persisted...and appeared to symbolise underlying difficulties in family and community life'. The denizens of these estates were two-parent families, which were a more significant component of all households than was to be true in later decades: far fewer Baby Boom households had lodgers or relatives living with them than had been the case between the wars, although there was a strong chance that relatives and friends lived within the same urban area. Apartment dwelling was either for the very rich, or the very poor. New Zealand had very limited stocks of apartments, so stand-alone owner- or lessee-occupied dwellings were the norm, a feature buttressed by the extensive welfare system. All large urban commuting zones in Anglo settler-societies looked the same, in essence, as New Zealand's. American popular culture revelled in them, whether satirically – the suburb of fully detached, 'ticky-tacky houses that all look the same' – or nostalgically, recalling the 'white-picket fences' with their garden gates couples 'kissed over', in the smaller towns from where the new suburbanites had moved. Even 'Mother England' moved some degree in this direction.

Suburban life was divided strongly along gendered lines. Stereotypically, 'Dads' went off to work by car or public transport; 'Mums' stayed at home with the kids and other suburban 'housewives'; in New Zealand, Dad frequently returned home for dinner ('tea') after the pub closed at six. This gender division of labour, of some leisure and much of the housework was not total and had contradictory elements, some of which traced their origins to war experiences, and post-war labour market policies. Moreover, it may have been exacerbated by demographic factors: Nolan shows that female labour force participation declined in the early Baby Boom. But this can be explained demographically by the rapid, cumulative shift to younger ages at marriage and first conception that would have interrupted the age patterns of female employment – essentially work was concentrated into a brief school-leaving period. With younger marriage and childbearing, women would have been forced to choose between work and family formation (Shaw 2000:165; Nolan 2000: 192, 205-06, Table 220; May 1992: 43; Brookes 2016: 332-35).

Looking at cross-sectional quantitative data the curve of female labour force participation in the early Baby Boom was like an inverted 'J', peaking at school-leaving when almost every young woman briefly joined the labour force, then dropped out thereafter as family obligations took priority. Later in the Baby Boom it evolved into a deep 'M', with very high levels of participation from school-leaving ages until the early 20s, and then a secondary peak after ages 35-40 years. This occurred after child-rearing had effectively ceased, years later on, but nevertheless

often also at relatively young ages, made possible only because of the early commencement of parenting. After child-rearing many also took the opportunity of second-chance education, so that some older women in the labour force started moving into managerial and professional roles. Consequently, not only did workforce participation rates grow but the women entering the labour force at all life-cycle stages were increasingly well-educated and trained. Yet, there was still a marked gender pay gap, and women were clustered into a narrow range of clerical-secretarial jobs (see Davies 1993; Brookes 2016: 308-15).

Eventually, in the Neo-turbulent era after the Baby Boom, female labour force participation rates by age took the form of an increasingly shallow ‘M’, while the left-stroke of the letter ‘M’ moved rightwards as more and more women prolonged their education and took up a job at an older age. Simultaneously, the curve between the peaks flattened out as increasing proportions of women combined work and child-rearing. Cohort patterns of work-family intersections, modelled by Janet Sceats linking marriage, and childbearing and rearing to subsequent life-cycle stages, shows how age at first pregnancy has a strongly deterministic effect on subsequent life-cycle stages (Sceats 1988).

The Pākehā Baby Boom: Generic Reflections, and a Summary

More generically, as a socio-cultural phenomenon, the Baby Boom has been captured by the United States’ experience and the ubiquity of their popular culture (see Chapt 16). In reality, the American Boom petered out in the 1960s so was shorter than New Zealand’s – and, in fact, their Boom was shorter than those of most WDCs. In 1970, for New Zealand the number of births was still 99% of their peak proportion (1960 = 100), but in 1980 had dropped to 81%, but by which date NZ’s population was 33% larger. By contrast, United States’ births in 1970 were already down to 85% of their 1960 figure. So, New Zealand fits with Australia, Canada and non-Mediterranean WDCs, not the United States (Pool 2007). This is not just an academic point: the extension of NZ’s Baby Boom to the early 1970s, beyond when the United States finished, has had, and will have, major impacts on policy and markets well into the 21st century.

There is thus a difference between the Baby Boom as an ‘urban myth’ among commentators uncritically taking on the American version and the realities of the New Zealand Baby Boom experience. One fact alone, noted already, that sets New Zealand aside, most obvious in the sheer number of births each year. The fertility-driven waves of the Aotearoa Baby Boom – peak, ebb, then a second peak – introduced turbulence into the demographic system; ‘disordered cohort flows’ to give them their technical name. They presaged the more violent, shorter-term fluctuations, that were to come from migration from the 1970s on.

A macro-demographic result is that cohort flows, as they move from one life-cycle stage to another, will thus be rather different from those in the United States in relative sizes and tempo, reflecting these differences between the American and New Zealand experiences. New Zealand does itself a disservice by slavishly accepting the American model – Aotearoa’s needs will be very different.

The second peak in New Zealand, as already noted, took on in an exaggerated form the most iconic aspects of the Baby Boom – that it was generated by marriage then soon thereafter pregnancy, or pregnancy and precipitated marriage, either of which were likely to occur at a very young age. Historically, marriage had ideally preceded conception, although, as ‘Peter’ (E. G) Jacoby demonstrated, this Pākehā norm was breached in a significant minority of cases (Jacoby 1958, 1961; Pool and Crawford 1980); the TV series ‘Who do You Think you are?’ on the genealogies of celebrities, or its derivatives in different countries, often throws up such an event, and the dire family secrets that surrounded it. The factor of early timing, or tempo of reproduction to give it its technical name, was likely to be followed by a short interval before a second conception or spacing of pregnancies. But, *circa* 1970 these patterns occurred at even younger average ages and pre-marital conceptions became even more common. This exaggerated version of the earlier phase of the Boom had impacts on marital dissolution decades later.

Despite its high profile, the Baby Boom lasted a mere 23% of the period since the last ‘high’ Pākehā fertility period in the 1880s. Pākehā fertility rates increased, but differentials (class and religion), both of rates and their determinants, decreased. There were, however, significant intra-urban differentials. This was mainly because of neo-local patterns of family building that clustered young parents into suburbs, in ‘state house rentals’, or dwellings financed by government-subsidised loans. Inflows of young Māori couples into these same suburbs intensified the intra-urban differentials.

At the same time, however, the parenting potential was still weighted towards rural Pākehā New Zealand; countryside Aotearoa was having its last gasps as the ‘people incubator’ noted earlier (Chapt 15). In 1966, in an era when the force of childbearing was at young ages, there were 154 young rural adults (15-34) for every 100 older (35-64); in metropolitan New Zealand the ratio was much lower, 89. By 2001, however, a radical crossover had occurred so that the ratio was 51 rural, 86 metropoli; by then the rural working age-group was strongly weighted towards older adult ages, whereas the urban towards the younger.

This had an effect on parenting, as is shown by Child-Woman ratios (CWR = Children aged 0-4/Women at reproductive ages, 15-44)¹¹. In 1966 (Table 15.3), the point-differences were marked¹². A calculation not shown in that table is the difference between the ‘Rest of New Zealand’ and Metropoli: at the height of the

Baby Boom, in 1966, the gap between the two ratios was 157, but had it plummeted to a mere 88 by 2001.

To sum, the Baby Boom was a highly aberrant event, producing inflated birth numbers, with Total Fertility Rates exceeding those in any other earlier year since the 1890s. It was totally un-forecast in scenarios posited by pre-war policy makers, who across the WDCs were instead worried about sub-replacement fertility (Total Fertility Rate below 2.1 births per woman). The sub-replacement fertility rates of the interwar years had had no known historical precedents (in normal times), but saw some populations, including Pākehā New Zealand, drop below that level, and some large European cities to very low levels. These are, however, rates that we would see once again since about 1980 (eg Italy, Japan, Spain), for much longer durations and on a much wider scale.

Pākehā Population Replacement: Net Immigration, a Minor Player

For all the talk about ‘post-war migration’ and its place in Aotearoa’s national identity, in fact migration played a relatively small role in Baby Boom population growth, as is shown in Table 17.3. Of course, this is in part because rates of natural increase were abnormally inflated by the aberrant high fertility of the period. Nevertheless, even if the Pākehā TFR had been much lower, like the Netherlands at just over 3.0 births per woman in the mid-1950s, net immigration would still have constituted only 31 % of the growth.

Table 17.3: Contribution (%) of Natural Increase and Net Migration to Total Population Growth, 1946–80*

	1946-50	1951-55	1956-60	1961-65	1966-70	1971-75
Net Migration	17	29	18	25	3	39
Natural Increase	83	71	82	75	97	61

*Source: Papps 1985: Table 15. * In 1976-80, migration numbers were negative*

The mistaken image of mass post-war migration is coloured undoubtedly by the high-profile reporting of migrant ships arriving at that time¹³, especially those carrying Dutch families escaping their homeland’s population pressures (Yska 2005). The Dutch were the first non-British European-origin migrant group to make a significant cultural impact on Aotearoa¹⁴. But, the breaching of ‘Britishness’ had come earlier from the Croatian migration, mainly Dalmatians from the Adriatic coast, who had been a minor but important constituent of New Zealand’s peopling and development over the first part of the 20th century (Walrond 2005). Even further back were the non-European Indian and Chinese minorities. A heart-wrenching story prior

to the Dutch immigration was of the Poles, mainly orphans, who had been interned in Soviet Asia, and, after a grim trek to Iran, came to New Zealand (1944), to a camp in Pahiatua just outside Wellington, to recuperate, where they were welcomed enthusiastically by the local people. Their ‘adopted parent’ was the Prime Minister, who, with the Polish Consul, took a personal concern in their wellbeing – as adults they still cited this bond. It had been thought that most would return to Poland but in the event did not – in October 2019 the now very elderly survivors were welcomed back again to Pahiatua, this time with a haka performed by local school children (Sawicka 2005).

Croatian inflows had a lower profile than the Dutch as they followed the typical Mediterranean form of chain migration¹⁵, whereas the Dutch arrived, *en masse*, in families and had an immediate impact. Moreover, the Dutch spread across New Zealand, often going into farming, and many entered occupations that gave Dutch names more prominence: bakeries and furniture stand out. The imprint of the Dutch and their descendants is seen everywhere in the names of consumer goods and increasingly, driven by demographic forces, in some retirement homes that are distinct architecturally. By contrast, the Dalmatians were attracted to gum digging from around the Kaipara Harbour to the Far North and, at first clustered there, many marrying Māori. Their contribution to mainstream New Zealand life thus remained largely ignored, and they were often despised, as Andrew Trlin (1979) reported. Suddenly, however, what had been small-scale family interests – retailing fish, making wine mainly for their own consumption – began to blossom in the late Baby Boom period into both corporate and small-business life. They were also instrumental in this period in converting seemingly un-farmable northern ‘gumlands’ into productive farms. Dalmatian-descent New Zealanders play a major role in important industries: notably commercial fishing, and they contributed a great deal to the launching of the country’s successful wine industry. Dalmatian names adorn a significant proportion of all bottles of wine sold in New Zealand and exported overseas.

The Chinese had survived severe, racist hostility stretching from the gold rush days, but by the Baby Boom were typically market gardeners and retail greengrocers, with children entering the professions, as were some Indians who also had been in New Zealand for a number of decades (Chapter 5; Ip 2005; Leckie 2001). Both these groups are integrated to degree into mainstream Pākehā society, especially the descendants of the original Chinese migrants, and often have multi-ethnic families. New Zealand field hockey and cricket teams would not function without Patels and other players of Indian descent.

In the Baby Boom, the overseas-born were still an important element in the post-war population, but as a group they were significantly older than those born overseas and now living in 21st century New Zealand, as is shown in Table 17.4. The

32% of foreign-born aged 65+ living in Aotearoa in 1966, would have typically come as young adults 40 years earlier (in the 1920s) or even earlier. It is easy to forget that active young adult migrants eventually age to become the elderly citizens of the future, as has happened to the Dutch immigrants of the 1950s/1960s. The other factor of importance for the overseas-born in the Baby Boom was their regional distribution. In totality, it remained not too different from that in the interwar years; the older overseas-born had obviously ‘aged in place’.

Table 17.4: Overseas-Born as a Percentage of the Total Population, by Broad Age-Group, 1966 and 2001

Census	0-14 yrs	15-64 yrs	65+ yrs	All Ages
1966	4	18	32	15
2001	9	21	24	19

Source: Census of Population and Dwellings, 1966 and 2001

The other quantum change shown in Table 17.5, between the Baby Boom period and later decades, was the shift in the birthplace of the overseas-born. In 1966, 80% of immigrants came from the United Kingdom and Ireland, plus Australia, and 5% each from Netherlands and the Pacific. By 2001, there was far greater diversity (Table 17.5). To capture the sheer velocity of recent diversification trends, I have included 2013 on Table 17.5, by which date 25% of New Zealanders were overseas-born. Between 2001 and 2013 the most rapid growth was in people from southern and central Asia and Sub-Saharan Africa (see Table 17.5).

Table 17.5: Percentage of Overseas-born by Birthplace, 1966, 2001 and 2013

	1966	2001	2013
Australia	11	8	6
Tropical Pacific	5	17	15
UK and Ireland	69	32	26
Netherlands	5	3	2
Other Europe & North America	...	12	9
South-East Asia	...	6	9
North-East Asia	...	13	13
Southern and Central Asia	...	2	9
Rest of World	10	7	10*
Total	100	100	99

*Notes: ... = Very small numbers, combined for 1966 as Rest of World. * Sub-Saharan Africa alone, 7%*

Pākehā Population Geography in the Baby Boom Era

Aberrant fertility patterns and British-sourced immigration were not the only demographic factors seen in Pākehā society in the Baby Boom. A feature of Pākehā Baby Boom life that remained familiar from the interwar years was the slow but inexorable change in the population geography of New Zealand, with its underlying systems of norms and values that sustained ‘recolonisation’. As I will show below, this was not true for Māori. The proportion of the total population who were urbanites (living in centres of 1,000+) increased over the 30-year period from 72 per cent (1945) to 84 per cent (1976), and remained above 4/5^{ths} thereafter. But, the proportion of the urban population who were metropolitan (living in the largest centres, 100,000+) remained virtually the same in 1945 and 1976 (53 per cent), so the urban hierarchy established in the interwar years remained almost intact; thus, the small urban service centre was still a feature of regional Baby Boom Aotearoa. By 2006, by contrast, there were now new metropolises, so the per cent of New Zealanders in metropolises by that date rose to 65 per cent. This pattern of stability from the 1940s to the 1970s occurred despite some short-run peaks of net immigration in the 1950s and 1960s, despite the Baby Boom pressures (eg rapid suburbanisation fostered by increasing private automobile usage), and despite the Māori urban influx.

The industrial sectoral distribution of the workforce was correlated with the population geography. The long-term downward slide in the proportions of the workforce in primary industry continued and accelerated (Figure 12.1). Not surprisingly, given that the welfare state introduced significant changes in tertiary sector employment, service industries increased in percentage terms. By the second phase of the Baby Boom, they made up over 50 per cent of the total workforce. But, the secondary sector, at 37 per cent, reached an historical peak at the end of the Baby Boom. From that period on, both the secondary and primary sectors went through declines and the tertiary sector shifted to become the overwhelmingly dominant employer.

The decline in the farming sector work force had another much longer-lasting consequence. In the Baby Boom, the rural sector’s population was successfully generating its own renewal, as its child-woman ratios far exceeded those for metropolitan New Zealand, with small urban areas somewhere between (Table 15.3). But, its younger working age people were moving to urban areas (Table 15.6). This accelerated after 1966.

The largest urban areas, Auckland, Wellington, Christchurch, Dunedin and Napier-Hastings, in that order, consistently retained their ranking from 1936 to 1976, after which the North Island cities of Hamilton (4th) and Napier-Hastings (5th) passed Dunedin, which went down to down to 6th. Recently, it has been exceeded in size by another North Island city, Tauranga, just a small centre (3,000) in 1936. From the

1950s, its growth was propelled in part by it being a ‘sunshine belt’ centre close to Auckland and the Waikato. But, also of increasing significance was its export port function for logs, timber, pulp and paper shipped by rail from Kawerau, a newly commissioned industrial town east of Tauranga in the Bay of Plenty. A similar pattern has since emerged for Whangarei in Northland, long a minor urban area in a marginal region, but now growing rapidly. By contrast, in the former Auckland Province, by the end of the Baby Boom the eastern coastal port of Gisborne became more like the slow-growing cities to its south in the Rest of the North Island.

A trend that would become even more marked after the Baby Boom was emerging: the disproportionate increases in the Auckland metropolis. In 1951 the three cities it outranked (Wellington, Christchurch and Dunedin combined) were 171 per cent of Auckland’s size, down slightly from 181 per cent at the start of the interwar years (1921). By 1971 this had dropped to 107, and in 1976 combined they were only 99 per cent. But, after the Baby Boom, this trend greatly accelerated so that by 2006 Auckland greatly outranked its traditional metropolitan rivals, which, combined, now constituted just 69% of Auckland’s size¹⁶.

Finally, an important aspect of Pākehā population geography was the realignment going on within and around all urban areas. The car allowed commuting to expand, so that suburbanisation took on a new profile, with peri-urban zones growing rapidly to cater for these growing populations.

The Māori Demographic Surge: Rapid Population Growth

This was a period when Māori population and development also went through revolutionary changes (Figure 5.1). Because of their demographic transitions in this period, Māori now moved ‘into sight and into mind’ in the national social life. Until the late 1960s, as noted already, Māori fertility rates remained high. From the late Victorian era, their levels had followed a trajectory that continued until the dying days of the Baby Boom era. So, fertility changes were not driving the Māori transition, until their rates declined dramatically in the 1970s. Instead, mortality declines governed their population trends and structures.

Because Māori fertility rates remained consistent, their reproductive trends were much simpler to follow than Pākehā. To all intents and purposes in those years, they were a population ‘closed’ to migration and thus growth came only from natural increase. The Māori fertility and migration regimes endured until the 1970s, when a rapid fertility decline occurred to just above replacement, and they started to migrate overseas in significant numbers (Pool *et al* 1998).

The post-war transformation in Māori demography coming from mortality declines had very significant on-flow effects, impacting on their rates of growth, age-composition and internal population redistribution¹⁷. To describe the import of these

patterns and trend in my 1991 book *Te Iwi Māori*, I used the term ‘shocks’, borrowed from Quebec demographer George Mathews’ book, *Le choc démographique*. The ‘shocks’ included mortality declines *per se*, plus urbanisation (see below), a shift-share in industrial sectors of the workforce, and fertility decreases (Pool 1991: 133, 191; Mathews 1984).

In the Welfare State Era, two of these ‘shocks’ unfolded – one of them, a mortality decline (see below), was clearly very positive, and the other, urbanisation, was probably positive overall, but with some negative aspects. It was associated with development because in this era Māori partially ‘closed [many of the] gaps’ with Pākehā, particularly in terms of health, wellbeing and incomes. But this did not affect their underlying inadequate wealth base (Harris and Williams 2014), which started to ameliorate only from the 1970s on (Chapts 19ff).

Māori mortality rates changed dramatically in this period, a factor of proactive health programmes. These employed the new biomedical and other technologies, but also, equally significantly, were embedded in welfare state measures that directly contributed to improved health: for example, housing, nutrition, income, sanitation. This approach affected all the communicable diseases and had a particularly direct impact on childhood mortality. Between 1945 and 1956, the probability of a Māori boy reaching age 5 years increased from 85% to 89% and had reached 94% by 1961; for girls the gains were from 87% to 91% to 95%, bring Māori closer to their Pākehā peers. Alistair Woodward and Tony Blakely (2014: Chapt 5) have authoritatively detailed the biomedical and public health history of this era, which they see as one of ‘convergence’ between Māori and Pākehā¹⁸.

For the Māori population, the childhood survivorship improvements were so marked that they increased the size of the 0-4 age-group. In the interwar years and at the 1945 census, about 16-17% of Māori had been at early childhood ages; but suddenly, by 1951 this was well above 18%; by 1956 over 19% and in 1961 20%. That is, a staggering one-fifth Māori of all ages were in their pre-school years. Thus, from the end of the war, this age-group had ballooned out, relatively by 20%, or, in absolute terms, a 4-percentage-point increase over the short span of 15 years (Pool 1977: Appendix A)¹⁹. Normally, such a trend comes about because of a sudden shift in fertility (a rapid shift to fewer or to more births)²⁰, rather than through a decline in death rates as happened to Māori. Substantively, it has even greater significance. Immediately after the War, Māori early childhood dependency rates increased, which had macro-policy implications in sectors such as health and education. At a more micro-level, it also meant that Māori parents could suddenly be far more confident that their children would reach school ages, a very positive outcome, and this eventually probably had an impact on their fertility expectations, presaging the Māori Baby Bust of the 1970s. On the other hand, Māori whanau (families) were now faced with the challenge of caring for more children as they survived through the early

childhood years. Although Māori incomes were now starting to catch up with Pākehā (see below), they were still clustered in less well-paid occupations, yet their wage packet had to serve larger families – 2.00 children more on average than Pākehā.

The impact of the health programmes was not just felt at childhood. At older ages, the decline in tuberculosis was very significant. Table 17.6 relates to high-risk ages, plus all ages, to compare Māori and Pākehā tuberculosis mortality rates in 1945, by which date the certification of deaths by cause among Māori had improved. These data show that Māori, with only 6% of the nation's population, contributed 27% of all male deaths from tuberculosis and 41% of female (Pool 1985: Table 132). In fact, Māori tuberculosis death rates in 1945 (Table 17.6) were much higher than Pākehā levels had been in 1876, for which year the data were undoubtedly less reliable, although valid comparisons are possible²¹. Significantly, at 25-44 years for females – a group historically with high risks, as dramatised in *La Boheme* – Māori *in 1945* still had rates 2.8 times those of their Pākehā female comparators had had years before *in 1876*. The ethnic differences are striking, so much so that the medical researcher Norman Edson (1943), argued that Māori rates were high globally among populations for which there were adequate data. In the immediate post-war period, the health system prioritised this issue for Māori, and for other persons most at risk (eg nurses), and for low-income New Zealanders. The cause-specific crude rate dropped dramatically between 1945 and 1956 – for both Māori and Pākehā – as did the ethnic differential, both absolutely and relatively.

Table 17.6: Tuberculosis Death Rates (per 10,000), Māori and Pākehā, by Gender, Selected Ages, 1945; All Ages for 1945 and 1956

Age	Māori		Pākehā	
	Male	Female	Male	Female
15-24 yrs	40	54	3	4
25-44 yrs	35	46	5	4
45-64 yrs	48	59	8	3
All Ages (1945)	26	34	4	3
All Ages (1956)	6	5	1	1

Source: Pool 1985: Tables 115, 122, 127

Diagnostic technologies, employing mobile x-rays for mass screening were targeted where 'at risk' groups were clustered geographically. This allowed the identification of Tb sufferers and attention to be paid to their families – whether Māori, or Pākehā (their rates were low already, see Table 15.9 – for critical welfare support (eg housing). Thus, public health campaigns not only screened most Māori for tuberculosis²², but treated those who were ill with the new antibiotics, reinforced by welfare state measures addressing housing, income, nutrition and other directly

important factors for sufferers and their families. These programmes were well underway before streptomycin and other antibiotics became available, but the new drug technologies accelerated the process. The net result was that Māori tuberculosis age-specific death rates declined dramatically over a few short years, as is shown in Table 17.7.

Longevity also increased rapidly. The greatest increase was at birth reflecting childhood deaths, where the greatest force of mortality occurred and where communicable diseases susceptible to such programmes clustered, as well as adult deaths, as is seen in Table 17.8. With high fertility being maintained, rates of natural increase (births – deaths) reached 40 per 1000, close to a biological maximum. This Table also shows how there was a gender shift in life-expectation in the post-war period²³. The biggest change occurred at older ages as higher female than male rates from deaths from causes like tuberculosis started to converge.

Table 17.7: Māori Age-Specific Tuberculosis Death Rates (per 10,000), Selected Ages, and All Ages, 1945 and 1956

Age	Males		Females	
	1945	1956	1945	1956
15-24 yrs	40	2	54	3
25-44 yrs	35	7	46	8
45-64 yrs	48	23	59	14
All Ages	26	6	34	5

Source: Pool 1985: Table 127

The crude rates used in the calculation of Māori rates of natural increase are affected by age-composition: post-war, there were relatively fewer Māori at ages when risks of death from all causes combined would have been higher. This is because the mortality declines of the period greatly reduced childhood death rates, yet there were very low proportions of the population at high-risk older ages – 2-3 per cent only. Māori child dependency rates were very high, reaching 109 children for every 100 people at ages 15-64 years in 1966, yet aged dependency was very low (4 persons aged 65+ years per 100 at working ages), giving a total dependency ratio of 113. This ratio far exceeded the Pākehā of that date (Figure 11.2; cf Figure 10.1). Nevertheless, this was the one period – of all those covered in this book – in which ***both populations simultaneously*** had high (or for Māori very high) levels of demographic dependency.

Table 17.8: Māori Life Expectancy (Years) at Birth and at Age 15, By Gender, 1945 and 1956

e(x)	Males		Females	
	1945	1956	1945	1956
$e(0)$	49	57	48	59
$e(15)$	44	49	42	49

Source: Pool 1985: Table 124. $e(x)$ = life expectancy at any age x ; $e(0)$ at birth; $e(15)$ at 15 years

Māori on the Move: Geographic Mobility and its Consequences

The truly defining iconic socio-economic transformation for Māori was, however, their proactive accelerated shift in location from being mainly rural to becoming overwhelmingly urban – it was of far wider significance than either their continuing high fertility rates or the mortality declines. Ngapare Hopa (1996) argues in a paper titled ‘The Torn Whariki (tissue)’ that this affected every aspect of their lives – of their whanau (wider family) and hapu (sept) structures. But, it also had an impact on the wider New Zealand population structures – demographic, economic, geographic and social. Māori in-migrants of the Baby Boom period were overwhelmingly young, and a high proportion of Māori at early adult ages moved in this time. This meant that the epicentres for the Māori workforce and for their reproductive capacity shifted from peripheral rural regions to urban Aotearoa, then to metropolitan areas. It was not just to the large cities but to the North Island secondary urban centres – eg Gisborne, Rotorua, Tauranga, Whangarei and Hastings – that recorded very high levels of Māori population growth between 1945 and 1966, often through intra-regional migration. This aspect of Māori mobility has analogues elsewhere, especially at an early stage of a rural exodus when urban changes will be very rapid. To take an extreme New Zealand example, in these two decades Hamilton’s Māori numbers grew from a low base by 828%. Later, older people often joined the former migrants, but the rural areas often became the domains in which older people and their mokopuna (grandchildren) clustered (Pool 1966; 1991: 156-57; Merlin 1971; Rowland 1971; Poulsen and Johnstone 1973; Poulsen *et al* 1975).

It needs to be recognised that this was Māori managing their own destinies and engaging in a massive programme of self-help to improve their life-chances. Many Pākehā families before and since have also done just this – moved from country to town and taken similar risks. But, what made the difference in this ‘new Māori migration’ (as Joan Metge, 1964, called it in her anthropological study) was the sheer scale of the Māori redistribution. The University of California, Berkeley identified it as one of the most rapid shifts for a national population on record anywhere until the

1970s. One just has to acknowledge that '[T]he socio-cultural resilience of the Māori community must have been quite remarkable to sustain this transition' (Pool 1991: 154-55). From 1956 to 1961, 18% of all Māori aged 15-19 years and 11% aged 20-24 were 'net' movers – we cannot estimate the gross comings and goings. By 1961, 22% of the Māori urban population was composed of net arrivals from the previous five years. In 1956, the mobility was still of young adults, so the ratio of children aged 5-14 years/ 100 Males aged 20-59 was 84 for urban migrants, but 140 for New Zealand Māori as a whole. By 1961, however, the rural exodus had become a true family migration, so that in 1966 the urban ratio was almost the same as for Māori throughout the country: 147 to 149. The rural exodus peaked in the quinquennium 1961-66, during which period the Māori rural population decreased by a massive 14%. In this five-year period, 70% of urban growth in Māori numbers came from migration rather than natural increase (Pool 1966, 1991: 152-59; Rowland 1971; Poulsen and Johnstone 1973; Poulsen, Rowland and Johnstone 1975; Watson 1985: Table 60).

For Māori, this influx brought improved wellbeing, but also major problems such as with housing and welfare. At the family level, 'In urban areas, Māori women provided the buffer between traditional expectations and the aspirations of the young people who sought, in many ways to live like Pākehā' (Brookes 2016: 295, 304). It is worth making a comparison here. Māori urbanisation had many of the features, timing and consequences that have been documented in other countries, for example, for the main post-war waves of Puerto Ricans moving to the mainland United States, particularly New York²⁴. Puerto Ricans came in government-sponsored flows yet suffered the sort of vilification faced by earlier migrants from eastern and Mediterranean Europe. Like their migrant predecessors, the young tended to join gangs and engage in anti-social behaviour and subsequently the de-industrialisation of the United States' economy had a major negative impact on them (Thomas 2015). For Māori, de-industrialisation was to come later with the restructuring under Roger Douglas and Ruth Richardson (Chapt 19ff).

Fortunately, the peak Māori migration occurred in a welfare state era in which the government, to its credit, and officials like John Hunn, Noel Woods and Bill Sutch, were forward thinking and committed to an egalitarian New Zealand. Consequently, to a degree the state helped Māori in this movement through initiating a wide range of proactive 'closing the gaps' policies and programmes. While the 'gaps' were never fully closed they did diminish significantly, perhaps most dramatically in health (Woods 1960; Hunn 1961²⁵).

Along with urbanisation, for Māori, there was a parallel industrial labour-force, sectoral shift, especially into manufacturing (Figure 12.1), but even within primary industry from farming into forestry. Unfortunately, no one could have foreseen that these would be the jobs often eliminated in the late 1980s. But, for

almost four decades, these workforce changes had very positive effects on Māori wellbeing, and were accompanied by a range of housing measures, so that Māori living standards improved significantly. Barry Martin (1998) has analysed how Māori personal and household incomes increased and approached Pākehā levels through much of this period from 1951 until the 1980s – he used census data that economists tend to eschew (by comparison with survey data) as they cover both remunerated and unremunerated forms of income (they include benefits). But, they have an enormous advantage as they are a more extensive time-series and have large numbers, so are suitable for sub-national analyses²⁶.

Using component and cohort analysis, Natalie Jackson extended Martin's conclusions in a very compelling way by interrelating reproduction, labour force participation and income, synthesised in a 'total social production' model she elaborated theoretically, grounding this in wide-ranging empirical analyses (Martin 1998: Jackson 1998, 2002, 2005). She described how these factors are subject to the interacting determinant effects of the age of any respondent at the time of any census/survey, plus, if they are a parent, their age at childbearing. As a result, for Māori and Australian Aborigines, also in her study, these demographic factors have a 'disparate impact' on income and labour force variables. As long as babies are born to younger mothers, any change in wellbeing is difficult, a factor reinforced by another demographic-economic interaction: the fact that younger people tend to have lower wages than older, a further determinant of 'disparate' disadvantage. In part, the incomplete 'closing of the gaps' between Māori and Pākehā is due to this demographic 'disparate impact' rather than to purely economic factors. In part, Baby Boom urbanisation played a role by bringing Māori into major labour markets but also saw them cluster in lower income less skilled jobs. This served an important goal in the welfare state era of getting Māori into paid employment in what were termed 'economic areas' – major geographic labour markets. With restructuring however these were the very industries first affected by downsizing; Māori and Pasifika were also often last hired, first fired.

Tables 17.9 and 17.10 summarise this point (Jackson 1998: Appendix H.1). Māori of both genders saw their incomes move towards those of their Pākehā peers during the Baby Boom. Convergence was, however, merely part of the story: incomes of both ethnicities and both genders grew during the Baby Boom, but then this increase slowed dramatically between 1971 and 1991. Thereafter, this convergence slowed for Māori men, but accelerated for women. Using the highest ethnic/gender category (Pākehā males) as a reference, the table shows that, while Pākehā females had limited convergence towards Pākehā males, Māori women shifted further – they had further to go – again occurring mainly after the Baby Boom era. This is confounded, of course by the fact that more women than men are part-time on lower incomes and also that 1971 was a peak year for young women to leave the labour

force because of childbearing. By the 1980s, as they entered later years of childbearing but were now limiting their family sizes, Māori and Pākehā women were entering employment in far greater numbers, but many part-time.

Table 17.9: Māori Mean Income as a Percentage of Pākehā Mean Income, by Gender, and Female Mean Income as Percentage of Pākehā Male Mean Income, Actively Engaged, 1951, 1971, 1991 at \$1991

(i)	Males	Females	Females/Pākehā Males	
	M/P	M/P	P Fem/P Male	M Fem/P Male
1951	63	76	50	36
1971	72	80	47	38
1991	76	94	58	55

Source: Jackson 1998:Appendix H.1. This merely summarises one aspect of her massive body of research. The subsequent (and preceding) tables, her text and her component and cohort analyses detail the interacting effects of ethnicity, gender, age, childbearing, labour force status, source of income and other factors.

Notes: M = Māori; P = Pākehā; Fem = Female

Table 17.10: Change in Mean Income (\$1991), Actively Engaged Māori and Pākehā Males and Females, 1951-71 and 1971-91

	Males		Females	
	Māori	Pākehā	Māori	Pākehā
1951-71	67	42	50	36
1971-91	4	-4	8	20

Source: Jackson 1998:Appendix H.1

I have not shown Jackson's data on Totals (Actively engaged + Not actively engaged). For this status group, there were systematic improvements during the Baby Boom and until 1981 for all categories – Māori and Pākehā, women and men – and a marked convergence in ethnic differences. After that, the patterns diverge as I will outline in later chapters where the real story fits.

From Population Dynamics to National Development Issues

The dynamics of the Pākehā Baby Boom in its narrower sense have been detailed in this chapter. So too, have the rise in Māori rates of natural increase and their coterminous urban influx. By any standards, Māori demographic changes in the Baby Boom era would be rated as highly significant nationally as stand-alone events, but instead were byplays secondary to the central drama centring on Pākehā reproductivity. Māori had started the period as a small minority, 6% (1945), but increased their proportions to 8% by 1971, despite competing with the full

demographic force of the Baby Boom, which was driving up Pākehā numbers. Nevertheless, the Pākehā Baby Boom overshadowed all other population trends, most notably the Māori rural exodus in the period, which was remarkably rapid and with major consequences for Māori and the total population. Because they were the majority population who entered the Baby Boom exuberantly, Pākehā natality had a far higher profile than rapid Māori mortality declines, even though these were important for Māori population structures and for family dynamics. Pākehā birth rates even overshadowed other population changes pertaining mainly to non-Māori, including net immigration and the country's settlement patterns.

The Baby Boom ended quickly and in the 1970s faded as a driver of Pākehā population change. But, it had had an impact on development during the Boom itself. Furthermore, some of its substantive population structural shifts and community-wide ideational effects generated by, or during, the Boom were to linger on; in fact, more than that, they were have an impact on development into the 21st century, as will be documented in later chapters. The next chapter, by contrast, outlines the economic co-variates of the reproductive boom occurring in the post-war years – an economic boom as measured by composite indices such as GDP. It also discusses ideational factors, some of which ended with Baby Boom itself, but others of which have persisted as societal guidelines, albeit in the background of national life, until today.

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¹ Defined in earlier chapters: Australasia; Anglo-America; North, Central (including Austria), Iberian and Mediterranean Europe; and Japan.

² Ireland, Iceland and Japan excepted. The United States, as I will show, was something of a deviant case because it finished its Boom early.

³ For Māori and Pākehā combined, but most were Pākehā births (Table 6.2).

⁴ In 1947, when troops and overseas-resident Japanese were repatriated, Japan reached a Total Fertility Rate of 4.54 per woman, but brought this down very quickly, notably with the 1948 Eugenics Law (Kuroda 1972). This gave a window of opportunity which the Japanese managed skillfully to generate their post-war economic boom. For a long time since Japanese rates have been well below replacement.

⁵ In the opening pages of his chapter 'Escape from Nappy [diaper] Valley', Belich captures some of the negative and monotonous patterns of life of the Baby Boom. Brookes and Shaw separately document the home lives and housing of women (Belich 1996: Chapt 17; Brookes 2016: 299-308; Shaw 2000).

⁶ The Population Studies Centre, University of Waikato conducted this survey, accorded 'Associate Status' with the Fertility and Family Study (FFS) in the United Nations Economic Commission for Europe (which includes the United States and Canada), using their questionnaire. The FFS covered 25+

countries, so the New Zealand survey has an abundance of comparisons. Estonia and New Zealand were also given permission to sample both their major ethnic groups.

⁷ Cumulative probabilities (life-table), to eliminate censoring biases. See Dharmalingam *et al* 2004; Pool *et al* 1999.

⁸ See Chapt 14. To reiterate, fecundability is the capacity of women to conceive (defined as the probability of conception in any inter-menstrum in the absence of fertility regulation).

⁹ The following section of this chapter draws heavily on Pool *et al* 2007: Chapt 5.

¹⁰ These institutions and their alter egos – dairies (convenience stores) – do not seem to have received detailed attention in New Zealand’s historiography. Yet, in the 1940s and 1950s, as separate, or combined institutions, and even selling ‘takeaway’ (fast) cooked food, they were on the main street of every small centre and suburb. They then extended their scope into ‘superettes’ as independent groceries gave way to mega-shops of supermarket chains located some distance away. As corner stores, they also have served to launch migrants, typically non-Europeans, into small businesses. The New Zealand variant shares much in common with those in other Anglo-societies, and even, for example, Japan or France. Dairies as corner stores selling perishables, newspapers and tobacco, were rendered highly iconic in New Zealand children’s literature by Lindley Dodd’s *Hairy MacLary [a dog] from Donaldson’s Dairy*, Wellington, Mallinson Rendel (first published 1983). By contrast, the milk-bar of the Baby Boom and the Mazengarb Report was very different, more an attempt to clone American soda fountains. In Auckland, the milk bars of the main street became haunts for motor bikers, who earned the epithet: ‘Milk Bar Cowboys’.

¹¹ This is not a pure measure of fertility as it is also affected by child survivorship and the passive migration of children accompanying their parents.

¹² Eg the difference between ‘Counties’ and ‘metropoli’ was 235 per 1000 (= 734 – 499). That difference was almost equivalent to Central Wellington’s entire CWR in 2001.

¹³ The ‘bride ships’ bringing the new foreign wives or fiancées of servicemen overseas also gained high profiles and undoubtedly had passengers with poignant stories. They were faced with settling into a distant country they did not know and where, often, they faced hostility, both more general (eg those who were Japanese or German) and in interacting with their new families.

¹⁴ From 1971, however, the migration metrics changed totally, as will be discussed in later chapters.

¹⁵ Following a typical Mediterranean pattern, the New Zealand chain-migrations often had links to Dalmatian settlement in California, Western Australia and Chile, and elsewhere, a model recorded by Charles Price (1964) for Australia.

¹⁶ In 2006, all other metropoli combined (now six with the addition of Hamilton, Napier-Hastings and Tauranga) were only just equal to metropolitan Auckland’s size: it’s urban primacy, nascent in the Baby Boom, was now overwhelming.

¹⁷ The Māori experience fits international theory almost perfectly. Their high rates were exactly the sort one would expect before the onset of a fertility decline. See Dyson and Murphy 1985; also Pool 1991: 113. Similarly, as postulated by transition theory, mortality declines for Māori (1945-61) came before their fertility rate decreases (1970s), see Cleland 2003.

¹⁸ They also identify the cause-specific trends and their determinants (eg bio-medical risk factors such as smoking, underlying social and economic trends).

¹⁹ These shifts were enough to affect ‘stable population modelling’ retro-estimates of Māori vital rates. In these models this sort of change, technically called ‘destabilisation’, has major theoretical and substantive implications as well as technical (see Chapt 4).

²⁰ The most infamous case is the surge of births over one quarter in 1967 in Romania when contraception and abortion were banned without prior warning.

²¹ In one of his many papers on Pākehā mortality by cause in New Zealand, John Donovan (1969) assured us that ‘phthisis’ was a disease that, even in the Victorian era, was better recorded than most.

²² The aim was to screen 1/10 Māori and high-risk people annually. The geographical concentration of Māori facilitated this, simply by parking mobile x-ray vehicles in places Māori clustered and x-raying all passers-by – Māori or Pākehā – then hospitalising those were diagnosed with the disease.

²³ This recent, reliable set of data throws a post-facto light on 19th century gender mortality differences raised in earlier chapters: tuberculosis had ravaged Māori at that time. When overall mortality is high, it is notably a disease with higher rates for women than men.

²⁴ Puerto Ricans suffer a somewhat unusual form of internal colonialism that does differentiate them from Māori: the American political system rules them, yet they have no say in the United States

Congress. But, both Māori and Puerto Ricans experienced the effects of internal colonialism, however benign the intentions of the majority.

²⁵ The Hunn report was far wider in scope than its title suggests and has valuable statistical and other appendices.

²⁶ This issue will be taken up again later when I am dealing with the ‘gig’ economy and the ‘precariat’, when boundaries between remunerated employment, unemployment, benefit use and not actively seeking work constantly shift, thereby making classical national accounts employment data misleading.

Chapter Eighteen – The Baby Boom 1940s–c.1973: Development and Ideational Transformation

What the Baby Boom Left Behind

In the previous chapter I dealt with Pākehā and Māori separately. Now I return to discussing New Zealand's population as a whole. The most manifest reminder of the Baby Boom has been demographic – the surge in childbearing that produced the inflated birth cohorts, which will continue to wend their way upwards over different life-cycle phases. They will have a major effect on economic supply and demand for a very long time to come. They are undoubtedly the most important consequence of the Baby Boom, but, as seems to be the general rule with the Baby Boom, the passage of these cohorts through life is largely misunderstood and their impact unrecognised. The public discourse has focused on alarm as the first 'Baby Boomers' reached retirement age about 2010 – the last will reach 65 years in 2035. This has often resulted in a 'blame game' in which national ills can be attributed to the burdens this 'tsunami' of elderly will bring to the society and economy. By contrast, where *National Transfer Account (NTAs)* exercises have been conducted overseas a far more muted picture emerges – what are materially very significant within-family transfers¹ tend to be weighted downwards from older people to their children. When non-monetised transfers are added into the mix (eg looking after grandchildren after school while the parents work) the transfers are even stronger. Of course, the oldest-old will bring pressures, particularly from about 2040, as their grand old age means that they face ill health and other burdens. But, the evidence is overwhelming that the elderly of today are living longer and in better functional health than their predecessors, and that the effective duration and intensity of end-of-life illnesses due to disease are diminishing, especially when they can resort to pharmaceutical and other props such as percutaneous procedures rather than surgical operations.

All this misses the far more critical point. As they moved through the life-cycle, the inflated Baby Boom cohorts provided a 'window of opportunity'² for what could have been a demographic dividend. I stress 'could have' for reasons I will elaborate in later chapters – essentially, successive governments have squandered this opportunity that lasted from the late 1970s until the mid-2010s.

There is another story: in popular memory across the Western Developed Countries (WDCs) the post-war Baby Boom is seen as an era of prosperity – an economic boom. This view is sustained because of the blunt instrument used to measure economic output – GDP³ – which index grew during the epoch, although for New Zealand at a far slower rate than it had over the decade 1935-45. The question must be raised as to whether this was indeed a 'long boom' or simply a 'prolonged

sugar-rush' (Authers 2018) fuelled by the need to cater for more and more babies and young children? To do this the politicians of the day focused on much-needed infrastructure, social sector institutions and service workers to staff these. The related question is what the 'long boom' did leave behind for posterity beyond this physical capital and workers to staff the rapidly commissioned institutions. Investment in other policies favouring sustained and sustainable development, particularly built around deepening the now widened human capital base, seem to have been given far lower priority⁴. Comparing it to the Vogel Period, for example, as I noted in Chapter 1, the Vogel policies of the 1870s built both the long-term physical and the human capital that was to enrich New Zealand even into the interwar period.

Largely obscured by the urgent need to build infrastructure and housing and to staff institutions, another very low-profile initiative was underway, although its significance and impact were very much underrated, almost passing into history as a footnote rather than a game-changing event. The *Hunn Report* (1961; see Chapter 17), discussed later in the present chapter, was the first study to make a serious assessment of how New Zealand as a settler-society had managed inter-ethnic dynamics and differentials.

The Baby Boom and Economic Growth

This period saw an 'economic boom' as well as a 'Baby Boom' – a 'great' or 'long' boom as political economists such as Brian Easton (2016) call it (see Figure 5.1). Yet, the economic evidence is less clear than that for natality. GDP was lower than it had been in the decade 1935-45, and GDP/capita was well below GDP a function of more rapid population growth than increases in economic production (Table 12.1). There had definitively been a boom until 1945 that had been stimulated by the election of the Labour Government in 1935, although when exactly it finally finished in the post-war period seems to be less clear. The date Phil Briggs and others give is near the end of the Baby Boom (late 1960s) for the finish of what he calls the 'long expansion' (Briggs 2003: 37).

Briggs viewed growth over the period 1935-45, before the Baby Boom as 'strong', its highest level ever since 1860 – 5.9% per annum versus 5.4% for the 1860s that encompassed the gold rush. Nevertheless, he cautions that it may be 'overstated' as many 'soldiers were still overseas' in March 1945 (his reference date). Turning to post-war growth, his assessment is positive, but he is somewhat less enthused: 'Growth in real GDP per capita was reasonable over the thirty years from 1945;...' John Singleton, who pays granular attention to farm production and exports in analysing growth from 1950, rated it, however, as 'sluggish'. James Belich sees the period as consisting of 'long slow booms'. Moreover, according to Belich, some commentators say that: 'The roots of the economic problems of the 1970s and 1980s, ..., lay in the disappointing growth and diversification of the 1960s. On the doom side

of the argument, the economy remained extremely narrow, especially in the 1950s, with heavy reliance on a few products and one market'. In affording equal time to an opposite view, Belich cites Gary Hawke, '“There is no doubt that the post-war economy produced growth that was comparable with any previous New Zealand experience”'. Belich continues, 'One key to this was ...the “grasslands revolution”. Farm output roughly doubled between 1945 and 1970.'. 'Grasslands' production included, of course, the extraordinary Korean War wool boom of 1950 (Figure 5.1), probably New Zealand's greatest ever export spike. Briggs has an informative run of graphs that describe and analyse GDP (eg by comparing real and 'potential')⁵ providing a useful summary. His conventional statistical analysis (5-year running annual averages) used in these graphs just cannot dampen down the spike of GDP, attained that one year of the Korean wool boom, which overshadowed GDP trends, almost over the following decade (Easton 2016; Briggs 2003: 36-41, Figures 14-18; Singleton 2008; Belich 2001: 307-08).

Taking the whole period of thirty years, Belich encapsulates the flavour of the Baby Boom's economy rather neatly. Because of its demography – and even after eliminating the statistical effects of the Korean War wool bonanza of 1950 – 'New Zealand's GDP had to go around more *capitas*, lowering its relative rate' [my italics]. That is, national income was spread across more people by comparison with other countries, all of which had less inflated Baby Booms (Belich 2001: 307-08). In the 1940s, the *capitas* would also have included returning soldiers whose 'rehabilitation' into civilian life was heavily subsidised; 'Returned Servicemen' from this war were treated far better than their fathers had been after World War I. Yet, we are still left with circular logic because, ironically, the Baby Boom *per se* was by far the main process of accumulating the *capitas* that, in turn, strongly drove the demand-side of the basic economic boom. The 'grasslands revolution' was its export-side. Its overdrive came, of course, from the wool bonanza.

It would be unjust to infer from this that the post-war economy was some sort of 'Potemkin village' of a booming economy, or just the 'sugar rush' referred to above. GDP growth definitely occurred and many of its signature projects, particularly infrastructural ones, persist and are operational to this day. Yet, there were insubstantial elements to it. It was driven to a large degree by the purely serendipitous and transitory phenomenon of high fertility, and some more sustained fundamentals were not laid down at this time. This became evident in the late 1960s when New Zealand's performance started to drop below Australia's, America's and the OECD's (Briggs 2003: Figure 15).

In many respects, the Baby Boom economy stimulated by a demographic phenomenon, ironically resembles that in the 2015-18 economy, 70 years on, when GDP was driven by another population trend, this time massive net immigration, reinforced by an earthquake rebuild. But, like the Baby Boom's 'boom', that of the

2010s also still featured grasslands' production in the form of large-scale dairy exports. Economic commentator Shamulbeel Eaqub (2018) summarises the years 2015-18 succinctly and critically, but he could equally have been reflecting on the Baby Boom: '...the poor quality of economic growth...has been more about population growth than increasing economic prosperity for the population'. Both periods – in the triennium 2015-18 and in the Baby Boom – saw less real growth than desirable in the fundamental economy.

What is clear in both periods is that demography played a catalytic role, not always positive, and that this cut across more sustained development. In the Baby Boom, dependency burdens due to high fertility diverted investment away from the productive sectors other than construction, notably away from import substitution of high technology goods, towards financing the social sectors and their urgent needs.

The Baby Boom may also have had a sting in its tail – a lag effect. Its large birth cohorts entered the world in an era in which educational opportunities were expanding, so higher and higher proportions of pupils were not just entering secondary school but moving into its more senior grades, and with some enrolling in trade training and tertiary education. In this regard, a pure Baby Boom momentum effect was producing growing related fiscal burdens into the 1970s and 1980s. Until the War years, by contrast, late teens had mainly left school and immediately entered the productive sectors, thereby contributing to fiscal capacity.

The post-war Baby Boom had a built-in advantage not available, however, to the post-millennial economy of the 2010s: without the Keynesian policies of the 1935 Labour Government, the task of trying to catch up with the *capitas* would have been even more problematic. Late Depression training schemes and state-promoted major, infrastructural programmes, particularly mass housing, were reinforced by the gains in human capital, especially for trades, coming from war service. This workforce, along with new migrants, who were often financially bonded as a condition of supporting their passage, was employed by the state for its programmes. By contrast, the neo-liberal restructuring of the 1980s and 1990s, with the aim of deregulating trades, essentially eliminated apprenticeship and training programmes, which had a marked long-term impact on industries such as construction. The short-sightedness of this application of ideology to development was clear in the housing crisis of the late 2010s⁶.

As well as housing and transport infrastructure, successive Baby Boom governments simultaneously embarked on major development schemes, most notably the construction of a chain of hydro-electric power plants, diversionary waterways and dams in the central North Island along the Waikato river. The programmes paralleled the Snowy river schemes in Australia. This meant that the two countries competed for labour, with Australia meeting its needs with significantly larger

inflows of non-British European migrants. New Zealand relied more on British and Dutch, and, by the late 1960s, Pasifika.

Baby Boom infrastructural development, as against consumption patterns, was, thus, really a building and construction-driven boom *par excellence*. All over the land, pouring concrete and hammering nails was the post-war norm: from roading and reticulating the mushrooming suburbs, such in the Hutt Valley or Naenae, in outer Wellington, or their equivalents in Auckland and Christchurch; to opening dams such as Maraetai and its numerous siblings on the Waikato, and later in the South Island High Country; or to the institution of complex, multi-function timber, and pulp and paper mills of Kinleith and Kawerau.

In addition to the large-scale projects there was the demand-induced boom in housing, health and education that came from the Baby Boom, all of which required construction, or ‘making do – for example, the rapidly growing schools whose pupils had to traipse through the mud from ‘prefab’ to ‘prefab’ classroom had to be housed in more permanent structures. Beyond building and construction, there was also, of course, the need to train workers to provide the services for the youthful population – construction workers, teachers, and health workers. Presiding over these needs was the demographic reality of high youth dependency (see Figure 11.2). At no time since the peak of hyper-fertility in the colonial era, say since the 1880s, had there been such a high total dependency ratio for Pākehā as occurred during the Baby Boom. As was true for its colonial antecedent (1870s/1880s), Baby Boom dependency ratios were due to child demographic burdens, not to aged dependency (see below) (Pool 2003).

Nevertheless, alongside a boom in consumption, building, construction and training service workers, there was, a remarkably *status quo* dimension to development – this was New Zealand’s export economy, still based on pastoralism. Wool was no longer ‘king’. After the Korean war wool boom of 1951, it ceded this role to dairying and fattening of lambs for meat, and in 1966, wool prices went through an ‘almost permanent collapse’ (Easton 2020: Introduction). It was producing more now per worker or land-unit than ever before. It was also doing it across more of the land surface of Aotearoa by extending the farm-scape, as new lands, such as scrublands north of Lake Taupo, came under production, and new technologies like aerial topdressing improved the quality of grasslands in hillier areas. At this point, it is worth noting that, unlike its Northern Hemisphere competitors, New Zealand’s pastoralism was very efficient as it was based on larger family-owned and operated units (all this has since changed at both antipodes, Europe and Australasia), and its stock were not housed in barns in winter.

Farming generated an export boom, but also reinforced all the underlying elements of Aotearoa’s economic and population geography which had continued through the 20th century. Along with this went political-economic dependency on Britain. So, domestically, the country’s spatial structure was reliant on pastoralism –

although construction towns sprang up here and there, with government-owned houses that were often identical and the business and social facilities necessary to service hundreds of people. Some of these ‘towns’ later virtually disappeared once the project was completed.

Externally, New Zealand was still tied to ‘Mother England’, the trend seen through all the first decades of the twentieth century. In the Baby Boom there was just more of the same, although talk of Britain entering the European Economic Community was the ‘Sword of Damocles’ poised over this this blissful scene (Phillips 2019: 51). Loyalty to ‘Home’ was largely uncritical: of course, Britain would always protect New Zealand’s interests, and only the unpatriotic few would question this. In the event, the sceptics proved to be somewhat more correct than the believers. In 1973, Britain turned its back, not without warning, on ‘White Dominions’, above all New Zealand. This left it a decade or more in which it struggled to find alternative markets: on the ‘Home Counties’ main street New Zealand butter was replaced by Danish; New Zealand lamb by French, or heavily subsidised Welsh lamb.

To sum this up, let us accept that there was an economic ‘boom’, at the least one generated by responding to the demographic effects of the ‘Baby Boom’ and to a society-wide demand for improved lifestyles. This was sustained, in part, by a ‘grasslands’ revolution’, itself turbo-charged by the Korean wool spike. Wind-drag came, however, from responding to the Baby Boom demands, by diverting investment away from other avenues of industrial development and institution-building. Yet, paradoxically, it was the Baby Boom that drove up the GDP. We cannot do a double-blind experiment on this, but in this light, Belich’s argument just cited, that ‘New Zealand’s GDP had to go around more *capitas*, ...’, seems very convincing.

Like its catalyst the Baby Boom, this post-war economic boom was not unique to New Zealand: it occurred in the other settler-societies. In the United States it gained the honorific ‘Golden Age of Capitalism’. Even France, without a Baby Boom anything like the size of New Zealand’s, went through ‘Les trentes glorieuses’ (30 glorious years. 1949-79). What differs the economies of the various countries over their booms is the degree of intervention of the state, directly or indirectly in different development sectors. In the United States, for example, under a Republican President the federal government invested directly in interstate roads through the *Federal-Aid Highway Act* 1956. In New Zealand, the state played a seminal role in housing: it built state rental homes, and thus owned a high proportion of the nation’s rental stock; through the State Advances Corporation it subsidised mortgages for owner-occupied dwellings, with zero or low interest and on favourable payback terms. To help couples finance a home they could even ‘capitalise their family benefits’ (*Family Benefits (Home Ownership) Act* 1958), taking a lump sum in advance as a deposit on a house, in lieu of receiving monthly payments until the child reached the end of their years of eligibility. Conservative commentators at the time alleged that the policy would be

pro-natalist – that couples would be provoked to have babies with the simple aim of getting a loan. In reality, there was an inverse correlation between the take-up of capitalisation and fertility rates (Pool *et al* 1998: 121). Against this, the Baby Boom pressures also put brakes on investments on those elements of infrastructure beyond the narrow range of sectors on which post-war governments focused, or on funding institutions in productive sectors that would have allowed more diversification of the economy.

The Long-term Demographic Impacts of the Baby Boom

The most critical long-term effect of the Baby Boom on Aotearoa's economy and society came not from development, but from demographic impacts, which had, and will continue to have long-term consequences, coming from the high-medium Baby Boom birth rates. Together Pākehā, births reinforced by the very high rates for Māori, (but overwhelmingly because of the Pākehā trend), generated numerically large birth cohorts, the largest in New Zealand's history. Thus, there was a rapid increase in cohort sizes at the very end of the depression and then during the War, rising more to peak around 1961, then drop off in the 1960s, only to rise again about 1971, then decrease dramatically in the Baby Bust (1970s and 1980s). Birth cohort sizes rose again briefly and modestly around 1990, in what I have called a 'Baby Blip'⁷.

For policy makers, it is this factor – the size of cohorts – that is more important than the rate that produced it. At birth, and soon thereafter, the babies born 1944-73 caused the immediate rapid population growth that placed huge demands on the economy, especially its social sectors, and thus drove GDP to higher levels. To add to this, a quirk of the New Zealand Baby Boom was that it was bi-modal, as indicated by the data on birth cohort sizes in Table 17.2. A longer-term policy analysis of birth cohorts showed that, as a result, New Zealand has been subject to what are called 'disordered cohort flows' when each birth cohort significantly varies in numbers from those before it or after it, producing oscillations of fluctuating size. Demographic instability of this sort is anathema for policy and planning, as it demands on-again/off-again provision of institutions and services. With the Māori fertility increases and then their Baby Bust, which occurred more or less simultaneously with the Pākehā one, national cohorts became even more disordered (Pool 2003: Figures 4 and 5; Pool *et al* 2007: 220, and *passim*).

From a policy standpoint, the Pākehā Baby Boom and its birth cohorts resulted in high 'Total demographic dependency burdens'⁸. I must stress the point that the Total dependency levels reached during the Baby Boom ***will not be passed until the middle of the twenty-first century***: those pundits who make careers of forecasting doom and gloom because of the 'tsunami' of ageing that confronts Aotearoa are being decidedly disingenuous – they must be reminded that, even by the mid-21st-first

century, total dependency will still only just reach the levels already accommodated in the Baby Boom (see Figure 11.2).

But, Baby Boom total dependency was itself a function of the inflated levels of ‘Child dependency’ (Children /Working age Population), whereas the high dependency projected for the mid-century (2050) will be because of age dependency (Population 65+/Working age Population). It is a moot question as to who provides the greater familial and fiscal capacity: the baby, born without its own equity, but a great deal of charm, though dependent in today’s world on their parents at least until reaching their early twenties? Or, an older person, probably retiring with some savings and assets, and certainly aiding the economy, and the Goods and Services Tax-take, by engaging in consumption of basic groceries, energy, etc? So, the good news is that, in the Baby Boom, New Zealand managed to accommodate very high dependency ratios; the bad news is that in the future these will be affected by disordered cohort flows that will make planning difficult (Pool 2003).

Ideational Systems: The Baby Boom and Recolonisation

The matrix of values and norms governing New Zealand, Pākehā in particular, but also Māori, during the Baby Boom era present us with something of a conundrum. On the one hand, this epoch suffered ‘shocks’ that upended the comfortable attitudinal-behavioural nest in which Pākehā had been sitting for 80 or 90 years. The Baby Boom itself was unpredicted and something of a surprise. It significantly transmuted family dynamics – the younger age-structure of the nuclear family unit, its residential neo-localisation of young couples and the accompanying suburbanisation, stand out. It was also rationalised with a long-established New Zealand mantra that ‘it was a great place to bring up kids’, a ‘Better Britain for child-rearing’. The Māori urban influx also affected Pākehā values systems as it brought Pākehā into face-to-face daily contact with Māori, especially in North Island cities. The higher fertility of Māori was recognised in academic and policy circles (Borrie 1967), and seen as an issue having implications for family wellbeing, but, as Pākehā fertility was also at medium-high levels, there do not seem to have been the eugenics’ outbursts of the interwar years (Chapt 15). The rejection by ‘Mother England’ at the end of the Baby Boom, when Britain joined the European bloc, came as something of a shock to many New Zealanders. It even resulted in some absurd responses, such as ‘punch a pom [Australasian slang term for Britishers]’ outbursts in the early 1970s, when British immigration flows were high. Lastly, the post-war period saw migration inflows diversify – albeit very modestly – but for the first time enough to have more than local impact. By the end of this period, there were growing numbers of Pasifika in Auckland’s inner suburbs, and then later in the southern and western zones of Auckland urban area in new state housing estates. Pasifika were also notably present in the Taupo area⁹, and in inner suburban Newtown and outer suburban Porirua in

Wellington. In 1956, 0.4% of all New Zealanders were Pasifika; 1% by 1966; 2% by 1976 (Bedford and Pool 1985: Table 203; Pool 1959: vol 1 58-62; vol 2, 40)).

On the other hand, as mentioned earlier, paradoxically there was a great deal that remained familiar in Baby Boom New Zealand. Social historian Bronwyn Labrum (2015: 11) has summarised the conventional historical narrative about the era¹⁰:

‘... the 1950s and 1960s are indeed usually understood as the stable, prosperous and safe years between the privations, stresses and submission of wartime, on the one hand, and an era of political protest, economic downturn and oil shocks and growing social diversity, on the other ... settling down after the war, domesticity and suburbanisation. This was, so this story goes, a time of conformity drabness and turning inwards, when the royal family and other signifiers of orthodoxy, such as the Plunket Society, ruled’.

A very familiar feature of the Baby Boom was the maintenance in post-war Aotearoa of a domestic population geographic structure still geared to serving the wool, meat and dairy markets of the United Kingdom. Along with this, the gender-divisions in society and in the workforce seen in the pre-war years, despite a brief adjustment to women in work during the Second World, became if anything even more entrenched in the Baby Boom. This was reinforced by the newly booming advertising industry that saw the ‘little woman’ at home, in her suburban house. She would have been a young mother of two or three children, and almost universally spent the child-rearing period outside the labour force. Men and women typically started work in their late teens, and the husband continued until he retired in his early 60s or died in the meantime. The wife left work at marriage or her first pregnancy, but, as noted above, often returned to a job when the ‘kids had left home’, sometimes to pursue a fairly long career because pregnancy and ‘empty-nest’ statuses both came relatively early (Davies 1993: Figures 4.4 and 4.5; Sceats 1988). The Māori pattern was less defined but similar.

Gender-divisions penetrated deeply into the workplace itself: there was gender selectivity in the jobs into which women were accepted in the same industry, while conversely men were not accepted in some – doctors were men, nurses were women and the ‘power couple’ in the hospital were the medical superintendent, a man, in suit, white lab-coat and stethoscope (if he was doing rounds), and the matron-in-chief, a woman, stately in her starched uniform and hat, hand-watch pinned to her chest alongside a badge saying NZRN; there was gender selectivity in the status they might reach if both men and women were employed in an industry; and there were marked gender differences in the income received.

Bronwyn Labrum (2015: 11-12) cautions her reader that the Baby Boom era contained the ‘seeds’ of changes that were to become far more manifest from the 1970s onwards. Some of these, such as Māori urbanisation, have been referred to here, along with social upheavals, such as the ‘teenage delinquency’ that led to the Mazengarb report discussed earlier. So, she says, ‘it is clear that other things were going on underneath and alongside the outward conformity and uniformity.... [V]ariety, change and experimentation’ were occurring, in areas of cultural life, such as for design, arts and in daily rituals, that were parallel to, but not central to, the peopling and development story I have been telling. Nevertheless, Labrum’s suggestion raises an issue that I will return to in later chapters: the possibility that, what was ‘going on underneath’ the more manifest demographic, economic and social trends of the Baby Boom, were latent ripples that would subsequently enter the mainstream of New Zealand’s life-ways as more fully formed social movements. At that time they played a catalytic role in the transformations I will be describing in later chapters.

The ‘latent ripples’ would have been enhanced by the impacts of TV, screened to a minority of homes in the 1950s, expanding its coverage in the 1960s and, by the end of the 1970s, so widespread that it had become almost a basic need like a refrigerator. It greatly accelerated the spread of ideas, whether coming from within New Zealand or from overseas. The latter was highly selective: hippies in Haight-Ashbury would have had a far higher profile than the 1,000s drowning in the annual floods in Bangladesh. Yet, alongside this was the persistence of local dramas/programmes against much cheaper imports. New Zealand ‘content’ may have served a particular function of reassuring the older and more conservative that recolonisation had not completely withered, and the younger viewers that New Zealand’s lifestyles were in line with what they believed were occurring elsewhere¹¹. Perhaps, the most iconic relic of recolonisation came in a TV programme, *Coronation Street* (set in Manchester): persistent attempts by broadcasting bureaucrats to eliminate it have failed against its loyal viewers.

Ideational Systems: Reassessing Indigenous-Settler Interrelations

This era also laid down some far more manifest structural foundations of Aotearoa’s future peopling and development that will be analysed in later chapters. Some, such as the ‘disordered cohort flows’, have had their own momenta and inexorability. Others were more ideational and abstract in content and impact. In this regard, the tabling of the *Hunn Report* (1961), noted above, named after John Hunn, was seminal. Although not a high-profile event at a popular level, certainly not rivalling the Korean War, the Mazengarb Report, the 1951 waterside strike, or the Vietnam war, over the long run has played a crucial role in setting directions for New Zealand’s

development then and into the future for that most sensitive of domains: race relations. My argument is that, for all its flaws, its impact has been undervalued.

Its recommendations were implemented more or less fully by a new minister, Ralph Hanan, even though he was part of a government that had just electorally defeated the party that had commissioned the study. Subsequent parliaments essentially adopted and extended its basic premises that proposed the way in which settlers and Māori might interact. This paved the way for the general acceptance by later governments to employ the Treaty of Waitangi (1840) as a set of parameters determining Indigenous /non-Indigenous relations. It also set baselines for the multiculturalist approaches in dealing with the sudden large-scale influx of non-British migrants after the 1970s.

The Hunn Report's greatest immediate power lay in its detailed documentation of Māori disadvantage and the effects that this was having on race relations: no reasonable commentator could dispute the litany of facts Hunn had assembled, nor his forensic exegesis of legislation. The report identified for all to see the impossible burden Māori faced if they were to attempt to develop their remaining assets – mainly pockets of land with multiple ownership, a legacy of the 1860s individualisation of titles – whose use was blocked by all the factors Hunn had so carefully catalogued.

Most importantly, in my view, Hunn set down, at least as a framework, an official view and a line of development that specifically favoured 'integration' over assimilation, and certainly over segregation. The Hunn Report was criticised when presented and is still reviewed somewhat negatively at times (eg Harris and Williams 2014). These critiques are not unreasoned, and mainly revolve around arguing that, deep down, he really espoused the assimilation of Māori. An example was 'pepper-potting' of Māori residentially, as a measure to avoid the growth of ghettos, but which could also be seen as assimilationist in intent. To the 21st century reader there are sentences which jar, such as 'Much of [Māori culture] has ... already departed and only the fittest elements worthy of preservation have survived the onset of civilisation' (Hunn 1961: 15). The legal scholar David Williams (2019: 39, citing his own paper and also Richard Boast, 2017:123-24 and Hugh Kawhuru, 1967) makes a telling point, which is probably more a function of relative demographic weights affecting institutional decisions rather than an outright rejection of the notion of integration, that ' "equality was as defined by the Pākehā majority" '. He cites Richard Hill (2009: 93), who says ' "Although Hunn distinguished integration from assimilation, the goal of official policy remained assimilative in all but name" '.

Confusion also arises from Hunn's writing style when dealing with the core issues of race relations: he was writing in the 1950s. Moreover, almost out of character, he seemed to hark back to 19th century 'amalgamation' arguing that 'detribalised' Māori (never really defined) should be assimilated. But, ultimately, and

most importantly for Aotearoa's future, it was integration that he clearly advocated. Michael King criticised many aspects of the report, but saw it as an important step forward from the uncritical acceptance until then of 'assimilation' as the guiding principle for race relations – he thus saw it as a 'milestone for its time' (King 2003: 479-80). Whatever the flawed presentation of the basic principles from our perspective almost six decades on, it has been the stumbling and imperfect advancement of integration at an operational level, as a broad social objective it has stood the test of time.

John Hunn (1961) posed a fundamental question for Aotearoa New Zealand: effectively, he challenged how a settler-society such as New Zealand could negotiate relationships between the Indigenous population and the Europeans who had come later. After posing alternative strategies and, following wide consultation with the leading social scientists of the day, he advocated 'integration', which I will define later. A similar choice was made a decade later by Canada in its *Royal Commission Report on Bi-lingualism and Bi- (later Multi-) Culturalism (1963-69)*. In both cases a narrow objective (French-English and Māori-Pākehā relations) broadened over time to become guidelines that encompassed also relations with the migrants who came later and (as I showed last chapter), rapidly diversified the two countries. Without suggesting causation, and certainly this was not even inherent in either the Hunn Report or Canada's many Royal Commission reports, this ethos has been incorporated into other dimensions of Canadian and Aotearoan life, such as foreign affairs, development aid and even military service under United Nations control. Integration stands in stark contrast to 'assimilation', and thus distinguishes how Aotearoa and Canada approach settler-Indigenous relations from how the United States and Australia approach the same problem. This mainly forgotten by-line to recent history requires a reassessment, and being brought out more into the light, and thus later in this chapter I will expand on this brief introduction.

Before progress could really be achieved, however, Māori – and Pākehā, where it directly affected them (many could and others would avoid this question) – had to renegotiate the new Māoridom that was now urban, not rural, and all that this implied. Hunn could not have been expected to foresee what actually occurred between 1961 and the 2010s; even when he was writing only a minority of Māori had urbanised (35%, 1956). Michael King (2003: Chapt 28), looking back from the early 2000s could give a more comprehensive analysis of the 'Return of Māori Mana', and that renaissance has proceeded further since. There have been, for example, major initiatives, led by Māori with support from government, often grudging, to ensure the maintenance of te reo (Māori language). Now, New Zealanders can legitimately call New Zealand Aotearoa and use te reo, one of the country's two official languages, in Parliament and in other high official contexts, at a popular level on national media

and in the opening parts of speeches (Phillips 2019: 38-41). These may be symbolic steps but are telling.

But, arguably the most strategic advancement has been in the material domain, by making available to iwi through Waitangi settlements funds, in lieu of returning private land taken in the land grab. What is fascinating has been the use by Māori of ‘Communitistic’ structures to forward development. This seen in the governance and management of the iwi corporations, which are undertaken in a distinctly Māori way and often by giving investment priorities to social and human capital (eg marae – village – facilities and education), over physical and financial assets. During the last 150 years, ‘the worm had turned’ 180 degrees from when Henry Sewell, Attorney General *circa* 1870 and his contemporaries, had fervently intended the Māori to be a subject race that was disappearing. They had seen the taking of land from Māori as a desirable step towards ‘detribalizing’ them and thus eliminating their ‘Communism’ – in reality, of course, the objective of Sewell and his compatriots had been to dispossess Māori from their resource-base and pass it on to colonists (Chapt 3).

Nevertheless, the concept ‘integration’ encounters major ontological problems. By contrast, ‘assimilation’ is easier to define and is a very instrumental process: it means that the dominant majority will simply attempt to absorb the minority(ies). To define it more realistically, assimilation is where the hegemonic people prevail and the other groups adopt the dominant population’s norms, values, languages, behaviours and life-ways, which almost by definition, intentional or not, are seen as superior. The unwritten agenda is that the minority culture is eliminated definitively, although this is seldom spelt out; certainly they will lose their culture. Assimilation is very much the guiding philosophy for ethnic relations in the United States and Australia, and it had strong advocates in New Zealand when Hunn was preparing his report¹²; assimilationist values appear most frequently today in the commentaries of ‘one-New Zealanders’; the ‘one-New Zealand’ they use as their model is that of the Pākehā majority.

‘Integration’, by contrast is far more difficult to define and implement. It clearly implies some degree of cultural give and take, but exactly how it should be operationalised is still an issue of unresolved debate. For example, the boundaries between integration and various levels and forms of self-determination for Indigenous Peoples is a problem all the settler-societies face. Some Māori call for sovereignty citing a clause in the Treaty of Waitangi as justification, but quite how this could be achieved in a society in which there are daily inter-ethnic interactions, and with the major exception of the Urewera country¹³, mainly (but not entirely) peopled by members of the Tuhoe iwi (tribe), co-residence is the norm. With large sections of its land mass almost fully self-governed by ‘First Nations’ who are major populations in those regions, Canada has gone a long way along this route. In New Zealand, Māori now own and manage large areas of land and capital resources, so are corporate

players, but do not govern areas. An equally important question, which also has to be resolved, is how to resolve the conflicts of objectives, where, what may seem a most desirable courses of action for the majority, are contrary to the needs and wishes of a minority.

In advocating integration, Hunn had consulted widely among the leading social scientists of the day, and their views varied, some even favouring separate paths for Māori and Pākehā. Some explicitly called for ‘parallel development’. which Hunn dismisses summarily, saying that ‘in essence [it] is segregation under another name’ (Hunn 1961: 15). It certainly seems unbelievable from our perspective but is an indication of how advanced was Hunn’s thinking in the face of rather major constraints prevalent in the intellectual discourse of that day. His conclusion was that New Zealand should seek ‘integration’: guaranteeing full economic, political and social equality, yet that each ethnic, cultural linguistic or other socio-cultural grouping should be free to practice their own beliefs. This was an ideational game-changer among officials and similar people at that time. As a young academic in Wellington when the report was released, I vividly remember the impact it had on policy discourse.

The issues raised by the Hunn report are best evaluated by experts, philosophers, cultural and constitutional specialists, and might be seen to be at the margins of the concerns for this book. In reality, however, this is no digression, as the Hunn report addressed core issues for peopling and development in all settler-societies. I have already stressed that Māori-Pākehā/Non-Māori relations, above all the 19th century displacement of Māori and loss of land, have been the backstory underpinning all of Aotearoa’s peopling and development. The Hunn report gave the clearest recognition by officialdom up to then of the import of those events as they affected post-War Māori life, and thus the continuing major constraints this history placed on Māori development. The report set out the parameters defining future development, seeing integration as the guiding principle, a theory that has turned out to be very prescient in a number of ways, albeit that critics can justifiably point to situations when the praxis has turned out to be less than perfect.

Within New Zealand itself, just a decade or so after Hunn, the government legislated the need to negotiate Treaty of Waitangi claims with iwi (tribes). Philosophically, this is a process that depends on integration as an operating framework. It posits iwi and the Crown as equal partners in these negotiations and assumes that Māori will independently manage large segments of their own lives.

The Hunn report had another, positive, unintended consequence. It addressed Māori-Pākehā interrelations, very much as Canada’s Royal Commission had started by focussing on Anglophone-Francophone interactions. Both left behind, however, a wider residue covering ethnic and cultural relations beyond their original interest. This distinguished Canada and New Zealand from Australia and the United States:

integration became the Canadian-New Zealand ethos, while assimilation remained the goal of American and Australian cultural policies. This difference is far more than symbolic but seems to govern both First nation(s)-settler dynamics and how the resident populations engage with immigrants (Chapts 19 ff).

‘This is the way Recolonisation ends, not with a Whimper but a Bang’

(With apologies to T S Eliot, 1925, *The Hollow Men*)

This chapter and those preceding it have thus covered a period that is enigmatic. In part, it represents the continuation of earlier patterns of population and development that had unfolded over previous recolonial decades. Yet, it also unleashed its own aberrant dynamics in the form of related ‘booms’ – the Baby Boom, which was the demographic driver of the others, the boom in massive infrastructural projects, and the boom in residential, hospital and school building. An expansion of grasslands’ production, along with the frenzy of building and construction produced an economic ‘boom’, especially by comparison with the Depression that preceded it. By contrast, the Baby Boom, which had resulted in the need for the building boom, and for the rapid training of a workforce necessary to service the inflated birth cohorts, may well have led to a diverting of investment away from productive sectors and from innovative ventures that might have diversified the economy. Perhaps, the conundrums just outlined are not just a feature of its population and development trends but are better symbolised by the 1951 wharf strike/lockout (Green 2001): it could be seen as a collision between an ‘old regime’ of recolonial New Zealand and a new emerging society. The conundrum then deepens because many of the new regime’s features, turned out to be transitory – such as the surge of infrastructural construction – or aberrant, such as the Baby Boom. By contrast, one significant continuity from the old regime – grasslands production – continued on, despite the shock in the 1970s of the entry of Britain into the EEC.

We have come to the end of Recolonisation – the booms had to finish – so I turn now, briefly, to the changeover years, 1972-76. An almost unbelievable feature of the recolonial era was that it took 20-30 years to get underway (Chapter 14) and fully unfold, yet it abruptly ended and folded up in fewer than five. The Baby Boom thus finished not with a ‘whimper but a [short but spectacular] bang’, ushering in a radically different era, in virtually every way – demographically, economically and socially. The peopling and development trajectories explored in the next few chapters are, therefore, very different from what had been happening over the previous 100 years, 1880s to 1970s.

There were all sorts of clear delineation points of massive change. The social-emotional underpinnings of loyalty to Britain wilted, particularly with Britain’s entry

into the EEC (1973). Intensive pastoralism continued, but now, after a great deal of searching, with new export markets. Māori had become urbanised, but New Zealand's population geography was about to re-align itself radically – for both Māori and Pākehā. Elevated rates of reproduction represented (aberrantly and transitorily) by the Pākehā Baby Boom, plus the high Māori birth rates in this era, went through radical Baby Busts, over a few brief years, to low levels for both ethnic groups. This was facilitated by two 'contraceptive revolutions' post-1960: (i) the Pill (1960s); (ii) resort to sterilisation and modern condoms (1970s).

The historian Rowan Light (cited by Illmer 2019) pinpoints 1979 and the Mt Erebus (Antarctic) plane crash that November – when an Air New Zealand DC10 on a sightseeing trip hit a whiteout and smashed into the mountain causing 257 deaths – as the event which finally sealed the new post- Baby Boom national narrative: ‘ “It came at a ... crucial period of finding a new narrative for [Aotearoa's] identity... In the 1960s the old narrative of being a progressive outpost of the British Empire had fallen to pieces or was just not making sense any more” ’. Other commentators may have selected the 1981 Springbok tour or the election of Labour in 1984 as the key points; I have taken the early 1970s because two ground-breaking demographic events, rather neglected in the national historiography, erupted radically at that time: a total shift in levels and patterns of migration and the Baby Bust.

It must be restressed that the *1970s were Aotearoa's Baby Bust years, not the late 1960s*, when America's occurred; New Zealand and most WDCs did not follow the United States' model. With the decline in fertility, long-term fertility-driven fluctuations affecting the population's annual growth rates and its demographic structures disappeared, and, for the first time since 1876, the factor of migration began to replace natural increase in the prime role in perturbing the national demography system. In some senses there were re-runs of the two massive quinquennial inflows of 1860-65 and 1870-75, and once again variations appeared between quinquennia in the same decade. But new elements were to be added – diversification and churning in the age-ethnic-occupational structures of influxes, something not seen in the 19th century, when the immigrants were clustered at working ages and almost all were British.

In the new millennium, an observer looking at New Zealand's non-metropolitan landscapes would still have noted cows everywhere, even in places where they had been rare when immediately post-war regional geographies were being written (Cumberland and Fox 1959). But, much of the rest of the countryside would be something of a surprise. They would see the abandoned buildings that marked the disappearance of the small crossroads' service hamlets dairy factories, replaced by a few mega plants run electronically with very small workforces; they would see the ballooning of the Auckland 'super-city', as it is called; and they would see the emergence of 'rurban' retirement and recreational centres such as Tauranga

and a run of nascent, future large centres in the South Island's Alps. But, hidden from the same observer would be the online, electronic economy, a large employer, centred on financialisation and hubbed in Auckland, that had replaced the hands-on productive activities directed to the processing and shipping of grasslands' commodities to Britain, and previously involving a major workforce. Change was also evident in the most pivotal of recolonisation's workplaces: the ports. The observer would see vast, multi-story edifices of shipping containers and the drivers of their lifts – stacking them on the decks of huge ships. The 'wharfies', who, through recolonisation, had worked on the quay or down in the holds of ships going to British ports, were now a footnote in history.

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¹ Typically, 'intra-family transfers' outrun those from other sources.

² Taking as a crude index of the 'window' when less than 10% of the total population is aged 65+ years, and fewer than 30% are at ages 0-14 years (Pool 2007: 33).

³ Throughout this chapter, for reasons of brevity, I use the term GDP, but strictly speaking the figures quoted here refer to 'real GDP' (as Briggs, 2003, correctly does), which is an inflation-adjusted statistic and thus more meaningful in time series' analyses.

⁴ Policy makers were placed in desperate situations meeting the Boom. Eg minimally-qualified candidates, many returned servicemen, many of whom later pursued very valuable careers, were rushed through schoolteacher 'pressure cooker' courses in one case in a newly commissioned (1948) Teachers' College housed in prefabricated American wartime buildings. The largest maternity hospital was also a former American military prefab building.

⁵ Importantly, his analysis of the Baby Boom is embedded in the wider context of New Zealand's long-term economic history.

⁶ Developer lobbies instead saw the difficulties for house-building as a function of shortage of land to build on, in turn due, so they argued, to regulations coming from the *Resource Management Act 1991* introduced by a National (conservative) Minister, Simon Upton. The more basic causes were instead shortages of skilled labour, reinforced by supply-chains, for building material and corporate management of some sections of the building industry.

⁷ Or 'echo' to the Baby Boom. In New Zealand, the 'Blip' was a result of the daughters born to young mothers at the peak period of teen-age pregnancy (c.1970-71), going on themselves around 1991, to have babies at young ages — in 2011, there was even a muted secondary 'blip' to the 1991 'blip'. Micro-level data showed that this was not just a macro-level phenomenon, but that it actually involved daughters following their mothers' reproductive trends. It was sufficiently important briefly to push the 1991 TFR just above replacement.

⁸ Total Dependency ratio = Population 65+yrs + children 0-14 / population 15-64 yrs

⁹ Family groups from Tokelau settled in this area to work in the forest industries. Others went to Auckland and Porirua. Concern over Malthusian pressures on these atolls saw significant proportions of these islands' population move to New Zealand, with government assistance. This story, and, above

all, the health implications, are superbly reported in Wessen (ed) *et al* 1992. Today New Zealand resident Tokelauans greatly outnumber those still in tropical Polynesia.

¹⁰ Her lower case for 'royal family'. The Royal New Zealand Plunket Society is unique to New Zealand, a charitable trust, but publicly funded, dedicated to the care of mothers and babies, established in 1907. Named after a Governor's wife, a mother of eight, it has high social mana in New Zealand.

¹¹ '*Country Calendar*', visiting a farm each week, or '*Close to Home*' that kept abreast with emerging majority trends (eg public exams as these affected teenagers) were examples. Sports, particularly rugby, were beamed at all audience groups.

¹² Hunn's language, which today seems quaint, even ambiguous in places, belies the significance of his advocating integration over assimilation or segregation –which, when he wrote, was still legal and enforced in the United States, South Africa and Australia – and symbiosis (which he dismisses). A Canadian Royal Commission's findings (and implementation) (see later text) show how strategic this direction was there, and for New Zealand; the *Treaty of Waitangi Act, 1975*, made this strategy more concrete.

¹³ Under a *2014 Act*, Te Urewera has legal 'personhood' – essentially it owns itself, a unique provision seen in New Zealand law.

PART FIVE: Aotearoa's Turbulent Transformation, 1970s–2020

Chapter Nineteen – Transitioning Millennia

An Inflection Point

In 1970, New Zealand, and other Western Developed Countries (WDCs) had reached a major critical threshold in development. Either they could build on, and hopefully enhance, the evolutionary paths they had followed until then; or, alternatively, they could attempt to go in a totally different direction, which would involve a radical revolution. This choice was very significant: on the one hand the economy could be seen as development, in which people and demographic trends were major factors; or a narrower growth of GDP approach could be taken in which people were minor actors (both terms are defined in Chapter 1). As the following chapters will detail, in policy terms the latter path was followed. But, over this period, the reality was that the WDCs were also undergoing rapid and radical demographic transitions that, I will argue, will have the greater impact on the society in the future than the factors emphasised in the growth approach.

The first of these alternative public policy approaches, in New Zealand as much as in other Anglo settler-societies, would have been to continue along the trajectory followed until then through the long years of recolonisation since about 1880. This was not a reason for public policy to eschew restructuring *per se*, but to make changes wherever these were necessary to meet emerging circumstances. The prime objective for the society and economy would have been to accommodate change by catering for its two drivers: **peopling and development**. There would have been differing mixes over time and thus varying emphases given to (i) the factors of reproduction or replacement through migration, (ii) of production, (iii) consumption and (iv) exchange, and (v) the services available through public sector and charitable agencies. But, these would have been essentially the components of the narrative I have told here up until the end of the Baby Boom.

My story in earlier chapters has not attempted to provide an economic history and has not set out to meet the canons of economics *qua* economics. I would argue that my scope is far wider, as it has covered the economy and the society as seen through the lens of both population and development. As I said in Chapter 1, ‘This book starts with the proposition that population trends are core factors of all development, and very often are its drivers’. In this I accept Diane Macunovich’s (2002: ix) definition of the economy, cited earlier, in which she sees population and social trends as very much interpenetrating with: ‘An economy is ultimately a mechanism for satisfying the wants of a population and its performance in the long run will be a direct function of that population...its size and composition...’ What was clear, however, was that, whatever the deviations in the journey Aotearoa and the other Anglo settler-societies had taken, whatever the successes and failures they had

encountered on the way, by the time that the Baby Boom had ended, collectively, they were wealthy, imperfectly egalitarian, welfare states, comfortable in their life-ways and coming out of the ‘trentes glorieuses’ years. Most observers would have agreed that they could no longer continue exactly as before and were starting to look a little ragged around the edges. In self-selected localities, such as Berkeley in California, this manifested itself in so-called ‘Revolutions’, which were of greater flamboyance in their protest actions than being fundamental challenges to the existing order, and thus generally had little real impact.

These high-profile, limited impact, social events coincided with an oil-shock which was geopolitical rather than economic in origin producing inflation rates that rocketed up into 2-digit figures. New Zealand also had the spectre hanging over it, and then the reality, of Britain’s entry into the ‘Common Market’. In fact, the new trade patterns probably obscured a longer-term erosion of the United Kingdom-New Zealand exchange (Holland and Kelly 2012). To add to these seemingly urgent political-economic issues, in the late 1970s, and not without controversy, New Zealand embarked on the construction of huge plants and their associated infrastructure aimed at making it more self-sufficient in energy (see below): the ‘Think Big’ projects.

Somewhat lost in the discourse surrounding these ‘crises’, however, and in the issues that were to the forefront in the public policy and business concerns of the day, were enormous peopling changes that were occurring, and which would be of fundamental significance then, in the new millennium and, in fact, into the distant foreseeable future. Their effects were more latent and thus were obscured. This effect was exacerbated because they occurred very quickly – over 3-5 years – and then became a part of the context of national life, not its shapers. This contrasted with the long period taken for recolonisation to emerge and to be cemented into the society’s life-ways (Appendix C). Consequently, they were largely overlooked in the academic, policy and business circles that provided the actors who played key roles in formulating and implementing development strategies. In the 1970s, the dominant actor became *homo-oeconomicus*, first making an appearance in the development field and then across most areas of public policy and business. There was a radical scaling down of manufacturing, producing a marked sectoral shift-share in employment (graphed in Figure 19.1). *Homo-economicus* became eventually the dominant commentator on most social and economic matters (Easton 2020: Chapter 45-55) often far beyond the limits of economics itself.

In the early 1970s two game-changing demographic trends were unfolding at a very rapid pace: (i) a ‘Baby Bust’, as birth cohort numbers dropped dramatically from their 1970 levels, and (ii) a massive net immigration inflow. As I will show below, net immigration was to have a lower long-term impact in building the nation’s stock of people than was natural increase, but it gained a far higher profile in public

perceptions about peopling because of ‘churning’ effects that I will detail later. More latent than either of these, but also of great significance were realignments in the country’s population geography.

It is trends in reproduction, not just of the Baby Bust but of the Baby Boom, acting through age-structures (as I will detail) that will be the real driver of the economy and the society. Concern over age-structures has been somewhat misguided and replete with misunderstandings of its processes, producing a sort of ‘panic’ about ‘grey waves’. The long-term impacts of the core age-structural issues, however, were far more fundamental. They will far outrun the impacts generated by the second and much higher profile approach to development: *neo-liberalism*.

Neo-liberalism

The genesis of neo-liberalism did seem to come from a cabal secretly meeting somewhere to formulate and implement a doctrine. In New Zealand’s case a rather small group, comprised of a ‘troika’ of cabinet ministers and a small number of officials ‘who captured the ministers’ ears’, did in fact play central instrumental roles, orchestrating much of the programme (Easton 2020: 46). But, already among more critical thinkers at the end of the Baby Boom profound doubts were being expressed as to whether the existing peopling and development trajectory could be maintained without major reform – especially, as in New Zealand’s case, because the century-long, cosy metropole-periphery, two-way trade exchanges were about to be eliminated. The oil crisis added to immediate uncertainty. A call for radical revolution seemed, however, also to come from neo-classical economics by borrowing and gaining intellectual mana from what was a discipline with deep, well-founded theoretical roots. Academic status came from the Mont Pelerin Society founded by Frederick Hayek in 1947. This was the generic picture across most WDCs, although there were seeming exceptions to the uncritical adoption of neo-liberalism: the Nordic countries, France to a degree and Catholic Democratic central Europe only went part way along this path. By contrast, in the Anglo-world it was the dominant paradigm for development (Esping-Andersen 1999).

This paradigm subsequently evolved conceptually¹. Its appeal lay in its simple focus – finance – which had always been a core component of the field; its simple explanation of how the economy worked – market forces; and a simple solution about how that could be most efficiently achieved – by privatisation. In that sense, it saw a limited role for the state and society (Hartwich 2009; Monbiot 2016²). Rhetoricians would have rated neo-liberalism’s doctrine as ‘axiomatic’ and certain, both powerful attributes, and very different from the attributes of peopling and development which, as a paradigm, was complex, diffused, nuanced and often beset by cross-cutting ideas.

In some Western Developed Countries (WDCs), especially those in the Anglo-American sphere of influence the alternative – peopling and development – was

largely forgotten, something tangential to the main business at hand and it virtually disappeared out of sight. How population growth and structure came about was of surprisingly little concern for neo-liberalism, something that seems curious given that almost two-thirds of the economy is vested in consumption, which is driven by the ‘size and composition’ of the population (Macunovich 2002).

The result is now history – unfortunately it is recent history, which renders difficult judgements by commentators living through the era. That said, the turn of events themselves is overwhelmingly clear: the decades from the 1970s and continuing in the 2020s are best known for the intellectual and policy dominance of the doctrine of neo-liberalism. Its seminal capacity was to achieve a strongly functional, highly active symbiosis between academia and agencies engaged in the formulating and implementing of a radically different way of organising the economy. This symbiosis was formed between leading universities and the most powerful development and banking agencies that together comprise the ‘Washington Consensus’ already discussed in earlier chapters. While individual voices criticised this arrangement and its hegemonic control of development and economics, the intellectual and policy movement was remarkably all-encompassing, and its critics were seen almost guilty of apostasy. By design, or by chance, the neo-liberal paradigm avoided dividing the more scientific issues from policy and from ideology, and thus from values and norms, which are always difficult to define. Tim Hazeldine (2014: 73) is very dismissive of its values: ‘the 1980s counter-Keynesian revolution celebrated unrestrained greed in an ever-more permissive policy environment’.

Neo-liberalism’s provenance and core theoretical doctrines may have been somewhat murky, but the symbiosis noted above was an extremely powerful unifying set of mechanisms. The doctrine has been remarkably adept at formulating the statutes, regulations and human capital it has needed to ensure its long-term viability – I will return to this point for New Zealand later. Together these factors seemed to accord it a high degree of self-confidence – what it was doing was right – and to give it stability, allowing it to weather what appear to have been major threats to its viability. For example, Piketty’s (2014) unassailable documentation of the covariance between growth in inequality and the management processes adopted for neo-liberalism might have seemed to be a mortal blow to the paradigm, yet it did not wither, let alone disappear.

Neo-liberalism has generated a vast industry of comment and criticism. Internationally, yet another critique is published or blogged – many if not most negative. Anecdotal, also there are indications that the hegemonic status of neo-liberalism is now being challenged, at least at its margins. Other more trenchant exegeses, such as Piketty’s (2014) comprise detailed research drawing on his and other powerful econometric analyses. He has questioned the very core of neo-liberalism, not so much by attacking it head-on, but by demonstrating how its practice

and mechanics (eg vast pay differentials between managers and workers), have radically increased inequality within polities, and between countries (see Chapter 22), without really increasing productivity. He is merely one among a number of commentators, from journalists to Nobel Prize winners: Stiglitz (2003, 2009), Deaton (2014) and Krugman (2015, one of many blogs and newspaper articles).

A vibrant critical literature, and also apologia, exist as well for New Zealand. Most comprehensive is the collection of numerous essays by independent authors commenting on Piketty (eg Bertram *et al*, 2014) and linking his work to neo-liberalism. Perhaps the most fascinating New Zealand contribution comes in comparisons with Australia. For example, there is an exchange between a critic and ardent supporters of the reforms. A paper by Lew Evans *et al* (1996) saw the reforms as exciting, and of global significance. They went so far as to compare the neo-liberal revolution with the ‘state experiments’ at the dawn of the 20th century, with ‘New Zealand once again appear[ing] to be emerging as a laboratory from which results will animate economic debate and policy throughout the world’. In a counter-argument, using standard indicators, Paul Dalziel (2002: 44, citing Evans *et al* 1996; see also Castles *et al* (eds) 1995, which makes Australia-Aotearoa comparisons across a number of sectors) compared New Zealand with Australia, probably the economy and society closest to New Zealand’s. He concludes: ‘The present paper reports from the laboratory that the New Zealand experiment did not succeed’. In his recently published book Brian Easton (2020; see my Chapter 21) goes into far more depth, sector by sector, to demonstrate that Australia’s more gradualist approach yielded better results than New Zealand’s more radical strategies.

It is not my intention to make a critical review of neo-liberalism – other authors abroad and in New Zealand have done the job much better than I could hope to do. So, I leave the critiques and exegeses to them. I simply take neo-liberalism as a given fact of life from the 1970s until 2020 and attempt to describe how it might have contributed to the core issue dealt with in this book: peopling and development. Even my chapter on growing inequality does not attempt to ascribe blame for this to any economic doctrine, although the covariance over time of neo-liberalism and growing inequality seems to provide circumstantial evidence on the role of neo-liberalism.

My task instead is to investigate the alternative approaches open to the economic and social academic, business and policy communities in 1970. This would have been the continuation of peopling and development as it had evolved over at least the previous century, although this undoubtedly would have involved some attempt to reform aspects of it. To make this comparison will require a detailed analysis of population change in the 1970s – the society was undergoing momentous demographic transitions, which will have an impact on development trends in New Zealand well into the foreseeable future. They take their impetus primarily from age-structural changes the significance of which for population and development was

recognised only in the late 1990s (see Chapter 4). This may seem a fruitless exercise – after all, we cannot rerun history. Yet, the very factors on which a population and development approach would have been elaborated are still with us and are still largely ignored. Like recognition of climate change, some voices will be raised about demographic dividends (eg Jackson 2016) and perhaps gain an impact gradually until some triggering event brings the issue to the forefront.

It is also beyond my mandate to describe the genesis of the Breton Woods' agreements that morphed into the Washington 'consensus'. But, of direct relevance here was that its key actors came disproportionately from the Anglo-world. Other Europeans, Africans, Asians and Latin Americans are among its staff, but instrumental roles, such as the head of the World Bank all but one of whom have been Americans, rest with the Anglo-world. What is important for my analysis is that numerous New Zealanders had an association with the key agencies and some (eg Scott 2001) helped build the doctrines that the 'Consensus' was attempting to implement. The manifest functions of these agencies were to act as development banks, lending to the least developed countries. But, this was translated into structural adjustment programs in which the consensus agencies went beyond consultation to prescription in intervening in the affairs of client countries³. Similar more muted interventions were also a feature of developed countries, such as New Zealand, which sought loans and other forms of assistance.

In Aotearoa there was, however, a seeming major exception to free-marketism: the attention being paid from the 1980s by the Crown to Māori grievances. These went back to the land losses of the 19th century and the continuing corrosion of Māori control of these potential assets in the 20th, as described in earlier chapters, but which were now being treated more seriously. This era has seen the reappearance of Māori business enterprises, both individually and collectively owned by hapu and iwi (Love and Love 2010). The injection of capital from the Crown to runanga (iwi councils) from Waitangi Tribunal settlements has been an important element in Māori collective enterprises. But the economic geography was still stark: in 2000, Māori retained pockets of the most hilly, erosion-prone sections of the North Island, where, for reasons of physical geography (Introductory Map 3), animal husbandry was difficult and uneconomic, and horticulture virtually impossible except on pockets of flat land, such as those in Poverty Bay. Multiple ownership, the legacy of Victorian legislation to individualise titles, added to the constraints imposed on the Māori owners. By the second decade of the 21st century the functional utility of these lands was being reviewed again, for example as localities that could be reforested.

Phases of Turbulence 1970-2020: Demographic and Economic

Coinciding by chance with the start of this era, Alvin Toffler (1970) published his book *Future Shock*, which projected accelerating turbulence in future years. But, even a perceptive futurist like Toffler could not have foreseen how rapid and widespread change would be – globally. The planet's population has doubled in size, the effects of climate change are becoming more and more evident, and every dimension of demographic, economic and social life has gone through transformations – and continues to go through these at faster and faster speed. It is a highly turbulent period across the WDCs and certainly for New Zealand among them. This is the wider context within which the New Zealand case study is located.

The year 1970 saw a radical shift in New Zealand's history of peopling and development, between high average annual population growth rates and lower levels. This shows up in Table 19.1, which provides the rates and the factors that drove them. Until the early 1970s the Total Fertility Rates (TFRs) were high, well above 3.0 births per woman, but then they dropped very rapidly. Growth was still high, however, because of a major migratory inflow. TFRs then remained consistently around replacement but population growth rates varied mainly as a function of net migration – how the inflows counterbalanced outflows. There was not a perfect temporal divide in determinants of turbulence. Broadly speaking, until 1986 population trends drove turbulence. Thereafter, it was a mix of economic restructuring, with financial ordering as its objective, plus net migration.

Table 19.1: New Zealand, 1956-2016, Decennial Population Changes and Their Drivers: Decennial Growth Rates (%); Growth per Annum (*r*) (%); Total Fertility Rates TFR) at a Decade Midpoint Year; Comments on Factors that drove Changes

Decade	(Midpoint Year)	Population Growth %	<i>r</i> (%)	TFR*	Comments**
1956-66	(1961)	21	1.9	4.1	Baby Boom
1966-76	(1971)**	16	1.5	3.2	Boom to Bust; Major Im
1976-86	(1981)	4	0.4	2.1	Baby Bust; Major Em, then Im
1986-96	(1991)	15	1.4	2.2	Em (late 1980s), then Im
1996-2006	(2001)	12	1.2	2.0	Low Im (& Em 1998-2000) then Massive Im 2001-05
2006-16	(2011)	12	1.2	2.1	Low Im then Massive Im 2013-18

Notes: * TFR (Births per Woman) 1966 = 3.5, 1971 = 3.3, 1976 = 2.4 (Average TFR 1966-1971, 3.4; Average 1971-76, 2.9)

** Comments: Im = Net Immigration; Em = Net Emigration

The 1970s, when there were several massive demographic transitions occurring almost simultaneously, were not free of economic transitions; while, equally well, in the 1980s and beyond there were major demographic changes, in this case coming from major swings in migration flows. Nevertheless, by 1986 the population transitions that had erupted in the early 1970s had virtually run their course (fertility rates) or settled down into what were to become longer term, continuing patterns (migration and population geography).

When post-1970 average annual growth rates are compared with those of the Baby Boom, the trends fluctuate more intensely, but are at lower levels. Thus, overall, the years since 1970 are characterised by relatively slow demographic growth, negative in some years, despite massive periodic immigration waves. Yet, since 1973, New Zealand has been carried along more by its replacement levels of reproduction, despite their being at historically low levels although in the upper range for WDC countries. There has also been growth coming from momentum effects as large Baby Boom cohorts move up the life-cycle.

In the 1980s, it was the turn of the economic system to generate major game-changes executed for financial ordering. This is most vividly reflected in the national accounts, where 14% of GDP had been transacted in the Finance, Insurance, Real Estate (FIRE) sector in 1986, but had reached 25% in 2006; the community, social and personal services sector, which includes health and education, rose dramatically from 4% to 12% of GDP. There were also radical changes in the export and import sectors, a diversification, for example, in goods exported by commodity and trading partners. In Phil Briggs' highly informative, summary statistical analysis of the most widely accepted data series and his review of the literature covering New Zealand's long-term economic history, the 1970s and 1980s stand out as eras in which fundamental transitions occurred, whether domestically or externally (Briggs 2003 *passim*).

New Zealand's export trade, economy and national identity is still shaped, even in 2020, to a significant extent by pastoralism, even though it employs just a minute proportion of the labour force. Nevertheless, that sector too has gone through major mutations over recent decades, mainly through further intensification, and a geographic expansion to less humid parts of the east of the country, especially Canterbury. The farm workforce has also changed from the family to employees (Jackson 2013). The commodities of yore still feature very importantly in the trade data, but trade exchanges have undergone major restructuring. Along with globalisation – getting New Zealand's commodities or services out to the world – the factors of production, especially of commodities, grew significantly in part because of on-farm efficiencies and in part by the extension of land in pastoralism, especially dairying.

Moreover, the entire trading sector has passed through a sub-sectoral shift-share. Because of tourism, education and training, and their downstream support functions (eg rental housing, hospitality) the trade service sectors soon started to challenge the previously dominant traditional commodities – meat, wool, powdered milk, butter, cheese, timber. It all happened very quickly, in the 1970s, when services rose from 5% of the share of total exports to 25%, then stabilised in the low 20%’s (Briggs 2003: Fig 30.). Services had grown a little in percentage to 30% of the total exports by 2018, and that year, services exported exceeded those imported by about a fifth.

Even in the late 20th century the full extent of this was still to be appreciated, as further pastoral intensification, especially in the less humid eastern regions of New Zealand raised new issues of environmental degradation. The increasing problems of social density (intensity of land-use by people) coming from recreation and a rapidly growing international tourism industry, as against the low levels of physical density (number of people per km squared), added to this. Aotearoa’s hallmark had always been that its ‘low population would indicate a lack of stress on the New Zealand environment... Closer examination shows, however, that this was true only to a limited extent’. Exponentially increasing pressures on even the most remote areas because of ‘recreational use’ put a lie to this belief, if it were ever completely true (Crothers 1985: v 2, 170, 180-82).

In the post-war period, the peopling factor that had most closely co-varied with the economy had been fertility. There were major fluctuations in birth cohort sizes – medium term in duration, but large in magnitude. At first in the late 1940s and 1950s, this generated momentum flows that affected the health and education sectors because inflated cohorts at young child ages needed basic health care and education. Then these bulges moved successively to those sectors servicing older children, although the numbers of young children also steadily grew. As I noted in Chapter 17, in the Baby Boom the growth driven by reproduction, when total fertility rates (TFRs) varied from 3.0 births per woman to over 4.0, also had flow-on effects on GDP, producing what some economists called the ‘long Boom’. The need to service large cohorts at childhood and adolescent ages was what Baby Boom child dependency involved. What had been child dependency in the Baby Boom became the cohort momentum flows that have affected New Zealand’s age-structure since and will do so into the foreseeable future. But, in the early part of the era covered in this chapter, the age-structure had already become weighted disproportionately towards the working ages: 63% of the total in 1981, compared with only 58% in 1961. Child dependency rates were even more markedly different: 33% (1961) as against 27% (1981) (Neville 1985: v1, Table 30).

There was another built-in advantage in age-structures identified by Natalie Jackson (2016) but not explored in policy circles. Aotearoa has markedly different

age-structural transitions – Pākehā as against Māori and Pasifika – co-existing in the one country. The Māori and Pasifika transitions are such that a window of opportunity occurs for a demographic dividend as their labour force age-groups widen. But to exploit it, there is a need for heavy investment in training, education and job creation, none of which are evident.

A major argument when one assesses neo-liberalism as against the alternative of a realignment of the long-term peopling and development strategy is what might the latter have done. In 1970, the economy faced the major advantage of significant numbers entering the working ages, which could have been exploited had the existing population and development trajectory been continued efficiently⁴ – with appropriate rejigging of course. Instead, the age-structural flows from the Baby Boom have had momentous negative effects, which have passed by largely unnoticed in policy circles, yet that will have consequences for decades to come: they came from the failure to capitalise on the potential demographic dividend coming from Baby Boom birth cohorts reaching adult ages.

This is one of the very clear conclusions of the demographic dividends literature to which I referred in earlier chapters. There, I also pointed to the way age-structural shifts are related to all aspects of supply and demand – in crude terms this is the dichotomy between who pays the taxes and produces, and who needs support from these. During restructuring, however, one aspect of cohort flows that did enter the public discourse was concern over structural ageing (the per cent at older ages), usually in inadequate analyses and often in doomsday terms; it was even cited as a reason to eliminate the welfare state. But, the macro picture shows that, in 2013, 14% of New Zealanders were aged 65+ years, up from 10% in 1961, the date I used above as a Baby Boom marker. As I noted, in that Baby Boom year, 33% were children 0-14 years, as against 20% in 2013, well below the figure for 1981 noted above. Looking after the wellbeing of the combined population of dependents (children and the aged) in 1961 had fallen on the 58% at the working ages, among whom were women, a significant proportion of whom were outside the remunerated workforce. In 2013, by contrast, this same burden was much better balanced, being borne by 66% per cent of the population, up from 63% in 1981, and this in an era when female labour force participation rates were far higher.

By the dawn of the 21st century, the earliest Baby Boom cohorts were now at retirement ages (around 65-75 years), joining the smaller older generations, 80 years and over, born before World War II. From the onset of the Baby Bust, starting *circa* 1970, the role of reproduction changed dramatically. Since then, total fertility rates have fluctuated only very slightly, around exact replacement, 1.9 - 2.1 births per woman, and has thus done little to perturb the demographic equilibrium. By contrast, since the early 1970s, perturbations in the demographic system have come from migratory waves, which, unlike fertility trends, are subject to extreme short-term

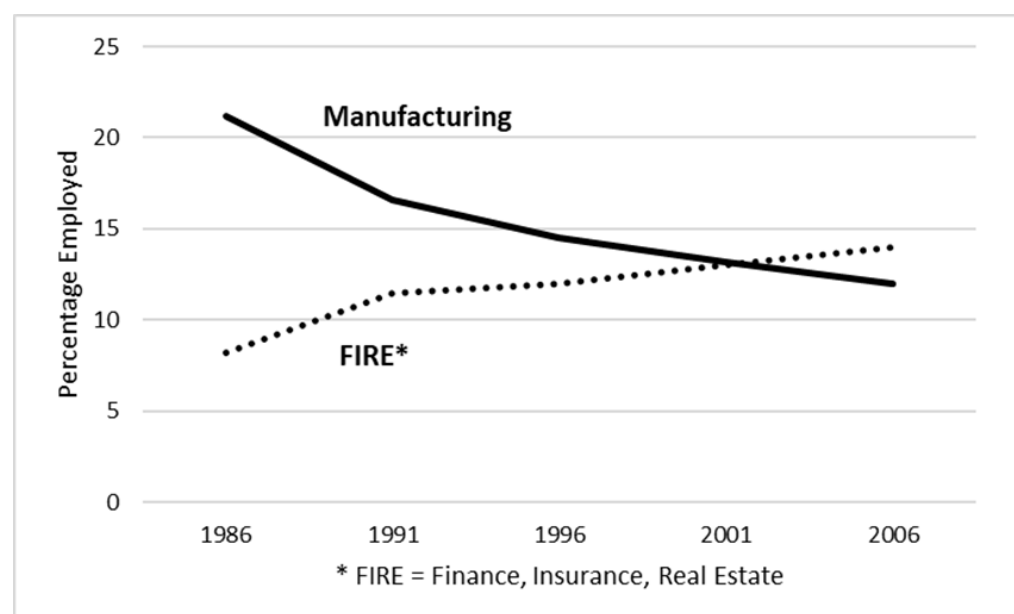
fluctuations and even reversals – from heavy net immigration inflows to net emigration, switching sometimes literally from one year to the next. In the 21st century, the more ‘economistic’ of observers, particularly those most frequently commenting in the media, often take a remarkably short-term perspective on these waves and ebbs, and also misinterpret migration trends as equalling overall population change. This is then extrapolated, too easily, from a short-term observation to forecasts of long-term future population and development driven by one dominant game-changer – last year’s net migration figures. In reality, in most years, even from 1970 to the present, migration overall has been a minor factor in the gross quantum shifts in the demographic system. By contrast, it has played a major role in perturbing it. In most years, migration has added much less than popularly believed to the annual stock of new people, yet these migrant arrivals and their children, accompanying them or born in New Zealand, have diversified and enriched Aotearoa’s cultural profile. Nevertheless, it has also produced very significant demographic ‘churning’

This is a major observation to which I must return at times later in this and the next chapters⁵. So, let me define what I mean by churning, by taking an example that compares migration flows at the workforce ages (20-59 years) for two adjacent years. In 2005, all these age-groups except 20-24 years received positive inflows – on average +2,529 persons per age-group. By contrast, in 2006, the very next year, all age-groups except 30-34 years, where there was a small gain, showed losses – on average of -1,536 people. While the total flows (both directions summed) reached 37,771, despite all this coming and going that perturbed the demographic system, the net stock of new residents derived from this source was only +4,755, yielding a very low effectiveness ratio of 13%⁶. Given the paramount significance of migration for certain skilled occupations and some seasonal work, how does an economy plan its labour force needs under such conditions? In fact, ultimately it must rely on natural increase. Despite the high profile given migration, in most quinquennia, natural increase has outstripped it as the major driver of population change, which has been a major demographic catalyst of GDP growth. Net inflows may stimulate GDP in the short-run, but, as this paragraph has shown, they also rock the margins of the age-structures at key ages.

Restructuring of the economy led to the diminution of manufacturing, the redesigning of the conditions of public sector employment, the downgrading of apprenticeship and other vocational training systems along with the deregulation of industrial job entry requirements. It is the decline in manufacturing and the upsurge in the Finance, Insurance and Real Estate sector that probably best signals the effects of the neo-liberal revolution. New Zealand no longer pursued policies of import substitution. Even manufacturing firms that were oriented towards existing New Zealand markets, producing goods that were designed in New Zealand in accord with local preferences, found restructuring to be a challenge to their viability. The sectoral

crossover between manufacturing and the FIRE sector is shown in Figure 19.1. These are New Zealand data, but the crossover almost mirrors the American experience, even down to the dates when it occurred – late 1990s (Phillips 2006: p 267, ‘The Reversing Origins of U.S. Corporate Profits 1950-2004’). Because Aotearoa had not been a country highly dependent on its manufacturing sector, a major difference lies in the percentage-points – the absolute changes were far higher in the United States. But, for this book the lesson is simple and direct: that New Zealand’s transformation was a norm among Anglo settler-societies.

Figure 19.1: The Industrial Sectoral Crossover from Manufacturing to the FIRE (Finance, Insurance and Real Estate) Sector, New Zealand, 1986-2006



The decrease in manufacturing – and other factors, of course – was associated with the onset of the New Zealand diaspora that eroded the ‘window of opportunity’, in particular by the emigration of successive ‘Baby Boom’ cohorts, at adult ages, especially to Australia. Net immigration might have recaptured the ‘dividend’, but it was on-again and off-again, so was not at all systematic. In the 2010s, migration was being seen as the stimulant to GDP growth in a way which replicated the demand-side effects of the Baby Boom’s long [economic] boom (Chapters 17-18).

I have arbitrarily taken 2020 as the end point of this book, although the last decade is not as detailed in coverage. Table 19.1 (above) provides the broad, longer term population parameters for New Zealand from the mid-1950s until the mid-2010s. The last few chapters will range over the almost five decades since 1970.

Mittel-European Dogma and Development: Gomulka⁷

Transformation over the five decades being reviewed here were not all restricted to population change – Aotearoa experienced major trends in economic and social development. Indeed, from the 1980s, economic policy initiatives replaced demographic transitions on front stage, although, as always, the story was not quite so simple. The oil-crisis year, 1973, was also when Britain's long anticipated joining of the European Common Market took place. So, in a decade characterised by rapid demographic shifts, New Zealand had to re-orient its entire trading network and also compete with subsidised agriculture in the Common Market countries. The Labour Government of the early 1970s also established a sovereign investment fund. But Labour were swept out of power in 1975 by a right-wing populist politician, Robert Muldoon, who immediately – and unconstitutionally, according to a major legal judgement – eliminated the investment fund. He then set out on a series of 'think big' projects, some of which still exist, that required very heavy offshore borrowing. As a counter to Common Market agricultural subsidies, he also introduced economic protectionist support for grassland farming.

Muldoon's reign is important for this book for two reasons. First, it was almost as if he was single-handedly trying to do a 'Canute', to block the incoming tides of change. He and his core followers, 'Rob's Mob' seemed to be the last powerful bastions against the disappearance of what was a known, 'comfortable' New Zealand, of recolonisation. This built up a level of resistance in the policy domain, not just on the part of his natural political foes, but within more conservative groups more aligned to his views. While he was the public face of conservatism in New Zealand's political economy, a neo-liberal opposition, also right-wing yet generally libertarian by inclination, was emerging.

Sport turned out to be symptomatic of the Muldoon approach, providing a perverse diversion from the peopling and development realities that were unfolding. It has been virtually absent from this book, but it must be given a brief mention here because in New Zealand, it is seen as a key element in forming national identity. Rugby, in particular, has passed from being the 'national game' almost to being a national religion. Although this was not recognised at the time, a country-wide crisis erupting in 1981 was one of the key markers for the final death of recolonisation. The triggering mechanism was the claim that politics had no role in sport but underlying this were more profound socio-cultural fears about the loss of what was a familiar country.

In 1981, a Springbok (South African) Rugby Tour of New Zealand was accompanied by tumultuous, even violent demonstrations against sporting contacts with the apartheid regime. Muldoon chose not to use statutory powers to cancel the tour, but instead manipulated it to his political advantage. At that phase of history, rugby, a game that had come out of British 'public' (private) schools then migrated to

their colonial clones, had democratised outside England, so was played by all 'classes'. It was also still very much the poster child of settler self-images, certainly in South Africa and New Zealand, and to a lesser degree Australia, but not Canada. To add to this, the Māori contribution to the game gave them 'honorary settler' standing, but, out of respect to white South African sensibilities, they had been banned from membership in teams going to the 'Union'. In South Africa sports segregation was virtually total, but, in any case, non-whites preferred soccer.

In both South Africa and New Zealand, the 1981 tour brought to a head all the complex politico-cultural furies that can seethe around societies in a subterranean way, or appear in more serious socio-political contexts, but normally not sport. It transcended the playing field and touched every part of national life then, and for at least a decade thereafter: the question about where you were on the day of the Wellington or Auckland test defined your entire political persona. The turmoil due to the protests was manipulated deftly by Muldoon to maintain political support in non-metropolitan New Zealand⁸. Metropolitan New Zealand was divided off from provincial, and there were gender differences: women were more likely to be among the protestors, men among those attending games. In fact, when their granular details are looked at, it seems that the rugby protests were early forerunners of the divides that subsequently, years and years later, became associated with Trump's election in the United States (2016) and Britain's Brexit Referendum (also 2016). A pre-scheduled Royal Tour was allowed to proceed later that year and only served to increase the divides.

Essentially, the two tours deeply split New Zealand. On one side of the divide were the forces of recolonial New Zealand, for whom rugby was one of the cements that bound together their communities threatened by the population geographic changes I will describe later. Suffice to say that, in small-town South Africa and Aotearoa, and curiously the Southwest of France and other French provincial areas, 'le rugby a quinze', was one of the glues that held the community together just as other symbols of community life seemed to be succumbing to the inexorable march of 'progress'. Locals could see upsetting changes around them, such as their school being closed down and the pupils bussed to a larger, consolidated school, or their local store, épicerie and charcuterie threatened by 'super-marches'. Opposing the tour in New Zealand was a somewhat bizarre alliance of protestors including Māori activists, anarchists, feminists, anti-racists, church groups and trade unionists. Māori were particularly divided between those who were strong supporters of the tour and those against. Nothing better exemplifies the entire national fission of the day, than the formal welcome, strictly following the rules of Māori protocol, accorded to the Springboks at a major Gisborne marae (meeting house).

Mittel-European Dogma and Unpeopling Development: Hayek

In the mid-1980s, Muldoon was defeated. The neo-liberal boffins moved into action, under the powerful sponsorship of Roger Douglas, the Minister of Finance in the incoming Labour government (elaborated in detail in Easton 2020). Muldoon had kept this economic ferment at bay by implementing ‘think big’ energy sector projects, a number of which are still in production today. For his part, Douglas laid out neo-liberal doctrines, derivatively named ‘Rogernomics’. In this he was aided by a well-designed agenda, formulated by the so-called ‘Rogernomes’⁹.

This was the period in which New Zealand subjected itself to ‘structural adjustments’ of a Thatcherite-Reaganite sort. Along with this went the reduction of the state’s role in the social and economic life of the country. Globalisation, financialisation, privatisation, sale of state assets, reshaping the functions and apparatus of the state sector, and a partial dismembering of the welfare state were key achievements of the neo-liberal reformers. All of these innovations valorised the FIRE-economy over the productive.

The Douglas revolution was directed at the macro-economy. The follow-up phase, falling hard on its heels, was orchestrated by a conservative National government’s Minister of Finance, Ruth Richardson, through initiatives popularly named ‘Ruthanasia’. Her targets were the entitlements of people under the welfare state – health, employment and the other social sectors. Her government also introduced labour market reforms that favoured employers over employees.

Because these reforms stripped down – or even stripped away – long-lasting, well-tested structures and regulatory frameworks, the new millennium found New Zealand unable to meet new, and rather forbidding, developmental challenges, and yet also beholden to an ideology which called for further radical change. To pare down the state’s role even more, neo-liberals later became committed to austere strategies aimed at public debt reduction, even though this caused further erosions of benefit regimes for the poor and others in need. Yet, they saw no paradox in investing public monies in large financial entities that were failing, and to make tax cuts for the well-off. These would somehow ‘trickle down’ to the less well-off. They also changed the regulatory and statutory frameworks in order to discourage the unravelling of the reforms they had introduced. Ironically, despite their avowed ‘anti-statism’, under neo-liberals, so Jane Kelsey shows, the administrative ‘state became more powerful though the restructuring process, not less’ (Kelsey 1995: esp Chapt 3, 46; 2015).

Not the least of the emerging problems were rapidly increasing social inequality. But to add to these, Woodward and Blakely document that the convergences in health indicators between Māori, Pasifika and Non-Māori in the post-war years gave way, in some periods, to divergences, that can be traced back to Rogernomics and Ruthanasia. Such a link has been suggested for the stalling of

changes in life-expectation in the United Kingdom (Rashbrooke *et al* 2013; Boston and Chapple 2014; Woodward and Blakely 2014: 214-15; Raleigh 2018).

Data Availability and Quality

The data system changed in this period – in modes of data collection, analytical approaches and scope – and thus needs a review. It would be reassuring if one could assert that all the data problems raised in earlier chapters have been eliminated in this modern age. Indeed, as one of the rapidly expanding fields of technology directly pertinent to this book is in data collection and computerised analysis, so the analyst's life should be that much easier, and there have been steps forward. As recently as 1958, for example, for social analyses, data on each of Auckland's census tracts had to be copied by hand from large sheets of accounting paper in which they were recorded manually, and the resultant indices computed with a slide-rule. Very soon thereafter came electric calculating machines and all the rest, as they say, is history. Or is it? Certainly, evidence-based decision-making, based on meta- and big-data sets, and data-mining, is *de rigueur* in business and policy circles, but this assumes that data collection and analysis is technically of a high quality. Moreover, much of the progress has come in the darker confines of the cyber-world where hacking and trolling abound, while the knitting together of data from diverse sources is widely used malevolently for nefarious political purposes where exact fits are less important than general probabilities that associations occur.

In principle, in the 21st century, data sources should be richer and more reliable. There are many more surveys and registration of events as they occur yielding a much wider range of information than was available in the past. Information technology optimists see analysis effected by linking extant administrative data into super-sized 'big-data' sets, as if they contain information sources that are not exactly reconcilable. A major issue is that, because of minor definitional differences, they are not perfectly compatible with one another, and are likely to be collected by different people in various agencies each with their own protocols and for different purposes¹⁰. The individual record-linkage of administrative information makes for a rich array of sources, but it raises concerns about civil rights and privacy and none of this automatically ensures that the quality of data is better. In reality, data collection may not always be satisfactory: online or phone surveys frequently, if not always, yield under-counts and unrepresentative samples, and no amount of imputing can really restore accuracy. And, there is the ever-present problem of issues being poorly investigated because of data definitions imposed at a post-collection phase, or by poorly designed questionnaires. Questionnaire design is only as good as the researchers designing the schedules, and this may not have kept pace with the technologies of coding, and tabulating data. In this regard, IT is well ahead of the qualitative skills needed for questionnaire design.

In Aotearoa the official data agency, Statistics New Zealand, is assiduous in attempting to produce accurate data. Until now, its end-users have been able to assume that its census-taking is generally competent or even superior to those in other similar countries; for example, counts have long been virtually complete. Nevertheless, its success rate is not perfect; its experiment with an online census in 2018 seems to have produced an historically unique and severe undercount. But, there are other issues. First, for many of its index construction exercises Statistics New Zealand has to assemble data from other agencies with the result that it is very much at their mercy: this is a major problem, for example, for data on parity (births order in demography; pregnancies in biomedical sciences) that come from the Registrar General. The result is that a prime variable for all reliable projections in low fertility countries – parity progression – is based on poor data for New Zealand (Pool *et al* 2007: 318; detailed further in, Pool and Sceats 1981: 46-49). This is not unique. For numerous population-based statistical indices essential to policy analysis in many sectors, numerators coming from an administrative agency (eg the health, educational and criminal justice systems) have definitions inconsistent with their denominators (normally from the census). Secondly, however, particularly in its question design and coding regimes, the agency introduces its own problems.

One issue that affects the empirical chapters in this book is the definition of ethnicity. Over many years it used ‘degrees of blood’ as a delineator, producing responses that were probably close to feelings about ethnic affiliation (which is what most social and health research focuses on), but far from the desired response of genetic make-up (assuming that respondents even knew this with a high degree of accuracy). I drew attention to this problem first many years ago (Pool 1963). But, to attempt to confront this, Statistics New Zealand has recently shifted to recording what they call ‘total responses’, where a respondent notes all their ethnic affiliations up to six. This provides no means of calibrating strength of ‘belonging’ and creates the bizarre situation that New Zealand’s ethnic groups, summed, exceed 100 per cent. Recent New Zealand censuses have asked both ethnic affiliation and descent. Almost all people who reported Māori affiliation in 2006 also noted that they were of Māori-descent, a bare majority of whom (52%) saw themselves ‘solely Māori’. Among people reporting Māori descent, 12% do not see themselves as ethnically Māori (Kukutai 2011: 47), and small numbers not of Māori descent see themselves as having Māori ethnic affiliation.

Like all collections of data for national accounts in the economics’ sphere there are also problems, especially where the census and surveys are dependent on self-response. One far from robust example is information on hours worked¹¹. Another is income, particularly for workers whose remuneration varies over time, or for the self-employed. Because they are based on interval levels of measurement, these are sometimes viewed as being ‘harder’ data than, for example, nominal

variables such as ethnicity or religious profession. The latter includes the categories ‘non-response’, ‘don’t know’, ‘no religion’ and ‘refuse to answer’, all of which are socially legitimate answers depending on the feelings of the respondent. The difference is that the economic data are then subject to quantitative analyses, which reify their power when, in fact, they are based on highly subjective responses. That said, there has been increasing rigour in the collection and analysis of income data, noted above. In his review of this issue, Max Rashbrooke makes detailed reference, in particular, to the regular monitoring of income and wealth inequalities in the repeated studies from 1982 to 2017 of Brian Perry through the Ministry of Social Development, whose time-series uses *Household Economic Survey* data. Before then, and overlapping with his work, is that of Barry Martin, who employed census data, back to 1951 and up to 1996. Thus, data of varying quality are available for all the recent decades (Rashbrooke 2015: Chapt 3, see esp. n.26; Perry 2018; Martin 1998).

Economists favour household surveys over censuses for the collection of income, employment and similar data. A survey is advantageous in that it can devote more attention to minimising response error than a national census but yields sub-national data subject to sampling error. Moreover, the household economic surveys give data on earnings, an advantage for classical economic analyses, whereas censuses are on all sources of income (including benefits). But, in a gig economy, with casualisation and with people moving in and out of the remunerated labour force and also the beneficiary population, the census approach may provide a more realistic picture. There is also the unresolved, vexed issue of unemployment data, which, in public discourse, are accorded mythical properties as if they were real reflections of the job market. Their major flaw is that they are dependent on a subjective response to a question of whether respondents had actively sought a job over some pre-defined period prior to the survey. Their validity, especially when they allegedly show that unemployment rates are low, is belied by other data that show that large numbers of people are neither ‘working’, for a variety of reasons, including the absence of employment opportunities within reasonable distance from where they live, nor are in education (Cochrane and Pool 2017: 50, Figure 2). All this is to say that, like all other analysts of secondary data, I have to accept that the information I use is only as good as the way it has been collected, or assembled and analysed by other researchers if I use their results. And just because a data source is more recent does not mean that it is inherently superior.

Over the next – and final – few chapters, I will be most interested in the broad picture so will look at Māori and at Non-Māori as the two populations of major concern. For recent decades, Non-Māori is now a more accurate categorisation of an ethnically diverse population than Pākehā which I have used until now. Data presentation becomes very complex if the category Non-Māori is further refined, so, where some breakdown justifies this, it will be done, but not as a general rule. This

problem is exacerbated because of the use of ‘Total Response’ for ethnicity data noted above. At the national level, different ethnic combinations (eg Pasifika-Chinese) can be selected out, but because of ‘sampling error’ issues this is very difficult sub-nationally. Thus, it virtually renders sub-national multivariate analysis impossible, except at a high level of aggregation, and that raises other issues.

From a Revolution to its Aftermath

The remaining substantive chapters review the revolutions to which New Zealand was exposed from 1970 to the 2010s. The next chapter (20) looks at the demographic (and social) revolutions, which had more or less established their main features by AD 2000. It is thus an analysis of how and why New Zealand reached the situation it was in, demographically and developmentally, by the onset of the new millennium.

Chapter 21 turns to development. It describes how New Zealand went through an ideological revolution that set down its development path. It also looks at the changes in work patterns, which were partly produced by the restructuring.

The final substantive chapter (22) leads off from Thomas Piketty’s (2014) concerns about capitalism in the 21st century. For Aotearoa, it reviews what has happened to income and social inequalities, and the ‘polytomisation’ of New Zealand spatially into regions that differ markedly in terms of their development trajectories.

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¹ Despite its certainty over policy prescription it does not seem to draw on a singular coherent theoretical framework.

² Hartwich, writing for a libertarian think tank; Monbiot, writing in the *Guardian*.

³ Thomson *et al* 2017 say: 'Structural adjustment loans are provided to countries in dire fiscal or macroeconomic straits. In return, recipient countries are required to reform various macroeconomic and fiscal policies according to a neoliberal rubric, typically cohering around economic stabilisation, trade and financial liberalisation, deregulation, and privatisation'.

⁴ The Official population projections were not helpful in this regard as the Government Statistician assumed that the fertility declines of the early Baby Bust would not continue and thus forecast a continuous, relatively high TFR.

⁵ I support immigration from whatever the source country, so my comments here, or elsewhere in the book should not be taken as critical of migration. My view is that migration strengthens New Zealand economically, socially and culturally. I have, however, publicly criticised the way the process has been managed by successive governments. Migrants have been the major victims.

⁶ To use an index employed by migration experts, Pool 2015: Table 5: where, Effectiveness = Immigration/Emigration * 100.

⁷ Władysław Gomułka was leader of Poland on more than one occasion, notably 1956-70. David Lange, Prime Minister late 1980s was said to have quipped that Muldoon's New Zealand was run like a Polish shipyard.

⁸ Muldoon lost the popular vote in the 1981 election, but, under the 'first-past-the post' electoral system then operating, gained a majority of parliamentary seats.

⁹ Douglas later became a co-founder of a libertarian party, ACT. The actual reforms were implemented by instrumental 'Rogergnomes', who were well-organised (Easton 2020).

¹⁰ A five-year old's ethnicity will be assigned in the census by a parent; a schoolteacher may record something different in the school statistics without consulting the parents.

¹¹ Ostensibly a variable useful for interval-level analysis (where differences are numerical), but one that for which many workers struggle to provide precise answers. The results are then coded into fulltime and part-time employment as if these categories were based on exact quantities.

Chapter Twenty – The ‘Peopling’ Revolution, 1970–2020

Demographic Transitions

This chapter details what have been major neglected dimensions of peopling and development over recent years. Furthermore, some of the factors presented here are also subject in public dialogue to misinterpretations, especially ageing and migration. The chapter first describes what happened demographically to the two population dynamics that were instrumental in producing national population change in the period: natural increase (births minus deaths); and net migration (arrivals minus departures). Of these two, it is net migration that has taken the spotlight in the public discourse. The later sections look at population structures, in particular sub-national population trends and population geography, plus the grossly ignored factor of age-structural transitions. Age-composition is far more than simply the outcome of population dynamics, but also has a powerful life of its own, much more than is generally recognised. Thus, this chapter will look at the age-structural changes that will be instrumental in driving New Zealand’s peopling, and much of its development, both social sectors and markets, into the foreseeable future. The public discourse on this has concentrated on its end-product, a ‘wave of ageing, which will generate, it is alleged, severe fiscal and familial burdens.

When the media look back on the 1970s – 1980s, almost hidden from sight are the demographic revolutions covered in this chapter. They had to yield pride of place, probably rightly so at the time, to immediate policy issues such as the oil crisis of the early 1970s and, for New Zealand, Britain joining the ‘Common Market’. The ‘Think Big’ projects discussed last chapter were the high-profile issues of the later 1970s, and, in New Zealand’s case the 1981 ‘Springbok Tour’ which at the time had far greater traction than population changes. I argue, however, that the demographic trends coterminous with these other events were to have, and will continue to have, major consequences for all of development – social and economic. Then, this tendency was further exacerbated when, in the late 1980s and 1990s, interest shifted to economic restructuring. It gained an extremely high profile at a popular level, in the policy and business communities and in the media and thus absorbed most of the commentariat’s ‘oxygen’.

This chapter argues that far more fundamental events and actions, game-changing population realignments that were to have very long-term policy consequences, were the real revolutions. From time to time, ephemeral aspects of these demographic transitions and their consequences hit the news – the shameful night-time raids on ‘overstaying’ Pasifika migrants in the 1970s, heavy inflows of

British immigrants, outflows of New Zealanders and abortion among them. A more recent addition among the media is delayed childbearing.

This chapter analyses nine population transitions that have unfolded since *circa* 1970 (summarised at Appendix E), all paralleling what was occurring elsewhere across the Anglo-world. But the features of each transition still persisting in the 2010s had been initiated in the 1970s – and probably will persist. After a rapid decline in the decade 1970–1980, birth rates and numbers remained almost unchanged¹. By contrast, migration rates and numbers fluctuated wildly and churned, in every decade, producing transformations, good and not so good, in the population and society: increasing diversification but disequilibrium in population structures. Furthermore, there was a counterpoint between centripetal and centrifugal forces in the country's emerging internal demographic map. On the one hand, it produced both residential intensification and in-fills in the metropoli, yet, on the other hand, new urban *loci* were spilling out into farming heartlands that were simultaneously losing farm population numbers.

Migration and ageing generated public interest, yet, a quiet revolution, but more significant demographic restructuring, was taking place – a sudden major 'game-changer' for every aspect of family life and the entire demographic system, then and into the foreseeable future, for Māori and Pākehā, and even for Pasifika. These were fertility declines that were to be reinforced by the low fertility of Asian immigrants, many of whom came from countries with reproductive levels well below replacement². In popular perceptions structural ageing (increasing percents at older ages) is due to advances in medicine, whereas it is mainly a function of the Baby Bust's fewer babies and thus lower proportions at young ages, rather than of older people living longer. By contrast, numerical ageing (increasing numbers at old age), the oft-ignored dimension of ageing, comes from historical differences in the sizes of cohorts at the time they were born, augmented by improving life expectancy across the society as they aged. By late twentieth century most people born alive would survive into retirement ages and beyond (Pool 1997, 2003, 2010).

Correlates of Demographic Transitions: Social Change, Shifts in Values, 1970–2010s

From the 1960s, the new freedom from unwanted pregnancy that 'the Pill' brought was counterbalanced by constraints on conception coming from interrelated biosocial factors. These were declining fecundability at older reproductive ages (defined and discussed Chapter 14), often requiring resort to new reproductive technologies that focused on assisting conception. Cross-cutting this were increasingly complex work-life factors: job demands, work-travel, partnership, co-residence and the family lives of most Baby Bust and twenty-first century couples, where both people have to be employed to maintain reasonable household living standards.

Reproductive and family changes were also associated with shifts in sex-age-specific labour force participation patterns, particularly higher rates for women, and the increased interpenetration of family and work lives. These shift-shares were critical drivers of economic change, but not sufficient in themselves to require restructuring. Meanwhile, this Baby Bust was unfolding in the 1970s out in suburbs that still resembled their Baby Boom predecessors, but with fewer prams being pushed around.

Well into the 1980s, Robert Muldoon, the National (conservative) Prime Minister (1975-84), still dominated Aotearoa's political landscape. During his incumbency, he intervened in all development initiatives. At the same time, in the 1970s, everything that was social anathema for conservatives, particularly in the sphere of family living arrangements, seemed to be unravelling. Imported issues also dominated much of popular discourse in the 1970s and 1980, and beyond. Janet Sceats (1988: Chapt 4) records how, in the case of abortion, for example, the international debates were quickly diffused to New Zealand, and how local pressure groups followed the lead of overseas groups, sometimes more extremely so. This was counter intuitive as abortion rates at the time were low in New Zealand. Yet, controversies in the United Kingdom and the United States were adopted in New Zealand, but as was often true, given a local twist in the legislation that responded to the 'panic'. Paradoxically, however, once the peak period of controversy had erupted in New Zealand, and once robust data were available to assess trends, abortion became a much more muted issue thereby differing it from the United States, where abortion is the bellwether flashpoint for all political debate.

A further issue came from momenta due to age-structural changes, in turn resulting from a series of inexorable cohort flows. As noted already, the different policy initiatives – the elimination of the superannuation fund by Muldoon, and Douglas's and Richardson's interventions – had major negative impacts on the capacities of New Zealand to respond to emerging but longer-term demographic crises. These disordered flows were a result of the mega-fluctuations in birth numbers starting with the Baby Boom, then becoming most marked with the Baby Bust: in sum, annual birth numbers declined radically and as a consequence the proportion of the population at childhood ages decreased rapidly – driving structural ageing (see below).

Cohort flows are remarkable phenomena – once a cohort is born, attrition can only come from death or emigration among its members: thus we can forecast that, unless there is a mega-catastrophe or a hyper-diaspora, most 0-4 year olds in New Zealand today will be residing in the country when still in their 50s and 60s, and will have survived into the older working ages. This seems unbelievably deterministic, yet is founded on fact: for example, at the 1996 census, once we allow for survivorship, the population aged 60-64 years was 98 percent of its size as a birth cohort (1931–

36)³. These momenta generated major demographic trends that, had they been exploited, could have favoured New Zealand's long-term development. But, instead, these opportunities were squandered. The age-structural realignments spanning from 1976 to 2016, coming from fertility trends in the Baby Boom, and generating a marked clustering at working ages, could have provided a perfect 'window of opportunity' for demographic dividends (see below). Later analyses will show that they were squandered for different reasons. The education, training and employment, and thus the integration of the last large Baby Boom birth cohorts so as to exploit this 'window of opportunity', especially in the 1980s and early 1990s, were instead given lower priority than implementing other policy strategies.

Paralleling all this was a 'spatio-demographic' restructuring of New Zealand. It has been investigated in-depth by a research project, *Tai Timu Tangata: Taihoa e?* (*The Ebbing of the Human Tide*) led by Natalie Jackson, on a Marsden Research Grant. Among the programme's empirical findings are a theme I have raised in earlier chapters – how, historically, rural New Zealand's dynamics were sufficient to maintain its own growth and labour force needs, while also being a reservoir for urban population growth coming from in-migration from rural regions into metropoli and other large urban aggregations. Given that the in-migrants tended to be young adults, however, this simultaneously reduced the pool of potential rural parents while increasing the childbearing age-group in urban New Zealand. A counterbalance had been achieved in the past by rural fertility being markedly higher than for major urban areas. This was seen as recently as the late Baby Boom; in 1966, the Child-woman ratio for Counties was 734 per 1,000 women aged 15-44, yet for major urban areas was 499, a difference of 235. By 2001, however, the rural-urban difference was much less ('Rest of New Zealand' 379 - Major Urban 291, difference = 88) (Table 15.3). The labour force ramifications of this are discussed later.

The analysis required detailed modelling by *Tai Timu Tangata: Taihoa e?* of the links between sub-national dynamics in the demographic and mobility transitions (Chapt 4)⁴. At a more abstract level outside the scope of my book, *Tai Timu Tangata: Taihoa e?* asked a portentous question (Jackson 2017: 4):

'Faced with empirical evidence of widespread subnational depopulation [due to out-migration plus a marked decrease in rural-urban fertility differentials] in New Zealand across the period 1996 to 2006,... [what] is the extent to which New Zealand might be following its international counterparts – and therefore if there might be a tipping point which would provide early warning of the onset of national level depopulation'.

Population Transitions: Migration and its Impacts

Chronologically, the first demographic revolution was a sudden migration transition starting in 1970–71, comprising a massive inflow until mid-decade, and then a huge outflow. Starting only a year or so before the Baby Bust commenced, the first demographic trend to make a distinct wave was the heavy net immigration in the early 1970s. After modest migratory losses in the late 1960s, the largest wave of net immigration since 1871–75, hit in 1971–75⁵ – exactly one century later, right at the moment that the second Baby Boom peak was reached and about to decline rapidly. In a sense, the migration patterns in the early 1970s represented the emerging era and what was to follow; by contrast, the fertility trends briefly – but just for year or so – also marked the last gasp of the dying recolonial era and its final major outburst, the Baby Boom.

The sheer volumes of international migration, both inflows and outflows, starting *circa* 1970, shown in Table 20.1, were just two expressions of the migratory changes that perturbed the entire demographic system. These waves and ebbs of the 1970s presaged what was to become almost the norm from 1970 until the end of the story here. In every decade since, there have been waves, even spikes of immigration, then ebbs or even net emigration. This has been a marked inter-quinquennial, but intra-decennial pattern. Such fluctuations are common across the Western Developed Countries (WDCs), as migration has always been an oscillatory phenomenon, but in New Zealand the post-1970 trends have seen this maximised.

Moreover, the 1970s saw a related major transformation occur: a total crossover in the drivers of shorter-term perturbations in the demographic system. In the post-war period, fertility – fluctuations in birth cohort sizes and their momentum effects – had driven disordered flows, but with the Baby Bust total fertility rates have fluctuated only slightly. Instead, perturbations now came from migratory waves. They were shorter-term and, relatively speaking, swung more up and down from one year to the next, and thus perturbed the system more than the fertility fluctuations of the Baby Boom.

Table 20.1: Net Migration: Numbers and as a Percentage of Total Population Growth, 1971–75 and 1976–80

Quinquennium	Natural Increase	Net Migration	% Migration
1971-75	179,580	116,917	39
1976-80	134,961	-98,800	...

Source: Papps 1985: Table 15.

Notes: ... Percentage cannot be computed because natural increase exceeds net migration.

It is tempting to see migratory fluctuations as responses to ‘business cycles’, in New Zealand, or Australia or elsewhere overseas. Although the term ‘business cycle’ is specifically defined, and GDP is often used as its gauge, it is difficult to determine whether the economy drives spikes in net immigration/emigration or is simply correlated with the flows. We also easily forget Ernest Ravenstein’s *Laws of Migration* (1885), which assert, *inter alia*, that ‘each stream of migration produces a counter-stream...’ (Taylor 2003). That said, his law does not fit perfectly with Aotearoa’s migratory patterns: its recent inflows have often come from one or several major national origin group(s) and counter outflows composed of people from a different set of national origins. It is important not to overlook the large returning New Zealander flows, but beyond them Asian- and European-origin groups dominate arrivals. By contrast, New Zealand-born or residents are major components of the departures for overseas. This is all part of the ‘churning’, a new factor in New Zealand’s peopling history⁶, to which I refer below. Along with this, the late 1970s also saw the start of an unprecedented diaspora of New Zealanders, although modest net emigration losses had occurred briefly in the past⁷. Māori were notable in this movement, in particular to Australia (Hamer 2007/2008). This stream is looked at here quantitatively as a demographic phenomenon, but the other factor must be its impacts on norms and values. Returning New Zealanders bring with them ideas assimilated while overseas that undoubtedly have an effect on life-ways.

The huge surge of net immigration at the start of the seventies was followed immediately by net emigration in the next quinquennium (Table 20.1). This Inflow/Outflow crossover in the 1970s then set in train a pattern that continued at least until the 2010s. Yet, paradoxically over the long term, this high-profile factor migration has barely affected the net stock of new population, by comparison with natural increase. There were, for example, historically high inflows in the five years 2001-06, as is seen in Table 20.2. Over the quinquennium 2006-11, however, net immigration made up only 21 percent of national population growth, while in 2011-16, when some commentators were volubly excited about inflows, migration increased but still only contributed 53 percent of the total increase.

Table 20.2: Net Migration, Natural Increase, Numbers of People, 2002-2006 and 2006-2011

	Net Migration	Natural Increase	% Net Migration	Census Population
2001-06	160,700	143,300	53	(2001) 3,820,000
2006-11	47,700	175,000	21	(2006) 2,143,000
Decade Total	208,400	318,300	40	* (2013)
2011-16	168,400	146,400	53	4,352,000

*Note: * The 2011 census was postponed until 2013 because of the Christchurch earthquake; Census-taking had long been quartered there in a building that was badly affected.*

In the period 2010-18, migration became a major point of contention in the country's political discourse, and in the media. But, viewed over the longer term, the arithmetic is simple: since 1876, quinquennial net migration has outrun natural increase only twice ever – in 2001–06 and 2011–16⁸. In the past, after a surge over a few years, it usually dropped away dramatically during the next few. Moreover, from 1976–2000, net migration was actually negative; and from 1976 to 2010, despite the new millennium's huge inflows shown in Table 20.2, it contributed only one percent of the country's new population growth. Indirectly, of course, migration can play an important demographic role as migrants have the potential to become parents in their new country of residence.

Population Transitions: Diversification

‘[Men] of every creed and race, gather here before thy face’,

Lyrics from New Zealand National Anthem

composed by Thomas Bracken, in 1870s, adopted in 1970s.

When Bracken composed his poem that eventually became New Zealand's National Anthem, Aotearoa was solidly bi-cultural. He could not have envisaged that a decade or so after it had been adopted as the anthem of choice, New Zealand would have become a highly diversified, multi-cultural society (Figures 5.1 and 5.2; Table 6.1), a result of all the different flows and ebbs from the 1980s on. By the 1980s, the Māori population was 15 percent of the total, but now there were also statistically notable Asian, Pasifika and other migrant waves. In 1981, New Zealand had still been bi-cultural; 87 percent of its residents were either Māori or Pākehā. For 2013, it is difficult to estimate ethnicity because of ‘total response’ coding routines by Statistics New Zealand, but by then significantly more than 20 percent of residents were neither

Māori nor Pākehā (Pool 2015)⁹. Moreover, overall, perhaps 30+ percent of New Zealanders were non-European, higher if one looks at descent as against ethnic affiliation. Without minimising the occurrence of social tensions, to date New Zealand, like Canada, seems to have avoided the growth of large ‘white supremacist’ organisations, although there are small vocal protest groups¹⁰.

A sudden change towards a diversification in migratory inflows is not unique to New Zealand – other Anglo settler-societies are major destinations for Africans and Latin Americans as well as Asians. They are also now becoming very diverse societies that are culturally rich. This is not to judge the emerging population structures, nor the new system of values, but simply to say that they are different¹¹. In addition, both migrant and resident minorities may help rejuvenate the structure of the population as a whole, as the American demographer William Frey states in an op-ed: ‘The likely source of future gains among the nation’s population of children, teenagers and young working adults is minorities — Hispanics, Asians, blacks and others — most of whom are born in the United States’. Similarly, the 2013 Aotearoa census shows younger age-structures for some minorities, especially Māori and Pasifika, a factor with implications for national development. Natalie Jackson (2016) looks at their age-composition as a ‘potential collateral demographic dividend’ for New Zealand, an issue to which I will return.

In general, however, when migration is viewed granularly, in recent decades in New Zealand the forces of migration, in and out, have been wildly disordered by age because of churning, which also occurs for national origin, occupation, the reason for seeking a visa, etc, etc – the list seems almost endless. This renders systematic analysis, and planning in key areas such as the workforce, and across the social sectors, very difficult. In peak inflow years to New Zealand, 50,000+ net immigrants per year can arrive. They will have a high media profile, and probably also have an impact on GDP. But, it is really the 4,749,000 already-resident New Zealanders whose consumption of goods and services, and the 60,000 new babies born in the country requiring health, housing and other services, who together drive the core economy; ironically, even the 25,000 newly-deceased, dying in New Zealand over the past 12 months, will have helped GDP growth through their probate disbursements, funeral costs, and the services and employment this generates.

Migrants do have special needs that, most appropriately, must be given priority in a social democracy seeking to integrate these people into the national society, to welcome them and absorb them into daily life – yet ensuring them the dignity and security of maintaining their own culture and language. Meeting these needs may have disproportionate cost effects that impinge on the national accounts, but balancing this is the fact that many migrants provide essential services and perform tasks, skilled and less skilled, that would not be successfully carried out

without them. In the longer run, the former migrants contribute more to the public good than their relative weight in the population might suggest (Akgun et al. 2011).

But, to see migrants as the core of peopling and development is a misunderstanding of demography and its flow-on into production and consumption, except at the margins. Compare this with the impacts of Ruth Richardson's policies, a radical retrenchment of the welfare state, that was first enunciated doctrinally just on Christmas 1990, and formalised in the 'Mother of all Budgets' in 1991. It had a far more corrosive effect on the factors of consumption and exchange – which make the basic economy run – and thus on development. This was because its twin pillars were cutting welfare benefits drastically and changing the entire tenor of workplace relations. It resulted in immediate, negative effect on a significant proportion of all ordinary resident New Zealanders – anyone on a benefit and their dependents. It also had downstream effects by dampening down economic growth – beneficiaries had to cut down on basic groceries, could not pay their rent and utilities, and put off buying new appliances. It significantly impacted on Māori, who were proportionately more than twice as likely as Pākehā to be aged 15-24 years, and thus at much greater risk of the very high levels of youth unemployment at the time (Jackson 1994).

In New Zealand's case there is a further confounding factor. In some years the inflows of foreign-born were exceeded by outflows of New Zealand residents, with two consequences. First, there was a build-up of the large Aotearoa diaspora noted above, especially in Australia and England: estimates suggest that over 20 percent of all New Zealanders were living overseas in some years¹². Secondly, the replacement of New Zealand-born and residents with new overseas-born arrivals has reinforced the impression of churning in the migration system, noted already, and added to the turbulence of this recent period (Pool 2015). This meant that the Anglo-Pākehā norms that had been all-pervasive in New Zealand society at least since the 1880s, and that had been enforced on Māori, now had to confront and integrate new values-systems.

Diversification has other flow-on effects – it can lead to spatial clustering of people from the same ethnic groups in areas where predecessors may have settled. This could be a zone in which many, and sometimes most, people have shared cultural expectations and behaviours. Clustering may come for legitimate reasons such as personal choice, or through historical factors, or can be due to negative factors such as ghettoisation resulting typically from housing market dynamics. In every Anglo settler-society versions of clustering have occurred, as was noted earlier.

Douglas Grbic *et al* (2010) have made a spatial time-series analysis of Asian, Māori and Pasifika segregation indices, as they are termed in the literature¹³, in relation to Europeans (Pākehā), nationally and for the ten largest territorial authorities. The analysis is strengthened by international cross-comparisons grounded in shared methodologies. Using conventional indices in the field, their data, reproduced in my Table 20.3, allow them to conclude that 'levels of segregation are relatively low for

all three groups compared to the levels of segregation in the United States [black-white, Hispanic-white and Asian-white]...[but are] roughly comparable to those in Canada for black-white and Asian-white segregation'. Nationally, between 1991 and 2006, indices declined for Māori and Pasifika and rose for Asians¹⁴. Most large local authorities had rates that were around the national level, but for Manukau City (south Auckland), Māori and Pasifika indices (47 and 62 percent respectively in 2006) were much higher than country-wide, although also decreasing 1991–2006 (see Chapter 5). In the case of Pasifika, south Auckland constitutes a unique phenomenon: its segregation rate is far above their national figure, but, because such a high percentage of all Pasifika in New Zealand (and even Oceania-wide) live there, their indices in all other major local authorities, except for central Auckland fall far below national levels.

In a multiple-regression analysis¹⁵, Grbic *et al* also show that the higher the level in a residential area employed in manufacturing and construction, the higher the rate of segregation. This accords with the history of suburban zones like south Auckland¹⁶. By contrast, higher rates of segregation are associated with lower socio-economic status, again a function of the concentration of lower income Pasifika and Māori in state rental estates in the 1970s and 1980s. Generally, Grbic *et al* 's results fit the conclusions of assimilation theory in North America, but with some differences: being born overseas as against born in New Zealand had little effect on the Pasifika indices. This again points to the unique character of South Auckland for New Zealand's population geography and Pasifika society, in ways that are both good (maintenance of Polynesian culture) and bad (a degree of 'ghettoisation'). Increasingly, Pasifika are playing a more prominent role in national life – beyond sport where they have always been disproportionately represented – and today are represented in Parliament and in the Cabinet.

Table 20.3: Ethnic Residential Segregation Indices (%) for New Zealand, United States and Canada

New Zealand (2006)		United States (2000)		Canada (1996)	
Māori-Pākehā	27	Black-White	65	Black-White	37
Asian-Pākehā	30	Hispanic-White	52	Asian-White	32
Pasifika-Pākehā	47	Asian-White	42		

Source: Grbic et al 2010: 32-33

One must add the important caveat that Pasifika are not of one homogeneous origin but comprise a range of ethnicities from all the island groups of Oceania.

Some, such as Samoans (both territories) and Tongans (and the closely related French-speaking Wallisians and Futunans), are large blocs within the Pasifika population. Anecdotally, and in press stories that cite ethnicity(ies), it seems that exogamy between different Pasifika is commonplace, as well as with Māori and Palagi (Pākehā). The results for ‘Asians’ were also confounded in Grbic *et al*’s analysis to a degree by the heterogeneity of this group, and the very different periods of immigration. For example, mainland Chinese came to New Zealand in different waves from Malaysia and Singapore, Hong Kong, Taiwan, Korea and from other sources. Filipinos and Indian waves have been later. Between 2006 and 2013, the largest Asian group, Chinese grew by 17 percent, Indian by 47 percent. To add to this, different Asian groups do not necessarily reside in proximity – as noted in Chapter 3. Chinese cluster in Auckland’s eastern suburbs and Indo-New Zealanders to the south of the isthmus that constitutes central Auckland. Finally, ethnic exogamy seems to be less for Asians than among Pasifika (Grbic *et al* 2010: 32-34, Tables 2 and 3).

It is important for both the advocates and the opponents of migration to understand that it is very difficult to regulate trends in a social democracy. Entry and exit to an island country is controllable and our records of gross arrivals and departures are probably among the most exact anywhere. But, management is a different issue. For a start, entries and exits of adult, non-criminal New Zealand legal residents is automatically allowed – and should be as a civil right. Problems arise with other migrants, and with category-jumping even among those leaving and/or entering by right or as legally documented arrivals. This occurs, in the main, not by design but through changes in intentions, such as New Zealanders intending to, and declaring, that they are leaving ‘permanently or long-term’ but returning after a short term overseas. For the foreign-born there are many who, arriving on one visa category, change, legitimately, to another.

There is also the eternal optimistic belief that migration is a replacement mechanism and will stave off ageing; in reality the churning precludes systematic replacement, and migrants, especially some age-dependent categories (business; family reunion) actually accelerate ageing. In any case, as the United Nations (2000) has shown, the numbers arriving to replace the labour force or whatever group would have to be very large to be effective. In New Zealand’s case, the already occurring huge annual fluctuations and churning by category make this goal unattainable. That migration enriches and diversifies the society are strong positives but again are threatened by the churning effects. Churning has yet another undesirable side-effect of threatening the viability of migrant ethnic groups: to remain viable they really need consistent refreshing by inflows, and balanced age and sex structures. If these conditions are not met there is an understandable tendency to move on to seek larger communities, such as in Australia, where they will have more compatriots. Long ago,

the late Andrew Trlin (1979), writing about Croatians, had warned about this exact effect.

In the second decade of the new millennium, migration became a controversial issue, negating the benefit it should have been, and had been for much of our history. This burden became so obvious that, by the late 2010s, it was one of the more prominent issues in public discourse. Typically, commentators focused on volumes of inflows and outflows, simplistically relying on net migration, a figure that hides a multitude of complex counter trends, whereas there were less manifest aspects that were unbalancing New Zealand's demographic system, with marked fluctuations and churning being key factors.

In the political-economic discourse, migration is seen as a driver of the economy, but, in reality, its effects are more like the Baby Boom. In the short-run it may produce a 'sugar rush', for example, in property prices or the flow-on effects of overseas students paying fees and living costs. But this is not true sustainable growth, and like the Baby Boom may be a dampener ultimately. In the Baby Boom this was because, as I noted earlier, it diverted expenditure for the productive sectors and innovation to the social sectors. In the case of migration, the unintended effect may be a failure to deepen human capital. Thus, in the new millennium, as long as Australia's economic prospects looked good, New Zealanders joined a diaspora, and the country tried to replace that loss by immigration from elsewhere.

Population Transitions: A Reproductive Revolution

By 1973, a Baby Bust – a rapid decline in fertility rates (Figure 14.1) – was starting, hard on the heels of the Baby Boom's second peak. Nevertheless, reproduction rates were still countering the high rate of immigration in driving growth. The following paragraphs, on the shift from Baby Boom to Baby Bust and beyond, draw heavily on published work written with various teams from the University of Waikato's Population Study Centre (Pool *et al* 2007; Dharmalingam *et al* 2004; Johnstone *et al* 2001; Pool *et al* 1999; Marsault *et al* 1997)¹⁷. Together these studies, and others, show that a revolution in family formation in the 1970s and into the 1980s was deep-seated and had flow-on effects that patterned related social behaviours, but also that were co-variates of a wide range of social change.

I want to make a very important observation about the roles played by the different related elements of the reproductive revolution during the neo-turbulent period. The next few paragraphs of this chapter describe *how* the fertility revolution occurred: its dynamics. These became the most significant determinants of Aotearoa's future population size, and age-structures, and thus every aspect of its social development and of the real economy, both for factors of supply and demand, and including its fiscal and domestic banking sectors (see below 'Population Transitions: Age-Structural Effects'). The later sub-sections of this part of the chapter on the

reproductive revolution are, by contrast, focused on *the mechanisms that drove its fertility dynamics*: nuptiality and fertility regulation.

From 1973 on, there has followed a long period (almost 50 years) – and let me stress this point, far longer than the Baby Boom (30 years) – when fertility has remained at replacement levels, or a bit below, and variance between calendar years has been very slight. To add to this, from 1973 to 1978, Māori went through the most rapid Baby Bust for a national population group that I can find anywhere, including those of China and Thailand (Pool 1991: 166-75). The Māori Bust affected the proportion of the total population that was Māori, and within Māori society it had major effects on age-structures.

The Pākehā Baby Bust was rather different. In one sense it was nothing more than a precipitate return to pre-war levels of fertility, from which the Baby Boom had deviated. This means that, except for the brief divergence over 30 years in the Baby Boom, the Pākehā population has been characterised by low fertility for a long time (refer Figure 14.1), from 1900 to the 2010s, for 90 of the last 120 years. By 1901, the TFR was less than 3.5 births per woman. By 1920, the TFR was below 3.0, and very low fertility has been the norm for more than 70 of the last 100 years (1920-1943 + 1973-2018). Moreover, as noted earlier, the period of consistently low fertility since the early mid-1970s, say 1976-2018, exceeds the duration of the Baby Boom.

The Baby Bust involved a decline in fertility and a total change in patterns of family formation, and also ushered in a period in which rates of reproduction were not subject to fluctuations of the sort seen in the Baby Boom. Since the 1970s even shorter-term oscillations in growth have been due, instead, to shifts in the direction – in or out – of net migration flows and their volumes. These can change from one year to the next, whereas the Baby Boom changes in fertility rates (e.g. during the 1960s) were less sudden. From 1973, the total fertility rate has dropped well below its Baby Boom levels, and this is also true for the numbers of births and patterns of childbearing. In 1971, a population of 2.8 million had produced 65,000 births; in 2015, a population that was 60 percent larger, 4.6 million people, produced only 61,000¹⁸.

New Zealand is at the upper end for levels seen in the low fertility Anglo-countries, a position that sees it vying with the United States (Pool and Sceats 2003). Some commentators have perceived higher fertility in the Anglo-countries as due to the presence of minorities with higher levels of reproduction (forgetting that New Zealand's sizeable Asian minority has low fertility). A careful cross-country analysis shows that this hypothesis cannot be sustained, certainly not for New Zealand (Chandola *et al* 2002, see also Caldwell and Schindlmayr 2003), although it has spawned significant academic debate.

In my view the intellectual chasm occurred because disciplinary explanations of fertility trends have increasingly centered on the micro-level, almost the couple,

whereas earlier explanations were more at the macro-level, for example, Kingsley Davis' (1937) argument that higher fertility is incompatible with modern industrial life. At the same time, macro-factors must also be operating in more abstract ways: how else does one explain the sudden emergence, almost simultaneously, of the Baby Boom across the WDCs, and its equally rapid, coterminous disappearance. The somewhat higher rates in the Anglo settler-societies may also need a macro-explanation. It may be a function of suburbanisation and the tendency of couples to live in separate owner-occupied dwellings, a norm for housing over much of the twentieth century. This form of living is the closest one can get in an urban world to a rural lifestyle and, perhaps, it counterbalanced the extremes of modern life that are more a norm outside New Zealand, such as apartment dwelling in multi-storey buildings (Pool *et al* 2007).

One other aspect of the Baby Bust needs comment: the 1970s produced a marked reproductive hiatus and an associated contradiction. Couples who were switching to the new regime of late childbearing were delaying and not having children, while those actually becoming parents in the mid-1970s were more likely to be following the now out-dated Baby Boom regime of conception at young ages. This is important, because one of New Zealand's two globally ground-breaking longitudinal surveys of a birth cohort – the Christchurch Study – was established in 1977 and its respondents (children and their parents, then adults as the respondents aged) thus reflect the changeover period: they were likely to be the children of younger parents. Their parents' peers, who were to become older first starters, would have had their babies several years later. The other longitudinal study of worldwide importance, also in the South Island, in Dunedin, was at the end of the Baby Boom, 1972–73, so its parents truly reflected the early childbearing of that period – or at least its tail end. Nevertheless, extrapolating from these studies to policy pronouncements becomes confounded by these effects as young parenting, often associated with a precipitated marriage at an early age, is also correlated with later higher levels of marital breakdown.

The importance of this issue cannot be overstressed, as it has affected most other aspects of social dynamics, gender equality and also workplace-family relationships. A paper by Prue Hyman (2014) is built around this issue and the impacts it has on factors such as casualisation of employment and part-time work; one must add the problems of career ladders to be scaled and the decisions women and couples must make about career or pregnancy, and whether or not to have a second child. Even those nation-states with liberal pregnancy and childcare support regimes, with 'parenting' leave rather than just 'maternity' leave, and with comprehensive social back-up (e.g. support for pre-school care), have not satisfactorily confronted the fact that women bear children and lactate. This bestows a deterministic advantage

on men. New Zealand is far less advanced legislatively than some other countries (especially Nordic).

Fertility differentials took a different turn. Taking Child-Woman Ratios (Children aged 0-4/ Women aged 15-44) as a measure of replacement, today, the differentials in replacement are now being seen within metropolitan areas. Inside the Auckland metropolis, South Auckland with a CWR of 306 approaches the national figure; Porirua (Wellington metropolis) at 415 greatly exceeds it; by contrast Central Wellington (238) and Central Auckland (267) had very low levels of replacement, as did the North Shore (Auckland) at 275. In the latter case this was, in part, because of its concentrations of low fertility Asian populations.

Finally, in the wider literature, it is argued that, traditionally, higher rural fertility had generated migration exoduses, yet ensured sufficient work and reproductive capacity for country life-ways to be maintained. But, the more recent studies show that when rural fertility rates go through a transition, bringing them closer to urban, declines in natural increase occur and ‘natural decrease’ starts to exceed out-migration. This has occurred in France, is seen elsewhere in Europe and the United States, and is starting to become apparent in New Zealand (Merlin 2009: 13; Johnson *et al* 2015; Jackson 2017; Jackson and Brabyn 2017). The Baby Boom may thus have been a factor that dampened down rural-urban differences in both desired and actual family sizes and even opened the way for a sub-national fertility decline.

Population Transitions: From Marriage to Cohabitation

Throughout history, formal marriage and childbearing had been almost inseparable; pregnancy either followed soon after the majority of weddings, or, for a minority, it precipitated marriage. This is no longer true at all. Couples marrying, at least from the 1970s and 1980s, do so because of social-emotional bonds, including a desire to raise children together, often having co-parented one or more children. As noted earlier, an unmarried Prime Minister having a baby with her common-law spouse excited little negative comment. Since the 1970s there has been a lower incidence of first unions that are formal marriages, than of consensual, cohabiting arrangements. In this regard, New Zealand rates for cohabitation were relatively high, resembling more Denmark, Norway or France, or Quebec, than Anglophone Canada, the United Kingdom or the United States. The difference with the ‘Mother country’ is instructive: in the first tumultuous Victorian colonial period Pākehā patterns of family formation had shifted markedly away from the British model, even among settlers who had probably been born in the United Kingdom. Then, in the era of recolonisation, Pākehā New Zealand slavishly re-adopted British family formation norms – and quite probably British family relationships, or at least those portrayed in the stereotypes held about them in New Zealand. But, from 1970 the country entered another tumultuous period, and

once again British norms were rejected, this time in favour of Nordic and French patterns: it was well after the changes in New Zealand, which had unfolded rapidly in the 1970s, that 'Mother England's' couples also took up the frequency of consensual unions seen in New Zealand.

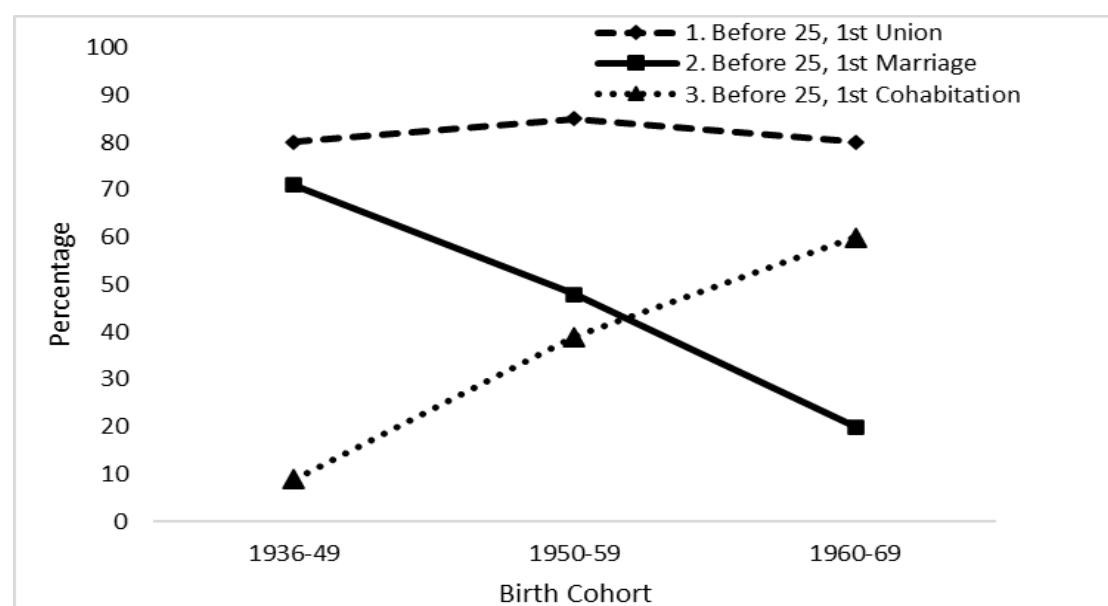
In New Zealand, policy relating to issues of family formation produced a considerable degree of controversy. there was, for example, debate about the *Domestic Purposes Benefit*, for single-parents, mainly mothers, introduced in the *Social Security Amendment Act, 1973*. This was fuelled by the residual effects of the second peak of the Baby Boom (*circa* 1970) with its marked trends of precipitated marriage, at highly fecundable young ages, by brides, often pregnant at their weddings, or very soon thereafter. Many unions consummated around 1970 were to play out their finales in divorce and with the need to resort to Domestic Purposes' Benefits much later, in the 1980s and 1990s. Conservative commentators since then have attributed this surge of marital breakdowns to social dysfunction and not to its underlying cause of unprecedented levels of adolescent and young adult conceptions, and weddings a decade or two earlier (Pool *et al* 2007: 235-40, 271-73). Another 'radical' policy measure, the reform of matrimonial property rights, threatened to be explosive, but instead dissolved into arguments around the proportions into which the estate should be divided. Other legal changes promulgated in this era have eliminated the distinctions between marriage and longer-term cohabitation for issues such as property and conjugal rights; this legal protection has been further extended to same-sex couples.

Reproduction is a 'fertile' ground for urban myth making. In New Zealand, popular discourse wrongly attributed the *Domestic Purposes Benefit Act, 1973* and the *Property (Relationships) Act 1976* as proximate causes of the fertility decline and of the availability of babies for adoption. In neither case was this attribution even logical. The first *Act* provides support to solo parents (of both sexes), including the divorced, mainly women in their late 20s or older, and who by definition already must have children. The second *Act* generally divided in half matrimonial assets: couples might separate but one, most typically the mother, would be the prime guardian of any children. An equally inaccurate argument was that adolescent women would have babies to get the benefit; in reality, modally, beneficiaries were older women being supported with child-rearing costs. (Brookes 352-53 and 359-61).

The Pākehā Baby Bust was accompanied by the liberalisation of social norms and values; all trends shared with other Anglo settler-societies. A very high-profile example of a values-shift came in patterns of nuptiality, where, in Aotearoa, there was a radical shift away from marriage towards cohabitation in the percents in each birth cohort who, by age 25 years had cohabited on entering a first union. This increased from 10 to 60 percent of all first unions, as is shown in Figure 20.1. In the survey data on which these statistics are based, cohabitation was measured by participation in a

consensual union of more than 3 months duration, so excluded short-term, casual relationships. Figure 20.1 shows that entering unions was not ‘going out of fashion’, merely taking a different form: rates of entering a heterosexual first union of any sort remained constant. This graph does not, of course, cover single-sex and other unions, which, at the period when the data were collected, had no legal status and were still often covert and clandestine; heterosexual consensual unions had also not yet been accorded legal standing, but by then were accepted as a norm by most of the community¹⁹. Subsequently, a series of Acts gave these different sorts of unions some degree of protection in areas such as property rights; as of 2018 there were still some areas of dispute to be resolved by legislation, but the normative system was very different from the 1990s (when the survey data were collected) and even more so from the 1980s and earlier periods to which the data refer.

Figure 20.1: Percent of Women in Each Cohort Who by Age 25 had: (1) Entered a First Union, of Whatever Type; and (2) Married OR Cohabited



Source: Pool et al 2007: Figure 6.2. Data collected in the NZW:FEE.

Note: Marriage + Cohabitation = Entering a First Heterosexual Union of Whatever Type

Marriage rates have dropped very significantly, and so too have formal divorce rates; that is hardly surprising but is a function of fewer marrying. By contrast, consensual union separations are very frequent, sometimes as a result of trial-unions before deciding to settle down with a partner, but also often involving children. Reconstituted families are commonplace and typically include children, often generating complex childcare regimes.

Family living arrangements were changing in ways other than whether couples married or entered a consensual union. More and more late teenagers and young adults were living with their parents: the ‘empty nest’, which had characterised the Baby Boom home as children left as soon as they reached their late teens or early adulthood, was being replaced by ‘boomerang kids’ in ‘a cluttered nest’. In part this was because of the prolongation of education and the costs that this entailed, and in part because there were slight increases in the ages at which first intercourse was occurring – a shift occurring elsewhere in Western developed countries. But, as in France, where it was first identified, and elsewhere, the proportion of consensual unions that were ‘LATs’ (Living apart together) was increasing: the couple would cohabit intermittently at their respective parents’ home (s).

Population Transitions: Fertility Regulation

Patterns of contraception have gone through several previous and recent revolutions. By the early 1970s the pill was widely in use among women of all marital statuses, mainly for timing and spacing of births. Depo-provera and the IUD were also in relatively widespread use in New Zealand. But, in the 1970s two ‘new’ techniques entered the menu of methods available. Sterilisation had long been practiced in New Zealand, but most typically involved invasive hysterectomies, requiring significant surgery, mainly for gynaecological reasons. Tubal ligations, a far less invasive method, became available, but generally for family limitation purposes. Vasectomies were also frequently resorted to by New Zealand couples, so much so that the proportions of all sterilisations that were male were notably high by international standards. The percentage of all sterilisations that were vasectomies was, however, higher among Pākehā than Māori. Also notable was the fact that rates for sterilisations were elevated at younger ages than was common overseas, a function of the early force of childbearing among New Zealand women: couples felt that they had completed their childbearing and thus could afford to be sterilised by tubal ligation or vasectomy. In this regard, contraceptive practice was driven by the shift in mean ages of childbearing, which had been very young by WDC standards, to much older ages. But, logically, by the late 1970s, as births became more and more common at older ages, so too was sterilisation for reasons of family limitation also delayed. This then caused overall rates to fall.

The other ‘new’ method was a turn back to condom use but employing technologically advanced designs. In part, this was a response in the 1980s to HIV/AIDS, but more widely they were adopted as a means of avoiding pregnancy or contracting STDs from in a casual sexual relationship (Pool *et al* 1999).

There was a great deal of controversy in the 1970s and 1980s about the legislation on induced abortion, which seemed to produce ‘cumbersome procedures’ and the possibilities of delay into the second trimester of gestation. In the early 1970s

there was a highly publicised brief period in which women travelled to Australia to seek an abortion. But, a detailed national survey carried out by Sceats (1988: Chapt 8) in the 1980s showed that most if not procedures occurred in New Zealand, quickly and early in pregnancy, although disproportionately in the Auckland urban area where there were two specialist clinics²⁰. Most importantly, by comparison with other WDCs, New Zealand General Abortion Rates (Abortions/Women aged 15-44) were low. In 1983, for which comparative data are available and when terminations data were very reliable in New Zealand, its rate was half that of most other WDCs, and a third of the level in the United States (Sceats 1988: Tables 6.5 and 6.6). An underlying reason which Sceats identifies was that other means of regulation were used very efficiently by New Zealand couples, starting with the rapid adoption of the 'Pill' in the late Baby Boom (see Chapter 16). Then in the 1970s sterilisation rates were not only high but, as noted above, frequently carried out on young couples, who had had all their desired births (Pool *et al* 1999). Abortion was thus a means of timing and spacing births but not limiting them, which, by contrast, had been the case historically. Rates did creep up subsequently at the end of the twentieth century, in part because of large inflows of young Asian women students, from societies where abortion was widespread as a primary means of regulation (Sceats and Parr 1995). More recently, the rates have declined.

As I noted above, there were attempts to link availability of benefits for solo parents to declines in adoptions. Reproduction just seems to generate these sorts of inexact accusations, as was true for another commonly cited factor: it was often asserted that increases in abortions in the early 1970s were a cause for a drop off in the availability of babies for adoption. Janet Sceats' detailed analysis (1988: 446-51) showed that the effects of abortions on adoptions were minimal. Those arguing that terminations had had such an impact ignored demography: a rapid decline was occurring in the number of births to very young mothers – indeed in births overall – and they had been the source of many of the babies given up for adoption. Those conceiving at exceptionally early ages, close to legal minimum ages for marriage, became married precipitately. It was only years later, when they were in their late 20s and their unions broke up that many became beneficiaries – by that stage their children would not have been prime candidates for adoption.

Population Transitions: Issues of Longevity

Let me shift gear away from reproduction. The history of mortality and health trends has been every different from that of reproduction. For all but some small recent migrant minorities, New Zealand's peoples are at the last phases of their epidemiologic transitions. The deaths heard about, the funerals attended, are normally of persons 65 years and over; the heart attack of a 50 year old, or, worse still, the rare death of a child, becomes a shock event. For centuries, high death rates were the

Malthusian check that controlled population growth. Of course, deaths were outpaced over the long term by births, or else the world's population – or, for that matter, British or pre-contact Māori societies – would never have grown. High death rates were due to communicable causes producing a particularly marked force of mortality at childhood ages, as seen for Māori in 1886 (Figure 14.3); older people in such societies also had higher risks of death than they do in low mortality populations, but the differences between societies subject to low and high rates were less than they are at childhood. Take a very high mortality population, Māori in the 1890s, perhaps only 55 percent of male births would have reached age five, whereas in a very low mortality group, Non-Māori in 2001, this held for 99 percent of births, a 44 percentage-point difference. Among the minority of Māori males in the 1890s reaching 60 years, 71 percent would have attained 65 years; for Non-Māori in 2001 the figure was 96 percent, still a significant difference from the Māori level but only 25 percentage-points.

Until the Baby Bust, Māori remained a high fertility population but with declining mortality. After World War II, birth rates remained high and even when they declined in the late 1960s and 1970s, births well exceeded deaths. For Māori females since the late 1950s, survival rates have been higher than male. By the end of the twentieth century Māori mortality levels had dropped and its force was now felt almost entirely at middle and older ages. While most Māori reached 45 years, by comparison with Pākehā significant proportions of late middle-aged, especially Māori men, would not go on to reach retirement, the last manifestation of the second to last phase of their epidemiologic transition – Māori and Pasifika are at the cusp of entering the final stage.

For Pākehā arriving in New Zealand in the Victorian era, conditions in the colony allowed settlers to gain levels of longevity that were high by the standards of the day, so death rates dropped. Initially at least, they also had hyper-levels of fertility (Figure 14.2). But, by 1971, Pākehā had completed their epidemiologic transition and were also entering the last stages of a demographic transition (really, natural increase), with low birth rates and low death rates: for Pākehā, life expectancies were high and the relative force of mortality had passed on from middle ages to older ages. Most were reaching 45 years, and having achieved this, 76 percent of males and 86 percent of females aged 45 would go on to reach 65. The causes of death were largely non-communicable diseases, female life expectancy was higher than male, and the gap was growing. Recently, however, this gender advantage started to narrow, in part because male lifestyles improved, and there were changes in their propensity to present themselves for health checks (Woodward and Blakely 2014; Pool *et al* 2009).

Today, we tend to pay a lot of attention to minor gains in longevity at the oldest-old ages, but the real improvements had come already from surviving people through childhood and the working ages to reach retirement, with Māori and Pasifika

men the last major New Zealand groups yet to make this transition. Now, a higher proportion of each birth cohort reach older ages, and within the geriatric ages they also have better survivorship. The important question has now become whether or not this increased longevity after retirement is accompanied by reasonable levels of health for persons of that age, or will they be subject to prolonged ill health. This has both health and fiscal policy implications.

Despite their early life-expectation advantages, as I have shown in earlier chapters, by the 1940s and since, Pākehā were ceding top ranking in longevity to north-western European populations. Reading the data is problematic, however, as today rank-differences, even the calendar year to which the data refer, exaggerate what are really narrow absolute differences. Like other Anglo settler-societies, life-expectation was high by 1970, but concern was being voiced over high rates for cardiovascular diseases. Meanwhile, Māori life expectancies, which had lagged well behind Pākehā, improved rapidly between 1945 and 1960 as has been noted earlier. This was a function in part of a shift in the ratio between communicable and non-communicable causes of death. By the 1970s, however, the gaps between Māori and Pākehā were widening again, largely because Pākehā gains became more rapid than Māori improvements. To add to the health development challenges, the ethnic diversification brought in new mixes of morbidity – Pasifika have some of the health issues that Māori face, while some Asian groups have high levels of diabetes.

By comparison with the other two drivers of growth, fertility and migration, health and mortality are rather latent factors today now that life-expectation has reached high levels. Clearly, it occupies the forethoughts of many individuals and their loved ones, it is a constant subject of popular articles and the failures of the health system are trumpeted daily by the media – less frequently its successes. But, as a component of the demographic system it is almost a given.

Most deaths occur above 65 years of age, but this phenomenon is often misinterpreted – as if suddenly most retirees were going on to survive into their 90s – and thus that declines in mortality are the cause of ageing. In reality, as noted above, it was the reproductive factor, the Baby Bust, that was the cause of structural ageing, the component of ageing that most captures the public imagination. This is usually projected as the ballooning growth of costs due to more elderly but with fewer workers to support them. The real cause is the cohort mortality declines that have unfolded across the last four-fifths of the twentieth century and into the twenty-first. These ensured that most births of the 1920s and 1930s not only reached working ages, but then reached middle age and then went on to retirement, most dying at 70-90 years. One could say almost that the health system was a victim of its own success – by largely eradicating communicable causes of death and even confronting non-communicable causes (e.g. cardiovascular and some cancers), it had ensured that the young and middle-aged were highly likely to reach old age, and even ‘grand old age’.

Population Transitions: Health, Hospitalisation, Health Policy

Mortality patterns changed further in the period from 1970 on but were a far less manifest element of the demography than fertility and migration. Over the last three and a half decades, both Māori/Non-Māori and gender differences in key life-stage survivorship levels had decreased, as is seen in Table 20.4. Three-quarters of Māori and Non-Māori who reached 45 years – over 90 percent of all births will now do this – were also then going on to reach retirement. There was still justifiable concern about the prevalence of cardiovascular diseases and diabetes, resulting in long-term campaigns to reduce risk factors, notably smoking but also body weight, poor diet, excess intakes of animal protein foods, and lack of exercise. Most affected were middle-aged and older Pākehā males, and Māori and Pasifika of both sexes. These campaigns ushered in a period in which rates of death from these diseases, and others, declined, the effects of which show up with the improving survival probabilities at middle ages for Māori and Non-Māori males between 1971 and 2006, as is seen in Table 20.4. Thus, a particularly significant change, but one that has not been greatly heralded was the survivorship improvements for males whose probabilities of reaching retirement from middle age went up rapidly. These successes aside, however, problems with Māori and Pasifika health in general, and gaps between them and Pākehā were continuing issues of concern as indicators of inequality (see Chapter 20). Māori survivorship improved, but as noted above still lagged behind Non-Māori. This is seen most dramatically in the statistics for survivorship from 45 years to 65. By 2006, by comparison with Non-Māori, Māori males and females were already at the levels that Non-Māori had already been exposed to thirty-five years earlier.

Table 20.4: Survival Probabilities (%) From Birth to Age 45 years, and from Age 45 to Age 65, Māori and Non-Māori, 1971 and 2006

	Māori		Non-Māori	
	Male	Female	Male	Female
1971				
From birth to age 45	84	89	93	95
From age 45 to age 65	57	65	76	86
2006				
From birth to age 45	92	96	96	95
From age 45 to age 65	76	83	91	94

Sources: Statistics New Zealand Period Life Tables

Health is more than the rates of illness and death in a population. Almost a norm among older age-groups in developed countries is a reliance on pharmaceutical props that help to prolong life, but also to limit the prevalence of hospitalisation, in most countries a much more costly care option than drugs. The success of a health system could be measured by rates of admission/discharge from hospital and deaths in the population. But, once most people survive well into retirement ages and thus reach those older years at which, mainly because of age, they are likely to need more care and are at greater risk of mortality. Additionally, a population such as Italy's, which has had low fertility for a long period, has an age-composition which is very different from New Zealand's, as I will discuss below. Italy has a higher percent of its people who are older at high-risk ages. So, to analyse all of mortality, health and hospitalisations it is necessary to allow for the force of morbidity and mortality at various ages, and the underlying age-composition of the population.

To confound this further, hospital procedures have changed radically. In the past, elderly were often bed-ridden in hospital for long periods, whereas today they are typically discharged home, much earlier – or, less likely, to residential or hospice care, to a regime that will almost certainly require continuous prescription-drug use. For most geriatrics, this will give some degree of self-sufficiency, perhaps with visiting support systems, and can be seen as affording a 'better quality of life'; admission to or remaining in hospital was seen to give a lesser quality.

Using this concept, we carried out a detailed study of New Zealand and sub-national regions over a long duration (1981–2009). The raw data were hospital admissions/'discharges', either out from hospital, or by dying there, and we also incorporated into the analysis the deaths of people who had not been hospitalised, and who had died at their normal place of residence. This analysis was based on a period-prevalence life-table methodology we called Hospital Utilisation Expectancies, a statistical relative of health expectancies²¹, the results of which were the number of days someone at a given age could expect to spend in hospital, while still surviving (in hospital or out in the community) (Pool et al 2009).

The health services system came under scrutiny in the early 1970s in a report that recommended administrative restructuring (*AJHR* 1974, H-23). In the 1980s the Minister of Health, Helen Clark, undertook major reforms. In particular, she moved to a population-based funding formula, which had a net effect of a major improvement in inter-regional equity – essentially, money and services moved north from the over-bedded south to the under-served north. A number of major changes were also made to case-management in hospitals, particularly as this affected days-stay (overnight as against day-patient routines). The detailed study referred to above, covering 1981 to 2009, showed that favourable changes were effected in all of: (i) 'efficiency' of patient management (particularly cutting days-stay and thus costs), (ii) effectiveness of care (improved outcomes as measured by standard and other indices), and (iii)

equity between regions. In this there was a natural tension between demands for efficiency in order to meet fiscal objectives, and of effectiveness that was the ultimate measure of the success of the system. In this regard, over this and succeeding periods, new technologies, not just biomedical but also others, such as land and air based communications and transport, played a major role in improving both the efficiency and effectiveness of health care (Pool *et al* 2009).

Two conclusions emerged from these analyses: first that the population was, in general, becoming healthier, and secondly that episodes of hospitalisation were becoming increasingly compressed by age, and were occurring more frequently at older-old ages rather than younger-old ages. The public still tend to see hospitals as institutions responding to acute episodes, particularly of children. But, the reality is that the infectious diseases that could be ‘cured’, or the patient died, have yielded place to chronic disorders many of which may respond to palliative care but not be eradicated. This is still true for accidents, but for disease, the paediatric patients of the past in isolation wards are increasingly ceding place to those suffering from childhood leukaemia, or geriatrics with chronic disorders, albeit sometimes in an acute phase. The problem for the health system is that the traditional ‘acute infectious model’ of treatment still dominates popular precepts about health, raising expectations that are unattainable and thus criticism of the services for having failed the impossible. The general public still sees going to hospital as a step towards curing a condition; more typically the patient is likely to leave hospital in remission rather than cured.

In the past, health had been seen as a factor almost exogenous to social and economic development – health care was deemed a right but was also seen as a fiscal burden. But the recent transitions have seen health gain its rightful place as a part of all development, as Nobel Prize economist Angus Deaton (2013) has strongly advocated. Health standards that were similar to those across the WDCs are seen as an integral component of human capital deepening essential to all economic growth and welfare. In fact, we can go further than this. Health had also been seen as central to development in Nelson’s low-level development equilibrium trap (1956). ‘The “Great Escape”’ as Deaton calls it, is an essential part of fleeing the trap. On average, Pākehā are largely free of this trap and will live into their 80s, but Māori and Pasifika have still finally to escape. But, more generally, with such high levels of survival to old ages, the focus has turned increasingly from survival to health, properly speaking, or to its inverse, disability.

Within the social sectors, health and disability seem to be areas which are particularly susceptible to controversy, often with ideology as an accompaniment. Because, across the WDCs, until the advent of the welfare state, health services had largely been the financial responsibility of people themselves, influential voices still see private care as a more efficient delivery mechanism than the systems such as the British National Health Service, often cited as a leading example of ‘health care for

all'. It was implemented in post-war Britain by making health care available to all and access cheap or free, yet New Zealand had already ushered in such policies. Primary care was virtually free at first, but this was gradually eroded away as the government allowance remained stable, but charges rose and there was inflation. From the 1970s, this came under attack because neo-liberalism very much favoured privatisation, and the health system became a target in which their philosophy could be implemented²². Targeting became a major factor based around household incomes. In the actual event, as the study referred to above showed, many of the neo-liberal interventions revolved more around fairly low-level managerialist and administrative changes than any fundamental re-organisation of the system. Service delivery was maintained, sometimes in the context of destabilising changes from the latest of numerous episodes of restructuring imposed in the name of efficiency: but doctors and nurses and specialist units still continued to interact positively with patients.

But, on a higher plane, over this period survival and health became the subject of a major international debate over what was largely an existential question: what were the limits of human life? There is no doubt that the increased survival of the elderly is due to some form of 'extension' of life-expectation, that more and more older people are surviving to even more advanced ages. But the crucial question is whether humans in Western Developed and newly industrialised countries, and later elsewhere in the world, will survive on to some infinite age, an age well above 100 years, or, alternatively, will extend their longevity more modestly. If expectation extends more modestly would this simply be linear or be affected by what is called 'compression', involving a narrower and narrower range of ages at which death occurs. This issue has been explored for New Zealand (the PhD thesis of Jit Cheung 1999 focused on this issue and its actuarial characteristics; see also Pool and Cheung 2003, 2005)²³.

There is also a methodological dimension to this. In earlier periods as late as the 1970s, analysts had used means as their measure for this issue. But, statistically, averages are always affected by extremes – in life table data, even in low mortality populations – by the small number of deaths at neonatal ages. In work on New Zealand data in the early 1990s, I instead used medians and quartiles and inter-quartile ranges. Recently, these measures and modes have been employed in state-of-the-art overseas analyses on compression, which have tended to confirm my argument in favour of 'compression'. This is a notion that is appealing in another way – causes of death are being increasingly compressed into several major families of non-communicable diseases, the cancers, and the cardio- and cerebro-vascular disorders.

A paper by Zuo *et al* (2018) has, however, raised another hypothesis. They turn away from using means to analysing life-table survivorship percentiles for persons aged 65+ years in WDCs, New Zealand included, over five decades. They use the analogy of an 'advancing front' to conclude that '...deaths [are] steadily delayed

as societies develop, and [this] supports an ongoing increase in the age of transition to disability' (ie lower functional health capacities, see below) (Pool 1994; (Karen Siew) Cheung *et al* 2005; Pool *et al* 2009; Pool 2014: 40). The analysis of Zuo *et al* (2018) is very thought-provoking, but a major question needs further exploration: is this purely a period effect (improved health care as available in twenty-first century WDCs), or is this confounded by the cohort factor advanced the analysis made in an earlier paragraph?

These cohort effects have been demonstrated to be among the key underlying dynamics of geriatric health. In an innovative New Zealand study, using mortality indices, Yongjie Yon and Eileen Crimmins regress cohort data and show that some of the ethnic differentials are deep-seated going back to varying levels of exposure to infectious disorders in childhood, as measured by differing death rates: 'Childhood mortality, rather than mid-life mortality, accounted for greater variance in old age'. Their study shows the way in which cohorts, like individuals, carry collectively with them into older age the 'good and bad experiences' to which they were exposed when at young ages, thereby stamping ethnic and other patterns on cohorts as they proceed through life. As Yon and Crimmins note, 'The mortality trend of the 1948 Māori birth cohort is similar to the 1902 Non-Māori birth cohort, 46 years earlier' (Yon and Crimmins 2014).

While morbidity, ill health, experiences earlier in life are correlated with death rates later, one must turn also to a related question on the context of death rates – the general health of the population, a factor which can also experience both 'extension' and 'compression' of morbidity. That is, whether or not in future the elderly will spend more time functionally limited by ill health (extension), or less time (compression). Writing about American James Fries's studies on sickness, the analogue of death, Aimee Swartz (2008) says,

'Known as "compression of morbidity", Fries' hypothesis holds that if the age at the onset of the first chronic infirmity can be postponed more rapidly than the age of death, then the lifetime illness burden may be compressed into a shorter period of time nearer to the age of death'.

The index used to analyse these mortality-morbidity interactions is termed 'health expectancy', computed by what are termed, technically, period-prevalence life tables, which in turn are divided into groups depending on degree of disability, or 'functional health' as it is also called, running from 'good health' to severe impairment. In field surveys, as against clinical trials, morbidity is very difficult to measure in the sense of cause of sickness, so a related index is used: functional health.

'Functional health' is defined as the capacity, appropriate for your age, to carry out routine tasks (e.g. feeding yourself, walking certain specified distances) and

modest physical exercise. In New Zealand the middle range health expectancy, drawn from official surveys, has been analysed, first for synthetic (period) data and then for real cohorts. While the officials who carried out these analyses are assiduous in stressing that both extension and compression are seen, the results lean towards compression. The cohort analyses show that Māori/Non-Māori and gender differentials exist and their elimination (e.g. future eradication of the Māori/Non-Māori difference at late middle ages) has policy and health cost consequences. In general, internationally the health expectancy literature shows improvements in health among elderly, including the prevalence of severe handicap (Tobias *et al* 2009; Pool *et al* 2010; Pool 2014; Cai and Lubitz 2007).

Over three plus decades 1981-2010s, the New Zealand health system was further and frequently restructured²⁴. Our study showed that, overall, efficiency gains were achieved and, gratifyingly, effectiveness improved. Population-based funding imposed a degree of broad equity on the system, although continuing efficiency gains sometimes came at the expense of equity, with smaller, peripheral regions losing out, particularly in the interface between elective and acute services; unmet elective demand, which might be costly and be seen as an optional extra, can translate into acute need. The 2000s until 2009 saw some new elements, most notably through primary screening, which produced a significant improvement in the rates of presenting at hospital for middle- aged and older men, Māori and Pasifika, and a gender crossover in hospital utilisation. This fits with an international trend in developed countries that saw a turnaround in the gender gap, not by women's risks becoming worse, but by men's health improving by presenting earlier to a health provider (Shiple 1991; Pool *et al* 2009).

Population Transitions: Realigning Settlement Geography

In this summation of the demography of the last fifty years, I must now return to a new development on an old subject. Sub-national population distribution also went through radical shifts over the last few decades. There was nothing new in these changes; what was new was the speed of change that often caught urban planners and local authorities by surprise. There had long been out-migration from rural New Zealand, as documented in earlier chapters, but reproductive levels were high enough to counterbalance the losses in numbers, while mechanisation offset the declining labour needs. As rural fertility levels and patterns converged downwards towards urban, the exodus was no longer being counterbalanced by reproduction.

Then something of a new countertrend emerged that seemed to signal a return to demographic growth for non-metropolitan New Zealand. Metropolitanisation continued and there was even an increase in population densities in central city areas. Yet, at the same time, suburbanisation also exploded, producing peri-urbanisation that ate up recently productive rural lands, and turning pastoral and horticultural areas into

farmlets or hobby farms. In Auckland, and to a lesser degree Wellington, ‘journeys to work’ of more than two hours were becoming common, with Auckland’s outer fringes being most strung out: anecdotally its extreme commuting zone extends from Hamilton-Cambridge in the south to Paparoa in the north, 270 km, a longer distance than from Oamaru to Christchurch.

There has also been a spatial dimension to the national reproductive and related changes. In the period covered by *Tai Timu Tangata* (see above), a shift has occurred: the accrual of children in metropoli has accelerated and outrun growth in total population numbers there. In the twenty-first century, nationally the child population had fallen numerically below its total in 1966, whereas total population numbers (all ages) had increased from 1966 by over a million people. The metropoli, which were now assuming the function of housing the nation’s young, were replacing their birth cohorts at ever-lower rates. Along with this, major differentials in replacement are being seen within metropolitan areas, particularly in Auckland and Wellington. As noted earlier, two suburban zones with large numbers of Māori and Pasifika have high fertility: South Auckland and Porirua. By contrast, Central Wellington and Central Auckland, with their concentrations of career women, had very low levels of replacement, as did Auckland’s North Shore (275), with its clustering of low fertility Asian populations coming from low fertility societies in East Asia (verified by total fertility rates, Pool *et al* 2007: 333-34). High proportions of migrants coming in as students add to this situation—most are not here to have children.

While 50 percent of children are located in metropoli (central cities) this is merely proportional to population. Moreover, in major segments of metropoli, where persons of working and parenting ages are concentrated, the norms favour late childbearing, significant numbers of couples remaining childless and thus low fertility, so that reproduction rates are low, well below replacement. This even applies to Māori (Kukutai and Pool 2014: Table 18.2). By contrast, where fertility used to be high – in the rural reproductive incubators of the past – there are now incipient indications of seminal shifts from natural increase (births exceeding deaths) to natural decrease (deaths exceeding births) (Jackson and Brabyn 2017; Jackson *et al* 2019; see also ‘trichotomisation’, in Chapter 20 of this book). This is not unique to New Zealand but seen across Europe and in the United States (Johnson 2011; Johnson *et al* 2015).

Even in Auckland, the urban area that receives a high proportion of migrants, in most, but not all years, GDP stimulated by social sector demand (e.g. health, housing, education, and related capital works) comes from natural increase, which typically outruns net international immigration. For internal migration, Auckland continues to lose people, although this is rather more complex in two distinct ways than the crude figures might suggest. First, much of the ‘loss’ is overspill as

commuting from the metropolis crosses its boundaries, or because of retirement migration to 'coastal sunbelt' or 'lake-land' destinations. Secondly, the city gains young people but loses some of its older to retirement centres. This inflates the size of the parenting group in the life-cycle, but they are also the women and couples who delay childbearing and have small families.

Population Transitions: Age-Structural Effects

Age-composition is a particularly complex phenomenon, but in a sense is the synthesiser of all the other trends; age-structural effects are the markers that result from all the transitions discussed above, some or all of which may be occurring simultaneously. At a sub-national level this is further confounded by the fact that both local and national trends may be having an impact on a particular area. Age-sex pyramids are much beloved by commentators and are wonderful descriptive tools, but they cannot capture the explanation for the complexities of a region's demography that drives its age-sex profile.

In its turn, the age-sex structure provides the plinth on which population dynamics are built. This is because population change is not simply a matter of births, deaths, inflows and outflows, but is also affected by the age-composition of the population, and also by the rates that change these structures – the so-called age-specific 'force' of mortality, fertility or migratory flows²⁵. Ultimately, in a slow-growth population, as New Zealand's will be for the foreseeable future, they have a major impact on policy and on the markets, as they determine both the burdens population generate on economies, societies and families, and their capacities to respond to these. But the picture is more complex than this. Digging down further into these population dynamics yields granular results that confound even this picture. Today, New Zealand faces a diffused peopling picture that is far more than a mere balance between net migration and natural increase, around which the popular demographic narrative is drawn. Age-structural factors thus affect all other demographic transitions, plus social and economic transformations.

The first of these, net migration, is a commonly used measure, but provides grossly misleading impressions of migration effects. The net figure is due to changes in the volume of flows, both inwards and outwards, each of which is the result of forces that, to a large degree, are independent of one another, particularly in societies subject to 'free' (not 'forced') migration. For example, it is the net figure after New Zealand residents going off to work in Australia or Britain, are counterbalanced by say South Africans or Mainland Chinese arriving as active immigrants, or to effect family reunion. Migration is thus subject to its own age-composition effects and forces, that are extremely difficult to disentangle. This is not just because of the gross fluctuations that are destabilising, but also migratory churning, involving rapid changes from year to year in the sizes and directions of flows, and in their

distributions by age-, ethnic, national-origin, occupational and other factors, for both arriving and departing migrants (Pool 2015).

Then take natural increase, which is defined as births minus deaths. In each case, absolute numbers are driven not only by the prevailing birth and death rates, but by the population's age-composition in two senses: (i) the changes in the 'forces' of fertility and mortality (the ages at which actuarially mortality and fertility are most likely to occur, thus affecting numerators for rates); and (ii) shifts in the age-structural distributions of deaths or of the ages of birth-mothers, who provide the denominators of age-specific fertility rates. The age-structural distributions, the 'population at risk' of dying or giving birth, are most affected by cohort momentum effects – as birth cohorts of varying sizes when born, over their life-span gain numbers through immigration, or lose through death and emigration, and thus have an impact on the numbers at different life-cycle stages and age-groups. The events in the numerator for vital rates can also be affected by momenta: for example, because of the rapidly improved survivorship at childhood in the late Victorian period, the numbers of New Zealanders reaching adult and middle ages in the interwar years increased (Pool and Cheung 2003, 2005).

The result of these diverse and often counterbalancing forces is a momentum effect – 'numerical ageing'. Unfortunately, in the public discourse this concept is often confounded with 'structural ageing' (both defined earlier). To add to this, the ageing debate is phrased in terms of costs and fiscal burdens, based on economic projections, that become reified in the political dialogue, yet which have very short time frames of reliability. Far less attention is paid to the more tangible and projectable factor of numerical ageing, discussed above in relation to cohort flows. Relatively robust and reliable forecasts can be made for a long time ahead for any populations born and enumerated already. We thus have a broad general picture of the quantum of people who will add to fiscal and family burdens, or, by contrast, will contribute to fiscal and household capacities, as well as to work and social service provision. Structural ageing, around which the debate centres, is far more problematic because it depends on estimates of future birth cohort numbers as well as their numeric ageing (Pool 1997: Figure 1; Pool 2003; Pool and Wong 2006; Rowland 1996).

The debate on ageing has been captured by a panic about structural ageing, which, so it is argued, will engulf the social sectors. Looked at more analytically these 'waves' are best measured by modes. After all, policy makers are interested in peak numbers that will affect services and markets. These are quantified best by modes, rather than the indices policy analysts often use. I return to this issue in Chapter 20.

The Overture to Peopling in the Neo-Turbulent Period

The 50 years 1970–2020 had a stunning overture that came in its first quinquennium from a number of demographic transformations that erupted, more or less simultaneously. All of them had long-term significant economic and social development consequences. Furthermore, all had parallels in other Anglo settler-societies, and even in Europe. One also can see incipient phases for each of them back in the Baby Boom and even earlier, but it was their explosive emergence in the early 1970s that set them aside from their historical roots. Over the next few decades, they played out in different ways with varying patterns of periodicity, but their genesis goes back to the last manifestations (1971-73) of the Baby Boom and then its sudden demise over about 3-5 years duration.

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¹ Except for the small 'echo' baby blip between 2002 and 2012.

² Where birth cohorts of varying sizes pass through key life-cycle stages.

³ Of course, there is churning, so the population in 1996 had a somewhat different composition from that of 1931-36. In nation states and similar polities migration can affect the flows. Some young children of today will have been replaced by migrants, but this occurs only marginally even in countries with historically large inflows and outflows. A classic example would be the labour force circular migrations between Burkina Faso and its southern neighbours where perhaps a quarter of young workers were engaged in these movements at any one time (Cordell *et al* 1996).

⁴ A special issue of New Zealand's *Policy Quarterly* Vol 13 summarises the programme's results: Jackson (2017), Pool (2017), Jackson and Brabyn (2017), Brabyn, L (2017), Cochrane and Pool (2017), Cameron (2017), Cochrane and Mare (2017).

⁵ It is worth recalling that the gold rush inflow of 1861-65 and the Vogel migration scheme's wave of 1871-75, described in earlier chapters, were far greater *relatively* than that of 1970-75, and even *absolutely* rivaled it. The Victorian immigration levels were exceeded absolutely, but still not relatively, only in the 2000s, in a population more than 25 times as large as it had been in the 1870s.

⁶ Inflows followed by outflows, but, as I will note below, there were other factors for which there was little fit between arrivals and departures. Historically, it had needed some effort and expense by an immigrant to leave soon after arriving. An exception might have been among the itinerants and gold-seekers portrayed fictionally but with historical accuracy, in Eleanor Catton's *The Luminaries* (2013), set in Hokitika in the late 1860s. They were notably mobile and just as likely to leave to take a dangerous voyage to get to the next new gold field, anywhere in the world, as to stay on the West Coast.

⁷ Net emigration, mainly of Pākehā or former migrants, had occurred very briefly in the great depressions, 1890s and 1930s, and the late 1960s.

⁸ There was an historically unprecedented surge in the mid- and late-decade (2014-18), which ensured that net migration exceeded natural increase, after a decade (2004-14) of low positive net immigration rates. From late 2018 an ebb may have started (Statistics New Zealand 2019).

⁹ By 2018, the proportion overseas-born exceeded 25%, but these numbers included Māori and Pākehā born elsewhere and who had returned to New Zealand.

¹⁰ The appalling Christchurch Mosque attacks of March 15th, 2019 were by one gunman armed with assault rifles. His arrest and arraignment were very quick, and within a month Parliament had banned all such weapons.

¹¹ As I noted in Chapter 3, I am very much in favour of migration, but I am critical about some migration policy, especially the settlement of new arrivals and absorption capacities when there are large waves.

¹² I thank Jacques Poot for this estimate.

¹³ As used in sociology, the term 'segregation' refers simply to levels of clustering, not to legally enforced statutory separation.

¹⁴ They allow for the confounding effect of a small proportion of people, mainly Pākehā, who recorded their ethnicity as 'New Zealanders'. Also, the main inflows of Asians came during this period, and new arrivals, especially from Mainland China, were likely to cluster.

¹⁵ This is spatial-correlation. Their analysis attempts to take account of the significant proportion of Māori (50%) and Pasifika (37%), and 10% of all New Zealanders, who claim multiple ethnicity. The results are different, but not markedly so.

¹⁶ The earliest waves of Pasifika migrants clustered in parts of central Auckland (Pool 1959: vol 1 58-62; vol 2, 40), attracted by high wages and cheap, larger houses (suitable for large Pasifika families), so there is a residual, ageing community that has gradually ceded place to the inroads of Pākehā and the gentrification of inner Auckland suburbs.

¹⁷ Now National Institute of Demographic and Economic Analysis. Based on two nation-wide, in-depth, face-to-face (ie not telephone) fertility surveys, with large N's, employing probability samples

proportional to population size, that are thus representative of the target population. An advantage, especially for subsequent comparative studies, was that it was granted associate membership in the UN/ECE Family and Fertility Study, which included Canada and the United States, and could draw on their questionnaire (Marsault *et al* 1997).

¹⁸ The size of each birth cohort is the key metric for policy planners.

¹⁹ At the behest of a number of officials, a serious attempt was made in the survey noted above to collect data on lesbian relationships – this was a survey on women, so gay relationships were not of interest – but the response rates seemed unrealistically low. By contrast response rates for other ‘sensitive’ questions, including abortion, were very satisfactory (Marsault *et al* 1999). This confirmed the experience of a social psychologist, consulted by the survey staff, and who had looked at lesbian relationships. Even in 1995, the normative system could not accommodate conjugal and gender diversity sufficiently for respondents to feel free to report lesbian unions.

²⁰ Because of the geographic distribution of medical consultants qualified and willing to certify a patient, an essential pre-abortion step, there were regional inequalities.

²¹ This methodology was internationally peer-reviewed and refereed. In calibration terms it is less exact than health expectancies that use functional health markers whose properties are well known. Hospital admission is a less definitive factor, as it is confounded by the fact that it occurs both out of need for an intervention, and by bed availability.

²² The United States provides a case-control for studying different approaches to health system management: alone among WDCs it has opted to maintain a mainly private system in which decisions about access and compensation for bills are made by insurance companies rather than by health service regulations, priorities and protocols. Its costs, say as a % of GDP, are far higher than in other WDCs and its outcomes, say measured by longevity, fall below.

²³ Debate was not entirely free from ideology. The epidemiologic transition was seen as a bio-social progress through stages in increases in longevity, but some commentators went further and posited a hubristic stage when causes of morbidity were seen to be due to choices made by people – overeating, smoking, lack of exercise. Arguments revolved around whether or not people with these illnesses should be treated by public health services, with some libertarians taking the position that freedom of choice to adopt ‘bad habits’ must be countered by personal responsibility in responding to the ensuing health problems: people require health services because they chose to be sick, clearly an illogical view (Trlin 1994).

²⁴ There was even an attempt, labeled a ‘farfetched failure’ by Easton (2020: 544), to ‘Americanise’ the health system.

²⁵ To illustrate this, for example, contrast the simple dynamics of the Māori population in the early 20th century with Aotearoa’s complex patterns today. Until the 1970s, as discussed in earlier chapters, the Māori population was ‘closed’ to migration – just affected by natural increase – which itself was changing consistently and, until after World War II, thus slowly producing a ‘quasi-stable’ composition. As noted in Chapter 17, it disappeared initially when mortality declined rapidly (1945-61), and further rapid ‘destabilisation’ came from the Māori Baby Bust to be covered in this and the next chapters.

Chapter Twenty-One – Economic and Social Revolutions

Quitting Recolonisation: Restructuring and Globalisation

The last chapter was devoted to the demographic trends which provided the overture to economic and social transformations in this era. Now it is the time to pay attention to the country's economic and social life, *per se*, focusing on the economy, which is there to meet the needs of the people. This comes primarily through consumption, which in most countries comprises approximately 60% of GDP and involves consumption that varies widely from one age-group to another. Other sectors are also age-specific: who pays the taxes; who needs these monies; who invests in equities; who drives cars and buses, and who needs to be driven. Then there is the issue of who needs chronic health care services, and who provides these; etc etc, the list is endless. The workforce is an identifiable tranche of ages, and within it we often distinguish between the training, experience and skills of younger and older workers.

Policy formulation in the era 1970-2020 saw no real attempts to address the issue of age-specificity, despite massive changes occurring in age-structures. Instead, the focus was on financialisation; concern was not about meeting the needs of ordinary people but in maximising profitability for corporations and individuals with the hope that this would 'trickle down to benefit the general populace.

The context for reform after 1970 lay with the trends seen during Recolonisation. From the 1880s, settler New Zealand had followed a rather narrow demographic, economic and social evolutionary path. It is true that some more fundamental changes were already bubbling along under the surface in the post-war period as I described in earlier chapters. For example, from the 1960s Britain was flirting with the Common Market and New Zealand economic pundits legitimately saw this as a threatening cloud. Once Britain was definitively in the Common Market the metrics changed: New Zealand had to look afield for new markets. While the underdeveloped, former colonies of 'true empire' justifiably had their exports to Europe protected, at least in principle, by the Lome Convention (1975), the more developed former 'settlement-empire' colonies (see Figure 2.1), especially New Zealand which was the most dependent on the British market, received less sympathetic treatment. The Aotearoa governments of the day struggled to open new markets, a task rendered all the more difficult by the high levels of subsidisation of agriculture in the Common Market, and now Britain: as New Zealand penetrated some market, subsidised produce from Europe, Australia and Anglo-America would often follow. For those countries exporting was the icing on the cake – domestic consumption was paramount – but for New Zealand trade underpinned the entire

economy. With his ‘Think Big’ projects, Muldoon did try to diversify the economy, but, equally well, subsidised traditional pastoral farming, including the breaking-in and development of new farms: better-off urbanites availed themselves of the taxation and other benefits this entailed.

But, the aberrant Pākehā Baby Boom aside (Chapters 16-18), until the 1970s the factors of production and reproduction, and Aotearoa’s political economy were still dependent on the close links to Britain. Even the Baby Boom era was not entirely a deviation from this for it reinforced and petrified many long-standing settler social behaviours whose roots, ostensibly were British.

In the 1980s, the focus was firmly on economic restructuring directed to economic growth (GDP-centred) in the narrowest senses of that term (defined Chapter 1). As I will show later, this generated a wide gap between the growth approach and development (also defined Chapter 1), including the squandering of a window of opportunity for a demographic dividend, and a panic about ageing¹. The evidence on the economic growth reforms seems clearer, at least for the short-term and medium term: that growth slowed.

The most manifest indicators of the effects of restructuring were long-term shift-shares in the workforce that came to a head in this period with radical changes in the sectoral distribution of the labour force. This is most vividly demonstrated by the dramatic crossover in employment between manufacturing and the FIRE sector (Figure 19.1). But other fundamental changes were occurring and will be documented below, most importantly for employed women. In 1970, female labour force participation was still concentrated briefly in the years after leaving school, before giving place to a suburban family life in a sole-income, neo-local stand-alone dwelling, from which the husband sallied forth each morning to earn the pay that sustained the family. Later in this chapter I will show that this was to change in the post-1970 era, at least in terms of levels of labour force participation, if not for entrenched gender inequalities in work conditions and pay.

I leave to others the political debates that have abounded over restructuring then, and since; my goal is simply to try to tell the story of what happened and to look at the consequences particularly for peopling in relation to development. It is far beyond my brief to attempt to review the many complex assessments of restructuring. But, as noted in Chapter 1, the most recent in-depth analysis is about to appear (Easton 2020: Chapters 45-55) and provides a detailed review of the process and of its effects. He summarises why restructuring was necessary for the Aotearoa economy and the choices available to its reformers. His review uses detailed analyses of standard economic indicators and a comparison with Australia, to argue about that choice, and what were the many dimensions to the process of reform. He finishes with an assessment of the impact of restructuring made from three perspectives: how neo-

liberals would view the reforms; how the centre-right might; and how the left would do so.

The Need for Restructuring, and the Strategies Adopted

By about 1980 a sort of a consensus was emerging among policy analysts. It was becoming increasingly clear to most informed commentators that New Zealand needed to restructure economically, both by rejigging the factors of production and by globalising. Brian Easton (2020: 46) has summarised the problems facing the policy and business communities at this time:

‘The incoming labour Government in 1984 faced a major challenge to modernisation. The economy needed more flexibility and decentralisation in order to cope with structural change, diversity, technical change, social change, exporting diversification and proliferating consumer preferences arising from increasing affluence and complexity. It was not just “more market”; institutional changes were needed while social policy had to be brought into line with changing circumstances’.

While the factors of production facilitated by globalising would allow Aotearoa to confront the effects of Britain’s entry into the Common Market and its impact on markets, by contrast, the factors of reproduction were efficiently taking care of themselves, although net migration less so, as I discussed last chapter. In this new world, trade and globalisation, not just of commodities, which had still been the fundamental factors of exchange in Recolonisation including in the Baby Boom, were extended to services. It seemed that the third aisle of trade – in manufactured goods – would always be a minor one: New Zealand had limited human capital resources, it had few of the mineral natural resources on which traditional industry prospered and distance from markets precluded heavy manufacturing and export. To achieve any escape from a reliance on primary commodities, ‘niche’ market, light manufacturing was the secondary sector’s best possibility, but ultimately trade was increasingly focused on services – eg education and consulting – than on items.

In fact, through tourism, education and training, and their downstream support functions (eg rental housing, hospitality) the trade service sectors soon started to challenge the previously dominant traditional commodity exchanges – meat, powdered milk, butter, cheese, timber. It all happened very quickly, over the 1970s, when services rose from 5% of the share of total exports to 25%, then stabilised in the low 20% (Briggs 2003: Fig 30.). It had grown in percentage to 30% of the total by 2018 but was still a minor factor. That year, services exported exceeded those imported by about a fifth. The commodities of yore still feature very importantly in the trade data, but the trade exchanges have undergone major restructuring. Along

with globalisation – getting New Zealand’s commodities or services out to the world, the factors of production, especially of commodities, grew significantly in part because of on-farm efficiencies and in part by the extension of land in pastoralism, especially dairying. This intensification has had negative ecological effects, especially in the more arid irrigated eastern regions of New Zealand and has become a major political issue.

But these shift-shares between the export of commodities as the basis of the economy and the rapid growth in employment in services belied more fundamental underlying issues. About two-thirds of the economy, trade and domestic, involved the tertiary sector as a whole, but it was not clear what form the remaining third should take. Must New Zealand remain heavily dependent on the export of commodities or could globalisation and logistics’ efficiencies allow it not just to export services but to engage in high technology, footloose manufacturing with high per unit profits? But this would require a well-trained specialist workforce. Within the commodity production sector, how much longer could it afford to export raw commodities with little value added on the ground in New Zealand?

These were the more operational questions facing policy makers. But, underlying these were deep philosophical issues that were causing major schisms in economic thought, even in a narrow growth sense, let alone for wider development trajectories. Brian Easton (2020: 46) has summarised this intellectual divide:

‘There were two broad strategies for economic modernisation. The first was to give a pragmatic preference when economic decisions were made (a “more-market” approach)...The second was neo-liberalism, an extreme form of “more-market” called in New Zealand “Rogernomics” [somewhat derivatively as a word play on the name of its architect Roger Douglas]...Neoliberalism was then sweeping the English-speaking world, although many countries resisted it in its most extreme form.

The distinction between the two philosophies of “more-market” and neo-liberalism lies in the role of government. The first has some trust in government and sees the market as a means by which the government or the community operating through it can effectively regulate the economy. Neo-liberalism deeply distrusts the state and sees the “free” market as the alternative providing property rights over personal benefit.

Given the stress the New Zealand economy was under in 1984, and its increasing complexity, it was not surprising that a Fourth Labour Government pursued “more-market”. It was surprising, though, that it also embraced the more neo-liberal version’.

It must be stressed that policy-driven restructuring was not the only source of change at this time, nor the only determinant of negative trends. Later in this chapter factors that constitute what could be seen as consequences, or co-variates, of restructuring will be reviewed.

The linkages between the restructuring, and social and economic change over this period (1970-2020) are somewhat blurry and confounded by the other changes occurring in the society, often making causative judgements difficult to sustain. Moreover, many of the trends were far from unique to New Zealand but were common to the other Anglo settler-societies and /or Great Britain, or occurred in most WDCs, and even elsewhere. So, it could be argued, they came from factors that were exogenous to Aotearoa's own restructuring and were part of a wider globalised movement. Belying this is the fact that neo-liberal ideologies were, to a greater or lesser degree, the dominant economic development paradigm over a wide swathe of the globe, although perhaps less so in the western European and Nordic WDCs that had not been as enraptured by the 'Anglo-American model'. Against this, the dominance of American and British voices in the agencies of the Washington Consensus ensured that this paradigm was enforced on the Third World, on the former Soviet states in transition and on any other state whose economic shortfalls saw it knocking at IMF's door. The impact of the Anglo-American model also was seen in increasing inequality within and between countries, as Guy Standing (2011: 1) has argued.

It is very important to acknowledge, however, that the neo-liberal revolution scored some successes for the society and economy. It certainly shook off much of the dust of recolonisation across many sectors into which it introduced flexibility, albeit with disadvantages as well as advantages. Shop opening times are an example that changed the New Zealand weekend, but also often had negative effects on the pay levels of retail workers – overtime as a concept largely disappeared. To take another case, the international bargaining position of New Zealand in the trade of commodities was actually strengthened by it legislating the elimination of farm subsidies. This meant, however, that its exports immediately came into competition from subsidised commodities coming from other countries – the flat playing field of neo-liberal mantras turned out to be a lonely space for New Zealand, often the 'good guy' in a world of more Machiavellian actors. Generally, for the better, New Zealand became a globally open economy and society, but, less positively, some sectors, notably banking, became almost entirely foreign owned. This limits New Zealand's financial independence by giving New Zealand's own peculiar needs a lower priority than those of the parent company's country (mainly Australia) and weakens the power of the Reserve Bank. With much trumpeting in New Zealand, a 1989 *Act* piloted the concept of Reserve Bank 'independence' from political interference, surely a most desirable objective. But then, in the true managerialist spirit of the age, the Act set up

a rather specious contracting system, linked to the Governor's performance reviews, thereby constraining the monetary parameters under which he/she could operate with genuine independence. It also in a *de facto* manner limited his/her degrees of freedom by prescribing a focus on inflation. While, in principle, the Bank surveys the wider economy, it admonishes the general public for its reluctance to invest in stocks and shares in favour of buying dwellings instead; its counsel to government, centres around factors such as the role of housing (admittedly a huge component of banking debt) on inflation, so that the Bank can exert pressures to meet its narrow inflation targets. This puts dampers on public sector borrowing to meet infrastructural and other demands. Finally, the restructuring also greatly reduced the public debt, but did so by creative accounting – by privatising and thus shifting the debt into the so-called household sector.

There was another dimension to development in this era. Technology has always been a companion to the trends being recorded throughout this entire narrative, going right back, for example, to the Māori of antiquity. But it has been in the neo-turbulent period that technological change, whether home-grown or imported, has accelerated exponentially. A good example is the 'Pill' becoming, as noted in Chapter 16, a major player in facilitating, although not determining, the end of the Baby Boom. Communications are another case where there has been extraordinary change. Perhaps, the most widely felt socio-economic impact of the technological revolution is on employment, where computerisation and robotisation of many work processes is arguably a very important factor. It is of benefit where heavy, dirty or repetitive work is replaced by machines, but also reduces the sizes and functions of labour forces, both skilled and unskilled. Increasingly, there is even the export of jobs themselves although this depends on technologies providing immediate turnaround (eg call-centres located offshore; the interpretation of medical diagnostic tests in a totally different time-zone). Some of the technology emerging in the 21st century merely constitutes an acceleration and a broadening of their use in development in areas that already have made a mark. Other inventions are real breakthroughs that can rightly claim to be original innovations.

This means that we are continually confronted with innovative technologies that promise life-changing effects. One has only to think of the new vocabulary we must absorb and that touches every part of our lives, creating new needs (and tensions): an example is containerisation, which has totally changed how New Zealand imports and exports products. Tower blocks of containers in 'hubs', looking like multi-coloured Soviet era apartment complexes, have become a part of everyday landscapes, and their locations have altered transport, economic and population geography. Most extremely, information technologies seem to change constantly, with digitalisation and electronics, to say nothing of the internet, and of apps, micro-chips and social media. Inevitably, though, there is a downside to technological

booms. Then the world is beset with other macro-problems largely due to the actions of humans. there are the global threats: climate change, or the cluttering of space with junk, or the pollution of the oceans with plastic fragments.

To understand development in this era it is necessary to start with the ideational flows that were probably major drivers of change. There was ferment in this period as the world went through IT and communications' revolutions. This has altered the whole architecture and immediacy of global, or intra-country, exchanges. Travel, as a means of accumulating new ideas or of imparting them, is no longer a necessity but has become a nicety. In New Zealand, the local values-systems, forged in the recolonisation period, became subordinated to those that were imported, but perhaps taken further in New Zealand as Jane Kelsey (2015) has argued. I will merely summarise other researchers' arguments as a context to my own analysis. The narrative below is about how ideational structures metamorphosed into ideological drivers that were concretely operationalised in particular by the reforms of Roger Douglas and Ruth Richardson.

The Ideational Revolution in Public Policy and the Economy

Through all of this, four sets of values emerged and dominated New Zealand's ideas and development; two were economic paradigms, ideologies with their own mantras – neo-liberalism and globalisation; and the other two, running on a parallel track, were how New Zealanders saw themselves as a people. As I will discuss below, neo-liberalism was both ideologically-driven and highly proactive, globalisation *per se* could be a neutral concept and, except for a few nation-states which attempted to seal themselves off from the wider world, was the new reality of the late 20th century: N-way exchanges replaced 2- or 3-way. For the more extreme globalists any alternative was deemed to constrain growth and was thus negative. But it was argued cogently that, for New Zealand globalisation was necessary if it were to overcome the loss of the single, British market. But, some of the downstream arguments advanced in the name of globalisation – for example, that overseas buyers could control large estates or take over New Zealand enterprises without any monitoring of the longer-term objectives involved were less passive and in some cases arguably deleterious for New Zealand's independent development. The sale of some state-owned enterprises faced this fate, when they were sold on to successive owners and a number were essentially asset-stripped. That they might have a function meeting the needs of segments of New Zealand society was not a consideration (see below).

A third set of values, cultural diversification, was more a recognition of what was now a reality in 21st century New Zealand. Few would deny that the society is richer for it; I am strongly in favour of migration and diversification, if they are well-managed. The fourth, a Māori renaissance, was driven by a recognition of the

negative impacts of Indigenous dispossession, documented in earlier chapters, but has gained a far higher profile in recent decades.

As the citation above from Easton (2020; see also Kelsey 1995 and 2015) argues, to a greater or lesser degree New Zealand adopted, and typically attempted to implement, most of the main strands of the neo-liberal ideology. This enhanced the status of the financial sectors at the expense of the productive and gave a dominant operational role to managerialism (Jesson 1999). Yet, as early as 1996, Canadian management expert, Henry Mintzberg (1996), had questioned the application of many basic management beliefs to government, and showed that the public sector/private sector divide, around which much of the debate about efficiency erupted, is a false dichotomy (each has distinct functions they do better than the other does, he argued). As he noted, this dichotomy also disregarded the huge cooperative and ‘non-owned’ sectors of the economy, among which agencies, incidentally, is the University of Chicago. Another mantra of the era was the need for competition as an essential prerequisite of service delivery, including public education, health and public utilities. How competition might be effected in a long narrow, mountainous and hilly country with markedly uneven population densities did not seem to be considered, nor were downstream perverse consequences seen as significant.

A common argument of the neo-liberals, a pillar of their drive to privatise, monetise and globalise, was that, by definition, any investment in a New Zealand enterprise is good, even if control moves offshore totally and even if the accumulated skills and institutional structure are lost to New Zealand. This scenario was playing out as a part of New Zealand’s population geographic shift-shares. As a side-product of the regional analysis to be discussed later (Chapter 22), we tracked New Zealand’s ‘top 200 companies’ over 25 years. Of course, the companies in that cast changed dramatically over this time as some disappeared, some changed rank and new ones appeared. Nevertheless, there were two outstanding results of this review. First, main offices moved north and clustered in Auckland. This trend was endorsed by an outpouring of theory praising agglomeration as an end in its own right, emanating from the World Bank and United States based economists. In this scenario, large centres are seen as more productive than smaller ones because of the stimulus coming from business, cultural and intellectual interactions. All of this is probably true; but, the costs of gridlock, pollution, accommodation, and other unappealing features were given a lower billing. Secondly, increasingly New Zealand corporations, especially in Auckland, became foreign owned, so that the main instrumental office was in Sydney, or London, or wherever. By contrast, New Zealand ownership was still more likely in Christchurch based corporations. Auckland was not, in fact, the corporate entrepreneurial capital of its own self-image, but was becoming a branch-plant economy. This went far beyond the core business of the corporations, but also for ancillary services – eg law, accounting, IT. Thus, one can query whether

agglomeration necessarily brings net benefits, but, in a small, unprotected economy, instead it might harbour disadvantages not the least facing urban growing pains but with no guarantee of sustainability (Pool 2008; Quigley 2009).

Along with this was a decrease in the proportion of the tax-take coming from direct taxation, by shifting tax burdens from direct taxation of income to indirect forms (GST). GST was seen as a highly efficient tax-capture as, unlike in other countries, no goods or services were exempted. But, this shifted the fiscal base from progressive to regressive, in the process shifting tax burdens from the better-off to the less well-off who are overwhelmingly dependent on their shopping basket of taxed basic food and other grocery items.

Then there were labour reforms that de-valorised union membership and attempted to downscale their functions and roles. Worker-employer relationships were changed by shifting them from human capital strategies within organizations and businesses into ‘human resources’, with asymmetrically weighted individual contracts replacing collective agreements. Casualisation and part-time employment were favoured but were mainly work conditions that suited employers. A consequence of this was that the effects of the ‘labour reforms’ disproportionately fell on those groups who were the most vulnerable, women workers and ethnic minorities, and thus affected income differentials. This further entrenched gender differentials. Prue Hyman (2014: 88-89) points to a structural factor affecting earning capacity – the ‘wider gaps due to women’s preponderance in part-time work and limited access to overtime due to greater family commitments – not necessarily an unconstrained choice’.

The restructuring aimed at eliminating much of the welfare state, although with residual elements based on targeting. This affected family wellbeing and saw a rapid increase in the numbers of vulnerable households (Pool *et al* 2007: 391-93; see Chapter 22). There was a focus on the individual as being responsible for their health and all other social phenomena affecting them, and that it is their own obligation to overcome these problems. For example, Stiglitz (2003: 35; see also Appendix A) says that in the fundamentalist labour market model, ‘someone who is not working has evidently chosen not to work’.

The neo-liberalisation process in New Zealand was carried out in two revolutionary surges. The first was effected by the Minister of Finance, Roger Douglas, assisted by his supporters in the cabinet and Labour caucus, and a number of technocrats and agencies in the public sector or contracted in as consultants. Why a left-incumbency party undertook these measures remains something of a mystery. As noted already, there was a need to reform the economy, but the speed and depth to which the reformers went was surprising. There were, however, peculiar circumstances – at the very outset of his incumbency the Prime Minister, David Lange, was overburdened as he had to fend off a particularly aggressive American

intervention, surrounding New Zealand's nuclear-free policies that intersected with the ANZUS pact, of which New Zealand was a member. Then, almost immediately thereafter, with no political support from Australia, the United Kingdom and the United States, he had to deal with the sinking of Greenpeace's Rainbow Warrior in Auckland Harbour and murder of a crew member by French state terrorists, the capture and trial of several of the perpetrators and then severe trade pressures from France to release them. To add to all this, the outgoing Prime Minister, Robert Muldoon, had refused for a time to release the reins of power and control of the Treasury instruments. When his power in cabinet became more assured, Lange did call for a halt to restructuring in his 'cup of tea' speech (the title for Chapter 15), and eventually Douglas resigned after falling out with Lange, particularly over the flat tax linked to user charges for health and education.

Secondly, Labour lost the 1990 election and the new Minister of Finance, Ruth Richardson, with the support of business interests, executed the infamous 'Mother of All Budgets' of 1991 (her own appellation). This was preceded by a mini budget termed an 'economic statement' tabled just before Christmas 1990, imposing 'draconian benefit cuts' (Kelsey 1995: Chapt 3; 276-80; 401-11). At the same time the basis of employer-employee relations in New Zealand, the *Industrial Labour Conciliation and Arbitration Act*, 1908 was reformed and replaced by more market-friendly systems of labour relations that greatly limited the size and influence of trade unions.

The Impacts of Restructuring

The rhetorical question inferred at the start of this chapter – was the gain worth the pain? – has been responded to by Easton (2020: Chapters 46-55) who notes that, initially, Rogernomics was 'largely successful. As the reforms were extended and became more extreme, however, there were more and more failures'. For example, in redesigning the welfare state, changes varied in terms of success from 'farcical failures', to 'failures', to interventions that were 'contested and/or partially revised', to a few areas in which the reforms were 'retained with modifications' or 'largely retained' (Easton 2020: 51).

Instruments put in place under Rogernomics still have an impact. One, that has had major continuing effects was the 1988 *State Sector Act*, described in very positive terms by the State Services Commission (1998):

'The *State Sector Act 1988* was designed to introduce into the public service many of the positive features and incentives of the private sector. The key principle is that managers if they were permitted to make *all* [my italics] *input* [SSC's italics] decisions – pay, appointments, organisational structures, production systems, etc – would respond by accepting personal responsibility

for producing substantially higher quality outputs – the goods and services provided for the Government and other users’.

The effects of the *State Sector Act 1988* have been severely criticised. To take three critiques, Wilf Malcolm (a first-generation university ‘Chief Executive’, formerly known as Vice-Chancellors) and Nicholas Tarling (a former Deputy Vice Chancellor) showed how the *Act* had massively shifted universities away from being collegial bodies dealing with complex issues in a pluri-disciplinary environment, and being responsible to the wider community in their catchment areas. Under the new *Act*, they became corporate bodies headed by Chief Executives responsible for all ‘input decisions’, as prescribed by the *Act*. Secondly, in an op-ed, Simon Chapple argues that the *Act* has led to the gutting out of expertise in the public service and to large-scale need for external consultancies. And, thirdly, there have been other perverse consequences, as Simon Wilson reports: although the mega-city of Auckland owns its port, they have to abide by the decisions of the port’s chief executive, even if that goes against the best interests of the citizenry as a whole and are instituted in order to make short-term profits for the Port Authority. These were statutory conditions outside the control of the Auckland local body, but imposed by central government when the Auckland ‘super-city’ governance structures were being put in place (State Services Commission, 1998; Malcolm and Tarling, 2007; Chapple 2018; Wilson 2018).

As the *State Sector Act* shows, the interlocking of neo-liberal doctrine and management creeds was reinforced and entrenched statutorily in New Zealand, as Jane Kelsey argues on the basis of her legal-economic research. This was achieved by a rewriting of statutes, often in complex ways that make any retreats or revisions virtually impossible. The neo-liberal revolution thus had many features of other revolutions: its leaders were certain that they were right, and also wanted to ensure that the changes they introduced, as quickly as possible, could not be undone. As a consequence, this has empowered those very technocrats formulating and implementing the reforms. Perversely, despite the avowed anti-statism of the neo-liberals, in Kelsey’s words, the administrative ‘state became more powerful through the restructuring process, not less’ (Kelsey 1995; 2015: esp Chapt 3).

Easton’s last chapters (2020: 46-55) provide a stepwise denouement of neo-liberalism, sector by sector. He also compares New Zealand with Australia for factor after factor. This is a research strategy that is the closest that macro-economics can come to a quasi-experimental design. The two polities are different in many ways and Australia lacks New Zealand’s diseconomies of small scale, but they are also more similar to each other than to other places. In many ways, functionally, but not constitutionally, New Zealand resembles the Australian states, although its biggest

metropolis contains a lower proportion of its population than does any Australian state or territory, where metropolitan dominance is extreme.

Paul Dalziel (2002) used a similar Australian comparison to respond to some of the reforms' more ardent supporters. These researchers had even become so enthusiastic about the reforms that they compared the neo-liberal revolution with the emblematic 'state experiments' at the dawn of the 20th century, with 'New Zealand once again appear[ing] to be emerging as a laboratory from which results will animate economic debate and policy throughout the world'. Dalziel concluded that: 'The present paper reports from the laboratory that the New Zealand experiment did not succeed' (2002: 44, citing Evans *et al* 1996).

Both countries underwent restructuring, but Australia's reforms were far more gradual. Economic trends in the two states had been rather close until the advent of Rogernomics, but thereafter Australia did better, particularly for conventional indices, such as GDP and GDP/capita. Workforce participation rates had been higher in New Zealand, but dropped below Australia's then recovered, although the gap was less than before. Unemployment rates, which had been 4-6 percentage points below Australia's, surged in tandem with, but above, Australia's. New Zealand's then fell below again, but the gap was much less than it had been. Finally, the two nations' labour productivity indexes, which had been closely in tandem, widened with Australia moving ahead. Easton concludes (2020: 46): Australia was 'able to implement a broad social democratic, "more-market" liberalisation. Its economic outcomes were better... [New Zealand's] economy stagnated between 1985 and 1993... 20% lower than Australia with its more sober liberalisation'.

Elsewhere Easton (2020: 'Introduction') makes two general criticisms: 'At the heart of Rogernomics..., was the application of an extreme form of market theory to New Zealand as though the country was an idealised United States. The result was a deep and self-inflicted wound to the economy arguably unique in our history'. More specifically, 'The period of stagnation 1986 to 1993 was the result of the influence of ideology, unlike previous recessions and depressions, which were generally caused by contractions in our overseas markets'.

An empirical analysis based on a long-running statistical series (1960-2012) by Kay Saville-Smith appeared right at the moment of finishing this book. It strongly demonstrates the impacts of Rogernomics on low-cost housing that underlay the crisis that was to emerge fully much later in the 2000s: in 'one year, 1986, more than two-thirds of the funding [for this sector] was stripped out'. In the early 1990s, Richardson's policies continued and reinforced this. Douglas also 'abolished the' administrative and statistical expertise and checks and balances that ensured the relative availability of this housing for people in need. Essentially, New Zealand 'largely stopped building these low-cost homes... Sucking out housing finance is what happened' (Wilson 2020: A20; citing Saville-Smith).

The Unseen Coterminous Demographic Revolution

In the background, however, another far quieter revolution was playing out – a restructuring of peopling. These were major age-structural shifts which, unlike economic reforms, are inexorable. Their genesis was purely demographic (from Baby Boom to Baby Bust shifts in fertility) – they were not caused by economic restructuring. Indeed, the Rogernomics’ revamping seems to have proceeded on blissfully unaware of what will be the most significant factor coming from this era, quite probably with impacts when Roger Douglas has become merely a footnote to history.

This leads me into what may be the most important applications of the entire history I have been narrating until now in this book, particularly for policy. As noted last Chapter, Baby Boom fertility levels had a major impact on Pākehā age-structures in that era, increasing child dependency. Baby Boom rates were exceeded only by the very high levels of child dependency occurring in the hyper-fertility Victorian period (Figure 11.2). As they pass through successive life-cycle stages, the inflated births born over 30 years, 1943-73, will affect burdens and capacities, as outlined last paragraph. The social and economic, and the cultural and political impact of these cohort flows will be felt until about 2050. While aged dependency also increased at the start of the Baby Boom, as part of a long-term trend, it reached a shallow peak in the 1950s, dropping marginally then continued its long-term trend. Total dependency ratios, driven in the past by the very high levels of child dependency produced by the Baby Boom will not be reached again until the mid-twenty-first century, but then will be instead a result of the ageing of the cohorts born in the Baby Boom. Over their life-cycle, between producing youth dependency and aged dependency, they passed through a phase of being young adults and went on to be middle-aged adults sustaining the economy’s productive sectors – this phase has already been passed through (1976-2016).

The dependency burdens due to structural ageing will increase and become difficult to sustain in the longer run, although New Zealand for the moment is somewhat behind other western developed countries in this trend. Its catch-up will be rapid because the large Baby Boom cohorts born as late as around 1970 (New Zealand: Pool 1997; WDCs: Pool 2010) transmuted into the smaller baby Bust cohorts born between 1973 and *circa* 1981. But this will be mitigated by a more even spread across adult age-groups even later in the 21st century, as is clear when one looks at modes (Table 21.1)

The general public is subject to media reports on the new fertility regime, typically revolving around childbearing by women in their late 30s or older. But, the real, more fundamental import of the historically unprecedented shift in ages at which first births occur has perhaps not been recognised in the way it should. Taking that important long-term driver of the demographic system, the force of reproduction, it is

useful to compare the last few post-1970 decades with the Baby Boom. In 1971, at the second Baby Boom peak, in the dying throes of the boom, women would still have had 1.4 births before age 25 years; in 2013, by contrast this figure was only 0.5 births. In 1971, the age-group with the highest fertility rate was at 20-24 years, which exceeded that for the sum of all ages 30+ years combined; by 2006, age-group 30-34 years had the greatest rate that was 20% above the sum of all the rates below 25 years. Looking at age-compositional effects on fertility, in 2013, 58,717 births were recorded in New Zealand; if 2013's age-specific fertility rates had still applied to the median official projections by age for year 2023, because of population growth and shifts in age-composition the number of babies that year should have leapt to 71,151; if growth had occurred, but also migration churning – typically at the young adult ages, 20-44 years – causing the age-structure to look like that of 2013, there would have been only 65,841 births, but still significantly more than there actually were that year².

This shift-share in childbearing ages has immediate implications for all of maternity services, work and family life. Public policy is addressing these issues to a degree. But, with the exception of the potential health and other costs that will come from an ageing society, and their associated fiscal and familial burdens, there is little attention given to the effects on the society and economy of age-structural transitions already underway and following an inexorable path. They will affect all aspects of production, reproduction, as is already evident (see paragraph above), consumption, exchange and trade flows. The main fluctuations in the demographic system will come not from growth so much, but from age-compositional shifts as is seen in Table 21.1 on modal age-groups for 2016 and future years. Counterbalancing the relatively even spread across adult ages is the deficit at childhood ages – at every date the numbers at ages 0-14 years fall well below that for the modal age-group. Consequently, child dependency levels will be low allowing resources to be channelled to meet increasing aged dependency rates.

What is striking in Table 21.1 is the impact of momentum as larger cohorts affect the modes at each successive age-group. Nevertheless, this momentum towards ageing is muted as the modes at older and older ages are counterbalanced by significant numbers approaching the mode at younger adult ages – at working ages, not at childhood. In 2056, when 60-74 years becomes the mode, this form of structural ageing is counterbalanced by large cohorts at younger working ages – indeed, the distribution at those ages is almost tri-modal. Incidentally the mode reaches 60-74 much later than it will have in Europe where this occurs in the decade 2030 to 2040. The policy issue for Aotearoa may be more how the economy finds the jobs to employ people at workforce ages than how childhood and aged dependency pose fiscal burdens. This problem may already have arrived: the next chapter will raise issues of inequality, the precariat and the implications of a 'gig' economy in

which participation in the labour force is highly destabilised. Age-group 0-14 years remains at a consistent size, whereas at ages 30+ years the sizes of cohorts vary.

Table 21.1: Projected Broad Age-Groups (000s), 0-14, 15-29, 30-44, 45-59, 60-74 and 75+ Years, 2016–56 (Figures in *Italic Bold* are Modes)

Year	Age-Group					
	0-14	15-29	30-44	45-59	60-74	75+
2016	921	<i>1,005</i>	880	931	660	295
2026	977	1,013	<i>1,108</i>	907	842	449
2036	991	1,035	<i>1,130</i>	989	886	653
2046	966	1,063	1,089	<i>1,171</i>	888	830
2056	984	1,043	1,120	1,106	<i>1,199</i>	892

Source: Statistics New Zealand, Median-series, 2016 base

There is another dimension to this which comes from New Zealand's ethnic structure. To date its policy world seems to have largely ignored the message of Natalie Jackson (2016): that Aotearoa has markedly different age-structural transitions, Pākehā, and Māori and Pasifika co-existing within the one national population. The transitions of Māori and Pasifika are such that a window of opportunity exists for a delayed demographic dividend, to which they would be the main contributing population. To succeed, urgent proactive policy interventions would be needed to afford this large cohort entering the workforce ages, the training and up-skilling necessary to ensure that they could make significant inputs to the economy – at present their educational and job statistics are well below those of their Pākehā peers, as will be discussed next chapter.

Work in the Neo-Turbulent Era

The labour market was changing significantly over this time (refer Figure 12.1). By the end of the Baby Boom, the industrial distribution of the workforce was already heavily weighted towards the tertiary sector, yet manufacturing was still a significant employer. Pastoral exports were important to the economy, yet even when its employees are included, the rural sector, which in 1970 had still been dominated by the family-operated farm, comprised a very small proportion of the 21st century overall workforce. Throughout the first three-quarters of the 20th Century, in the epoch of recolonisation, the industrial structure of the labour force remained broadly similar in profile. But, in the subsequent neo-turbulent era there was a rapid shift-share, as is recorded in Table 21.2. Until the War, the primary sector shrank gently and became more labour-efficient as mechanisation was increased for many farm operations, especially in the milking shed and for haymaking. It then declined in size slightly in the Baby Boom but plummeted thereafter in the neo-turbulent period. The

secondary sector remained fairly steady until 1966, but then declined radically in the period covered in this chapter. The tertiary sector stayed around half the labour force until the end of recolonisation, then grew rapidly to three-quarters of it.

Table 21.2: (a) Industrial Sectoral Distribution (%) of the Employed Population, 1926, 1951, 1966 and 2006*; (b) Percentage Distribution Within the Tertiary Sector, 1966 and 2006

(a) Sectoral Industrial Distribution (%) of the Employed Population				
	1926**	1951**	1966	2006
Primary	29	19	14	7
Secondary	30	34	37	22
Tertiary	41	48	50	71
Total	100	101	101	100

(b) Percentage Distribution of the Employed Population by Tertiary Sub-sector, 1966 and 2006

	1966	2006
Wholesale, Retail, Hospitality	27	23
Transport, Communications	10	6
Finance, Insurance, Real Estate	3	14
Health, Education, Community and other Services	10	28

Source: Thompson, 1985: Tables 257 and 263, updated by the author to 2006.

*Notes: * The length of the periods are different ** Non-Māori only*

In the last quarter of the 20th century there was a shift within the tertiary sector directly related to the explosive growth of the FIRE economy. Today employment in the FIRE industries, alone, well exceeds that in manufacturing. The sheer weight of education and health as sectors today – 18% of the workforce – is also a major change. The effects of these shift-shares can be seen in data for selected industrial sub-sectors in Table 21.3. Today, 57% of all workers are in three sets of service jobs: commercial, FIRE, and health and education – far more than in the combined totals for the primary and secondary sectors.

The labour force was bifurcating into a better-paid minority and a less well remunerated majority. Training such as in accounting, law, information technology, and, for New Zealand at least, the new field of management or business studies, became popular. How much of that translated into more highly paid jobs in the FIRE sector is difficult to determine. This is because at the same time there was unprecedented growth in the less skilled and unskilled, and poorly remunerated, components of the tertiary sector – jobs in the hospitality and other service industries.

Table 21.3: Percentage of the Labour Force Stating an Industry, by Selected Sub-Sectors, 2013 Census

Sector	Selected Sub-Sector(s)	% of Total
Primary	Livestock Farming (incl. Bees)	4
	Other Primary	3
Secondary	Manufacturing	10
	Construction (incl. Building etc.)	8
Tertiary	Wholesale, Retail, Related Retail Services (e.g. Hairdressing, Accommodation, Cafes)	21
	Water, Electricity, Gas, plus Transport and Communications	7
	FIRE = Finance, Insurance, Real Estate; also Law, IT, Accounting, Public Administration, Defence, Fire, Police etc.	5
	Health and Education	18
	Other Tertiary	6
	Total Stated	100

Source: 2013 Census, Tables by topic. My categorisation into sub-sectors.

In the medium range, in terms of income there were the burgeoning numbers of jobs in health, education, science (and related fields such as managing the national conservation estate) and for some services requiring permanent and full-time staffing: police for example. Yet at the same time with this went an overall shift to part-time employment and casualisation. The work history of cohorts will have been shaped by education as well as their family formation histories. In turn, this affects two other key factors of the life-cycle – the career ladder achievements of women and men, and the work-family-leisure inter-linkages for both genders³. The 1970s saw increases in female tertiary study rates, and this increased over succeeding decades so that today more women than men attend university; more men undertake trade training.

The workplace also took on a different architecture in other ways, some of which is difficult to capture in broader statistical analyses of the type used here. A regular job, five days a week, from 8.00/9.00 am to 5.00 pm, which was the standard in the recolonial epoch, gave way to casualisation, to the emergence of a ‘gig economy’, in which workers are engaged on short-term contracts and usually without the attendant benefits of more regular employment (eg leave), and to increases in part-time work. Even worse were some forms of franchising, as portrayed so bleakly in Ken Loach’s film on courier delivery, *Sorry We Missed You*. In 1971, 5% of male workers and 21% of female were part-time; by 2006 this had grown to 11% of men in employment and 35% of women, so there were also marked gender differences. Another trend was a shift to ‘labour market flexibility’, an operational idea that transmuted into one of the more reified platforms in neo-liberal ideology. Flexible hours, and/or part-time work, can prove beneficial to some employees, but in practice this more often represents a net shift in labour-capital or employer-employee

interrelations. Historically, the employer invested his/her capital and provided the workplace and plant. Over time with unionisation this became a more balanced exchange in which the worker had some rights, including statutory benefits such as annual leave, some degree of protection from unfair dismissal and continuity of employment. But flexible labour markets often alter this balance, a point to which I will return next chapter when discussing the ‘precariat’.

Despite all this turbulence and change there was one economic continuity. Pastoral farming still maintained a highly significant place in New Zealand’s economy and national identity, even though it employed just a minute proportion of the labour force. Nevertheless, it too has gone through major internal mutations over recent decades, mainly involving further intensification. This has come about from an increasing degree of concentration on dairying alone, rather than the mixed dairying/sheep fattening/pig raising regimes of the past. Along with this, there is now heavy usage of artificial fertilisers, which has environmental impacts. There has been a major shift in ownership to agri-businesses, often built on multiple former family farms, and a move from the family to a waged farm workforce. Herd sizes have increased, both per farm-unit and in the numbers milked in the one shed. Additionally, the ‘land-abundance’ myth has been realised not so much by ‘breaking-in’ unfarmed lands, but by converting land with different uses historically into dairy farms (eg meat-sheep breeding farms; exotic pine plantations; tussock-grass inland basins previously ‘high country’ stations grazing wool-sheep). Although dairy farming is still a dominant activity of the humid west of the country, it has now moved to the less humid eastern regions, requiring major use of irrigation, that has environmental implications and is a contentious issue (Stringleman and Scrimgeour 2009).

Gender and Work in the Neo-turbulent Era

A very significant change has been the feminisation of the work force. In 1971 there were 235 male workers for every 100 females; by 2006 this had dropped to 113. The male workforce grew by 48% over the 35 years, but the female one by 195%. There was still industrial clustering by gender and in some ways this intensified. Thus, the primary sector remained solidly male, as did transport and communications. Manufacturing moved from close to par (118 males: 100 females) to strongly male (242); by contrast masculinity ratios dropped further in health, education, and community and social services from 44 males per 100 females (1971) to 39 in 2006. In the cases of wholesale, retail and hospitality male ratios increased from 63 male:100 females to 80 and for the FIRE sectors from 63 to 93. By 2006, about 35% of working men were in industries with high masculinity ratios, while 41% of employed women were in industries in which female workers are clustered. Table

21.4 gives the data by occupation, an approximation of skill levels, of the employed population at 15-64 yrs.

Table 21.4: (a) Percentage Change in the Occupations of the Workforce Aged 15-64 Years, by Sex, 1986–2001; (b) Percent of the Total Workforce in each Occupational Grouping, 2001

Occupational Grouping	Change 1986-2001 (%)			2001 %
	Males	Females	Both	
Professional, Technical & Related	45	91	68	22
Administrative & Managerial	59	349	110	9
Clerical & Related	-31	-14	-18	13
Sales	8	34	20	11
Service Workers	27	42	37	12
Agriculture, Forestry & Related	-22	-7	-18	8
Production, Transport, Trades & 'Elementary'*	-23	-32	-24	21
Unidentified	N/A	N/A	N/A	4
Total: Percentage Change in Number Employed	2	30	13	100

Source: Pool et al 2005: Tables 9 and 14

*Note: *Cleaners, Rubbish Collectors, Labourers; New Zealand Standard Code*

Barbara Brookes (2016: 361) reports that 'The majority of women in the early 1970s were reluctant to take on paid work outside the home while their children were young, and those who did so faced a strong social stigma'. By the 1980s, however, female labour force participation rates were undergoing a major change: to an M-shaped curve, with high participation rates on leaving school, a drop off at childbearing ages, followed by a return to work at older working ages after child-rearing had more or less finished. Brookes continues, 'While attractive avenues opened up for the well-educated, the majority of women were not in well paid occupations and those seeking work [at the end of the 1970s] were doing so in a period of economic recession. The 1981 census showed that the main full-time jobs for women were clerical and sales related, followed by workers in teaching or the health care sector. Part-time work reflected a similar distribution...' and was a growing trend.

Of course, women at older working ages in the 1980s were also the mothers of the late Baby Boom, working alongside much younger cohorts who represented the young adults of the Baby Bust, who were to have very different fertility and work histories. This shift to an M-shaped curve represented a quantum change from the labour force patterns in the previous period of low fertility in the interwar years. It is tempting to see this as being without historical precedence, but this ignores the participation of women who historically worked unremunerated in family businesses or on farms. But in the modern era, say since 1850, for urban populations this change from an inverted hockey stick to an 'M' was probably unprecedented. Moreover, the

shoulders of the ‘M’ achieved higher and higher rates, and the depression at reproductive and child-rearing ages became later and later, and its central ‘V’ shallower and flatter as more and more women worked also through their child-raising ages. In sum, by the 1970s, incipient signs were there for what were to become the major trends in the new millennium: ‘attractive avenues’ of work for the better-educated, but these women faced ‘career ladder/work/family/life balance’ issues that were to dominate much of the discourse on female employment, for women in all occupations, in subsequent decades. This was accompanied by the shift toward part-time work and casualization. While women were to diversify the jobs they enter, or have access to in the labour force, four decades on there is still gender-clustering.

Gender pay equity was still a distant dream in the 1970s and 1980s and remains so for most women workers. The legislation intending to rectify this, sponsored by Helen Clark in the late 1980s, was repealed by Bill Birch in a National Government, committed to workers’ rights being covered by individual contracts rather than by collective bargaining – a position that took legislative form in the 1991 *Employment Contracts Act*. In the new millennium, Barbara Brookes (2016: 361) argues, some parameters changed yet others remained the same – pay gaps, work-family balance issues. Cross-cutting these were other new confounding factors:

‘Once the expectation was that men worked for families and provided for them through the breadwinner wage; the state stepped in to assist families when that wage was insufficient... The decline of the breadwinner wage [plus the props of state allowances described earlier] reflect[ed] a new reality, one in which it cannot be assumed that people live in heterosexual nuclear families that can be supported by a single male wage’.

She goes on to comment that one legislative breakthrough, ‘Parental leave, however meagre, recognised that women’s earnings were often central to the family economy, but that gendered life cycles shape women’s careers differently from men’s...but clearly it remained difficult to combine family responsibilities with demanding work’. The then Minister, Laila Harre, working hard against extraordinary Parliamentary opposition, managed to orchestrate a first *Paid Parental Leave Act* (2002), lifting New Zealand from the bottom ranks of the WDCs (with the United States) up a notch by legislating 12 weeks on benefit, now (2018) extended to 22 weeks. A leading American expert, Janet Gornick, commented that Harre’s legislation had lifted New Zealand from ‘the bottom’ to the ‘bottom grouping’ of the OECD, above her own country (Brookes 2016: 427, 432-33, 462-70; see also Gauthier 1996; Gornick and Meyers 2003; Gornick cited in Pool *et al* 2007: 294n).

A New, More Manifest Māori Renaissance

Counterpointing these neo-liberal ideational flows – sometimes along parallel paths, sometimes in opposition and sometimes tangentially – has been the most recent signs of a Māori renaissance, arguably more surgent than its predecessors with that title in the 1890s or 1960s. Its driving forces have been ideational, but it seems to have produced a sea change in some aspects of Māori mana – status – in the wider society. It has not seen a universal achievement of gains for Māori across an entire people and in every aspect of Māoritanga (way of life), yet the settler-society of recolonisation, with a Māori appendage, displaced from their resources and disheartened, seemed in this era to be ceding place to one in which a Māori presence has brought Aotearoa closer to genuine bi-culturalism. And Māori and Māoritanga are reasserting their position in the nation, from minor but symbolic steps such as the far more frequent use of te reo (Māori) words in everyday discourse, to the role of Māori or their descendants in political life, through to major capital investments (see below). In a sense, this means that Māori are redefining the parameters of what is a settler-society, a corollary to the question I raised in Chapter 2 – is a person of settler descent living in 21st century New Zealand, born and brought up in Aotearoa and loyal to it, often with Māori wider family and interacting with them, really a settler in the way that their ancestors definitely were in the Victorian era? This extends, of course, to other non-Māori who are not Pākehā by descent; there are significant Pasifika-Māori sub-populations and smaller Chinese-Māori and even smaller Indian-Māori groups that are long-established. One of the regions that is most Māori demographically had a multi-term, Chinese-descent Mayor (subsequently Race Relations Commissioner) who is a fluent Māori speaker, gained not as a symbolic gesture on entering politics but from childhood exposure to te reo.

The most recent renaissance can be traced to the establishment of the Waitangi Tribunal achieved by Minister Matiu Rata in 1975; its existence has had profound ramifications, far beyond what he might have hoped for, yet this is an anathema for the residual conservatives, who want a homogeneous culture really Pākehā, or even ‘English’ in form. Fortunately, they are more an irritant than a force in the public policy arena, where most New Zealanders, for example, overwhelmingly favour the teaching of te reo (Māori language) to all children. But, at a material level, Waitangi’s peaceful revolution has altered forever the distribution of capital resources in New Zealand.

In earlier chapters, I stressed the fact that Māori had lacked access to the financial capital necessary to drive development. The settlements of Waitangi claims, often in cash, albeit that they repay merely a small fraction of the losses of iwi, have meant an injection of capital to runanga (iwi councils). This has been translated into population and development strategies, above all the entry of runanga into the world

of corporate New Zealand in which until recently very few Māori were actors. Ideationally, this has seen the development of corporate structures, which ensure that hapu, iwi and other groupings act as collectivities rather than as a set of corporate 'rich-lister' individuals. This movement has not built up the wealth of individuals, although some Māori have become much better-off, but the capital base of these collectivities. Their corporate structures and their missions (eg how they perceive wealth, including intangible cultural wealth such as language retention and marae maintenance) are different from those in conventional business models, although, of course, runanga also use standard accounting, legal and management tools. Their perception of the public obligations of collectivities has gone beyond Māori to the whole society: eg when it was returned to them in the Ngai Tahu settlement, the iwi vested much of the alpine South Island in the public estate as domains accessible to all New Zealanders. In a sense, Henry Sewell's desire to destroy the 'communistic' ways of Māori, in his commentary cited earlier on the 1860s *Native Land Acts*, has come back to haunt his ghost as a viable way of economic life in twenty-first century New Zealand. Finally, there has been a spillover of Māori language and concepts into interpersonal interactions in New Zealand (eg use of words such as whanau, korero and hui) so that the renaissance has also affected wider popular culture more than was the case a few decades ago (Love and Love 2010).

Nevertheless, the 'gaps' between Māori and Pākehā have still not been closed. Until the mid- 1970s/early 1980s incomes were converging, but with the restructuring they diverged. Some of the differences cannot be eradicated as they are due to exogenous demographic factors. Natalie Jackson (1998) has pointed to the intervening effect of demographic differentials, age-structure and age at childbirth, on differences in labour force participation rates and income.

Reflecting on Revolutions

It is beyond the scope of this book to analyse the cultural and social changes that were sweeping New Zealand at this time. But, the census data do throw light on one factor of major change: religious affiliation. Joanne Young (1997) has documented the demographic dimensions of this in detail. Notable are the growth of the charismatic and new evangelical faiths, non-Christian beliefs, mainly among recent migrants, and the decrease in 'mainstream' (eg Anglican) church membership. The net result was marked secularisation. At the 2013 census 42% of the population reported no religion, up from 30% in 2001. To compare, about a quarter of Americans have no religious affiliation (but many believe in a 'Higher Being') or are atheists and agnostics.

Central to this book, however, is that challenges due to demographic changes of the past were now coming to haunt New Zealand and other Western Developed Countries. These included pressures on the health system due to the numeric ageing of cohorts born way back in the century (1905-1925) when Total fertility Rates were

declining but still higher than they became in the depression. This was not the structural ageing, which so captures the imagination of the media, but which will not really be upon New Zealand until 2035 but was the momentum effect of numeric ageing. An artificial fear of structural ageing allowed politicians to call for the elimination of the welfare state, and some demographically unschooled commentators wrongly claimed that Aotearoa was the ‘oldest country in the world’. In reality, New Zealand’s demographic profile was the youngest among Western Developed Countries (WDCs), and somewhere between the other Anglo settler societies and the Latin America’s Southern cone countries. In 2016, the modal age-group was 15-29 years, which exceeded, in relative terms, by 8% the next largest, at 45-59 years, which had been inflated by migration and the childhood ages by 9%. By contrast, the main child-rearing age-group, 30-44 years, was 14% below the young adult one (refer to projections in Table 21.1). But because of misinterpretations about ageing, suddenly, the political discourse was confronted with new fears – not just health but housing and income support for a ‘tsunami’ of the aged, yet simultaneously the welfare system structures that might accommodate this wave were being dismantled. There were other related issues: for a younger population health and hospital care typically relate to a single condition, often which can be treated with antibiotics or others of the miracle drugs that had entered the biomedical armoury since World War II, but now cohorts of patients were emerging who had co-morbidities, making service delivery ever so much more complex. Monitoring for global outbreaks of ‘new’ viruses and bacteria was now possible, but difficult as the 2020 Covid-19 pandemic, occurring as I finish this book (see also Chapter 14, 1918 ‘Flu pandemic), shows.

There is another ironic twist to all this. By Belich’s (2009: 2-3, 9) definition noted in earlier chapters, recolonisation endowed New York and London with hinterlands to which they would not otherwise have had access. Equity passing through their financial institutions was invested in infrastructure and resource development across the Anglo-World. The twenty-first century economy, the structural adjustments and the status in policy circles of the FIRE sector almost as a cult, suggests that a form of that recolonisation has returned in the new millennium, albeit clothing itself in different garments. Information Technology (IT) has, of course, been the vehicle for this, so that New York or London are very close in cyberspace, and time is now ‘supercharged’ into nanoseconds. To borrow from the traditional centre-periphery literature, the new compradors of the FIRE economy are also meeting the more global objectives of the wealth accumulators working in the new metropolises that are now compressed into a few square kilometres around ‘Wall St’ and ‘the City’; they may be the new imperia. Silicon Valley and similar clusters deal with technology.

At the end of the twentieth century, rapid change to the society came first from its demography going through previously un-experienced upheavals – while fertility

hovered around replacement, this was accompanied by massive swings in net migratory inflows and outflows. These mutations were associated with new approaches to the organisation and interpersonal exchanges in the country's social life. This then drew back the curtains for an economic revolution that had no precedents, although some ideological elements had archaic throwbacks to the Victorian era: charity for poor relief from the 'worthy rich', instead of welfare statism, along with 'free trade', that really only succeeded in the past because of the capacity of the metropole to draw on the resources of the empire. While it is possible here to identify the trends passed through in these various revolutions, assessing what were the causally more remote determinants of the population and economic shifts is beyond the scope of this book.

What is particularly clear is that the neo-liberal revolutions of Douglas and Richardson and the interventions subsequently of austerians had divested NZ of many of the tools with which the society could manage change, especially the radical ones to which it was now being exposed. The neo-liberals had swept away – not in its entirety – much of the collective social infrastructure necessary to cope with transformation. That hegemonic ideology saw market forces as the singular factor mediating any movements in the economy, population and society. Exactly how was never really explained; the 'invisible hand' of Adam Smith was frequently appealed to by the religion's preachers. Neo-liberalism's underlying ideational premises had also eroded the regulatory tools by which continuing demographic shifts could be accommodated, most notably the factor of migration, which became the twenty-first century's demographic driver *par excellence* – not contributing to continuing and consistent growth, as its boosters would argue, but to extreme fluctuations that affect every aspect of the 'demographic system', discussed last chapter. To the neo-liberal mind, intervention in processes such as migration, or its downstream effects on consumer needs, on property and on the financial levers that might be used to manage these, is anathema.

By contrast with migration, throughout the 1980s-2000s fertility trends remained steady with fertility just on replacement, and births numbering around 60,000 (+/-). Natural increase outranked net migration as a driver of growth, even in peak years of inflows, in the early 1970s, through to June 2013. Since June 2013 to the time of writing, however, net migration has outrun natural increase every year, a situation unseen since 1871-75. The dramatic shift is not simply because net migration has increased, but because natural increase has fallen (by 27% since 2011), as birth numbers have declined and deaths increased, simultaneously the causes and manifestations of population ageing⁴.

Seemingly counter to the increase in deaths, which is a factor of the increased numbers at older ages (numeric ageing discussed earlier), life expectation has gradually increased, but the long-term trajectory was controversial – will it be

extended and extended, or, as I have argued last chapter, are there factors of compression at work? The overwhelming impression at the start of the new millennium was that health had become a victim of its own successes, thereby creating new challenges. As only a very small minority of New Zealanders were now dying before retirement, the health system was faced with the problems of an ageing population. Moreover, health expectations indices showed improvements over time in reported health status among elderly; geriatrics were not only living longer but were healthier (Yon and Crimmins 2014). Nevertheless, this did not reduce burdens on the system, as they are more likely than younger people to have to present at a health service facility to maintain their good health. Furthermore, significantly refined diagnostic systems are identifying complex co-morbidities from non-communicable diseases that might have remained undetected in the past. They may be treatable in the sense of putting them into some level of remission and allowing the patient a reasonable quality of life, but, unlike communicable diseases that might respond to an antibiotic, may not be definitively curable. There was also another, ‘sleeper’ that there was little or no discussion about in policy circles, but which I will review next chapter. The survival probabilities, both in standard life tables and in health expectancy data, for middle-aged Māori, Pākehā and Pasifika, especially males were increasing. This means that the patient mixes in the health system noted earlier in this paragraph will also change. The numbers of geriatrics with co-morbidities will increase, and many of these will be carrying into old age, morbidities such as diabetes. Next chapter, I will look at cohort, ethnic and gender shifts that complicate this picture (Pool 2014).

New Zealand’s Economic Management Since 2000

New Zealand has had three governments since 2000: Labour under Helen Clark, 1999-2009; National under John Key, 2009-17; Labour under Jacinda Ardern. Many of the policies moved with the electoral changes, so that often governments were not widely apart ideologically. To the casual outside observer, however, they seemed to share one trait in common: they were constantly looking over their shoulder at the spectre of lingering neo-liberal sentiments, most importantly the not unreasonable aim of achieving fiscal responsibility. But fiscal responsibility was seen as a principal objective of growth policies, and not just a modality by which growth might occur, and it had the effect of side-lining development as a prime objective. For Labour it came from the desire to get on side the business community, for which the government debt was an important consideration; for National it was rather more natural and revolved, in particular, around tax cuts and micro-management of benefit regimes. All governments faced social housing crises and none seemed to overcome them as easily as might be hoped; in part because the underlying factors had become deeply entrenched, reaching back to Rogernomics, as I noted above. To add to this,

the building workforce was a major problem, a result of the elimination of apprenticeships and training in the heady days of Rogernomics.

Michael Cullen, Minister of Finance in the Clark Government, probably joins Vogel, the Liberals, and Savage as someone who had a longer-term development perspective. He reinstated the sovereign wealth fund – National threatened to get rid of it but did not, although they withheld government contributions. Cullen also passed some Keynesian measures to assist home ownership.

National's Prime Minister, Key, and its Minister of Finance, Bill English, leaned heavily on the Global Financial Crisis (2007-08) to argue for an austere regime and budget cuts, but in the same breath saw the ensuing savings as going to tax cuts. Because of progressive taxing, individuals with higher incomes, even within the same tranche, benefit more from such policies. But, additionally, New Zealand had moved to goods and services taxes, which draw the same amount from the same basket of basic needs, whether the purchaser is poor or well-off.

The return of Labour saw Grant Robertson as Minister of Finance. He increased social sector spending in his two first budgets, although had to run to catch up with shortfalls in numerous sectors because of the prior austere policies that were affecting their operational capacities. At the time of writing his ministry is about to launch major infrastructural programmes.

WDCS, Anglo-Settler Societies, New Zealand at an Inflection Point

Of course, the whole world is facing major interlocking crises, but I focus on New Zealand and its comparators. Passionate thinkers like Greta Thunberg are prodding the world towards responding to major questions, such as climate change, which affects both peopling and development. These factors have been pushed to one side by growth economics, and by the fixation of political actors on minor power plays at the expense of true realpolitik. New Zealand, in common with other WDCS, faces three immediate high-level problems, but which constantly have to vie with more minor issues that capture the popular interest and appeal to political actors. It is easy for politicians to put mega issues on a back burner: (i) climate change, which rightly dominates other major issues, (ii) age-structural changes including ageing, and (iii) increasing social inequality (the subject of Chapter 22). In the first and last cases proactive interventions are possible and desirable; in the case of age-structure the changes are inexorable so it is more a matter of mediating their impacts (refer Table 21.1).

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¹ This debate was notable for the way in which what are rather distant trends (2030s) were posited as if they were immediate; indeed, ageing was even advanced as a reason for reforms.

² My profile is very close to Statistics New Zealand's estimate positing cyclic migration, which seems a reasonable assumption but that probably still underestimates churning. In projections' exercises it becomes almost impossible to posit reasonable assumptions about churning as it is somewhat random – each new wave driven by new circumstances – at least to judge from recent New Zealand experience.

³ This shows how essential it is to use cohort data if they are available – each cohort will have had very different life-cycle histories.

⁴ As I completed this book, the coronavirus of early 2020 saw migration drop dramatically. Natural increase also dropped, resulting in miniscule growth (0.4%) for the 2020-2021 period.

Chapter Twenty-Two – The Re-Emergence of Inequality

Piketty's Diagnoses and Prognoses: Where Does Aotearoa Fit?

It would be highly rewarding if, at the end of a long narrative such as this, one could end on an upbeat note. Alas, this is not to be the case. New Zealand seems to have joined the other Western Developed Countries (WDCs) in succumbing to the unfavourable aspects of *Capitalism in the 21st Century* as documented by Thomas Piketty in his seminal book (2014). Globalisation, which I will not be discussing at length in this chapter, seemed at first to offer a great deal of hope as economies opened up, and certainly achieved successes: the efficiency of supply-chain logistics, the telecommunications revolution and the availability of consumer goods from all over the world are three notable achievements, and there are many others. But, for all that it may have boosted some national economies and improved the lot of consumers, it has been flawed severely by a factor that is the global overlay of a more domestic issue to be dealt with in this chapter: inequality that seems to be becoming entrenched in New Zealand and the other Anglo settler-societies, plus the United Kingdom. This is a world in which a few, very rich individuals and corporations across the world have accumulated more wealth than the sum of all its remaining citizens combined; where corporations act almost as independent states, gaining immense profits in countries but paying no taxes or merely token amounts; where the super-rich can hide their wealth in shell-companies with post boxes in tax-havens; and where this wealth goes towards both 'conspicuous [and not so conspicuous] consumption' at a level Thorstein Veblen (1899) could never have envisaged. At the same time this wealth has been diverted away from productive investment. Even the 'Robber Barons' of yore created fortunes by building material infrastructure and plundering resources for productive uses, as against accumulating wealth by the profit margins, generated by algorithms, on cyber nano-movements of financial capital.

The net result is that the world has seen such a manifest surge in inequality, between individuals and between regions and countries, that it was even on the agenda of major meetings such as the G-8 at Biarritz, August 2019, and at capitalism's own flagship talkfest, Davos. If there is an optimistic note to my story, it is that Thomas Piketty and others do suggest modalities by which global capitalism might be regulated and reined back – not eliminated. Practised, ideally, effectively and justly, they propose efficient means of re-allocating capital resources more equitably.

Many sovereign states, not the least Aotearoa, are wrestling with a similar problem at home. The remainder of this chapter looks at the issue as it affects New

Zealand. Once again, as in so much of this book, Aotearoa's situation reflects much of what is happening in the other Anglo settler-societies, and across the WDCs and the OECD.

As previous chapters have shown, New Zealand fits almost perfectly with Piketty's temporal model. Like a number of other WDCs, it sustained high levels of inequality in the Victorian era, saw inequality diminish throughout much of the 20th century and then saw its re-emergence in the 1980s and since (Rashbrooke (ed) 2013; Rashbrooke 2015). New Zealand's 'goodness of fit', however, is less perfect in two other ways. First, by the late 19th century wealth in WDCs such as the United States and United Kingdom came more from investments in infrastructure, manufacturing and mining than from land; for New Zealand, rather uniquely among the Anglo settler-societies, land remained the dominant equity, then lost its singular status sometime in the 20th century, but is still important today. Secondly, most observers agree that the levels of inequality in New Zealand are not as extreme as in some overseas WDCs. That is small comfort for the family sleeping in a car and subsisting on an inadequate benefit, but simply means that Aotearoa's 'rich-listers' are not in Tier One of this class globally.

A major problem New Zealand and other WDCs face is that many of the props that might have helped them protect against inequality, or mitigate its worst effects, have been swept away in the neo-liberal revolution described last chapter. The erosion of these props affected not only benefits, but other structures that were pre-requisites for development. To reinforce the negative effects, the long period of fiscal austerity, imposed, for example, in the United Kingdom and in New Zealand, have led to running down of public sector institutions and infrastructure. Another case in point in New Zealand was the elimination of apprenticeship schemes and the deregulation of building and construction. This meant that when a housing crisis became urgent in the 2000s, made far more severe and immediate by the Christchurch earthquake rebuild, there was a depleted workforce. In this regard, any comparison with the immediate post-war period is stark: the late 1930s had seen the recruitment of a building sector labour force, and this had been reinforced by trade training many soldiers had received during the war. Thus, the governments of the day had a labour force with which to address the housing crisis (and infrastructural programmes) of that time.

The remainder of this chapter analyses some key factors of inequality nationally and then looks at the onset of sub-national inequality, a multi-faceted policy issue. Servicing a long, hilly and mountainous country which has one-third of its people in just one metropolis is always a challenge, but that was as true in 1981 as it was in 2019, yet over that period regional disparities grew. At the time of writing the economic potential of some New Zealand regions was not being exploited appropriately, and these were also regions in which services – market and public sector – were often inadequate. Typically, they lacked financial capital resources,

judging by educational data their human capital bases were inadequate, median remunerated incomes were low and their social capital was weakened. Their residents were more likely to be dependent on benefit incomes, these regions suffered higher rates of unemployment and hidden underemployment, and conviction and hospitalisation levels were higher.

Inequality: Incomes in the Neo-Turbulent Era

The most fundamental evidence about the onset of inequality relates to income. There are two key dimensions to this. The first is the decrease in ethnic differences, then their re-opening. The second has been the expanding spread between the 10% of the people receiving the highest incomes and the 10% with the lowest. On both counts, the effects of wide-sweeping social and economic changes over much of the neo-turbulent era, including the ‘creation’ of a precariat in New Zealand, are seen in an occasional analytical time-series on inequality published by the Ministry of Social Development and orchestrated by Brian Perry and his team (Perry 2018, and earlier years), particularly when they are compared with some available data for the Baby Boom and the decade after that¹.

Ethnic and gender income differences have always been a problem in New Zealand, but, over the period 1951-71, Māori incomes (there were few Pasifika or Asians in Aotearoa then) converged significantly towards Pākehā, despite Pākehā also benefiting from increasing levels. These changes are shown in Table 22.1 using percentage changes per 20-yr period and per decade as an index. In part 1 of the table Māori-Pākehā differences are shown: for example, Māori male incomes increased (from a low base) by more than two-thirds between 1951 and 1971, when the great urban influx occurred and Māori were increasingly residing in areas with employment available at reasonable wage-levels. But, Rogernomics affected this ‘catch-up’ as is seen in line two. Lines three and four break this down into decades, illustrating a stark comparison between when catch-ups were occurring², and when Rogernomics struck so that both ethnicities and genders suffered.

The lower panels of Table 22.1 look at gender differences. The index in this case is the female income as a per cent of the male. Māori gender differences improved more than Pākehā, but this may have been more a function of structural changes in Māori sectoral employment, discussed in earlier chapters, than an actual convergence.

Table 22.1: Percentage Growth in Mean Incomes (\$1991), Actively Engaged Māori and Pākehā Populations, by Gender, 1951 to 1991 (a), and Female Incomes as a Percent of Male (b)

(a) Growth (%) in Incomes: Actively Engaged Population by Gender and Ethnicity				
	Male		Female	
	Māori	Pākehā	Māori	Pākehā
1951-71	67	45	50	34
1971-91	4	-4	8	20
1971-81 (c)	34	22	58	40
1981-91	-23	-21	-11	-14

(b) Gender Differences: Female/Male (%)		
	Māori	Pākehā
1951	57	50
1971	52	47
1991	70	48

Source: Jackson 1998: Appendix H.1.

Notes: (c) This was an era when many women moved from non-participation or part-time to longer hours.

The restructuring undertaken during the Douglas and Richardson incumbencies turned a long-term trend of convergence around, as is seen in Table 22.2. All ethnicities except ‘Other’ (see Table Note), went through marked median income declines between 1988 and 1992, but for Māori and Pasifika the decreases were much more severe than for Pākehā.

Table 22.2: Median Incomes (\$1991), By Ethnicity, Selected Years 1988-2016

Year	Māori	Pākehā	Pasifika	Other *	ALL
1988	23,500	28,600	22,000	25,300	27,200
1990	21,900	28,700	19,600	24,000	26,600
1992	17,400	25,600	17,700	35,100	23,900
2001	22,800	29,800	18,800	27,400	27,400
2011	24,400	38,800	26,400	29,600	33,100
2016	30,800	40,600	26,400	34,500	33,100

Source: Perry 2018, and earlier years. International standard procedures have been followed. But there are methodological changes over time, mainly to refine calibration (e.g. the most recent reports ‘equivalise’ the household data for size and composition).

Note: *Because of migratory waves and churning, the age-structure of this group changes significantly over time.

Ethnic differences show up in Table 22.3 for both absolute and relative declines. Moreover, while all groups had recovered to a degree by 2016, Pākehā had regained by \$12,000 (42%), Māori by only \$7,300 (31%) and Pasifika by a very low dollar amount (\$4,400), just 20%, from a very low base.

Table 22.3: Absolute (\$) and Relative Declines (%) in Income, 1988 to 1992, Māori Pākehā, Pasifika and All Ethnic Groups

	Māori	Pakeha	Pasifika	ALL
Absolute Decline	-\$6,100	-\$3,000	-\$4,300	-\$3,300
Relative Decline*	-26%	-10%	-20%	-12%

Source: Table 20.2. See also note to Table 20.2

Notes: *Relative Decline = (Income 1988 – Income 1992) / Income 1988 (%).

The emergence of marked inequalities shows up vividly in the percentile data in Table 22.4 in a variety of ways. When housing costs are taken into account, the less well-off face the situation that the discretionary income available to them is severely diminished. In 2011, the top 10% of income earners still had 71% of the income they started with before housing costs were excluded, whereas for the bottom 10% incomes were down to 53% of the before housing costs figure. The impacts of the Douglas and Richardson restructuring is even more clear when data specific for the reform years are looked at in greater detail. The lowest income group saw its absolute income diminish by a \$1,000 between 1982 and 2001. By contrast, Percentile 90 increased its level slightly to 1992, then more rapidly to 2001³.

Table 22.4 Incomes of the Tenth (P10) and Ninetieth (P90) Percentiles, Before Housing Costs (BHC) and After Housing Costs (AHC), 1982, 1990, 1992, 2001 and 2011

	Percentile			
	P10		P90	
	BHC	AHC	BHC	AHC
1982	15,500	9,400	50,100	33,300
1990	15,200	9,500	52,600	36,600
1992	15,100	7,000	50,200	34,700
2001	14,500	7,600	58,100	41,000
2011	16,200	8,600	71,400	50,500

Source: Perry 2018, and earlier years. See also note to Table 20.2

Finally, Table 22.5 extrapolates the most robust results from Table 22.4. In 1982 there was little difference in the ratio between P10 and P90 whether BHC or AHC data were used. But, by 2011 not only did the BHC ratio indicate a much wider gap between better-off and less well-off, but this was much more severe once housing costs had been taken into account. For the lowest decile, this meant that almost 50% of their income had to be devoted to housing, but this was less than a third for the better-off.

Table 22.5: Relative Difference between the Tenth (P10) and Ninetieth (P90) Income Percentiles, Before and After Housing Costs, 1982 and 2011

Year	P10/P90 (BHC)	P10/P90 (AHC)	Housing as % of BHC*	
			P10	P90
1982	30%	28%	39%	33%
2011	23%	17%	47%	29%

Source: Table 20.3. See also note to Table 20.2

Notes: *BHC – AHC/BHC (%)

Inequality: Education in the Neo-Turbulent Era

In Piketty's paradigm the better-off attempt to reinforce their advantages and to extend them to the next generation by ensuring that their children receive a good education – typically at university. He shows how their offspring are over-represented in 'Ivy League' and 'Oxbridge' institutions, and in top tier French 'Grandes ecoles' and universities, thereby, in Kwame Appiah's words, 'co-opt[ing] meritocracy', in generating a 'new dynastic system...' that uses unequal access to superior educational systems to benefit its own offspring (Appiah 2018: 176; Piketty 2014 quantifies this for the United States and United Kingdom). In the United States, in particular, gifting by parents may facilitate the admission of their children to more prestigious colleges. By contrast, New Zealand's universities all have teaching units that are stronger or weaker than the norm. Entry to university is more or less certain for school leavers, but this may not guarantee enrolment in specialist courses. Thus, the trend identified by Appiah is probably somewhat muted in Aotearoa.

What is not muted is the gap between Pākehā, and Māori and Pasifika. This became critical in the period from 1976 to 2016 when New Zealand might have benefited from a 'window of opportunity' for a 'demographic dividend' based on the large, late Baby Boom cohorts entering adult ages (see Chapter 19). In Table 22.6 this is shown for the period which could have been instrumental in addressing the 'window of opportunity', using age-standardised data, which is essential as there have been cohort increases in attainment, as is clear in the last column. Comparing Māori and Pākehā, both saw increases but the absolute difference in the gap actually increased. Pasifika and Asian occupy poles in the year for which there are data.

High school cohort retention rates (percent of the cohort remaining at school from age 15 to age 17) increased steadily over the period until 1992, but what is concerning is that they then decreased modestly for Māori. They remained more stable for the Total population at the 1992 level, with a brief upswing about 1998, a decline and then another upswing about 2002 (Pool *et al* 2005: #56, Figure 5). Post 1986, inter-regional differences also extended as will be discussed below. Since 1992, gender differences have also opened up, favouring girls. This is part of a trend seen

across the Anglo settler societies and is a step towards minimising the imbalances of previous generations.

Table 22.6: Age-Standardised* Percentages of Ethnic Groups in Selected Educational Attainment Groups: No School-Leaving Qualification; University Qualification; and Participation Rates (Attendance at University at Key Age-Group, 20-29 Years), 1986 and 2001

		Educational Attainment		Participation (% at University, 20-29 Yrs)
		No Qualification	University Qualification	
1986	Pākehā	40	9	10
	Māori	68	2	2
2001	Pākehā	24	14	19
	Māori	47	5	6
	Pasifika	41	4	...
	Asian	18	25	...

Source: Pool et al 2005: #56, Table 2 and Appendix.

Notes: There are in between Educational categories not shown here.

**Because of marked differences in participation rates between age-groups, and between ethnicities, age-composition effects are marked. These effects are minimised here by a conventional methodology in demography and epidemiology termed age-standardisation*

Inequality: Health in the Neo-Turbulent Era

Health is a very good indicator of the relative wellbeing of different populations and thus of inequalities. It also underpins the quality of human capital. Internationally there is some concern that because of the general growth in inequalities, there is a parallel loss of life expectancy gains. This is reported, for example, for both the United Kingdom and the United States (Raleigh 2018; Saiidi 2019, citing Centers for Disease Control and Prevention, CDC).

In this part of the chapter, I use two sets of data. (i) Standard mortality-type life table indices, both those based on period-data (based on normal rates computed for a three-year average rates around a census year) and cohort tables (that follow persons born in the same period over their remaining life-spans). (ii) Data on functional health yielding life table indices which combine survivorship with functional health – what are termed ‘health expectancies’. Functional health is different from whether or not people have been diagnosed or are subject or not to some particular cause of sickness or death – how most people perceive health status – but is based on the capacity of a respondent to perform the normal tasks of daily living⁴. Functional health surveys yield data on three levels of what are termed

‘disability’, but I restrict myself to the middle range of these⁵. With two sets of survey observations on New Zealand functional health, collected by Martin Tobias and his teams (2009), these data are both period-specific and cohort in form. As these are survey data, sampling error properties force me to restrict the analysis to Māori and Non-Māori (including Pasifika and Asian) (Pool 2014).

Survivorship, or living through an age-span, is the simplest indicator of health. In Table 22.7 data are presented for selected dates for Māori and Non-Māori, on surviving through key life-cycle phases, through the younger working ages and then on to retirement. In earlier chapters, I argued that the great declines in mortality have occurred at the pre-retirement ages, as cohort after cohort at young adult ages increased their survivorship, until by 2006 most Māori and Non-Māori New Zealanders were reaching 45 years. Differences in survivorship at younger ages are now very small: today fewer than 1% of Māori and Non-Māori of both genders fail to reach their first birthday – Māori boys had the highest under-five mortality rates.

In Aotearoa, as indicated by Māori - Non-Māori differences presented in Table 22.7, there are inequalities in the probabilities of surviving across adult age-groups. This is computed by taking the number, in a life-table⁶ at any exact age and dividing it by the number at a younger exact age, in this case 30 years younger. Thus, the probability of surviving from exact age 15 years to exact age 45 in 1945 for Māori men was 77%, but by 2006 was over 90%. Today most children will survive until their 45th birthday. Then differentials by gender and ethnicity open up. In 1945 just three-quarters of Māori men survived over the 30-year span between childhood and 45 years of age, but, of these people only a further 30% went on to reach old age (75 years). This meant that only 24% of Māori male teenagers would attain 75 years. Thus, these rates affect the likelihood that people will continue working until their retirement ages, and, once in retirement, how long they might expect to be in reasonable health, and how long they will draw their superannuation – a vexed policy issue in Aotearoa given suggestions that age of eligibility be increased to 67 years and beyond.

The key burdens due to ill health have since switched from childhood to the last years of the working life: 45-75 years. By 2006, Māori rates had gone up at the pre-retirement ages, but because Non-Māori values for females in 1976 were already above those for Māori females 30 years later (2006), a differential remained for women between the two ethnic groups: 83% of Non-Māori women were likely to survive through this age-span, from 45 years of age to 75, whereas this was so for only 61% of Māori women. Thus, Māori women had lower probabilities of surviving from 45 years of age to 75 than did Non-Māori men, and Māori women had far higher likelihoods than Māori men.

Table 22.7: Survivorship* through the Young Adult Ages (15-45 Years), and from then to Retirement (45-75 years), Māori and Non-Māori, by Gender, 1945, 1976 and 2006 (Period Tables)

Year	Māori				Non-Māori			
	<i>(30)p(15)*</i>		<i>(30)p(45)**</i>		<i>(30)p(15)*</i>		<i>(30)p(45)**</i>	
	M	F	M	F	M	F	M	F
1945	.768	.733	.313	.247	.932	.945	.465	.563
1976	.901	.935	.311	.413	.947	.971	.471	.669
2006	.908	.949	.497	.605	.962	.978	.744	.826

Source: Pool 2014: Table 1.

Notes: **(30)p(15)* = the probability of surviving from age 15 to age 45; *** (30)p(45)* = the probability of surviving 30 years from age 45 to age 75. M = Male; F = Female

For Māori males there were improvements at the pre-retirement ages in the Neo-Turbulent era (1976 to 2006), but those for Non-Māori males were more rapid, so the gap actually widened. In 2006, only 50% of Māori men were living through this age-group to age 75 years, whereas for Non-Māori it was almost three-quarters (Table 22.7). That said, by the early 2000s when there was a focus on primary health, including screening, men of this age-group, particularly Māori and Pasifika, were increasingly presenting at hospitals and other health services in higher numbers and earlier in the progress of their condition than had been the case in the past (Pool *et al* 2009b). Nevertheless, between 1976 and 2006 the situation had improved significantly. By 2006, 90% of Māori men would survive from their teens to their mid-adult working ages, and almost half of these people would reach old age. But even in 2006 only 50% of Māori teenage boys reached old age from adolescence. By contrast this was true for more than 70% of Non-Māori males. Period effects undoubtedly played some role, but as I will show below cohorts carry with them health ‘baggage’ which may have been acquired in childhood but finally manifest itself much later in adulthood. The link between rheumatic fever and adult heart disease is a classic example of this.

Māori women were, in general, more advantaged than Māori men, but fell below Non-Māori men. A major important exception was the very low Māori female survivorship rates at menopausal years in 1945 – below men. It is a function of the differential patterns of survivorship of women reinforced by the fact that these women had suffered the ‘physiological burdens of childbearing’, detailed in earlier chapters, under less than perfect conditions of obstetrics, gynaecology and maternal health care in general⁷.

The last table in this series (Table 22.8) compares survivorship from mortality, with exposure to risks coming from a combination of mortality and inadequate functional health. For simple survivorship it uses the same index as that used in Table

22.7, but for different age-groups. Combined survivorship in terms of mortality and health status is denoted here as $S(x)$ and its computation described in the Table 22.8.

Survivorship probabilities are remarkable statistics, as they serve as a superb synthesis overall, and by age, of the capacity of a nation's health system to meet the more severe health problems. A former New Zealand Director of Primary Health put it this way: ‘ “The success of a nation's health system can be rated by how many people die and how many have to be hospitalised” ’ (Pool *et al* 2009b: Title Page).

Table 22.8: Probability (%) of: (1) Living through an Age-Group when Exposed to Risks of Mortality Alone*, and (2) Living through an Age-Group, when Exposed to the Combined Risks of both Death and Disability, Māori and Non-Māori, 2005-07**

Age	Māori				Non-Māori			
	Male		Female		Male		Female	
	(1) (n)p(x)	(2) S(x)	(1) (n)p(x)	(2) S(x)	(1) (n)p(x)	(2) S(x)	(1) (n)p(x)	(2) S(x)
	%				%			
40-59	84	60	94	75	90	63	96	79
60-79	39	18	63	32	50	20	74	44

*From the official Life Tables using life table function $l(x)$ defined as the number of people born alive still living at age x ; computed $l(x)/l_{x+20} = (20)p(x)$.

**Derived from Pool 2014: Table 4, drawing on Tobias *et al* (2009), where $(n)S(x) = (n)L(x) * (n)Y(x)$, where $(n)L(x)$ s are from official life tables (defined there), and $(n)Y(x) = 1 - \text{proportion at age-group } x \text{ suffering from a 'disability' that affects daily living (middle level) comes from Tobias et al 2009.}$

On both sets of indicators Non-Māori fare better than Māori. For example, for men only 39% of Māori males will survive death from 60 years to 80; for Non-Māori males it will be 50%. But, over this age-range for this group, a far smaller proportion, only 18% will neither die nor suffer incapacity with achieving daily living tasks; for Non-Māori it is 20%. For both ethnicities women do far better than men both for survivorship from death and survivorship from the joint likelihoods of mortality and poor functional health. As Yongjie Yon and Eileen Crimmins (2014) demonstrate, eradicating these differences in New Zealand will be very difficult as they have some of their roots in differential exposure to infectious diseases for older Māori and Pākehā as far back in their lives as childhood. This was 70 years or so ago when these now elderly cohorts were children living before the rapid Māori mortality decline of the ‘Welfare State Era’ was effected.

A cohort is rather analogous to an individual: it carries with it its own ‘baggage’. In 1945 at ages 0-4 Māori infectious disease death rates (excluding tuberculosis) had been ten times the magnitude of those for Non-Māori. This meant that at the end of the war, Māori children were still much more likely than Pākehā to be subject to death, and also live in an environment in which levels of morbidity were

very high – at least 10 times more than Pākehā, if death rates were any guide. By 1966 both ethnic groups had seen significant declines in death rates, particularly for Māori, but their rates were still 2-3 times those of Non-Māori (Pool 1985: v 1, Tables 121 and 127).

This analysis has focused on Māori - Non-Māori differences, undoubtedly the major public health issue in New Zealand⁸. There are also health status differentials within both the Māori and Non-Māori populations – these show up in custom-designed surveys.

The ‘Creation of a Precariat’ and Labour Market Flexibility

The new millennium has seen these and other factors of inequality coalesce into the emergence of what might be a new phenomenon, at least for the post-World War II era. It affects both the workplace and the system of social stratification. It harks back to past social pathologies, such as the street life of London as portrayed by Dickens, although, of course, in a new guise with cars and mobile phones. This is the ‘creation of a global “precariat”’ – although, it would be inexact to talk about ‘emergence’ and ‘growth’, simply because, for New Zealand and elsewhere, we cannot trace its provenance as there are no adequate time-series data on the key traits of this ‘class’⁹. Nevertheless, evidence on the pre-conditions for its emergence, or ‘re-emergence’ is strong: an example would be the income data trends cited earlier in this chapter. The spatial transitions and the identifying of favoured and disadvantaged regions, which I will be discussing below, provide powerful circumstantial support and cover a number of the social and economic co-variables of the precariat phenomenon.

The genesis and characteristics of a precariat has been identified, at least in its recent form, by the economist Guy Standing (2011: 1, 8), who writes that,

In the 1970s, a group of ideologically inspired economists captured the ears and minds of politicians. The central plank of their ‘neo-liberal’ model was that growth and development depended on market competitiveness; everything should be done to maximise competition and competitiveness, and to allow market principles to permeate all aspects of life.

One theme was that countries should increase labour market flexibility, which came to mean an agenda for transferring risks and insecurity onto workers and their families. The result has been the creation of a global ‘precariat’, consisting of many millions around the world without an anchor of stability. They are becoming a new dangerous class. They are prone to listen to ugly voices, and to use their votes and money to give those voices a political platform of increasing influence.

This was much more than a mere transfer of actions between the workforce and owners/managers but constituted a wholesale transfer of wealth and authority. The result has been inequality and uncertainty among a whole class of people about the future in general and their own chances. A side-effect has been that the rentier

class has increased its profitability because it is no longer responsible for workers' benefits and rights. This is, more or less, the way one would define a 'gig' economy; what takes the notion of a precariat a step further is that this has created a 'new dangerous class... prone to listen to ugly voices'.

The construct precariat has value as a framework for analysing the very different workplace of the 21st century and its flow-on effects in terms of social relations. The world of the precariat is an important co-variate of the wider economic trends and wealth accumulation, and conversely the increases in inequality and poverty. Poverty is never randomly spread across the society but its force falls most acutely on minorities, workers on minimum wages, and on their families and children – sadly, it is the young, and those elderly who somehow are not covered by pensions and other safety nets, who are heavily over-represented among the poor (Boston and Chapple 2014). In the United Kingdom the decreasing life expectation noted above has been attributed to the emergence of a precariat, while it is probably an indirect determinant of American opioid use and suicides which have produced their three-year decline in expectancies (Raleigh 2018, writing from the Kings Fund health policy 'think-tank'; Saiidi 2019, citing Centers for Disease Control and Prevention, CDC).

Standing pictures the emergence of a stratification system: a small 'elite', and two small influential but less powerful groups – the 'proficians', private sector professionals and technicians and the 'salarial', a larger group, particularly seen in the public sector. Below them is a working class, which is constantly being eroded so that its members risk sliding into the 'precariat' as different aspects of labour flexibility (see below) are imposed on employer-employee relations. Abutting the precariat are two other classes into which the members of the precariat can easily fall: the 'social misfits', and the 'unemployed'.

This phenomenon is also evident in New Zealand as has been shown by Bill Cochrane (*et al* 2017: Stubbs *et al* 2017). They identify regional differences – the clustering of the precariat in Northland, Gisborne and the Bay of Plenty, which will be shown to be the poorest regions, as shown in the next section of this chapter. Canterbury, by contrast has low numbers of members of the precariat class. Women are over-represented in the precariat (58%), as are younger people and the less well educated. Māori, 29% of whom can be classified as belonging to the precariat, and Pasifika (also 29%) are heavily over-represented, as against only 15% of Pākehā. Mohi Rua *et al* (2019: 12) provide an insight into the micro-dynamics of the precariat. They see 'Homelessness as the hard edge of poverty', one among a number of situations that bring the precariat into contact with bureaucrats and agencies to a far greater degree than the population at large. In turn, their 'Service maps' (interactions with other people like them, as well as agencies) are extraordinarily complex. Being a

member of the precariat is thus not a vocation for free-spirited people, but is a situation that is fraught with contacts, both benign and less so.

The manifestation of a precariat is related to the factors of inequality raised by New Zealand social researchers such as Max Rashbrooke, Jonathan Boston and Simon Chapple (Rashbrooke (ed) 2013; Rashbrooke 2015; Boston and Chapple 2014). To add to the problem, and, as stressed already, the last decades of the twentieth century may have seen the instruments that might have been used to combat the entrenchment of inequality removed statutorily as well as functionally, in Brady's words, a '*failure to institutionalize equality*' (Rua et al 2019: 12, citing Brady; my italics). Inequality was valorised as a driver of economic growth and thus was institutionalised – Milton Friedman even flirted with reifying greed as a pre-condition for free enterprise (Perry 2015).

As a background, we must consider recent social history. In the post-war period New Zealand had a rather muted version of the class-politics' society seen in Britain. It was most extreme at the time of certain events such as the 1951 Waterfront Strike. During that crisis, there was some degree of 'class solidarity' as 'wharfies' were supported by other unionists, even those related to the pastoral industries, such as meat freezing workers, and despite rather extreme legislation criminalising support for strikers (Green 2001).

With the rural exodus of Māori, the 'urban proletariat', until then almost entirely Pākehā, were confronted with the problem of Māori becoming new 'denizens' as Standing (2011: 93) calls migrants moving into employment markets. These denizens can replace 'citizens', by competing for jobs, depressing wages and conditions. But, as noted earlier, the Māori inflows of the 1950s and 1960s to urban areas, were entirely within New Zealand, were encouraged by officials, and were also driven by Māori aspirations to migrate in an era of full employment. At their destination they normally entered the urban proletariat, but because of high levels of demand for labour and of unionisation, their labour market opportunities were reasonably well assured, and by all measures of wellbeing their lives improved. In the Baby Boom there was undoubtedly a tendency on the part of some workers to view Māori migrants as work threats, very much in the way that the growth in female labour force participation was seen in the 1970s and 1980s. But, labelling them collectively in this way was not a notable feature of that period, in part because the impacts of Māori inflows were muted by virtually full employment until the neo-liberal restructuring. Gaps between Māori and Non-Māori incomes decreased until the 1981 census, essentially until Rogernomics was implemented, and then they widened again (Martin 1998: 165-166; Perry, B 2018). This was not true for 'all women', many of whom were beneficiaries.

The neo-liberal revolution, however, changed this imperfect, but not untenable, situation for the worse. Two radical shifts were implemented that forced

significant proportions of Māori (and Pasifika) into the precariat. First, there was a policy-driven decline in urban-based manufacturing, often aimed at import substitution, and primary commodity processing, which dramatically reduced the number of jobs held by Māori and Pasifika. Tropical Pacific Polynesians had been encouraged to migrate to New Zealand to overcome labour shortages in exactly these industries. Outside urban areas meat processing went through plant restructuring, partly in response to emerging fads about size-efficiency. Logging, processing and milling jobs related to forestry were decimated, particularly by the sale of the forests and the processing firms to non-New Zealand owners, who emphasised the exporting of raw logs over more refined products. A similar focus on bulk milk powder over processed dairy products occurred in pastoralism. Dairy and forestry exporting became high in volume but with low value per unit.

A philosophical underpinning and ideological justification for these changes in workforce patterns came from what was termed ‘labour market flexibility’, much proclaimed by neo-liberals as a way of making employment more efficient and productive. Typically, the instrument employed is contracting out services or production, a strategy that favours employers, who have ready access to legal and related expertise. Flexibility also extends into the waged, as against contracted, workforce. Some workers, particularly women, in jobs like nursing, or office cleaning, may prefer to work ‘flexible’ hours (eg weekends) so as to share childcare duties with their spouses and thus allow dual income earning. But, overall, it is the owners and managers who gained the most. This was reinforced by two initiatives that became policies in New Zealand labour law: 90-day probationary periods for new employees, and a statutory diminution in the bargaining powers of unions, even on health and safety issues.

Overall ‘employment flexibility’ produces major labour market changes – Standing refers to them as ‘numeric’ as they affect the quantum of employees – by making it easier to fire workers through imposing probationary, temporary and casual work contracts. He then refers to ‘functional flexibility’ that produces job insecurity by constant threats to reclassify the nature and conditions of a particular job. In employment terms, in developed countries, this is also associated with a growth in ‘informal’ employment, something that traditionally had been more associated with developing economies, but that, in New Zealand, disproportionately affected Māori and Pasifika (Standing 2011: 5-6, 31-33, 35-39).

Increasingly, tasks were ‘contracted out’, often to small under-capitalised business owners, particularly in the transport, forestry and some service sectors (eg office cleaning). Increasingly, this spread to other industries. Often there were advantages for the business owners, but for the new class of owner-operators equally there were disadvantages. Above all, the owners/partners tended to work very long hours and had no normal job protections such as holiday pay and annual leave. Where

the firm had previously shouldered these costs, now they fell on the contracted-out small businesses.

Simultaneously, however, the ambulance at the foot of the cliff, there to assist the workers affected by these management decisions had been driven away. The welfare system was reformed by targeting – really a severe downsizing – most markedly in the Richardson 1990/91 budget. The New Zealand reforms were not merely radical but have been labelled by Ian Shirley (1993) as one of ‘the most comprehensive free market reform programmes ever undertaken by an OECD country’. Rua *et al* (2019: 3) note that in the late 2010s, New Zealand was the fifth most unequal economy in the OECD. There was a particular impact on support systems and conditions relating to jobs, such as stand-down periods before newly unemployed were eligible for out-of-work benefits. Seasonal workers, who with overtime gained elevated incomes briefly at the height of the season, were particularly disadvantaged, as their stand-down was based on peak earnings, yet typically they gained no out of season incomes.

A particularly relevant example of the dynamics involved in turning the workforce in a viable employment market into a precariat occurred for two very large plants, Whakatu and Tomoana, meat works in Hawke’s Bay. They were closed down, Whakatu in 1986 as part of a ‘rationalisation’ of meat processing in the southern North Island recommended by a firm of management consultants, and Tomoana in 1994 by a decision by overseas owners to close a works. Both were long-standing plants, recently refitted, and with a workforce that was mainly Māori, often multi-generational members of the same families with links to other regions. To add to its negative impact, the second closure, occurring at the height of Ruthanasia, saw the workers receive no benefits as, on the basis of their seasonal earnings, they were deemed too well-off. Interestingly, the authorised history of the meat industry details the management changes and similar factors but does not comment on the impact on the workforce (Calder and Tyson 1999). Yet, 27% of all Māori men aged 15-59 in the Whakatu and Tomoana commuter zones were affected: at 20-44 years (the main family building ages), losses were much higher¹⁰. These events fit aspects of the Standing model (2011: 5-6, 31-33, 35-39). Beyond this, the Hawke’s Bay experience shows how exogenous factors can destabilise a regional economy and society. I turn to regional trends next.

The Geographic Trichotomisation of Aotearoa: The ‘Big Picture’

In dealing with the precariat I have already alluded to regional differences, but these were just the tip of the iceberg. In the decades of the neo-turbulent period, Aotearoa New Zealand became marked by a threefold division for numerous variables into regions that were advantaged, regions which were disadvantaged and the majority of

regions that fell between these extremes. This trichotomisation is partly a function of differential approaches to development in different regions, but also is due to the peculiar geography – physical and human – of the country. In this book this is the only period for which data allow social demographic (as against core demographic) analyses to be undertaken. It focuses on the period 1986 to 2001, when detailed analyses are available¹¹.

But this is merely the end point of history. Under the circumstances it is useful to reflect on how, over time, Māori first, and then settlers, and most recently new migrant waves have mentally mapped the morphology of Aotearoa New Zealand. From the earliest years of their arrival and settlement Māori had charted these land masses with a remarkable level of understanding of their attributes, especially their physical structures. Being the guardians of a rich metaphorical tradition, they took a different approach for James Cook, who was the ultimate navigator in the technical tradition. So, Māori turned to record Aotearoa's morphology metaphorically, in the process establishing an oral tradition that vividly describes the 'big picture' constraints affecting peopling and development in Aotearoa. Even their first sighting of the "land of the Long White Cloud" is a rich description of their new home. (Te Kete Ipurangi No date).

The morphology of 21st century Aotearoa is as omnipresent a determinant of peopling and development as it was in around 1250-1500 AD. In some Māori tradition, the North Island is called Te Ika a Maui (The giant Fish of Maui) a ray, with Taranaki as its western wing and the East Coast north of Hawke's Bay its eastern. Its mouth is Wellington harbour (Introductory map 2), and Northland its long tail. In Māori tradition, Maui was standing in a canoe – the South Island, Te Waipounamu – for which Stewart Island was its anchor stone.

As is true today again for all New Zealanders, except for a brief period of ascendancy by Te Waipounamu (late 19th century), the majority of Māori lived on Te Ika a Maui, north of Rotorua (Map 2). The Waikato, which was a more populous inland region, was called the 'Stomach of the Fish of Maui'. In northern regions Māori practised their gardening, hunting, gathering economy. Basic foods brought from Polynesia (especially the sweet potato, Kumara) could only be grown in northern climes.

The small proportion of Māori living in Te Waipounamu were in three main nodes – present-day Nelson-Marlborough; the area around Christchurch now a metropolis. In both of these places an economy close to that of Te Ika a Maui was practised by Māori. There was also a third node at the extreme south of Te Waipounamu, where the economy was more dependent on sealing, birding and fishing and the export of these products to all parts of Aotearoa.

Te Waipounamu is cut in two by an Alpine range and to its west is a wild mountainous region, the West Coast, with a few narrow coastal plains. But, for Māori

it was a very important economic zone, where a small number fossicked and quarried for pounamu, New Zealand greenstone a form of jade, the most desired of riches for Māori. It was typically found loose in the alluvial riverbeds, very much in the same way that gold was first discovered in the late 1860s. And the comparison does not end there – both had to be carried over extremely dangerous passes, or taken by sea, to get to end-users.

The settlers made seminal changes by introducing pastoralism and a settlement network to service this, and eventually, at an early stage, by urbanising. This settlement network directed for much of its history towards trade exchanges with Britain, backed by a social sector that supplied the human services was to become a prime factor in development. By the 1970s, New Zealand was not just highly urbanised but metropolitanised, with four major centres: Auckland, Wellington, Christchurch and Hamilton, all of which grew in population size and in the proportions of GDP they generated. Dunedin, which had gone through a brief moment as the largest centre, was now a commercially vestigial city, and its main industry instead the university.

But, the geographical profiles Māori identified and that I have just described remained basically intact as the macro-constraints on development. Until railways were built, coastal shipping maintained connections between regions. Ray wings, the tail and the trans-alpine region, Northland, East Coast- eastern Bay of Plenty and West coast, are all peripheral, each serviced by just one main road which is really of a secondary standard; Taranaki is less separated from neighbouring regions as its terrain is less daunting for infrastructure. Throughout its post-colonial history, the West Coast has been devoted to extractive industries such as logging and mining. Recently, however, tourism has been a growth industry, and the region has been wracked in debate between loggers and miners, on the one hand, and conservationists and the tourism industry, on the other.

On Te Ika a Maui, on the humid, lowland (Introductory Map 3) surrounding Mt Taranaki, resident colonists established dairy farming and processing for the local markets at an early stage after colonisation, and this peripheral region led in the intensification of pastoralism at the end of the 19th century; Southland followed its early lead to a degree, but sheep ranching became more significant there as it was for most of the rest of Te Waipounamu and the upper body and head of Te Ika a Maui (the southern North Island). In other favoured localities the colonists established horticulture – such on the volcanic slopes of the Bombay Hills just south of Auckland, or Hawke's Bay's prime viticultural and horticultural zone (on its Heretaunga Plains), or Nelson-Marlborough's farming, viticultural and horticultural zone (Map 2). But, despite the maintenance of dairying Taranaki's development trends fluctuated. A large stimulus came from Muldoon's 'Think Big' (late 1970s), which was centred on processing Taranaki's own local oil and gas reserves.

By contrast, Tiwai point in Southland, an aluminium smelting plant was dependent on imported bauxite, on government making available low-cost electricity, and on the export of aluminium metal, but not downstream manufactured products. It was established in a period in which aluminium smelting was something of a fad across the Anglo settler societies and elsewhere – the most classic example was the construction of the Akosombo, Volta dam in Ghana and the linked smelting plant at Tema port nearby. Most smelting projects promised increased electricity generation and sales in the home and neighbouring countries, and profits from the sale of aluminium metal. Many were dependent for success on government subsidies for electricity and or mining rights for bauxite. Many carried controversy with them and Tiwai Point was no different, and is still the case.

In sum, therefore, Aotearoa still fits the Māori model. Two ray wings, one more developed, form the margins to central Te Ika a Maui, which has the metropoli of the 21st century, and the major areas of more intense pastoralism. Some of these central regions, notably the Waikato are more ‘comfortable’ than others and more stable in terms of development trends. Finally, the tail of the ray, Northland, is another peripheral zone. On Te Waipounamu the Alps still cut off the West Coast from the more developed regions, mainly dependent on pastoralism but also metropolitanisation, especially in the case of the Christchurch region of central Canterbury. I now turn to how this broad picture is reflected in development indicators.

The Geographic Trichotomisation of Aotearoa: Indicators

Income, education and health discussed earlier in this chapter merely reflect a wider set of inequalities observed for numerous social variables. They take such a marked form geographically that they affect regional development, which in turn has been reflected in spatial differences in growth patterns in the Neo-Turbulent Era. Natalie Jackson and her colleagues (2019: 186-90), referring to the components of population growth, showed that ‘...the majority of New Zealand’s towns grew across the period 1976-2013¹², while the majority of rural centres declined’. In the latter part of the period a clear majority of rural centres and even one-third of towns saw population numbers decrease. There was shift from a traditional form of rural dynamics, signalled in earlier chapters, when loss through migration was offset by natural increase. This gave way to the emergence in a few regions by 2013 of a ‘new’ pattern of rural demography, identified for Europe and North America, where both natural decrease and net migration loss occur; Jackson *et al* (2019) analyse projections for territorial authorities showing that, in the future, this trend will become more marked also in New Zealand. In their paper, the authors ‘do not seek to understand societal factors behind...’ the demographic changes, the focus in my chapter. Data on all of demographic, economic, educational, employment and social factors are available,

however (Pool *et al* 2004-06), for what seems to be something of an inflection point—1986-2001 – in the longer period 1976-2013 that Jackson *et al* covered.

A detailed review of regional differences for the period 1976-86, sometimes reaching back before then, had already been made by the New Zealand Planning Council's Population Monitoring Group, convened by Richard Bedford (*et al* 1989). It focussed on two issues: changes in population dynamics, geographic structures (eg urban/rural) and age-composition; and on the labour markets, especially labour supply, oft-times a neglected aspect in analyses of employment. It also attempted a demographic-social-economic classification of regions into those growing more rapidly, those more slowly and what it termed 'outliers' (the North Island's East Cape region of that day and the South Island's West Coast). It showed that regional variance was a significant factor for some variables of New Zealand's peopling and development, although differentials became much more marked with economic restructuring 1986-93, which had just started at the time of the 1986 census. Nevertheless, what will become a familiar pattern in the following paragraphs was evident already in 1986: the regions with the most severe labour market problems were those where Māori were over-represented, notably Northland and East Cape. This may merely have reflected what was a long-term trend going back to the interwar years, but, apart from using age-data to indicate labour supply, there is no statistical base to test this. The analyses below will show that while the development of these regions was affected by long-term underlying structural factors, the 'development of underdevelopment' was accelerated significantly in the period 1986-1991. To add to the difficulties in building a picture of transitions over time, the regions employed by the Population Monitoring Group's analysis were radically restructured in 1989, making strict statistical sense time-series analyses comparing 1976-86 with later years virtually impossible¹³.

In order to synthesise the regional differences that emerged in the 1980s Figures 22.1a and 22.1b look at the ranges between the 'most advantaged' and 'least advantaged' regions, or those with the highest and lowest rates, at various censuses for various selected factors. In the case of demographic growth, for example, Figure 22.1a compares the highest per cent per annum with the lowest; for education the range from regions with larger numbers with a university qualification to the region with the fewest.

This statistical analysis for the period 1986-2001 (Pool *et al* 2004-06), and the data in Table 22.9, shows that New Zealand's regions were going through very different trends. To the extent that we can follow transitions from 1976 to 1986, and then on to 2001, it seems that variance between regions intensified from 1986 (Figures 22.1a and 22.1b). The regions involved in the most recent period have different geographical boundaries and domains from those in earlier years, but some general issues can be identified. The successor local government regions to the former

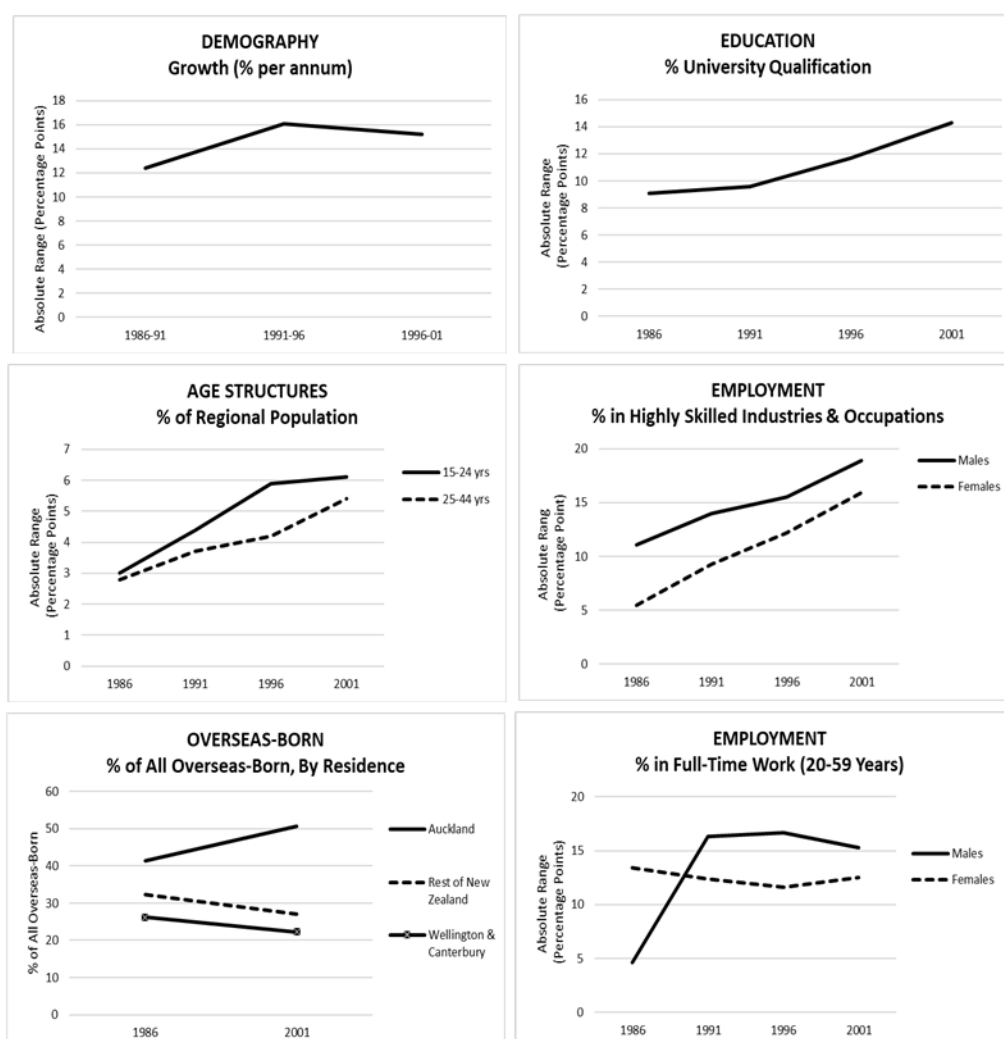
Northland, East Cape and West Coast regions of the 1976-86 period became even more marginalised: Auckland and Wellington more favoured. Waikato region was deemed to be 'comfortable' as was Christchurch, but most others were merely 'getting by'. Bay of Plenty was far more problematic as it had dichotomised into two very different entities: the western part, which was developing and could be seen as 'comfortable' and the east, where Māori were over-represented, which included parts of the old East Cape, and which was less favoured and similar in many respects to the most disadvantaged regions. I have divided it into its two parts in Table 22.9.

Changes in demographic growth over the period 1986-2001, for the new regions following local government restructuring, co-varied with complex societal transitions, selected aspects of which are also shown in Figures 22.1a and 22.1b (see also Table 22.9 for specific regions). In reading the graphs, it is essential to recognise that this was a relatively short period of radical change lasting merely 15 years.

The results in Figures 21.2a. and b. are systematic and remarkable. No matter which variable is selected, covering demographic, educational, economic, employment and social factors, the shifts shown in these graphs are in one direction and also very rapid. In every case, the spread between the regions increased, often dramatically, over this period. It is this general picture that the graphs show – all pointing in the one direction of increasing inequality – rather than the particular detail which is their most impressive result. Typically, change was most radical in 1986-91, during the Douglas restructuring and following the mini budget of December 1990, which instituted cuts in welfare taking immediate effect, several months before the 1991 census. Where data are available for 1986, 1991, 1996 and 2001 the trend rises less sharply after 1991. In fact, in a few cases there are even very modest declines in the rates of inequality after 1991.

Overall, what is disturbing is that these transitions shown in Figures 22.1a and b and Table 22.9 have resulted in marked regional differentials in the human capital assets which are so necessary for development, and that this variance accelerated after 1986. But the net result was that the spatial inequalities generally appearing before 1996 effectively produced low level equilibrium traps in development for some regions, of the sort Richard Nelson (1956) was positing for less industrialised countries in his classical work. The regions most affected will find it difficult, perhaps even impossible, to escape from these traps. Nevertheless, the Māori experience recorded earlier in this book – I showed that they were caught in such an underdevelopment trap *circa* 1900 – suggests that, given the self-determination plus political willpower, and the right policy instruments, escape is possible.

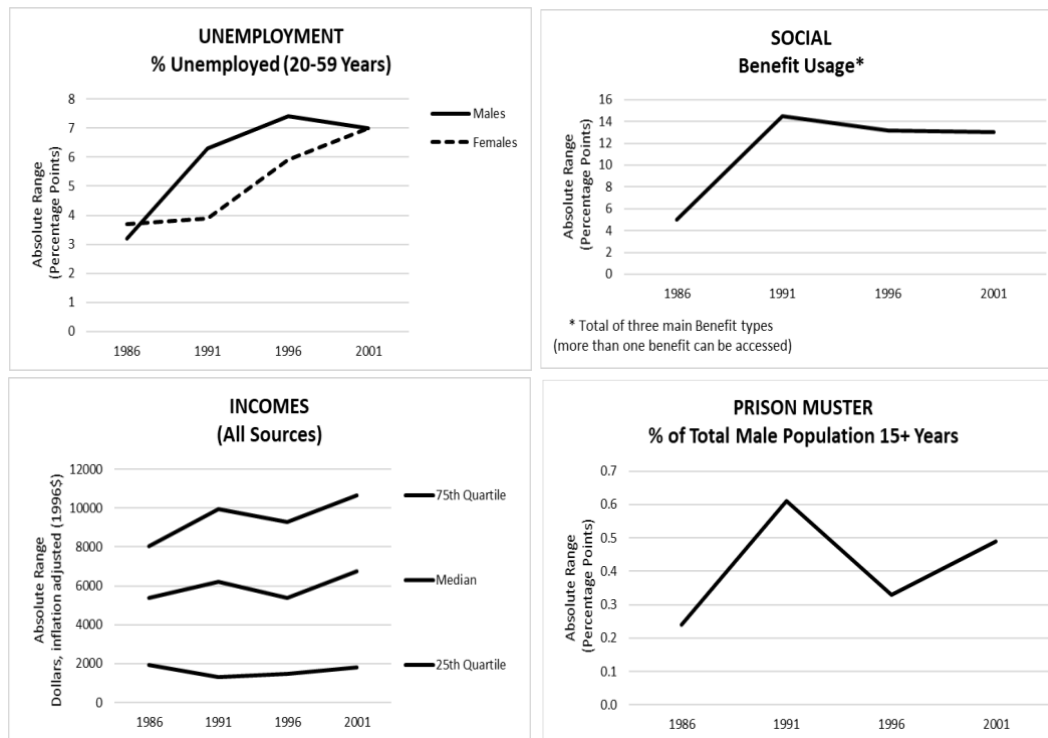
Figure 22.1a: Inter-regional Ranges (Percentage Point Gap Between Highest and Lowest Region)* in Selected Demographic, Economic, Educational and Social Indicators, 1986 to 2001



*Where relevant, indicators are age-standardised to the New Zealand population, or age-gender standardised (e.g., incomes). Methodologies are discussed in each source paper (see Note at foot of Figure 20.1b)

The critical period of change lasted from the reforms of Roger Douglas until the start of the new millennium and was probably a new phenomenon for the post-war period, at least in terms of intensity of regional and sub-regional differences – a component of the more widespread increases in inequality. Unfortunately, we do not have the data for earlier decades to test this hypothesis directly except for some narrowly demographic variables – population numbers, distribution, age-structures, and to a lesser degree households, and some variables not of great interest here¹⁴. But from 1986 to 2001, more detailed economic and social data were available, and thus we do have analyses of a wide range of population and development factors for regional New Zealand, the ranges for some of which are graphed in Figures 22 1a. and 1b.

Figure 22.1b: Inter-regional Ranges (Percentage Point Gap Between Highest and Lowest Region)* in Selected Demographic, Economic, Educational and Social Indicators, 1986 to 2001 (cont.)



Note: For these graphs, all data came from Pool et al. (2004-06), Population Studies Centre Discussion Papers# 4v-62; #44 'Population Growth'; #53 'Population Structures'; #56 'Education & Qualifications'; #58 'Incomes'; #59 'Industries & Occupations'; #60 'Labour Market Aspects of Human Capital'; #62 'Dependency & Social Capital'.

New Zealand's peculiar settlement patterns often rendered difficult servicing of marginal areas and exacerbated the trend towards inequality. It is highly urbanised, with one-third of its people in the Auckland metropolitan zone. Much of the rest of the country is hilly or even mountainous – the main North Island axial mountain range passes through the capital (Introductory Map 3). It has some regions with lower densities of population and with local areas and settlements which are very isolated. In this regard, a major issue for markets and for social services is the distribution of the population. For most regions, more than two-thirds of the people live less than 20km from an urban area. But, there are three exceptions to this, Northland (39%), West Coast (35%) and the Waikato (61%).

Table 22.9: Regional Inequalities*, 1986-2001: Most Disadvantaged and Most Advantaged Regions (Regions in between are not on the table), 1, 2

Disadvantaged	Getting By	Comfortable	Advantaged	Basic Attribute(s)
Northland				Peripheral
Eastern Bay of Plenty (3)				Peripheral
Gisborne				Peripheral
West Coast				Peripheral
	Hawke's Bay			Non-Metropolitan
	Manawatu-Whanganui			Non-Metropolitan
	Taranaki			Non-Metropolitan, petro-chemical
	Marlborough			Non-Metropolitan
	Southland			Non-Metropolitan
	Nelson-Tasman			Non-Metropolitan
	Otago (4)			Metropolitan
		Western Bay of Plenty (3)		Non-Metropolitan
		Canterbury		Metropolitan
		Hamilton (5)		Metropolitan and non-Metropolitan
			Auckland	Metropolitan
			Wellington	Metropolitan

Notes: (1) Drawn from Appendix F.

(2) Adopting the Population Monitoring Group's terms (see Appendix F).

(3) I have split Bay of Plenty into its two distinct components, east and west. The east, a mountainous and hilly zone (see Introductory Maps 2 and 3) of farming and small service centres, resembles Gisborne in terms of development, again with only one through road serving its eastern part. The Western Bay of Plenty has two large urban areas, Rotorua, a tourist centre, and Tauranga which became a metropolis in the early 2000s and is about twice the size of Rotorua. Tauranga dominates the Bay of Plenty, economically and socially, especially its western part.

(4) Dunedin's growth was slow and at times even negative, its size fluctuating just above 100,000, the cut-off point for metropolitan.

(5) Waikato has an even split between non-metropolitan and Hamilton City, New Zealand's 4th largest metropolis. The southern part of the Waikato region has social and health indicators which resemble those of peripheral New Zealand.

This analysis is at an aggregate level, but it is essential to recognise that, within regions, there are individual and inter-household differences, and these also show up sub-regionally once again at an aggregate level. In the background papers from which the results presented here are drawn, where appropriate sub-regional differences are identified, an issue beyond the scope of the present book. Suffice to note that Auckland has marked differences between its Central Urban Area and the North Shore, and its Southern and, to a lesser extent, its Western Urban zones;

Wellington has similar differences between its Central core and its three suburban satellite zones. The Bay of Plenty is particularly dichotomised between a more well-off retirement and ‘Sunbelt’ area in the west that is overwhelmingly Pākehā, and the east which is poorer and where Māori are more heavily concentrated; the Waikato has a similar divide, in its case north-central versus the south.

The Geographic Trichotomisation of Aotearoa: Regional Patterns

Only Auckland region and the Bay of Plenty – really its western retirement and sunbelt sub-region around the city of Tauranga – grew consistently over the 15 years 1986-2001. Nelson-Tasman, also a retirement zone, did briefly because of a short-run in-migration surge (1991-96). Total fertility rates (TFRs) were highest in Northland, Bay of Plenty, and Hawke’s Bay where Māori were more heavily represented, plus Southland, which was very much a farming region. Otago, Canterbury, Marlborough and Wellington regions all had low TFRs. Because of the higher fertility in its Southern and Western Zones, Auckland was not in this group. But it was the distribution of childbearing across the reproductive ages which differentiated Aotearoa. Young childbearing was still the norm in the regions where Māori were a higher per cent of the total, plus the farming regions of the southern North Island and Southland, exactly the regions that lost populations through out-migration. This represented the last throes of the ‘old non-metropolitan demographic regime’ referred to above (Jackson et al 2019). By contrast Auckland gained through the period and Nelson-Tasman in 1991-96. These factors generated the underlying demographic structural changes and set the context for variance in levels of regional growth. That said, while the demographic differences were marked, they were also affected by intervening cultural factors, so were still not as systematically trichotomised as occurred for social and economic factors to which I now turn.

The graphs presented above did not capture all of the many complexities of the widening of geographic inequalities in New Zealand in this era. In fact, there is a systematic pattern in the regional differentials which emerged as is seen in Table 22.9. They seem to have shifted Aotearoa from being a country with some inter-regional variance, but that was far more muted than was true for many overseas states (see Chapter 16), to one with marked inequalities and multi-dimensional, entrenched differences. I have referred to this as ‘The Trichotomisation of NZ’s Regions’¹⁵. The evidence base for this assertion came from a long-term research programme (Pool *et al* 2004-06; also the source for Figures 22.1a and b), covering the period 1986-2001, which had identified regions as falling into three strata. At the end of the 20th century and the first part of the 21st, sub-national New Zealand trichotomised markedly. Two metropoli, Auckland, by far the bigger, and Wellington, which competed in size with Christchurch, were doing very nicely overall, but with several of their urban sub-

zones, such as South Auckland and Porirua, that were notably poorer. Auckland was undeniably the country's commercial capital and Wellington was the seat of government. Although token moves were made towards decentralisation to other regions, the reality was that centralisation in these two metropoli dominated Aotearoa's population geography. This is most evident in the proportions of the employed labour force in highly skilled industries and occupations (Table 22.9). One-third of Wellington's workers are in this category.

Then there are the in between regions, those regions getting by as it were. They are led by Waikato and Canterbury, both of which showed sustained development. Alongside the Waikato and Canterbury were the regions that were getting by, but less successfully: by some criteria they developed but for other factors achieved less growth of assets and wealth. They varied in these capacities depending on the factor and the period being examined.

Finally, there were the regions that were poor and suffering the development of underdevelopment. These were the geographically isolated peripheral regions of the North Island, and also the South Island's West Coast, generally hilly and marginal for farming, and in terms of local economic assets. These areas of the North Island were those where, despite the depredations of confiscation and, more importantly, the Native Land Court (described in earlier chapters), Māori still retained some land. As I showed earlier, their demographic trends saw them lose human capital.

Conclusion

The 1986-2001 time-series analysis, and the changes seen between the 1970s and 2000s, span the decades of most intensive restructuring, and encompass both purely demographic variables, labour force and employment, and their co-variates (eg education, incomes), plus social capital and dependency. They allow two overriding conclusions. The first is that inequality increased during the period and that a precariat emerged at this time. The second is that variance between regions systematically increased over this period. The regional shifts show the importance of the period 1986-2001 in producing inequality; the decades since have seen it entrenched.

This chapter has thus shown that, within a nation-state, inequality has three dimensions to it : (i) Differences between individuals; (ii) Differences between different tranches of the population, say, for example between the highest and lowest percentiles for incomes; and (iii) Differences between regions. There are also inter-country differences that were not covered here. The differentials at a regional level are a very important element often neglected in the economic analysis of inequality. Regional differences are a dependent variable that are a function of differential development paths and outcomes, but also, they act as independent variables, especially where they manifest themselves through human capital widening and

deepening. This has policy implications. A regional development programme may generate significant numbers of less skilled jobs, but rely on the importation of the more skilled workforce, which is likely to be more mobile and thus contribute inconsistently to regional development.

It would be tempting to attribute the growing national and regional differences described in this chapter to the economic restructuring under Douglas and Richardson, but as suggested earlier that would be grossly simplistic. Overall, their interventions probably exacerbated the trends in this 15-year period, but their policy measures were second-order determinants. Many deep-seated, underlying structural changes had appeared in the Baby Boom, and were noted in Chapter 16, or earlier (eg the steady agglomeration and metropolitan dominance of Auckland throughout the 20th century). That said, even for these there seems to have been an acceleration in most trends from about 1970, and differentials became more extreme between 1986 and 2001. Overall, we can say that the circumstantial evidence suggests that there is some level of correlation in time and intensity with restructuring. We can go further than that and say that for some factors, however, and particularly some key ones – income, benefits and various sorts of criminal convictions – the scale, levels of inter-regional variance and the timing of changes indicate that the linkages are far more direct, that restructuring had a major negative effect on regional dynamics. Changes afoot in New Zealand reflected broader transitions across the WDCs, many of which experienced significant national and regional transformation in this period, but the intensity in New Zealand in 1986-91 was marked. The Global Financial Crisis of 2008, which provided a justification in the Anglo-Saxon countries for the austerity programmes of the next decade, particularly in the United Kingdom but also New Zealand, were the entrenchment mechanisms for the inequalities, which in Aotearoa's case had been the result of radical restructuring 1986-92.

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¹ Their data source is the Household Economic Survey so for minor ethnicities they encounter sampling error problems. Through recent initiatives, however, the HES data allow not only an analysis of income *per se*, but also 'a more comprehensive understanding of the links between income, wealth and material wellbeing' (Rashbooke 2015: Chapt 3, n.26, citing one of Perry's earlier surveys, 2013).

² Martin 1998 shows that the catch-up was still occurring in the early 1980s when Muldoon instituted a wage and price freeze.

³ Care must be applied when extrapolating absolute numbers over time from these data (see note Table 22.2), whereas the relative data for any year are directly comparable.

⁴ Walking a given distance, feeding themselves, going to the toilet, and their own assessment of themselves by comparison with those of a similar age and gender. I was rather skeptical about the last question, but a review of the literature shows that it is remarkably robust, and correlates highly with aetiological and other indices of wellbeing (Pool *et al* 2009a).

⁵ United States' data show that even the most disabled have recently seen improvements in functional health (Cai and Lubitz 2007). This may be due to pharmaceutical and other props, but that is irrelevant if the respondent can fulfill the daily living tasks.

⁶ A measure free of age-composition effects.

⁷ The 1945 data are close to reliable by that date, particularly at reproductive ages. These data reflect what is a continuation of what occurred in the 19th century. In 1945, while Māori male life expectancy exceeded that for females, for boys under-five male mortality rates were higher than those for girls, again a pattern historically for those periods (post 1921) for which one can directly compute rates (as against indirectly estimate them).

⁸ Later the Pasifika – Palangi (= Pākehā) differential became important. Pasifika patterns are closest to Māori. Even more recent additions to the health mix are some migrant groups with low levels of health status.

⁹ I am particularly grateful to Dr William (Bill) Cochrane, Cultures and Societies, University of Waikato, who publishes on this subject, for his insights.

¹⁰ Unpublished research with Tahu Kukutai using numerators from Keefe *et al* 2002, and denominators from the Census (1991) – all public record documentation – and interviews with local respondents. See also Te Ropu Rangahau a Eru Pomare (2001). The Whakatu employees could not seek employment at the Tomoana works. Many migrated to Australia in search of work. Women, at two fruit and vegetable processing plants, were more typically able to maintain their jobs, although shifts in ownership to an American multi-national, just before Tomoana closed, added to the air of instability in the region.

¹¹ The data presented here were compiled by Sandra Baxendine when a Population Studies Centre, University of Waikato, Research Fellow in a major project on sub-national differentials and trends. She was instrumental in handling a large and complex data set. For every variable employed in the programme, she identified statistical problems and played a major role in developing solutions. My gratitude goes to her for her seminal contribution.

¹² Normally, censuses are quinquennial, but the Christchurch earthquake forced a postponement from 2011 to 2013.

¹³ Digitalised data files allow the analysis of 1986 census data, and for a few variables back before that. To add to this complexity, ecologists gained a powerful voice in the restructuring exercise and thus from 1989 regional boundaries often adhered to catchment zones that had little or no relevance for social and economic dynamics. For example, Taumarunui, which the Whanganui river in a northern loop flows past, before heading directly south, has all its tribal, health care, social and business links with the Waikato, yet is classified as part of a vast region reaching south towards Whanganui-Rangitikei, Horowhenua and into the northern Wairarapa with all of which it has few major links. When Nelson and Tasman split, the boundary was drawn through a suburb of Nelson city. As both regions are small geographically and demographically, and have many social and economic similarities, we combined them in our analyses.

¹⁴ For some curious reason, New Zealand censuses, even as far back as the Victorian era, published very detailed data on religion, by age, sex and residence, but did not collect, let alone detail, many critical labour force variables.

¹⁵ In the 1990s, in presentations to senior local authority and Community Trust leaders.

**PART SIX: Aotearoa New Zealand
from Contact (1769) until the
New Millenium**

Chapter Twenty-Three – Towards a Synthesis

Facts are stubborn things. The stubbornest facts are demographic ones.

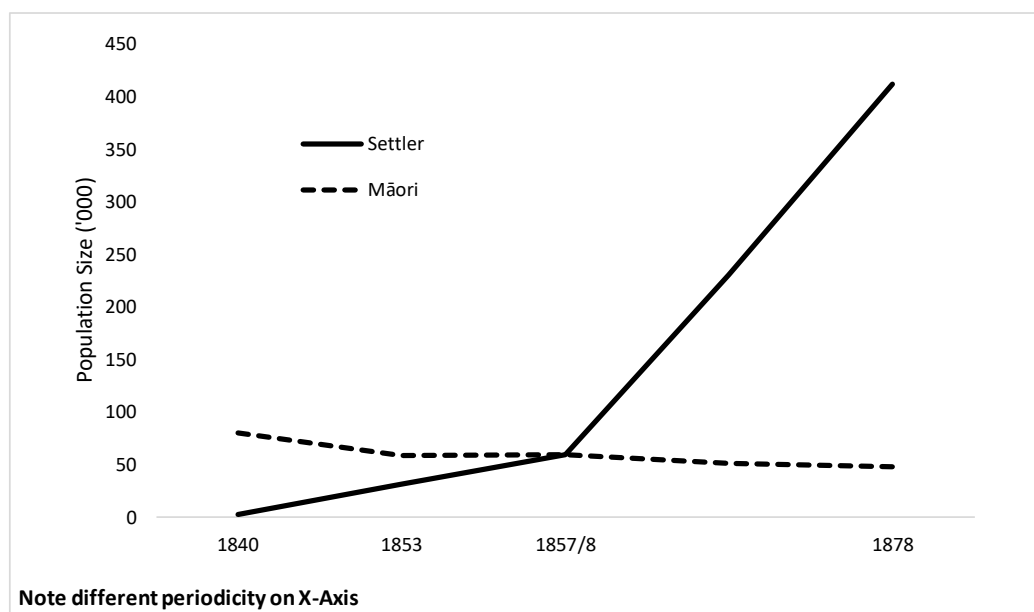
‘From the Editorial Board’
The Washington Post, March 19th, 2018

This book is a history of Aotearoa New Zealand, as seen through the eyes of a demographer, covering the 250 years since Cook’s voyages. My narrative has been about the process of ‘peopling’ – the population, the society and the economy, the latter defined here broadly as ‘development’ and not in its narrower, more conventional disciplinary *persona* as ‘growth’. Figures 23.1 to 23.5 summarise some of the key empirical trends I have analysed.

The most pivotal event, graphed in Figure 23.1, was the great economic reallocation – of land – from the indigenous Māori population to Europeans, exactly as occurred in the other Anglo settler- states, settler-societies and elsewhere. What is important was how quickly this occurred, first through an attempted war of conquest by the British, who had been preparing for this in the 1850s, and then, when this failed, by ‘legal’ means, often mendacious. The Native Land Court’s work was coming to an end in the early twentieth century but still dwindled on to 1920 and beyond. Economic reallocation was accompanied by demographic reallocation. By about 1880, the settlers were truly dominant demographically and not only in control of the reins of power but had extended their networks to most corners of the country.

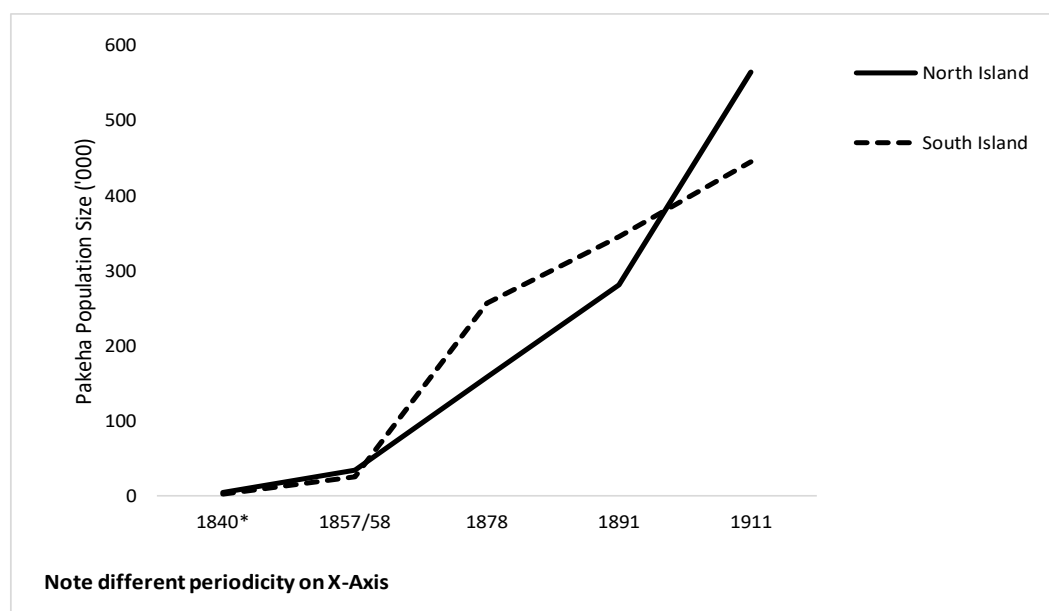
The determinants of this great ‘spatial reallocation’ were a result of several key factors. War in the North, alongside the goldrush and mainly pastoral development in the South, initially attracted settlers to the South Island. Then, as the Native Land Court wended its way across North Island regions – where Māori were still in control – and made land available to the colonists, many moved northwards, and Pākehā became an important force locally, eventually in most localities. This reallocation shows up on the inter-island differences in the proportion of settlers living on each island across the period 1840–1911 (Figure 23.2). Māori remained steadfastly North Islanders. Dunedin, which was briefly the colony’s major commercial centre and port, subsequently lost this status, around 1901 (Figure 23.3). Since the 1890s, the centre of population gravity has shifted north, clustering around Auckland. This is increasingly the case today.

Figure 23.1: The ‘Greatest Reallocation’, From Māori Demographic Dominance to Settler, 1840–1878 (’000s)

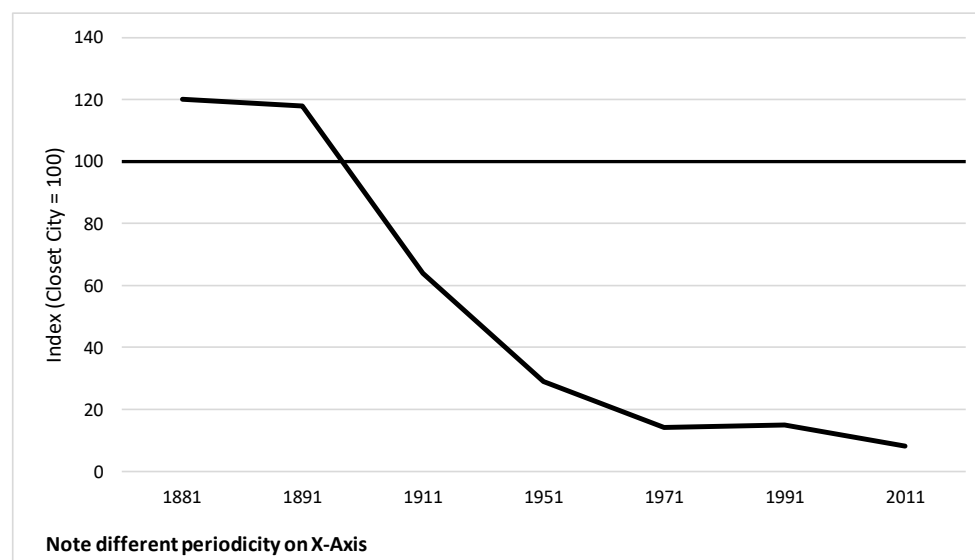


Source: Thomson (1859, v.2, Appendix Table 9)
1857/8 Pearce (1952)

Figure 23.2: The 'Great Spatial Reallocation' 1840–1911, Pākehā Settlers (only) ('000), Southwards, then Northwards



Notes: In 1956, 71% of Pakeha lived on the North Island

Figure 23.3: Dunedin – Loss of Primary City Status, Population Numbers ('000s), 1881–2011

Note: The closest city in 1881 is Wellington, thereafter Auckland is the Primate City

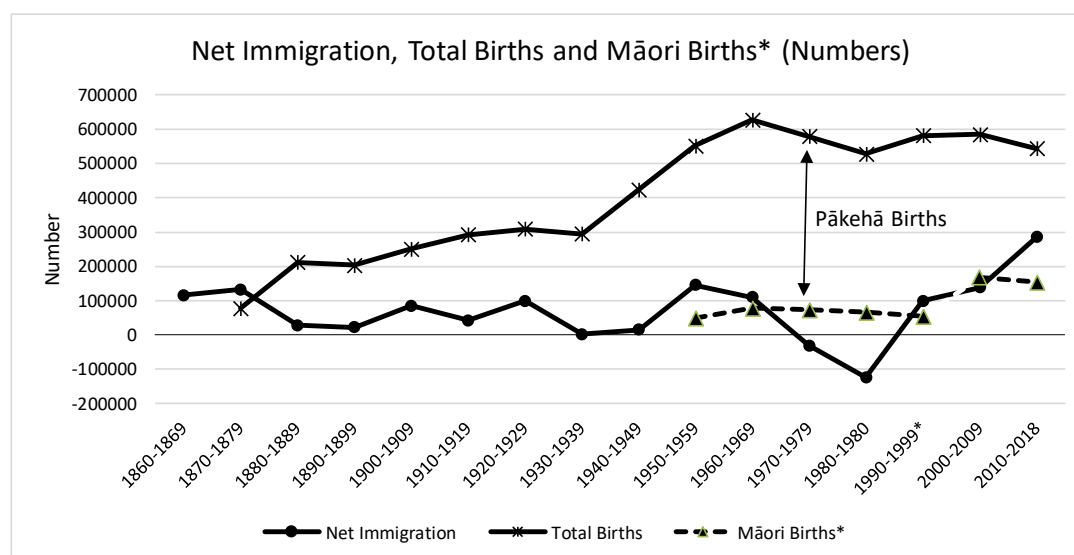
Source: Table 13.2

Both nationally and sub-nationally, there was one factor of overriding significance driving Aotearoa's population growth – the colonist's exceptionally high levels of fertility. These are shown below on Figure 23.4 in terms of birth numbers: after the initial – and foundational – migration inflows, births made a far greater contribution to population growth and composition than did net immigration. Even when fertility *rates* declined, as they did over much of the 130 years from 1880 to 2010, Pākehā reproduction was still the key factor in the demographic system, so, when rates fluctuated, and even when birth cohort sizes became disordered, they still determined population trends. A marked but very short departure from this long-term-trend produced the enigmatic Baby Boom, which resulted, in turn, in an economic boom of limited duration. Māori did not take part in the Baby Boom; rather, their birth rates were very high until the late-1970s, and the contribution of their babies to overall birth numbers was low: less than 13 percent, albeit greater than their population share. This contribution has now changed dramatically, although in part due to a significant change in the definition of a Māori birth in 1991. Since then, births classified as Māori have accounted for around 28 percent of all births, again well in excess of population share and playing a major role in the nation's current and future labour supply (Cochrane and Pool 2017).

Because of the overwhelming importance of fertility as a factor determining many of Aotearoa's social and economic trends, detailed attention has been paid in this book to their dynamics, especially for Pākehā women, for whom we have much longer time-series data. In fact, one can go further than this by looking at fertility as a

complex social phenomenon. This is most marked, for example, in the dynamics that produced the shift from the Baby Boom to the Baby Bust. This shift also had, and will continue to have, major consequences for the demographic system and thus for future peopling and development.

Figure 23.4: The Leading Driver of Reallocation: Settler Fertility



Source: Statistics New Zealand, Net PLT Migration Table ITM314AA; Births Tables VSB004AA, VSB036AA

Notes: The difference between Total Births and Māori Births = Pākehā Births

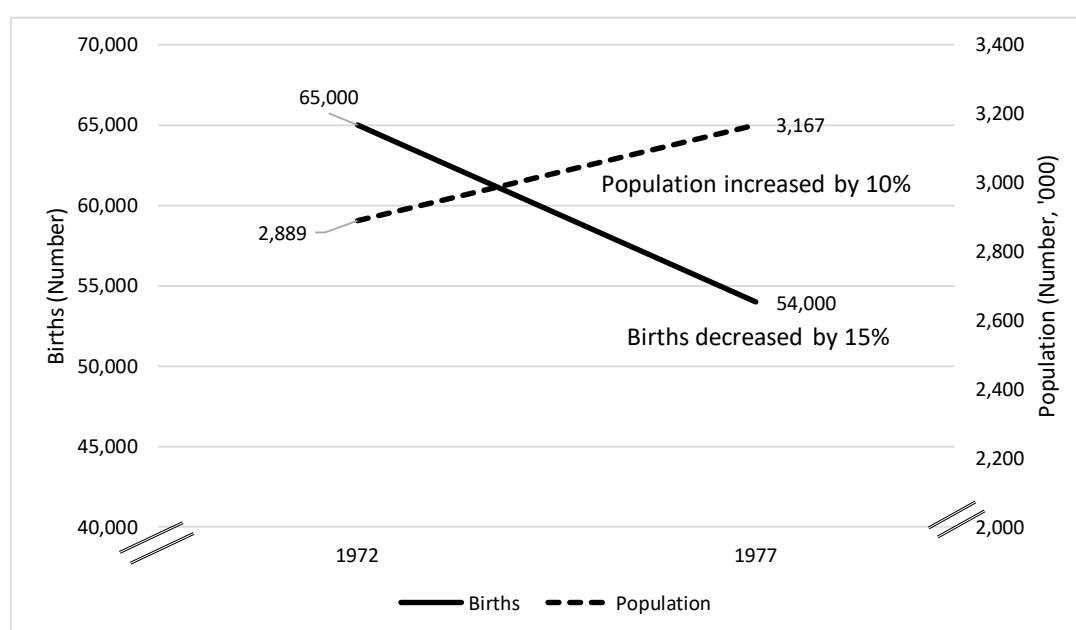
* Data for Maori births 1990-99 is missing, due to a major definitional change

The comparison between birth cohort sizes and total population numbers shown on Figure 23.5 (below) is somewhat spurious as they record two different factors. Nevertheless, the point is made that birth cohort sizes declined very dramatically, well in excess of growth in population sizes. This raises a major question – how, when reproduction is such an intimate couple- and women-driven event, such an extraordinary shift could occur over such an amazingly brief coterminous period – three to five years – not only in New Zealand but across the entire Western Developed world, which thus acted as a vast collectivity. The biosocial aspects of fertility were associated also with social changes, notably a shift in ages of parenting to older ages, and also a changeover in the status of first parenting unions, from marriages to conjugal unions, factors that show no signs of abating in the early twenty-first century.

As indicated on Figure 23.4 above, net immigration is a particularly problematic factor of peopling that can be positive or negative. It is beset by spikes and churning – between years there are marked differences in the number of people constituting the flows. As migrants tend to cluster geographically, their impacts vary across a country. But, in sum, its impact nationally is far less than perceived by the populace in general. This is because in most quinquennia it has been outrun by natural

increase. Even then, we forget that natural increase is part of the growth, a substantial proportion – it is not an either/or situation. I have stressed my support for net migration as a favourable process that enriches the country. However, its strongest advocates see it as the key driver of GDP, see a few high years as indicating a set-in trend and extrapolate on that basis. Instead, as I have argued, the demographic system driven by fertility has been, and remains, the major contributor to growth.

Figure 23.5: Baby Boom to Baby Bust: Accelerated Period of Decline, 1972–77 (all births, numbers) compared to Shift in the Population size.



Notes: 1) Different scales
2) This is a 'spurious' crossover as a true crossover should infer causality; this does not

The stock of new New Zealanders has been affected surprisingly little by migration as against natural increase, yet migration is nevertheless a powerful factor contributing to population growth, and one that will become more so as natural increase declines. One reason is that many migrants have children, often within a short period of arrival. Data on parents who have been in New Zealand over a relatively short time, as against a much longer time, explains this. Regrettably, New Zealand data does not include a set on first- and second-generation migrant-descent babies, born to parents who have/had been migrants. Thus, we cannot test this hypothesis. Another reason for the importance of migrants is, of course, the skills migrants bring to Aotearoa New Zealand's ageing labour force.

What I have shown in this book is that the above demographic factors – their patterns and trends at each stage: colonial, settler, bi- and multi-cultural, through periods of turbulence and periods of stability – have been constantly instrumental in driving demand for goods and services, and their supply. From the demand-side, for

homes, food, health and education, and all manner of other consumption goods culminating in today's complex health, education and transport systems and, above all, the evolution of our laws and governance. From the supply side, the trends produced the workers needed at each stage – sometimes with a lag, and not always perfectly aligned to demand. Relatedly I have referred throughout to 'demographic dividends' – beneficial changes in the age-structure of the population – and their potential for economic growth. Drawing them together I have shown how 'the economy' is truly, as Diane Macunovich (2002: ix) so elegantly put it, 'just people ... who are working, playing, eating, sleeping, loving, learning and dying.' I agree with her summation, that 'perhaps demographic change tends to be omitted from economic models because it is so ubiquitous [that] we take it for granted'. This is not to imply demographic determinism, simply to acknowledge that without people (he tangata: it is the people), there is no economy. While history is too complex and entangled to allow the imposition of causal models, the peopling of Aotearoa New Zealand certainly points to having set off the nation's development.

The demographic system I have focused on in a settler-society, that of Aotearoa New Zealand, exists in a peculiar context. As I have shown it is a function of colonial expansion and the 'Imperial Dividend' (one type of demographic dividend) that it initially brought. In the bulk of the chapters I have looked at how this evolved, but, ultimately, I return to the fact that the colonial experience has been one of a vast transfer of resources – in Aotearoa New Zealand's case from the indigenous Māori to the European Pākehā. As I said in my very first sentence (Chapter 1), there is no escaping this reality. For Māori it involved complete disinvestment – they are only now building up assets; for the settlers it brought them land and the accoutrements, to which they felt entitled. Many prospered: many did not.

This has been my narrative here. I hope that it successfully integrates the diverse narratives of a bi-cultural and now, multi-cultural society.

Epilogue

I have tried here to chronicle the history of a land to which I have deep attachment. Its failings become, as a result, just that more painful, its successes just that much sweeter. It presents an Aotearoa of which, ultimately, a writer can feel proud, with a hope that New Zealand's future will be 'great and good' comprised of '[men] of every creed and race gather here before thy face... [composed 1876]', as the *National Anthem* says. It must thus be a nation also proud of its diversity. This will be manifested in its emerging development path and by the populations who drive it – ideally as a small, but contented, well-off, egalitarian place, where caring and sharing are its dominant ethos.

But, how better than ending my expressions of belonging, of identity, than by acknowledging that these emotions were more elegantly portrayed over a century ago by the writer Katherine Mansfield (corresponding with her friend Dorothy Brett; quoted by Redmer Yska).

‘You know, if the truth were known, I have a perfect passion for the island where I was born. Well, in the early morning I always remember feeling that this little island has dipped back into the dark blue sea during the night only to rise again at beam of day all hung with bright spangles and glittering drops... I tried to catch that moment – with something of its sparkle and flavour. And just as on those mornings white milky mists rise and uncover some beauty, then smother it again and then disclose it, I tried to lift that mist from my people and let them be seen and then to hide them again’.

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APPENDICES

Appendix A: Phases in the Evolution of New Zealand's Welfare System/s

Phases and Duration	Values-system Underpinning Phase	Key Attributes
I. Māori Culture* Dominant 1769–1850 hegemonic; 1850 → present <u>residually.</u>	Whanaungatanga involving kinship rights and obligations. Basic principle of organisation for Māori ; reprised in 21 st Century Policy, Whanau Ora, (Family Health) in 2011	Exchange-dependent, Within family (whanau) and sept (hapu). Assets such as land managed by the community (demonised by settlers as 'Communitistic').
II. Initial Pākehā Colonisation 1840–1850s. <u>Huge Māori land loss. assets</u>	Impacts of Anglican Low Church evangelism, Presbyterianism, operationalised by colonisation companies/associations; state sector large (military, officials)	Some paternalistic concern for Indigenes; companies wanted hierarchical tenurial system and society. <u>Crown Purchase of Māori</u>
III. Victorian Charity model 1850s–1890s.	'Cherry-picked' from British Poor Laws, disproportionately from Scottish system. <u>Fragmented.</u>	Punitive, parsimonious, varied place to place (this also true for health). <u>Not a system.</u>
IV. 'State experiments'* Liberal Party 1891–1912 e.g. world's first <i>Conciliation and Arbitration Act</i> (1894); first nation (1893) to give vote to women; Māori , <u>Acting Prime Minister</u>	Possibly residual evangelism, egalitarianism, social democracy, agrarianism, with measures favouring family-operated, economically viable farms – land reform, credit etc. Yet, continuing Māori land loss. 'Australasian model' of welfare, based on a 'social wage for a working man and his family' – lasted 90 years.	First programme anywhere, widely encompassing factors of welfare. Attracted interest of Fabians and other social democrats. Subsequent governments (1912–35) added minor reforms, but not comprehensive until 1938; Māori covered in some measures, not all. <u>Liberals strongly anti-Chinese.</u>
V. Welfare State Social Security Act, 1938 , 1938 to c.1984. After 1938, plethora of enabling regulations (1940s, especially health). From 1938 covered all New Zealanders in need; major impact on 'closing Māori-Pākehā gaps'.	'Cradle to grave' social democratic regime. Esping-Andersen (1999: Chapt 5). included New Zealand in his 'Anglo-Saxon liberal' model, later subdividing it to posit an 'Antipodean model' Castles & Mitchell (1993: 93-94) cite ILO to rate 1938 Act highly as true 'social security'.	Esping-Andersen rates the 'liberal model' less than positively: as 'residual' with 'social guarantees restricted to "bad risks" '. Extended 1946 to Universal Family Benefit and low interest housing loans to veterans, then civilians (1958) through NZ State <u>Advances Corporation.</u>
VI. Neo-Liberal Revolution , 1984 → Effected radically 1984–93; rest of 1990s consolidation; early 2000s minor reprises; since then austerianism, erosion of state sector and welfare sub-sectors, <u>latent privatisation</u>	Thatcherism-Reaganism. led by Finance-Minister left-incumbency party, then by a Finance-Minister of a right-incumbency government. Key actors became associated with/co-founded far-right monetarist, social libertarian party. Strongly anti-statist; much influenced by 'Washington Consensus'.	Came in waves: e.g. macro-economic (floated exchange); major state sector restructuring, eg contracting CEOs and Reserve Bank's mandate corporatisation, change in management structures, sale of state assets at bargain-prices; labour market de-regulation; radical cuts in <u>all welfare sub-sectors</u>

Notes:. * Keith Sinclair's term (1959: Part II, Chapt 2)

References

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Appendix B: Were High Levels of Pākehā Longevity in the Later Half of the 19th Century Due to Migration Selectivity?

By 1876, Pākehā had achieved unrivalled levels of longevity, and this may have been the case earlier in that century. The data presented in Tables 9.3 ($e(0)$) and 9.4 ($((5)q(0))$) in the text demonstrate this. It is also clear that the determining factors were a result of the high average levels of socio-economic wellbeing experienced by the settlers, by comparison with their contemporaries (Pool and Cheung 2004, 2005).

There is, however, an alternative hypothesis: that the migrants were a selective group, who were healthier than their peers, and thus willing to take the long arduous trip to the colony. In Chapter nine I demonstrated that this argument is not supported by the data available; those arguing that there was selectivity give no proof, but just assume that this is the case. Another less valid case is based on social Darwinianism: that shipboard fatality killed off the less endowed, leaving the stronger passengers to survive. There were also attempts at screening, especially for phthisis. By the time large-scale migration to New Zealand was prevalent, the health of passengers was better regulated than in Britain; an exception seems to have been the brig *Lloyds* in 1842 (Mc Loughlin no date).

This issue is of importance well beyond New Zealand peopling. In a seminal article in *Science*, Jim Oeppen and James Vaupel use 1920s Pākehā data to pursue a major issue for longevity research: the limits of human life expectation. Pākehā levels in the 1920 already exceeded what experts were projecting as limits. Pool and Cheung argued that, instead, the 1920s data were a function of cohort survival momentum effects reaching adult ages, but due to improving levels of childhood survival in the late Victorian era. More recently, a leading French demographer and expert on mortality, Jacques Vallin, with France Mesle, ascribed this instead to selective migration. Woodward and Blakely noting the rural origins of migrants, come do not make a definite judgement but note that, ‘If the healthy migrant effect was the only explanation for low mortality in New Zealand, we would expect to see similar results in other colonies... Life expectancy in New Zealand was consistently and substantially ahead’ (text Table 9.3) (Oeppen and Vaupel 2002; Pool and Cheung 2005; Vallin and Mesle 2010).

In the earlier years of the nineteenth century, when cholera and other diseases wracked trans-Atlantic boats, they were turned into ‘coffin ships’, especially those carrying Irish – some Australian migrant and convict ships also had high death rates. In 1842, the small brig *Lloyds* coming from Gravesend to Port Nicholson with Nelson immigrant women and children, lost 67 to whooping cough (McLoughlin no date). But, Woodward and Blakely argue that, by the time mass migration to New Zealand was occurring, on-board disease rates had dropped, not because of ‘generic

improvements in population health', but because shipboard health was being regulated rather more effectively than was the case on land; this was a period in which public health in Britain was actually deteriorating. The most obvious intervention was to ensure that travellers were vaccinated, and to quarantine ships with smallpox cases aboard, the latter of which was done rather efficiently for the few times this occurred. Woodward and Blakely also address two other factors, oft-cited in the migration and health literature, the 'salmon bias' (that destination death rates are deflated by the return migrations at old age to a place of origin where a former migrant dies) and health checks at embarkation ports. In this era: '[T]he health checks were often perfunctory and the screening process was demonstrably ineffective'. Because of distance and prohibitive costs, a salmon-like return home was not much of an option for Pākehā. The following analysis reviews the likelihood of selectivity for the periods of peak migration, drawing heavily on Phillips' and Hearn's data for the period 1853-70 and 1871-90 encompassing, respectively, the two marked spikes in the 1860s and 1870s noted above (Woodward and Blakely 2015: 86, 95, 110-11; Phillips and Hearn 2008: Chapter 3).

The good health of the colonists, relative to other Victorians, did not occur because of the colony's health system or medical science, both of which were still primitive. Instead, one has to turn to other factors, notably the high level of economic wellbeing, plus a booster coming from the decline in family sizes in the late Victorian period (see below). Greater wealth than their peers affected factors such as diet (and thus nutrition), income, population densities (and thus the diffusion and pathogenicity of diseases) (Woodward and Blakely 2014: 109; Pool and Cheung 2004, 2005). Their housing was often squalid, but even in urban slums were stand-alone dwellings separated from their neighbours' houses.

Very high fertility rates were reinforced by extremely favourable levels of child survivorship, and thus longevity (as shown in text Tables 9.3, 9.4). In the 1870s Pākehā females had already reached 55 years life expectancy, and 60 years by 1901. As Jit Cheung and I have shown, improved child survivorship, were linked to a decline in fertility 1876-1901: couples saw that their babies were surviving and set about limiting family sizes. With smaller families, there was more per capita from the household's budget and material goods, children were less likely to have to share beds and bedrooms, and to spread pathogens among them. As parents increasingly took over childcare from older children, early childhood accident rates declined between 1876 and 1896. These improvements then had momentum effects, as more and more child survivors moved into adult and middle ages. (Pool and Cheung 2004, 2005).

By contrast with children, older New Zealanders of the 1870s and 1880s were very likely to be migrants and imported the health baggage they had accumulated until that age. At childhood, Victorian Pākehā had higher levels of life-expectation than, for example, Norwegians, but at 30 years and above the advantage shifted; as I

note in Chapter Nine this is compelling evidence's (Pool 1985: Figures 29 and 30; Table 117). It was great to be born a Pākehā child in colonial Aotearoa, but the likelihood of dying as an adult was less among Norwegians. On the other hand, your survivorship probabilities were better than for British at ages to 45 years (Table B.1 below).

The macro-evidence on Pākehā longevity and survivorship chances is robust. But proof of any selectivity in the intention to undertake the long voyage to New Zealand is more difficult to assemble. The 'push' or 'pull' factors that led person 'A' as against 'B' to move to the farthest end of the earth will have been selective, but also multi-dimensional and complex. In the 1840s to 1890s, few would have thrown themselves into the voyage on a mere whim, but many may have had few other options, or lacked any solid information. One thinks, for example, of skilled Paisley textile workers whose jobs were replaced by machines, the Ulster flax-workers losing jobs to mechanisation (in the early nineteenth century Belfast was called 'linenopolis'), the agrarian unrest across England's 'grassy shires', Highland Clearances and Irish Evictions, the adolescent girls who migrated alone to an unknown fate as a serving maid, or those who saw the incentive of an assisted passage and a hope to improve their lives. As one might expect, there is ample evidence of chain migration, of kith and kin and family reunion incentives, documented more generally and in case studies by Phillips and Hearn (2008: Chapters 3 and 4) and other authors. There was recruitment and assisted passage migration, but, as they note, clustering of places of origin was often a function of the presence of a recruitment agent: Hampshire was such an example, and Scotland had more agents than the much larger England and Wales.

But none of this, even health checks of assisted passage migrants (see above), really supports arguments about selectivity. By contrast, there is counterfactual micro-level data available. They show that residence in the colony gave Europeans some health advantages, probably because of nutrition and wellbeing. As noted, birth and childhood in the colony was certainly a very strong positive – for Pākehā, although not for Māori. At an anecdotal level, diaries and accounts are full of 'sickly' British migrating to the colonies. Many a 'sickly' migrant became a geriatric surviving to a grand old age, perhaps an indication of the restorative environment 'out there'.

Very early on in the colonial period, there are the death and hospital admission records that Surgeon-Major Arthur Thomson collated from across the Empire, including the mother country, using statistics on British Infantry soldiers tabled in the House of Commons (United Kingdom) plus his own records on those in New Zealand, and from a correspondent in Australia. This was a study that, by definition, controls for age, occupation and gender. Most importantly, as Alistair Woodward and Tony Blakely point out, there was no selectivity – all soldiers went where assigned. They make the caveat that the Aotearoa sample was small, 1200-1600 per year, but

the diligent Surgeon-Major did compute an annual average, or ‘central rate’, from an 8-year run totalling 8,400, and for a rather homogeneous population. Thomson shows that death rates in New Zealand were well below those in other stations: 5 per 1000 soldiers, as against 11/1000 in Australia the next lowest, or, most compellingly as a comparison, 16 for the United Kingdom, where the base population would have been large and climatic conditions not too dissimilar from New Zealand (i.e. not tropical). Hospital admissions were also half the British level, and that sample would have been both younger new recruits and older veterans awaiting a new assignment. Deaths from lung disease and ‘fevers’ were also the lowest in Aotearoa. Woodward and Blakely also draw on a study on soldiers in the 1860s, when soldier numbers had grown 10-fold, and which confirm the low rate in New Zealand (Thomson 1859: v 2, Tables, ii, iv-vi; Woodward and Blakely 2015: 94-97). Furthermore, when British regional data are parsed and paired with data on the British settler flows – to the extent that this can be done systematically – no evidence can be detected in the flows from Britain to New Zealand of any marked macro-level selectivity in terms of a healthier migrants (e.g. regions they came from).

Turning to indisputable evidence on the positive health advantages of colonists, I use the life table indices in text Tables 9.3 and 9.4. Table 9.3 showed strikingly that Pākehā settlers achieved higher levels of life-expectation at earlier dates than their counterparts in Britain and were also more advantaged than the settlers in Australia and Massachusetts (representing the better-off parts of the United States; no data are available for Canada). In Table B.1 (and in Chapter 10), I use more refined measures of survivorship, and thus health, that may be less familiar: $(n)p(x)$, the probabilities of surviving across key age-groups. There is a more general theoretical underpinning for this focus. In the international literature I have summarised elsewhere (see also Chapter 4), health has now regained its rightful place as a central factor of development, including for the productive sectors, with a proactive impact, and has perhaps quit the role assigned to it by neo-liberals as a simple demand-side variable burdening the fiscal system. Underlining this is that in the United Nations’ Millennium Development Goals (MDGs), based on a consensus across civil society, three of the ten relate to health, and a fourth to poverty that is clearly linked to health status (Pool 2015: 286-93). The data in Appendix Table B.1 show how relatively higher survivorship probabilities than in Britain at various ages brought about the overall life expectancy advantages to Pākehā. The settler experiences differed markedly from those in Britain, which themselves were not uniform, while changes occurred at different times for different age-groups.

The importance for health and development of surviving early childhood has already been discussed above, but it was of more general demographic significance. It should be stressed that 17 percent of all Pākehā in 1881 were under five years, and 90 percent of them were New Zealand-born. Moreover, 42 percent of all colonists were

under 15. Thus, by 1881, the impact of being New Zealand-born on the total Pākehā life tables was maximised – this had nothing to do with migrant selectivity.

This effect was detailed in text Table 9.4 by the early childhood mortality rates

ⁱ for the late Victorian era for Māori, Pākehā, England and Wales and Scotland as a whole, plus different-sized New Zealand and English settlement groupings. The Māori (5)q(0) stands out as very high, whereas the Pākehā rate is very low. Even the colonial boroughs, in which a minority of the settlers lived, were better than all but rural England. Rural Pākehā were the most privileged, although this was not universal. In 1878, in pioneering Hawkes Bay Province the rate for settlers' children was 247, a bit higher than the English rural rate, as against a Pākehā national rate of 120 (Tiong 1988: 141).

In Table B.1, two other age-groups are documented: later childhood, and the reproductive ages for women or earlier working life for men and women. Victorian colonists were a very high fertility population, as noted above. The adult women would thus have been adversely affected by what Ingrid Waldron labels as 'the physiological burdens of childbearing', which extended far beyond maternal mortality in its narrow sense, but to most disorders, notably tuberculosis. Everything is relative, of course, so Pākehā women were probably in a more favourable situation than their British peers for key variables such as nutrition and overcrowding, and many times better-off than Māori in their own country. In passing, this was an era when the pathogenic causes of tuberculosis were not understood – Koch' pioneer work came that decade. Thus, there were neither preventive nor curative biomedical measures available; any differentials were related primarily to the social factors just noted, plus high slum population densities in Europe and even on the east coast of North America. For Pākehā, declines in tuberculosis cohort mortality went ahead of similar changes in the Australian colonies and England and Wales. At the macro-level, the Pākehā colonists were relatively blessed socio-economically; to our eyes downtown Auckland of that day looks squalid and filthy in photos, but it was no Lower East side New York, nor East-end London. The settlers were well-fed for those days – overfed on sheep meat. By global standards, they had high average incomes, although there was marked inequality it seems. But, at least the poorer classes still had their home gardens producing most months of the year (Waldron 1982, 2003; Pool 2015: 286-93; Pool and Cheung 2004, 2005; Pool and Chan 1971).

Table B.1: Life-table Probabilities of Surviving through Selected Key Age-Groups (^{1,2,3}), (n)p(x), by Sex, for England and Wales, Scotland, and Pākehā, 1870s and 1880s

	Birth to Age 5 ⁽¹⁾		Ages 5 to 15 ⁽²⁾		Ages 15 to 45 ⁽³⁾	
	Male	Female	Male	Female	Male	Female
England and Wales						
1871-80	.73	.76	.95	.95	.75	.77
1881-91	.75	.78	.97	.97	.76	.79
Scotland						
1871-80	.75	.75	.93	.93	.73	.75
1881-91	.77	.80	.95	.95	.76	.76
Pakeha						
1874	.82	.83	.96	.95	.78	.78
1878	.85	.88	.97	.97	.81	.82
1876	.83	.85	.96	.96	.80	.80
(av.)						
1881	.86	.88	.97	.97	.82	.82
1886	.87	.88	.97	.98	.82	.83
1891	.88	.90	.98	.98	.84	.84

Sources: See Table 9.3. $(n)p(x) = 1 - (n)q(x)$, the index used in Table 9.4. Here $(n)p(x)$ is by sex and rounded to simplify presentation and interpretation.

Notes: - (1) Through Early Childhood from Birth to Exact age 5, $(5)p(0)$,

- (2) Through Late Childhood from Exact Age 5 to Exact Age 15, $(10)p(5)$,

- (3) Through Early Adult Ages from Exact Age 15 to Exact Age 45, $(30)p(15)$.

In Table B.2, I have drawn on the British Isles' comparators presented in Table B.1, to attempt to fit Phillips and Hearn's Tables and text to British Registrar-Generals' reports. The fit, it must be admitted, was less than perfect. But they still provide some rather compelling results (93 percent of districts covered by Phillips and Hearn approximately matched the Registrar-General's areas). The largest group, the English immigrants, were not all representative of a healthier Britain. Almost a third of them came from dense urban settings in London, Yorkshire, Lancashire and the central Midlands (Warwick) all of which had poor health statistics. In the prime migration periods arrivals from Lancashire and Yorkshire were fewer than one would expect given those counties' contribution to Britain's population, but as their home numbers were large they made a significant contribution to the migrant flows, as much or more than Cornwall, Kent or Hampshire (Phillips and Hearn 2008: Tables 6

and 7; Woods 2000:Tables 9.3 and 9.4). Some did come from better-off regions and localities with higher longevity, in the east from Suffolk to Lincolnshire being a case in point. Of Farr's 65 'healthy districts', there were three major swathes – the far north, from where relatively few migrated to New Zealand; the mid-coastal south (excluding ports) from Hampshire to Sussex, of which Hants contributed a hefty six percent to Pākehā immigrants, so had a positive effect on migrant health. But even those migrating from William Farr's band of south-western 'healthy districts' (see Chapter 3) may not have made as much of a positive contribution as one might expect – they included significant numbers from Cornish tin-mining areas. Overall, Cornwall at seven percent contributed almost half of those from the southwest, and among them tin-miners were a major group. Phillips and Hearn (2008: 96-97) note that early on 20 percent of Cornish had been miners, but that this proportion rose: 30 percent of all of the Otago miners of English-origin were 'Cornish people with a mining background', as was true for 20 percent of West Coast miners. Workers in this job in 'Cornish Districts' had notably lower 'partial life-expectation' (the expectation of living through the working years, 25-65) than non-miners. The north of England is quandary: it is not clear whether the migrants came from industrial or rural areas, but in the period covered in this assessment Northumberland and Durham seem to outrun the northwest. To be on the safe side I have divided the region 50/50 between positive and negative.

Wales was better, overall, than England, and parts of Pembrokeshire and Anglesey were 'healthy districts, but very few Pākehā came from that county or that country (one percent), even though it made up five percent of the British population, so it is not detailed in Appendix Table B.2. Its Infant Mortality rate (age zero) was about the same as Scotland's, and below England's. Perhaps the Welsh, like others from Celtic Britain (see below) had poorer health at adult ages. This follows from what we do know about them: Welsh coal miners seem to have been disproportionately represented among immigrants, and especially so, not surprisingly, on the goldfields in the 1870s (Hearn 2005).

Taking England and Wales as a whole, using another set of data, $(1)q(0)$ (the life-table infant death rate), as an index, about 40 percent of English/Welsh came from counties with better health than England and Wales as a whole, but 37 percent from areas that were worse. The mean deviation from the country as a whole for the better-off regions was, however, above that for the worse-off; against this the overall English $(1)q(0)$, the national comparator, was notably above the Scottish and the Irish infant mortality rates, if we are to believe the Irish data (see below). These independent data fit with what is shown in Table B.2 – that about half the English came from healthier and half from less healthy regions. The small flow from Wales may have tipped the balance ever so slightly towards those with an unhealthy provenance.

Table B.2: Estimated Factors that could contribute to Increased or Decreased Longevity in a Hypothetical Life-table constructed from the Weighted Collective Mortality experiences of all British Migrants to New Zealand 1850s-1880s

Country/Region	% of Total % (UK) % of Country	Effects on Longevity			
		Positive		Negative	
		++	+	--	-- --
England & Wales					
Southwest	16				
<i>Components</i>		13			3*
London	17			17	
Southeast	13				
<i>Components</i>		6		7	
East	7		7		
York	7				
Lancs-Cheshire	8			8	
<i>Components</i>				1	7
NE & NW	6		3	3	
Midlands	19				
[C, Warwick]	[5]				5
[E & W]	[9]		9		
[S]	[5]		5		
Residual**					
(eg Wales, Islands)	6	?	?	?	?
% Pop Eng & W + Islands	86/87	19	24	28	15
% of UK Migrants 51	44/44	10	12	14	7
Scotland		8	24	42***	25****
& of UK Migrants 25		2+	6	11	6
Ireland		10	23++	33 +++	33 ++++
% of UK Migrants 21		2+	5	7	7
Grand Total 100	Data on 89% 14	23	32	20	

Notes: These figures are merely estimates attempting to fit two sets of data with different geographical boundaries. They are rated ++strongly positive health effects; + positive; - negative; - - strongly negative. Components relate to components of likely effects (++, + / -, - -).

Mismatches + No data for Wales and Islands gives an 11% shortfall

** Tin-miners in Southwest*

***Includes Wales and offshore islands. Channel (2% of English and Welsh, Man and counties where Phillips and Hearn (2008) and Registrar-General do not fit;*

**** - Scottish (30)d(20) effect (see text);*

***** High Glasgow and Edinburgh mortality (- -), disaggregated from the Scottish national (30)d(20) effect (-);*

+ Assuming that 8-10% of Scots and Irish came from areas resembling Farr's 'Healthy districts'.

++Possible positive Irish rural effect;

+++Irish (30)d(20) effect. Poor vital statistics.

++++High Belfast mortality, probably higher Dublin mortality.

Scots at early childhood were healthier than their English counterparts, but this reversed at late childhood and adult ages. But, these older ages were those at

which typical migrants left Scotland for New Zealand, where they made up 25 percent of all new settlers, as against only 11 percent of the British home population. So, Scots were important at migrating ages, at which they had higher mortality than their English counterparts. Again, this strongly counters the argument of positive selectivity. In New Zealand, over the entire period 1874-91, young children, almost all of whom were born in New Zealand, benefited most from high survivorship. By contrast, older colonists, significant proportions of whom were immigrants, benefited far less. In this equation, the Scots' immigrants probably had a negative multiplier effect on the colony's predominantly immigrant adult population. To add to this, the national Scottish life tables probably understate the negative effects of the highly concentrated source area on Scots migrating to New Zealand, and thus on colonial adult longevity. As Jock Phillips and Terry Hearn (2008: 108) argue, they came overwhelmingly (60-70 percent) from the more urbanised and industrialised Lowlands especially around Edinburgh and Glasgow, and not from other more rural regions. 'It may well be that some of those who eventually came to New Zealand were the children of ex-Highland dwellers, but Highlanders themselves they were not likely to be'. Indeed, the Highland clearances might have been an experience of their parents who had had to move to cities, in which case the migrant generation would have been raised in urban families impoverished by this prior factor. At the two peak periods of migration, more than one-quarter of Scots came from just two cities, 17-18 percent from Glasgow alone, which had notably elevated levels of early childhood mortality, possibly the worst in Britain; Edinburgh's was in the same range as urban England's, again towards the 'unhealthy' (Table 9.4). Extrapolating from Phillips and Hearn, in Appendix Table B.2, below I have allowed a 1/3rd : 2/3rd split between 'healthy' (e.g. rural northeast and Borders) and 'less healthy' source areas. But the latter would have been further strongly weighted by the very negative health effects of Glasgow and health problems, of an unknown magnitude, due to coming from other urban, industrial Lowland centres whose mortality levels also would, at least, paralleled those of English towns (Table 9.4). This Scottish factor would have further diminished the survival rates of all immigrants to New Zealand – they would have been selected, disproportionately, from among adult groups with a bi-factorial propensity to higher mortality: being Scots and coming from its blighted urban, industrial areas. This might partly explain the point raised above, why Pākehā did better than Norwegians at younger ages, and less well at older.

The Irish were the most enigmatic, a problem exacerbated, it seems, by poor data. The large-scale migration to New Zealand came after the great famine and the earlier widespread evictions, by which date according to the first life tables the Irish, overall, had higher longevity than the English. In fact, in the 1870s their expectation at birth rivalled that of New Zealand for 1874. This is simply counterfactual given what the Irish were experiencing. We can probably accept in part Robert Kennedy

argument about their rural life, and Ireland did de-urbanise during the Victorian era. Beyond this, it lost population numbers – from 6.5 million before the Great Famine of the 1840s to 3.4 in the 1880s – many of whom migrated, but many of whom may have died as paupers and their deaths not recorded. This is supported as data improved: they made no expectancy gains from the 1870s, and even losses – life expectancy in 1881 was less than in 1871. Thus, a more logical explanation of the seeming advantage of the Irish, is that it is an artefact of poor data quality, as has been recently documented by Brendan Walsh: registration commenced in 1864, well after Scotland, but ‘under-registration of both births and deaths, and specially infant deaths, remained a serious problem...persist[ing] well into the 20th century and should be borne in mind when studying both the trend in Irish life expectancy, regional differences in Ireland, and when making comparisons with other jurisdictions’. In rural areas vital registration was worst in western regions, but best in Ulster’s County Down; neighbouring Belfast’s data were probably also more reliable (text Table 9.4).

Substantively, moreover, Ireland had not shed all its earlier woes. In the 1870s, there was a smaller famine, mainly in the west but affecting Munster. There was also rural unrest resulting in a ‘Land War’, plus, as Kennedy shows, a very significant upsurge in evictions and related emigration in the late 1870s and 1880s. Irish emigration to New Zealand in the 1860s and 1870s, the main periods, came primarily from Catholic Munster in the southwest (about a third of all Irish in those decades; 35 percent 1871–90) and from Protestant Ulster in the northwest, (two-fifths), the region where tenants theoretically had more protection. The availability of assisted passages from 1873 undoubtedly spurred on migration, especially from Munster. But, about 12 percent of all Irish were from Antrim alone, mainly from Belfast, which had very high childhood death rates resembling those of Glasgow (Table 9.4). Dublin, which had been an important source area in the first years of colonisation, when its life expectation was well below that of rural Ireland, became far less important (six percent) but probably still had poor health conditions (Kennedy 1973: Tables 2 and 3; Phillips and Hearn 2008: Table 23, 122).

There may be a further aspect to this. Irish life expectancies were inflated by under-registration at infant ages when the force of mortality is high, although, even adjusting for that, Irish $(5)q(0)$ are between the Scottish and English (text Table 9.4). But, we can also extrapolate from the Scottish experience. From 5 years to 45, Scottish survivorship probabilities were below the English (and well below Pākehā). Despite the advantage of the Scots at early childhood, their life-table deaths below 20 years $((20)q(0))$ and in the early working ages, 20–49 years, $((30)q(20))$ – the source ages for much of the migration) were higher than those for the English, reinforcing a point made earlier. But, what if the burden of adult disease and death seen in the Scottish $(30)q(20)$ also applied to the Irish? Unfortunately, an online search yielded no detailed Irish tables for this period so I am hampered in making firm conclusions,

but circumstantial evidence that the Scottish situation may have applied there comes from Walsh's work. The Irish age-group 15-64 years, again those most likely to migrate, suffered greater losses of life expectancy than children or geriatrics in the 1870s, then gained the most in the 1890s, and had further improvements, but less so than for pensioners, in the early 1900s. One is tempted to see this as a cohort effect: the children that suffered through the great famine, had they survived, would have been the adults of the 1870s; a cohort carries some of the bad health effects of its childhood into adult ages, much as individuals can (Kennedy 1973: Tables 2 and 6, Chapter 3; Walsh 2017:140, Fig 4; Phillips and Hearn 2008: Chapter 3, esp. Table 23, 125; Woods 2000:Table 6.9).

In sum, this complex exercise shows that a life table constructed from the mortality experiences on British Victorian immigrants to Aotearoa would not look the same as the Pākehā New Zealand one. Nor would it be a clone of some United Kingdom collective one, including all of Ireland of course. The emigrants were not perfectly representative of the British Isles population, but were healthy, or unhealthy British disproportionately selected in the flows, by recruitment or self-selection? To attempt to address this issue Appendix Table B.2 has posited the factors in 'migrant longevity' synthesising all the bits of information in the last few paragraphs. The key effects are standardised to a per cent of all of the United Kingdom. These data suggest that perhaps 42 percent of immigrants came from healthier region, but 58 percent from less healthy ones. Perhaps, 8-10 percent may have come from districts in Celtic Britain that were bucolic, in which case 16 percent of all immigrants would have been particularly healthy. But, counterbalancing them were the 22 percent who came from the most industrialised and least sanitary parts of the British Isles. On balance therefore, British immigrants were not a selective sample of people from the United Kingdom; because of the Scots' disproportionality, they were not even representative of the British, and the Scots, perhaps the Irish and the few Welsh came from areas with health levels below some United Kingdom norm. Only in the case of the English was there selectivity in favour – just – of good health.

In the analysis above there has been a focus on adults, who comprised the majority of immigrants. But, greatly counterbalancing this as a factor affecting colonial health is the fact that, by 1858, 60 percent of Pākehā children (0-4 years) had been born in the colony; by 1881, this was over 90 percent (Chapter 9). Thus, even early on, migrant selectivity was an adult trait. And as noted above, Scots and probably Irish adults had high mortality levels ($(30)q(20)$) relative to their childhood deathrates.

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Appendix C: Timeline of the First Four Decades of Recolonisation, 1976–1919

Prior Baseline, the economy of the turbulent era, until c 1880

[1871, Pākehā, industrial sectors, Primary 56%, secondary 13%; Tertiary 31%]

Recolonisation starts to emerge

1876, Pākehā International immigration starts to slow
1876, Pākehā, mortality lowest but fertility highest in industrialised countries
1876-1901, Pākehā mortality (especially childhood) goes through, for those days, further radical decreases
1876-1901, Major shift Pākehā, age at first marriage and % of women celibate
1876-1901, Pākehā Fertility decreases, rapidly for those days, setting in long-term decline until World War II
1881-1900, Pākehā, net immigration rates low, natural increase very high
1882, First refrigerated shipment of sheep meat
1880s, Dairy factories producing for export established
1886, Pākehā, industrial sectors, Primary (still largest, but just) 39%, secondary 25%, tertiary 36%
1888, Pākehā, net emigration loss of 10,000
1891, Shift of population southward decreases, Dunedin still largest city
1891, Māori reach population and development nadir
1891-1911, Liberals introduce radical social welfare legislation
1891-1911, Liberal Land Reforms (dismantling large estates) introduced
1890s, High rates of Pākehā internal mobility, with northward shift
1890s, Pākehā, rural intensification increases as pastoral farming intensifies
[1899-1902, Boer War, Māori volunteer despite Whitehall forbidding 'native troops']

Recolonisation now firmly entrenched

1901, Pākehā, industrial sectors, tertiary now equals primary (36%), and secondary lower (24%)
1901, Auckland now largest urban centre, remains so and increasingly dominates
1901, Pākehā fertility second lowest industrialised countries, below British
1901, Māori Hygiene Division, Department of Health (established 1900)
Early 1900s, Māori life-expectancy at birth increases significantly (by comparison with 1890s), through community health programme
Early 1900s, Māori land alienation rates slows – but only 12% still in their hands
Early 1900s, Dairying firmly established; sheep fattening (for meat) growing rapidly
Early 1900s, British markets favour NZ export trade
Early 1900s, Rates of inter-provincial mobility slow, and remain so for 90 years
1906, Pākehā, industrial sectors, Primary 33%, secondary 29%; tertiary 38% now exceeds primary
1907, New Zealand constituted a Dominion, but has little impact in Aotearoa
1911, Pākehā, industrial sectors, primary (36%), secondary (24%), tertiary (40%)
1911, NZ more than 50% urban, despite dependence on exporting pastoral products
[1914-18, Great World War, high volunteer/conscription rates, Māori and Pākehā]
[1916, Census excludes troops overseas (although reported in census table notes)]
[1916, Troops and nurses overseas: 43,000]
1916, Metropolitansation (100,000+ population) starts (Auckland)
[1918-19, 'Flu Pandemic, Māori death rates much higher than Pākehā]

Appendix D: Māori Geographic Clustering and Areas from Which They Were Virtually Absent, 1936 Census

In rural New Zealand in the interwar period, the degree of clustering by Māori – or their virtual absence – was far more extreme than can be inferred from text Table 15.4. In 1936, in the North Island, they were scattered across peripheral hilly regions, with intense local relief and thus not attractive for more intensive pastoralism, yet virtually absent in urban settlements, as the following data show:

- Northland's two northern counties, Māori 50 percent of the total;
- By contrast, Northland's southerly Rodney County, close to Auckland, Māori just five percent;
- West and south Waikato, King Country, Hauraki, Coromandel, 55 percent of Māori were concentrated in the poorer hill country areas;
- Westerly Kawhia county, Māori were 47 percent of the total, higher than any other local body in the region;
- Bay of Plenty, Māori concentrated in pockets in rural areas outside Tauranga, Te Puke, Whakatane and Opotiki, all small centres, and Rotorua, which somewhat larger. Opotiki County, in the east of the region 50+ percent of the total;
- On the East Coast, in Matakaoa county, 70 percent, the highest proportion for any local body nationwide, and 68 percent in Waiapu county (both on the tips of East Cape);
- Gisborne Borough, the East Coast's economic and social centre, a mere two percent;
- Wairoa County, south of Gisborne in northern Hawkes Bay, 51 percent;
- Yet, Wairoa Borough, Wairoa county's major settlement just one percent;
- Māori constituted even lower proportions in the Hawke's Bay's other more southerly urban centres.
- In the sparsely populated Taupo County, occupying a large section of the central North Island, a significant minority were Māori;
- Other counties with Māori concentrations were Great Barrier Island, Raglan (in the hilly west coast of the Waikato), Waikohu (inland from Gisborne), Uawa (north of Gisborne), the Chatham Islands and Whanganui (the last was something of an exception as Māori were concentrated on the coastal plain around the very important religious centre of Ratana Paⁱⁱ).

Appendix E: Aotearoa New Zealand's Demographic Transitions, 1970–2020

Aotearoa New Zealand's demography has essentially gone through nine discernible transitions:

1. In the mid-1970s, both Māori and Pākehā went through historically rapid fertility declines, referred to as the 'Baby Bust'. The trend was so accelerated that it had virtually finished by the 1980s, but it has left a legacy of long-term consequences on the age-structure (see dot point 7 below).
2. Correlated in time with the Bust, but not causing it, were changes in nuptiality – not of the same order as the nuptiality valve which has been an ever-present phenomenon analysed in earlier chapters. In the 1970s, a new form of linkages between conjugal unions and reproduction emerged. In its new form it had no historical precedents, above all resulting in a separation between being in some form of union and some form of childbearing, the inseparables of the nuptiality valve of past eras. The *function* of entering some sort of a conjugal union as a normal life-cycle phase did not change – it was the *form* that they took that did; in this case form did not follow function. This multi-faceted redefining of heterosexual marriage and relationships provoked conservative commentary and moral panics about the 'end of the family', and even 'of society as we know it' (Morgan 2004), while accompanying homosexual law reform saw public protests that are largely forgotten today. Despite these outcries, there is now popular acceptance of family building patterns that are very different from those of a few decades ago. In 2018, a prime minister bearing a child 'out of wedlock' – but in a consensual union – was not much of an issue, except among a few residual social conservativesⁱⁱⁱ.
3. A key factor was the adoption of efficient contraception, first the Pill before the end of the Baby Boom, and then tubal ligation and vasectomies.
4. In the early 1970s there was a massive migratory inflow, in absolute numbers by far the greatest for a century since 1876. Other even larger waves have recently occurred, but those of the 1970s were not surpassed until after 2010.
5. Inflows have increasingly been from new migration source countries especially in Oceania and Asia. New Zealand has rapidly turned from being a homogeneously bi-cultural country as recently as 1980 to a very diverse multi-cultural one. Complicating this is a corollary: over this turbulent period peak inflows have been followed by net outflows or by lower net immigration rates. These ebbs and flows have been the critical factor in destabilising the national-level demographic system.
6. For a range of social demographic indicators – longevity and physical health, income and wealth, housing and other basic needs, imprisonment rates and mental

health, education and career opportunities – divergences and differentials between Māori, Pākehā, Pasifika and Asians, opened or re-opened, a topic discussed in Chapter 22. Cross-cutting these trends were increases in inequality, within ethnic groups and between, and, to confound this further, gender differentials changed. Recently, and since the decreases in the 1970s, fertility differentials have emerged within Māori society plus a modest shift upwards in age of childbearing (Pool *et al* 2007: passim; Kukutai and Pool 2014).

7. Nationally, the age-structure shifted from youthful to ageing, both structurally (increased proportion at older ages) and numerically (increased number at older ages), the former primarily due to declining fertility rates and the latter to increasing longevity – two trends disconnected in both time and causality, although as of the beginning of the twenty-first century, they are merging (the ‘Baby Boomers’ made the population younger when they were born but are now adding to the numbers at older age). At sub-national level these shifts, paralleled in counterpart countries, are not due to declining fertility and increasing longevity alone: they have an important spatial component. Populations also become older when there is sustained net migration loss at young adult ages and/or sustained net migration gain at older ages, as has been shown for New Zealand by Jackson *et al* (2019).
8. Within the country, a population geographic trend, which had been spluttering along over the interwar years and the Baby Boom, suddenly moved into full throttle. This was the ‘gutting out’ of non-metropolitan New Zealand’s populations, with metropolitanisation being its inverse effect. Two new metropoli – Hamilton and Napier-Hastings, if one sees these two cities as one urban zone – had appeared and Tauranga joined this group at the 2013 census. But Auckland’s primacy dominated the urban scape of New Zealand. As was true elsewhere in the Western developed countries (WDCs) the new metropolitansation was taking an historically unprecedented form, in New Zealand and across the WDCs a function of the increasing range of commuting afforded by the car. In parts of Europe fast travel by extra-suburban rail was facilitating long distance commuting, but in New Zealand the car had become king. Auckland’s peri-urban zones spread across low-density housing areas into satellite towns. The majority of Aucklanders became suburbanites and even peri-urbanites. A not entirely unrelated phenomenon is what the French urbanist Pierre Merlin (2009) has called rurbanisation – the explosive growth of small resort and other secondary centres (e.g. in ‘sunbelt retirement areas’) into larger centres. Functional urbanisation has immutably transformed the nature of what previously were small settlements with a limited range of services. He points out that, not only are French metropolitan-dwellers suburban rather than central city dwellers but are increasingly peri-urban as the

spread of their commuting zones has triggered an ‘exode urbaine’ that is reinforced by ‘rurbanisation’.

9. A movement in the country’s population centre of gravity has occurred, commencing in the 1970s, again an acceleration rather than a totally new trend. This involved the redistribution towards the area to the northern half of the North Island, driven by Auckland’s metropolitan primacy (text Table 13.2) spawning satellite urban centres, a trend reinforced by the concentration of the foreign-born in Auckland. Looking at its mechanisms, New Zealand seems to have followed international trends in both peri-urbanisation and ‘rurbanisation’.

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ⁱ $(5)q(0)$, the inverse of the $(5)p(0)$ in Table B.1, where $1-(5)q(0) = (5)p(0)$

ⁱⁱ Ratana is a schismatic Christian religion, with messianic origins, but since the 1930s has played a major role in New Zealand politics; in the 21st century all leading politicians from the Prime Minister down, Māori and Pākehā, visit the Pa during Ratana’s annual celebrations (*Census 1936*: v III, ‘Introductory Notes ...’).

ⁱⁱⁱ The question of the day was far more pragmatic: how she might manage the ensuing conflicts in work-family balances. Notably it is not a question that was put to a previous prime minister, the Honourable Jim Bolger, who had nine children.

Appendix F: Regions of New Zealand, 1986–2001, Classified by Their Levels of Disadvantage and Advantage*

NB. Regions falling in between are not included on the table

Most Disadvantaged Regions

Most Advantaged Regions

1. Full-Time Work (% of persons 20-59 years reporting a labour force status)

Low: Northland, Gisborne, West Coast, Manawatu-Whanganui, Bay of Plenty

High: South Island except West Coast, Wellington, Auckland, Waikato

2. Percents at Key Working Ages

15-24 Years

Lowest: Northland, Bay of Plenty+, West Coast, Nelson-Tasman+, Marlborough+

Highest: Auckland, Wellington

25-44 Years

Lowest: Northland, Bay of Plenty, Gisborne, Hawkes Bay, Marlborough+

Highest: Auckland, Wellington
West Coast ++

3. Total Dependency (Ratio = Child + Aged population / Working age Population)

Highest: Northland, Bay of Plenty, Gisborne, Hawkes Bay, Taranaki

Lowest: Auckland, Wellington, Canterbury, Otago+++

4. Unemployment, Males, 2001, % of Labour force

Highest: Northland, Gisborne, Bay of Plenty, Hawkes Bay, West Coast

Lowest: Auckland, Wellington, Rest of South Island

5. Labour Force Participation, Males (female increases all regions, see also Chapt 21) (% of total Population aged 15-64 years)+++

Greatest Decreases (males): Northland, Gisborne

Least Decreases: Southland, Nelson-Tasman, Marlborough

Lowest Rates, 2001: Northland, Gisborne
Otago

Highest rates, 2001: Taranaki, Manawatu-Whanganui, Wellington, Southland, Nelson-Tasman, Marlborough

6. Median Income 2001 (1996\$)

Lowest: Northland, Gisborne

Highest: Auckland, Wellington

7. Decreases in Median Income, 1986-2001 (1996\$) (all regions experienced decreases)

Most: Northland, Bay of Plenty, Gisborne, Bay, Taranaki, Manawatu-Whanganui, West Coast

Least: Auckland, Waikato, Hawkes Wellington, Canterbury, Southland

8. Per cent of Employed Labour Force in Highly Skilled Industries and Occupations, 2001

Low: Northland, Waikato, Bay of Plenty,
Gisborne, Taranaki, Manawatu-Whanganui,
Southland, Nelson-Tasman, Marlborough

High: Auckland, Wellington

9. Increases in Educational Qualifications (% Attended/attending University)

Little change: Northland, Gisborne, Taranaki,
West Coast

Major changes: Auckland
Wellington

10. School Retention Rates (% Staying at School from 13 to 17 years)

Low: Northland, Marlborough, West Coast,
Southland

High: Auckland, Wellington,
Canterbury, Otago++++

11. Benefit Usage (% of Population aged 15-59 years)+++++

High Northland, Bay of Plenty, Gisborne,
Hawkes Bay, West Coast

Low: Auckland, Wellington

12. Prison Muster 2001, Males (% of total population, age-standardised)+++++

High: Northland, Bay of Plenty, Gisborne,
Hawkes Bay

Low: Wellington, plus all of
South Island

Notes: Sources, Pool *et al* 2004-06 (see Chapter Reference List). *A number of these indicators are age-standardised, or age and gender standardised. +Retirement zones with out-migration of young adults. ++ Small numbers. +++ Pool *et al* 2006: #60, Feb Table 2. ++++Skewed by its large number of students who tend to leave after studying there. +++++ Prioritised (see Pool *et al* 2006: # 62). ++++++The interest was the impact of imprisonment on the community.