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Improving Corporate Governance in Nepalese Financial Institutions to Promote Growth and Performance

A thesis
submitted in fulfilment
of the requirements for the degree
of
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at
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by
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THE UNIVERSITY OF
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Abstract

This study investigates the impact of corporate governance practices on the performance of commercial banks in Nepal. Specifically, the analysis focuses on the relationship between corporate governance mechanisms and financial performance. It explores the influence of corporate governance policies, guidelines and directives issued by the central bank, Nepal Rastra Bank, and self-initiatives implemented by the commercial banks.

The research undertaken in this thesis is important to stimulate economic growth and to encourage a more equitable sharing of growth. The lack of proper development of corporate governance and monitoring of financial systems results in a failure to capitalise on growth opportunities when they arise. A lack of capital is a major inhibitor to development, and enhanced governance will be a major fillip in promoting investor confidence, leading to a deeper and more efficient capital market in Nepal. There are many untapped opportunities in Nepal and a well-developed capital market will attract more local and foreign investors. An improved capital market will alleviate unemployment, and the balance of payments deficit, help to restrain the brain drain and help foster financial stability, strengthen risk management and ultimately contribute to a strong financial system.

A significant portion of Nepalese people, variously estimated to be around 30 per cent, do not have access to formal financial services and rely on informal service providers. There are many providers who take advantage of high interest rates, with financial frauds gaining recurring coverage in the news

media. These issues are not specific to the informal sector; they also occur in the formal financial sector. There have been several corporate governance failures in Nepali banks including the Nepal Development Bank Limited, the first Commercial Banks of Nepal-Nepal Bank Limited, Nepal Bangladesh Bank, Lumbini Bank, Gurkha Development Bank, United Development Bank, giving rise to demands for greater transparency and accountability in the way banks are controlled and managed.

Good corporate governance builds the platform for a smooth, faster, easier and reliable financial system, clarifying responsibilities, fostering transparency and fairness to encourage greater individual accountability. Although various corporate governance mechanisms have evolved in developed countries, their applicability in a low-income country such as Nepal may not be efficacious due to differences in political, cultural, social and economic factors. Hence this thesis addresses the requirement for an evidence-based study that evaluates the best fit corporate governance mechanisms applicable for the Nepalese banking sector.

Panel data were collected from all commercial banks' annual reports, central bank reports and world development indicators. The time period for the study commences in 2003, after the period of Maoist insurgency, and ends in 2012, prior to the devastating earthquake. The analysis proceeds using quantile regression, which is appropriate given the distributional properties of the data.

This thesis contributes to the existing literature of corporate governance and bank performance in several ways. First, it contributes with a precis of how

corporate governance developed in Nepal during severe political turmoil, including civil wars. Second, the method used is more robust than approaches reported in prior research and the careful diagnostics potentially provide useful guidance for other low-income country studies. Third, the present study recommends possibilities to improve corporate governance practices of financial institutions in Nepal by formulating good policies, processes and robust regulatory and supervisory systems. These improvements will ultimately lead to strengthening institutional structures, which in turn will foster various opportunities for sustainable development, not only in the banking sector but the economy as a whole.

The findings indicate that corporate governance does affect the financial performance of commercial banks in Nepal. The results indicate that corporate governance structures, e.g., board size, existence of CFO, percentage of minority directors and the percentage of female directors have statistically positive effects on performance, while the percentage of external directors has a negative impact on bank performance.

The findings from this study provide guidance to assist with policy formulation by highlighting the key areas that foster good governance, which in turn can improve the financial performance of the Nepali banks. The formulation and implementation of laws, regulations and policies by the government and central bank will enhance financial capability, reduce banking failures and build trust amongst depositors to help and develop more sustainable sources of financing.

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List of Abbreviations

ADB	Asian Development Bank
BAFIA	Bank and Financial Institution Act
BCE	Before the Common Era
BFI	Banks and Financial Institutions
BOD	Board of Directors
CBS	Central Bureau of Statistics
CEO	Chief Executive Officer
CFO	Chief Finance Officer
CG	Corporate Governance
CIT	Citizen Investment Trust
DTA	Deposit to Assets
DWH	The Durbin-Wu-Hausman test for endogeneity
EPF	Employee Provident Fund
FE	Fixed effects
GDP	Gross domestic product
GMI	Governance Metrics International
IFC	International Finance Corporation
LIC	Low Income Countries
LTD	Loan to deposit
MANOVA	Multivariate Analysis of Variance
MAOIST	Communist Party of Nepal (Maoist centre)
NBL	Nepal Bank Limited
NEPSE	Nepal Stock Exchange Limited
NGO	Non-government organizations
NIDC	Nepal Industrial Development Corporation
NPL/TL	Non-performing loan to total loan
NRB	Nepal Rastra Bank
OECD	The Organisation for Economic Co-operation and Development
OEII	Operating expenses to interest income
OETL	Operating expenses to total loan
OLS	Ordinary Least Square
RMDC	Rural Micro Finance Development Company
ROA	Return on Assets
ROE	Return on Equity
SEBON	Security Exchange Board of Nepal
VDC	Village Development Committees
VIF	The Variance Inflation Factors
WGIs	The Worldwide Governance Indicators

1. Chapter One

1.1 Introduction

This thesis investigates the impact of corporate governance on commercial banks' performance in Nepal. Specifically, the research question pursued in this study is: Does corporate governance drive performance in Nepalese banks?

This question is important because it examines the most contemporary issues in corporate governance from a Nepalese context, but has wider implications beyond this one country. The research is empirical and sophisticated statistical techniques that are suitable to the data are used, and robustness checks are undertaken to ensure the veracity of findings.

The research provides insights on the relationship between corporate governance and the banking sector. In all economic systems, banks have the leading role in planning and implementing financial policy. The difference lies with prioritizing goals and their methods of achievement. Corporate governance research has been receiving attention from academics and policy makers ever since the Enron and Worldcom scandals. On the other hand, the financial crisis of 2008, and the way the governments chose to save the banks by laying the burden on taxpayer shoulders, triggered a cycle of discussion over many crucial issues. Corporate governance is considered to be one of the most critical factors influencing firm performance. Therefore the present study deems corporate governance in the banking sector is particularly important given the important role the banking sector plays in the economic system of a country and in particular from Nepalese context. Thus, the

corporate governance arrangements of banks are very important for the business of the banks and their business customers.

Hence, this study is motivated by an ever-increasing literature concerning corporate governance and performance and a hope this might contribute to the improved well-being of people in the low-income country of Nepal.

1.2 Motivation for study

The banking industry plays a critical role in the efficient allocation of capital in an economy. It also promotes monetary and financial stability in the economy as a whole. The potential to improve corporate governance in Nepal is a primary motivational driver for this study. Being a developing country, most of the opportunities prevailing in Nepal are yet to be capitalised. A lack of capital is a major inhibitor to development, and enhanced governance will be a major fillip in promoting investor confidence, leading to a deeper and more efficient capital market. There are many untapped opportunities in the country, and a well-developed capital market will attract many local and foreign investors. This will help to solve the current problem of unemployment, reduce the deficit balance of payment and brain drain, and contribute to fostering financial stability, strengthening risk management and ultimately contributing to a strong financial system.

Very little research has been conducted into Nepalese corporate governance and firm performance. On the completion of this study, I will have good insights into the corporate governance practices that may best benefit Nepal.

Also, after the completion of this research on corporate governance, I will have proper insight into the best corporate governance practices prevailing in New Zealand and globally. This will help to inform the formulation of good governance practices with business organisations and with the government of not only Nepal, but also similar developing countries. The research skills developed during this period will help me to conduct independent research for various organisations such as World Bank, and Asian Development Bank (ADB).

Corporate governance is about monitoring and controlling the activities of the managers and owners of a company to ensure transparency, accountability, protection of the minority of shareholders, and mitigating conflicting interest between managers and owners, also known as agency cost (Michael C. Jensen & William H Meckling, 1976). Cadbury (1992) defines corporate governance as the system by which companies are directed and controlled. Becht, Bolton, and Roell (2003) define corporate governance by dividing it into two major categories: the first on the basis of behavioural patterns, such as capital markets, legal rules and regulations, and boards of directors; and the second on the basis of a normative framework which includes manager expertise and a large number of outside shareholders.

An important question is whether improved corporate governance will lead to an improved financial performance in firms. Prior empirical research has reported conclusive evidence (Ahrens, Filatotchev, & Thomsen, 2011). Additionally, the relationship between corporate governance and a firm's

performance is mainly affected by the institutional differences among countries (Aguilera, Filatotchev, Gospel, & Jackson, 2008). Further, there is a lack of perfect estimation of methods (Bhagat & Bolton, 2008). Due to these issues, this research studies the role of corporate governance in the performance of financial institutions in Nepal.

1.3 Research question and Hypothesis

The main research question set out to this study is:

Does corporate governance drive performance in the Nepali banks?

Based on the research questions, the background of the study in Chapter Two and the review of literature presented in Chapter Three, the study proposes to test the following research hypotheses:

- H1. : There is no relationship between board size and bank performance in Nepal.
- H2. There is a positive relationship between the existence of CFO and bank performance in Nepal.
- H3. There is a negative relationship between the percentage of minority directors and bank performance in Nepal.
- H4. There is a positive relationship between the percentage of outside directors and bank performance in Nepal.
- H5. There is no relationship between the percentage of female directors and bank performance in Nepal.

1.4 Significance of the study

This research examines the nature of corporate governance practice and financial performance of financial institutions in Nepal, considering potential changes to introduce improvement. The work is significant as it is the first empirical investigation of the link between governance and performance of banks in Nepal. There has been an increase in the number of studies of governance and banking in recent years. The failure of several banks during and after the global financial crisis has acted as an impetus for accelerated research in the area. In the United States, there were 80 bank collapses between 2007 and 2009 (Hoque, Islam, & Ahmed, 2013). Similarly, CEO frauds, a high rate of loan default, bank insolvency and bank failures increased concerns of governments and central banks, with the latter moving to promulgate Basel 3 and increase regulation in their respective countries. In the context of Nepal, one development bank of Nepal was liquidated, the central bank took over the management of two commercial banks, and issued warnings to more than two development banks within this decade. The causes for these difficulties stem from the vested financial interests of the promoters and the directors of the banks (Kumar & Upadyaya, 2011).

Financial institutions can play a significant role in promoting growth and efficient capital allocation (Paganetto, Phelps, & Paganetto, 2003). Corporate governance of banks may be considered to be more important when compared to other industries because the banking industry plays a pivotal intermediary role in finance. Not surprisingly, banks are subject to extensive regulation and

oversight but, even given the notional strength of the regulatory environment, low performance has not been eradicated. Poor corporate governance of the banks can drive the market to lose confidence in the ability of a bank to properly manage its assets and liabilities, including deposits, which could in turn trigger a liquidity crisis which might lead to economic crisis in a country and pose a systemic risk to the society at large (García-Marco & Robles-Fernández, 2008). Furthermore, the economy with a well-established and a profitable banking sector is capable of withstanding negative economic shocks (Dietrich & Wanzenried, 2011). Corporate governance reforms are of great significance for developing countries like Nepal to gain a sustainable effort to attract Foreign Direct Investment and Foreign Portfolio Management, and to mobilize greater savings through the capital market (Maskay, 2004). Therefore, the regulators in underdeveloped countries like Nepal may need to be more concerned about the governance and financial health of their banks.

Prior studies indicate that corporate governance mechanisms for banking firms differ from those of non-financial corporations. The significant difference is explained through the regulatory environment where they are subject to various regulatory requirements (Hadi Zulkafli & Abdul Samad, 2007). The role of a bank's board of directors is one component of the issue and the oversight of the central bank is another key component. Where there are government-owned banks which are subject to various government ministry suggestions/interference, the picture is more murky. The monitoring and oversight of the regulators and the compliance of banks with regulatory requirements provides an alternative governance mechanism which is absent

in the non-financial industries (Fahy, Weiner, & Roche, 2005). Apart from monitoring, central banks intervene in the management of banks in terms of number of members on the board of directors, CEO qualifications, numbers of minority directors and their responsibilities.

There is also the possibility of moral hazard in bank operations, through expropriation of bank resources in the form of transfer pricing, theft, asset stripping, and credit allocation, which can enhance bank insiders but hurt the bank. Furthermore, banks are exposed to information asymmetry problems that require a higher disclosure of information to their shareholders and creditors (depositors) (Hadi Zulkafli & Abdul Samad, 2007). Therefore, the regulators in an underdeveloped country such as Nepal have to be more concerned about the governance and financial health of the banks than those in developed markets.

There has been very limited research on the relationships between bank governance and bank performance, particularly in developing countries such as Nepal, an emerging South Asian country, where the regulatory, legal and institutional environment differs from those of developed economies.

1.5 Structure of the thesis

The remainder of the thesis is structured in chapters: Chapter Two: Background of the study; Chapter Three: Corporate governance mechanism; Chapter Four: Literature review; Chapter Five : Hypotheses and empirical model development; Chapter Six: Data collection and research method;

Chapter Seven: Corporate governance and bank performance in Nepal: An empirical investigation; and Chapter eight : Summary and conclusion.

1.5.1 Chapter Two: Background of the study

Chapter Two presents an overview of Nepal, including its background, geography, history, political system and economic system. It also provides a brief history and introduction to the Nepali financial system, its growth, use of technology, political interference in the banking sector, followed by corporate governance in the banking sector and finishing with the corporate social responsibility of the banking sector.

1.5.2 Chapter Three: Corporate Governance Mechanism

Chapter Three provides an overview of the internal and external corporate governance mechanism. It also provides a brief overview and development of corporate governance practices in Nepal including its supervisory framework, the various acts and directives of central banks and the legal framework for dealing with problems in banks and financial institutions.

1.5.3 Chapter Four: Literature Review

Chapter Four explores the literature in relation to the theories, models and research articles on various aspects of corporate governance. In doing so, it brings relevant literature in the context of this study to formulate a concept and an effective methodology, draw conclusions and provide effective policy advice. The ultimate objective of this review is to identify the potential for this

study and contribute to our understanding of the corporate governance practices in Nepal.

1.5.4 Chapter Five: Hypotheses and Empirical Model Development

Chapter Five examines the relationship between governance and performance of banks in Nepal as discussed in Chapter Three. Several hypotheses consistent with an underlying agency theory of governance are proposed and empirically tested.

1.5.5 Chapter Six: Data Collection and Research Method

Chapter Six covers the data collection process, the empirical model and research techniques used to investigate the research question. Various methods, used in prior research, have been considered as potentially suitable for this analysis in the Nepali context. A panel data-based regression approach is used to identify associations between governance and bank performance.

1.5.6 Chapter Seven: Corporate governance and bank performance in Nepal: An empirical investigation

This chapter presents the data analysis techniques, reports the relationship between the corporate governance variables and bank performance variables by using panel data techniques. Then it discusses the regression model used in the study and its findings.

1.5.7 Chapter Eight: Summary and Conclusion

This chapter provides a summary of empirical findings, reported in Chapter eight regarding the corporate governance practices and banks performance in Nepal. The findings are based on the various theoretical perspectives and empirical studies of the relationship between governance practices and bank performance in both developing and developed countries. Additionally, this chapter discusses the relationship between governance practices and bank performance in Nepal and its policy implications. Finally, the limitations of the study and recommendations for future research are summarised.

1.6 Conclusion

This chapter covered the background of the study, its objectives, significance and the motivation for it. Having presented the structure of the thesis, the next chapter will provide the background of the study from a Nepalese perspective.

Chapter Two

2.1 Introduction

This chapter presents an overview of Nepal; its geography, history, political and economic systems. It also provides a brief history and introduction of the Nepali financial system, its growth, use of technology, political interference in the banking sector, followed by corporate governance in the banking sector and finally the corporate social responsibility of the banking sector.

2.2 Nepal: Background

The geography, the history and people of Nepal create a unique environment which impacts on banking and many other aspects of commercial life. Understanding the background, current political situation, economic conditions, banking history and prevailing social responsibility practices will provide a clear picture of the country. It is useful to know exactly which stage it is currently in and how the political process is being developed. This chapter will help to provide an understanding of Nepal and analyse the scenario accordingly.

Nepal is a relatively small and sparsely populated country in South Asia, as shown in Figure 2.1. The Himalayas run the length of the country adding to its remoteness and presenting challenges for government, commerce and connectedness to embrace a sustainable future of growth and greater prosperity. An appreciation of aspects of Nepal's geography, legal, social,

ethnic and religious background is an important precursor to considering the governance of financial institutions of Nepal.



Figure 2-1: Map of Nepal

Source: Worldatlas, 2017. Retrieved from

<http://www.worldatlas.com/webimage/countrys/asia/np.htm> Reprinted with permission

Nepal, officially the Federal Democratic Republic of Nepal, is a landlocked multi-religious, multi-ethnic, multilingual country in South Asia. It is small, especially when compared to its southern neighbour India, and northern eastern border neighbour the People's Republic of China. It occupies only 0.03 per cent of total global land area, and 0.3 per cent of Asia. It has a land area of 147,181 square kilometres (56,827 sq mi) and a population of approximately 27 million (Central Bureau of Statistics, 2012). Kathmandu is the capital city and the country's largest metropolitan city.

Nepal is rich in culture, religion and natural beauty, presenting diversity in its religion, architecture, craft, language, literature, music, dance, festivals and foods (Dhakal, 2000). There are various temples, monasteries, churches and religious buildings in several places of Nepal. There are four castes and thirty-six different ethnic groups with multiple languages and religions. The religion in Nepal is a system of social coherence based on certain rituals and the binding force that ties all people together. The main religions are Hinduism (81.3%), Buddhism (9.0%), Islam (4.4%), Kirat (3.1%), Christianity (1.4%), and others (0.76%). Although the majority of people in Nepal are Hindu, respect is given to all other religions (Central Bureau of Statistics, 2012).

2.2.1 Nepal: Geography

Nepal is topographically divided into three geographical regions: The Himalayas to the north, the middle hills, and the Terai to the south. The Himalaya (mountain) region is situated 4,000 metres above sea level. It includes the highest peak in the world, Mount Everest, and another seven of the world's ten highest peaks. This region is popular for the habitat of the mythical creatures such as Yeti or abominable snowman. It occupies 16 per cent of total area of Nepal, but only 6.75 per cent of the population live there.

The hilly region is situated south of the mountain region, and it lies mostly between 1,000 to 4,000 metres above sea level. This region includes the major range of hills of Nepal: Mahabharat Lekh, Churia Range and several intermountain valleys. This region also has various lakes and beautiful valleys. The climatic condition of this region is magnificent when compared with other

regions. This region includes the capital city Kathmandu, covers 67 per cent of total land area and has about 43 per cent of Nepal's entire population.

In topographical contrast with mountain and hill regions, the Terai region is the lowland tropical region of Nepal that lies between 70 and 1,000 metres above sea level. This region lies on the Nepal-India border and hilly region. The Terai region has several valleys including Rapti Valley (Chitwan) in central Nepal, and Surkhet and Dang Valleys in western Nepal. It is the most fertile and most productive region of Nepal in terms of agricultural products. Although this region covers only 17 per cent of the total land area, it has more than 50 per cent of the total population.

The altitude variation and its unique geographical position have enriched Nepal with huge biodiversity. Probably, it is the only country in the world where it is possible to travel from 70 metres above sea level to the peak of the world, and with temperatures varying from +40^o to -40^o Celsius within a period of only two weeks.

The country is divided into five administrative development zones: Eastern Development Region, Central Development Region, Western Development Region, Mid-Western Development Region and Far-Western Development Region. The country is further divided into 75 administrative districts and districts are sub-divided into smaller units, called Village Development Committees (VDCs – total 3915) and Municipalities (58). The VDCs are rural areas, and municipalities are urban areas of the country. According to the National Population Census 2011, the annual growth rate of the population is

1.35 per cent, and the total population of the country in 2011 reached about 26.5 million with a sex ratio 1.04 male(s)/ female. About one quarter of the population (25.16 per cent) lives below the poverty line according to the Nepal Living Standards Survey 2010/11, and the Gini-Coefficient, which indicates an inequality in income distribution, is 0.328 (Central Bureau of Statistics, 2012).

Nepal occupying only 0.03 per cent of the Earth is home to:

- 2 per cent of all the flowering plant species in the world;
- 8 per cent of the world's population of birds (more than 848 species);
- 4 per cent of the mammal species on earth;
- 11 of the world's 15 families of butterflies (more than 500 species);
- 600 indigenous plant families; and
- 319 species of exotic orchids. (Caltech.edu, 2017)

2.2.2 Nepal: History

Nepal's recorded history begins in the seventh century BCE (before the Common Era) centred in the Kathmandu Valley. The first settlers in Nepal seem to have been the people from the north. The legend of Manjushree coming from China, draining away of the Kathmandu Valley Lake and the subsequent rehabilitation of people provides some clues to the earliest settlement by the people from the north. At the similar time, the ethnic groups of the Indian origin fleeing from the powerful enemies and political persecution entered Nepal and stayed (Kansakar, 1973). However, the origin of the native peoples of the hilly region such as Gurungs, Newars, Magars, Rais,

Limbus, Jirels and Chepangs remains unclear. The Sherpas, the Bhotiyas, the Thakalis, the Manangbas and the Lepchas seem to have migrated from Tibet (Hagen, 1961).

The Lichhavis, who were ruling over Baisali (modern Muzaffarpur), after suffering defeat by the Raj Griha seem to have migrated into Nepal around 250 Central Era (CE) (Shrestha & Singh, 1972). They overthrew the Kirat Kings. In the sixth century BCE, Siddhartha Gautama was born in Kapilavastu, near Lumbini, and he later became known as Buddha. The Buddhist religion grew up and became the dominant religion of Nepal and was followed by the Rai and Limbus of Kiratis (Gefont, 2008). During the Kiratis' rule, Nepal not only developed its relationship with India, China and Tibet but also made Nepal a trading route for commerce between India and China.

The Malla rule started in Nepal in the twelfth century with Ari Malla, and they ruled the country for centuries crumbling the country into small territories which were later known as Baisi (which means 22 principalities) and the Chaubisi (which means 24 principalities) Rajya. In 1743 CE, Prithvi Narayan Shah (the ninth generation descendant of Dravya Shah who was the founder of ruling house of Gorkha) succeeded to the throne of Gorkha; he started to unify the 63 small principalities including three Kathmandu Valley kingdoms, the Baisi and Chaubisi principalities which ultimately gave birth to modern Nepal. In 1769, Prithvi Narayan Shah, who had united all the small states within Nepal into one country, declared Kathmandu as the capital of modern Nepal (Gefont, 2008).

The War with British – During 1814, when the country was ruled by King Girvana Yuddha Biktram Shah and Bhimsen Thapa was the Prime Minister, the British attacked the Nepali forces at Nalapani, the westernmost part of Nepal. Although the British had superior weapons, the Nepalese wreaked heavy losses on the British army and evacuated the areas west of the Mahakali River which was captured by British. The war continued for two years and in 1816 the Sugauli Treaty was signed with Britain. Nepal faced loss in this treaty as a large chunk of Terai land was taken by the British and the rivers Mahakali and Mechi were fixed as the country's western and eastern boundaries. Having seen the brave fighting of the Nepali (Gorkha army) during this war, Britain and other countries' armies later started to recruit Nepali soldiers for their armed forces.

During the first half of the nineteenth century, there was a famous conspiracy called "Kot Massacre" where the high powered Shah Queen was assassinated and which resulted in instability in the country. At that time, Jung Bahadur Rana, a key plotter of the massacre, seized control of the country with the strong backing of the British Empire. Rana declared himself prime minister and began the Rana-rule by making the Shah King a nominal figurehead. He also declared the prime minister to be a hereditary title. After 104 years of autocratic rule, the Rana Oligarchy was ended at 1950 through a first-ever popular movement. However, the political power was again snatched by Shah King. King Tribhuvan became the first constitutional monarch in twentieth century Nepal. King Mahendra succeeded his father and was crowned in 1955. Due to his ambitious intentions for political power, the newly introduced

multi-party system did not last a decade. King Mahendra dismissed the government and suspended the parliamentary system. He declared the new constitution in 1962 which banned political parties and mass organisations, including trade unions, and he enforced the one-party autocratic rule known as the Panchayat system. This system ended in 1990 by popular movement; at that time his son, Birendra, had been on the throne since 1972 (Federal Research Division, 2005).

In 1990, a new constitution was set up and the multi-party system was implemented. The first democratic election was held, the Nepali Congress won, and Girija Prasad Koirala became the democratically elected prime minister. On 1 June 2001, again another massacre took place where King Birendra along with his entire family and some relatives were killed. After that the brother of Birendra, Gyanendra Shaha became the new King of Nepal. Like his father Mahendra, Gyanendra dissolved the parliament and captured all power and introduced absolute monarchy in February 2005.

In September 2005, Maoist insurgents declared an autonomous cease-fire, which ended in January 2006 with a peace accord. Then in April, big democracy protests organised by seven opposition party Maoists took place which resulted in reinstating the parliament. On 28 May 2008, the parliament declared Nepal as a federal democratic republic, making Gyanendra Shah the last king of the Shah Dynasty as well as of Nepal (Infoplease, 2014).

2.2.3 Nepal: Political System

As with other countries, Nepal has gone through rapid political changes in its history. The monarchy system was prevailing in the country until 1990, where the King used to hold the executive power of the nation. However, due to the great Communist movement against the King, in 1990 the political system was changed to a parliamentary monarchy where King Birendra was the head of state and the democratic prime minister was the head of government. There have been 23 governments since the introduction of democracy in 1990 because no government was able to survive for more than two years due to either internal collapse or parliamentary dissolution. On April 2006, there was a change in the nation's governance: an interim constitution was promulgated with the King giving up the power, and an interim constitution and government were formed along with the Maoists.

On April 10, 2008, the first election was conducted for a constitutional assembly. Although the Maoist party led the election, they could not gain a parliamentary majority. As a result, a coalition government was formed. On December 10, 2007, under the leadership of the Maoists, a Bill was passed through the interim parliament to make Nepal a federal republic with the prime minister being the head of state. Then again on 28 May 2008, they declared Nepal to be a republic by eliminating 239 years of the royal monarchy system and Girija Prasad Koirala became the Prime Minister of Nepal.

On July 19, 2008, voting for first president and vice-president took place in the constitution assembly, and Parmanand Jha was nominated as the first vice-

president of Nepal. However, being unable to get the minimum 298 votes needed to be elected by the two presidential frontrunners; Ram Baran Yadav (Congress Party) and Ram Raja Prasad Sing (Maoist Party), another election was held on 21 July 2008. During that election, Dr Ram Baran Yadav was elected as the first president of Nepal by getting 308 out of 590 votes.

Similarly, on August 15, 2008, Pushpa Kamal Dahal (Prachanda of Maoist) was elected as the first Republic Prime Minister of Nepal. Then under his leadership, the first constitutional assembly election was conducted. However, due to various issues and conflicts continuing within and among the parties, there were four changes of prime minister, and they were unable to draft the constitution by the deadline of May 27, 2012. For the second time, the constitutional assembly election was conducted, on November 19, 2013, and the Nepali Congress became the majority party followed by Communist and Maoist parties, and Sushil Koirala became the Prime Minister of Nepal. In the constitutional assembly, there are 601 independent members who are responsible for drafting the new constitution for the country, and they also serve as the parliament of the country.

The political instability present since 1990 is likely to have contributed to the World Bank Governance Indicators, which rank Nepal below the fortieth percentile in every category: voice and accountability (33.5), political stability and the absence of violence (16.2); governmental effectiveness (13.5); regulatory quality (25.0); rule of law (26.9); and control of corruption (35.6) (World Bank, 2016b).

2.2.4 Nepal: Economy

Nepal is one of the least developed nations of the world with a per capita income of US\$743.32 per annum and a GDP of US\$ 21.195 Billion (World Bank, February, 2015a). It ranks 144 out of 187 countries in the Human Development Index ranking. The overall inflation of the country was 10 per cent during the FY16 (Konema, 2016). Foreign aid is vital to the economy. Agriculture is the backbone of the Nepalese economy; it provides employment for 65.7 per cent of the population yet it contributes only 33.1 per cent to the nation's GDP (Ministry of Agricultural Development, 2015). There are 37 public enterprises operating in Nepal; among them, 14 are operating at net loss (Ministry of Finance, 2016). Out of the total land area, 25 per cent is cultivable, 33 per cent is forest, and the remainder is terrain region. The staple foods in Nepal are rice and wheat, and most of it grown in the Terai region. With the major dependence on agriculture, the economic growth of the country is influenced by annual monsoon rain.

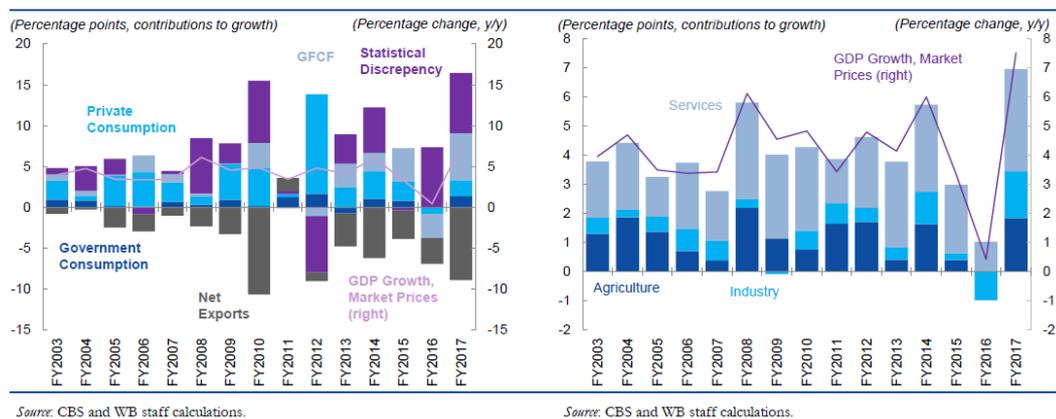


Figure 2-2: Contribution to GDP from various sectors - 2003 - 2017

Source: (World Bank, 2017, p. 13)

Figure 2.2 shows the contributions to GDP from various sources. The major industries of Nepal are the processing of agricultural products, including jute, pulses, sugarcane, grain, tobacco, and small industries like handicrafts, carpet textile and cigarettes. Nepal is heavily dependent on trade with India. The major products exported from Nepal are textiles, ferrous metals, chemicals, rubber, plastic, crops, beverages, tobacco products, vegetables, fruits, nuts, food products, minerals, tea, coffee, and leather products. The major products that are imported into Nepal are petroleum (its import was over Rs. 100 billion during the last fiscal year), electronic goods, coal products, chemicals, rubber, plastics, ferrous metals, machinery and equipment, mineral products, textiles, transport equipment, food products, motor vehicles and parts, and metals. The total trade deficit of Nepal was 6,388.6 USD million (around 30 per cent of GDP) during the year 2015/16. However, improvements in the service incomes, grants and remittance inflows exceeding 28.5 per cent of GDP have contributed to a surplus in the current account. The overall balance of payments has registered a surplus for the last several years and has remained at USD1.779 billion in 2015/16 (Nepal Rastra Bank, 2017b).

Hydropower is the main source of electricity in Nepal, and it has huge potential for development with an estimate of 40,000 MW commercially feasible, but only about 1.53 per cent of the current capacity is used, due to the political uncertainty, lack of proper policy for foreign investment and other bureaucratic delays. Although Nepal is bestowed with remarkable hydropower capacity, only 40 per cent of Nepal's population has access to electricity.

Nepal has a flourishing tourism industry. Tourism and remittances are the major sources of foreign currency in Nepal. The contribution of remittances to GDP is 25.5 per cent. (The South Asian Association for Regional Cooperation 2014). The strong revenue growth and subdued capital spending have led to a budget surplus during the last four years. This has led to a steady decline in public debt and an accumulation of large cash balances in the central banks. External public debt stood at 16.9 per cent of GDP (US\$3.6 billion) by end-2015/16. The World Bank and Asian Development Bank (ADB) accounts for 87 per cent of the external debt, while Japan is the largest bilateral creditor followed by South Korea, India and China. Similarly, domestic public debt stood at 10.4 per cent of GDP at the end of 2015/16, compared to 9.3 per cent a year previously (International Monetary Fund, 2017, p. 2).

In recent years, lack of political consensus, delayed national budgets, growing population and deforestation have significantly affected the country.

2.3 Nepalese Financial System: Background

The Nepalese financial system consists of banking and non-banking sectors. The banking sector includes the central bank, Nepal Rastra Bank (NRB), and commercial banks. The non-banking sector consists of few cooperatives and non-government organisations undertaking limited banking activities under the regulations and supervision of Nepal Rastra Bank. In the same way, the financial system also comprises non-banking financial institutions such as provident funds, for example, Employee Provident Fund (EPF) and pension fund – Citizen Investment Trust (CIT) operating under Ministry of Finance

regulations, the Nepal Stock Exchange Ltd (NEPSE) under the regulatory jurisdiction of Security Exchange Board of Nepal (SEBON), cooperatives under the Department of Co-operatives, and insurance companies under the regulatory jurisdiction of the Insurance Board.

2.3.1 Nepalese Banking System: History

The formal banking history of Nepal began after the establishment of the first commercial bank, Nepal Bank Limited (NBL), in 1937 under the Nepal Bank Act 1937. This bank was established on a public-private partnership model with 52 per cent government and 48 per cent public ownership. Until the establishment of Central Bank of Nepal, the foreign exchange reserve of the country was held in India, and in return, Nepal used to receive Indian currency which was fully convertible in Nepal. Nepalese people had more confidence in Indian currency than Nepal's own currency. (At that time, Nepalese currency used to be issued by the Treasury authority named Sadar Muluki Khana and the notes used to be printed by the Indian Security Press in Nashik (Revolvy, 2017)).

Formal laws to govern the financial institutions in Nepal began after the enactment of the Nepal Bank Kanoon (Law) 1936. Eighteen years after the establishment of Nepal Bank Limited, the independent authority to govern the bank and financial institutions, the Central Bank of Nepal, Nepal Rastra Bank (NRB) came into existence under the Nepal Rastra Bank Act 1955. Various acts were developed to govern the financial institutions such as the Banijya Bank Act 1963, Rastriya Banijya Act 1964, Commercial Bank Act 1974, Bank and

Financial Institutions Ordinance 2004, which are renewed time and again (Niroula, 2007).

The history of financial institutions in Nepal can be studied under three different phases by different milestones (Maskay & Subedi, 2009).

The first phase begins with the initiation of the formal domestic banking system in Nepal up to the establishment of NRB. The establishment of Tejarath Adda in 1880 can be considered the starting point for credit mobilisation in Nepal. However, this institution neither provided credit to the general public nor collected deposits from them. The government provided the credit facility for only their staff and landlords. So, during that period, even in urban areas, money lenders were involved. It was only after the establishment of NBL that the formal banking system was established in Nepal.

The second phase begins with the establishment of NRB continuing until 2002. After its inception, various rules and regulations were developed and financial liberalisation policy was formulated. Three joint venture banks were established during this period – Nepal Arab Bank Limited (later named Nabil Bank Ltd.) in 1984; Nepal Indosuez Bank (later named Nepal Investment Bank) in 1986; and Nepal Grindlays Bank (now Standard Chartered Bank Nepal) in 1987. During this period, major policies were changed, such as the shift from controlled to deregulated framework of interest rates; emphasis on open market operations as the main policy tool; direct to indirect methods of monetary control; permitting a market-determined exchange rate of the Nepalese currency against convertible currencies; and full convertibility of the

Nepalese currency in the current account. At this period, three different institutions were established by the Government of Nepal. The first was Nepal Industrial Development Corporation (NIDC in 1959, with the objectives of mobilising capital to the industrial sector and facilitating industrial development in the private sector); the second was Rastriya Banijya Bank (RBB in 1966 with the objective of providing banking services throughout Nepal and contributing to the socio-economic development of the country); and the third was Agriculture Development Bank, Nepal (in 1968 with the objective of providing banking services throughout Nepal and contributing to the socio-economic development of the country). After the formulation of three different acts (Finance Company Act (1985), Company Act (1964) and Development Bank Act (1996)), nine development banks, 51 finance companies, 11 micro-credit development banks, 16 savings and credit cooperatives, and 35 non-government organizations (NGOs) for limited banking transactions were established.

The third phase begins with the formulation of NRB Act 2002 (later amended in 2006) replacing NRB Act 1955. This act provides more autonomy for central banks to formulate various monetary and foreign exchange policies and monitor, regulate and control the banks and financial institutions of Nepal. Later, the Bank and Financial Institution Act (Bank and Financial Institution Act), 2006 was established by classifying all the banks and financial institutions into four different categories on the basis of their responsibilities. The four categories are commercial banks (group A), development banks (group B), finance companies (group C) and microcredit development banks

(group D). However, they have not categorised saving and credit cooperatives and non-government organisations (NGOs) even though they perform limited banking transactions as per the specific directives and guidelines provided by central bank NRB.

In mid-January 2017, there were 169 banks and financial institutions: 28 commercial banks under Group A; 57 development banks under Group B; 36 finance companies under Group C; and 48 microcredit development banks under Group D. There were 15 savings and credit cooperatives and 25 NGOs, both being allowed by NRB for undertaking limited banking transactions, 26 insurance companies (Insurance Board Nepal, 2016), one employee provident fund, one citizen investment trust and one postal saving bank. (Nepal Rastra Bank, 2017d).

Table 2-1: Number of banks, financial and other institutions in mid-July 2013

Type of Financial Institution	Number
Commercial Banks (A)	28
Development Banks (B)	57
Finance Companies (C)	36
Micro-Finance Institutions (D)	48
Sub-Total	169
NRB permitted Cooperatives (with limited banking activities)	10
NRB permitted NGOs (with limited banking activities)	26
Insurance Companies	25
Employees Provident Fund	1
Citizen Investment Trust	1
Postal Saving Bank	1
Total	233

Source: (Nepal Rastra Bank, 2017d)

Despite the number of financial institutions noted above, there are few informal sectors that conduct the financial transactions for informal groups, such as Dhukuti which pools the savings of the group and provides a credit facility to its members, money lenders and individuals.

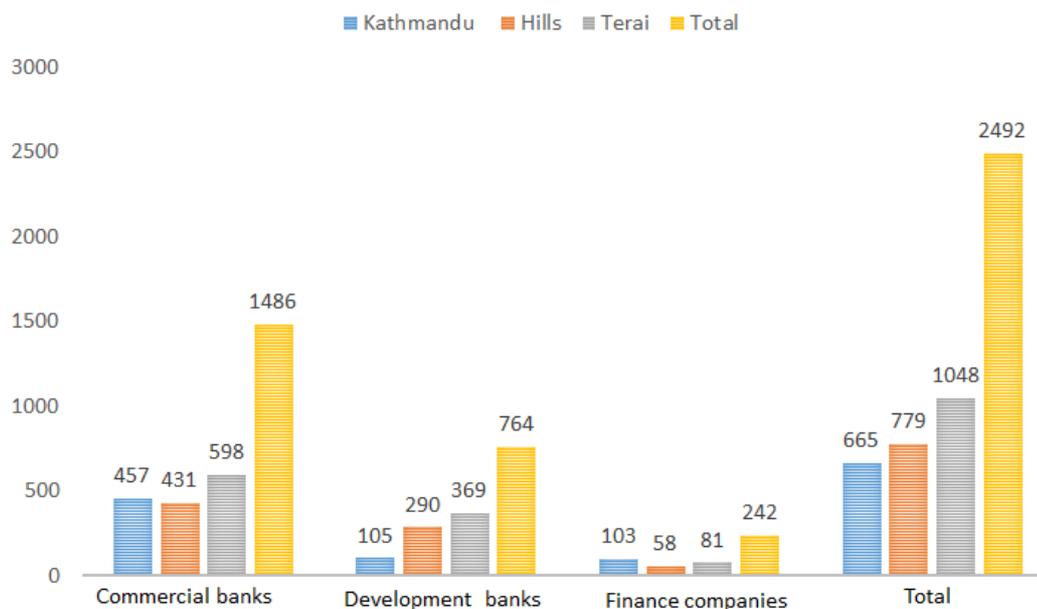


Figure 2-3: Total number of branches and their concentration (2017)

Source: (Nepal Rastra Bank, 2017d)

Until mid-July 2013, there were 2492 branches of bank and financial institutions in Nepal; among them were 1486 group A financial institutions, 784 group B, and 242 group C. Among them, 665 branches (26.7%) were operating in Kathmandu valley, 779 in the hilly and mountain region (31.3%) and 1048 (42.1%) in the Terai regions. Due to this, more than 60 per cent of total deposits and 44 per cent of total loans are disbursed in the Kathmandu Valley only. The private sector commercial banks hold 39.3 per cent shares of total bank branches, followed by state-owned banks (20.3%), development banks (30.6%) and finance companies (9.7%).

Table 2-2: Number of banks and branches

Bank Branches		Total	%	In 17	%
		Shares	Shares	Districts	Shares
Commercial Banks	State Owned	506	20.3	25	53.2
	Others	980	39.3	17	36.2
Development Banks		764	30.6	4	8.5
Finance Companies		242	9.7	1	2.1
Total		2492	100	47	100

Despite the high number of branches, 17 districts of Nepal (out of 75 districts), particularly in remote areas, are still a large distance away from formal financial services. Although almost all of the financial indicators of the overall banking sector show an encouraging trend, the growth of assets, credit and other indicators are yet to be improved to match other emerging South Asian and Asian countries. As of mid-July 2013, the share of total deposit to GDP reached 73.6 per cent (Nepal Rastra Bank, 2013).

The central banks listed below are institutions that have helped to formulate various standards to ensure compliance of the financial institutions in Nepal.

- Rural Micro-Finance Development Company (RMDC)
- Centre for Micro-Finance Limited
- Microfinance Bankers' Association of Nepal
- Microfinance Institutions' Association of Nepal
- Nepal Bankers' Association
- Nepali Federation of Savings and Credit Cooperatives Union Ltd.

- Insurance Board – the regulator for the insurance industry
- Securities and Exchange Board of Nepal (SEBON)
- Development Bankers Association
- Nepal Finance Companies Association

2.3.2 Growth and Performance of Nepal

The aggregate economic growth of Nepal is presented in Figure 2.4 below



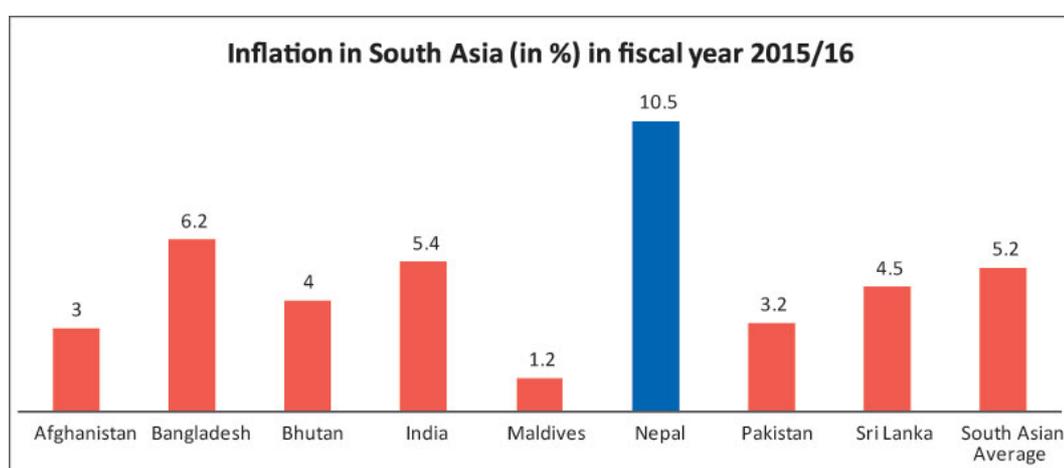
Figure 2-4: Annual growth rate of GDP of Nepal 2007 - 2016

Source:(Trading Economics, 2017)

The annual growth rate of GDP is very low compared with other South Asian countries. The highest GDP growth rate was 7.5 per cent during the year 2016 and the lowest was on 0.4 per cent during 2015.

Inflation Rate

The inflation rate indicates the general increase in the price level of goods and services. It is good for the economy to have lower inflation rate and higher growth rate. Figure 2.5 below demonstrates the inflation rate of South Asian countries and shows Nepal's inflation rate to be the highest of all the countries. Nepal has more than double the inflation rate compared to the South Asian average, and the economic growth rate is also no more than inflation, which is not good for the economy.



Source: Asian Development Bank

Figure 2-5: Inflation in South Asia: 2015-2016

Source: (Chalise, 2016).

Interest Rate

The 91 day interest rate of Nepal (see Figure 2.6) fluctuates greatly throughout the period. The highest interest rate was 9.68 per cent on 5 January 2010, and the lowest interest rate throughout this period was 0.0004 per cent on 15 July 2014.

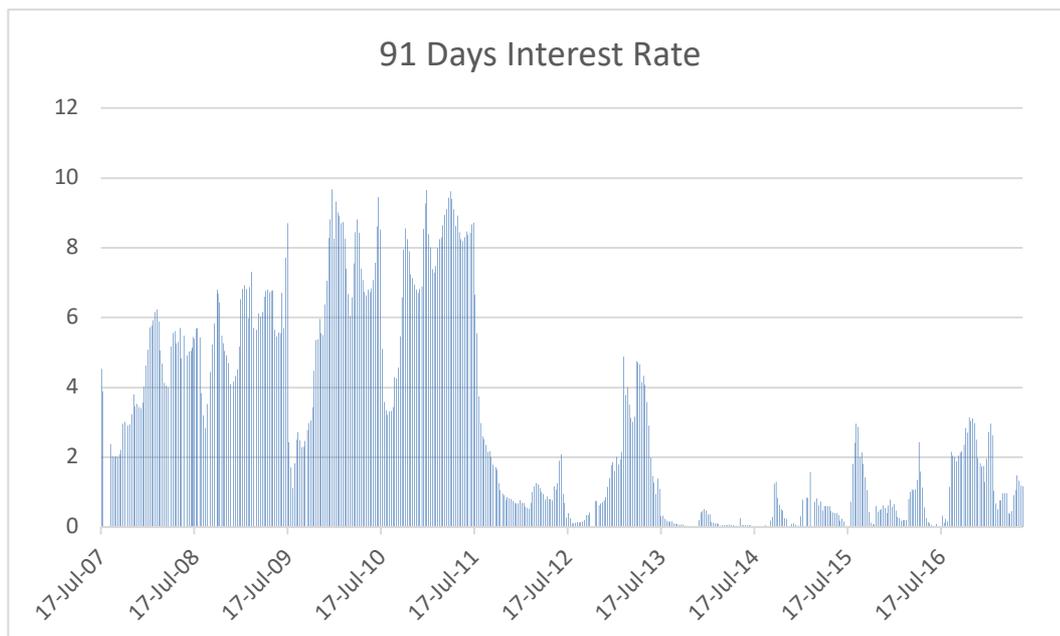


Figure 2-6: Ninety-one day interest rate; July 2007 - July 2017

Source: (Nepal Rastra bank, 2017c)

Unemployment Rates

Figure 2.7 below shows that for low income workers there is 30 per cent female unemployment and 17 per cent male unemployment, while this rate is 53 per cent for females and 33 per cent for males in the middle-income group, and 48 per cent for females and 32 per cent for males in the high-income group in Nepal. These data show that unemployment rates for both male and female workers increase from low income through middle to higher income groups for both male and female workers. Also, most of the low-income group are engaged in agriculture, and say that they are involved in the agricultural sector, which is only seasonal, so most of the time they are unemployed. Overall, the female employment rate is lower than that of the males in all three income groups. This is for cultural reasons. Even today, many families do not want to

send their daughters and daughters-in-law out to work and instead make them engage in household chores only.

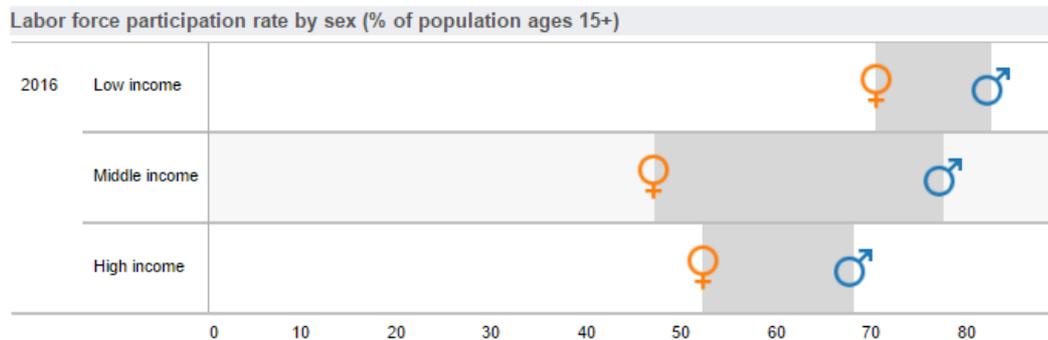


Figure 2-7: Labour force participation rate by sex (percentage of population aged over 15) - 2016

Source: (World Bank, 2016a)

Gross National Income Per Capita

The trend line in Figure 2.8 below shows the GNI per capita income of Nepal is far lower when compared to other South Asian countries, from 1985 to till 2015. Nepal has the lowest per capita income in South Asian regions. However, it has started to increase slowly since 2005.



Figure 2-8: GNI per capita of Nepal

Source: (World Bank, 2015)

Balance of Payment

The data in Table 2.3 show Nepal has a balance of payment surplus and the total balance is increasing. An alarming observation is Nepal exported \$703.9 million worth of goods while importing \$7092.5 million during the fiscal year 2015/16 (Nepal Rastra Bank, 2017b). Remittances received play a very large role in maintaining the balance.

Table 2-3: Balance of Payments of Nepal: 2014 - 2017

Particulars	(USD Million)						
	2014-2015		2015-2016		2016-2017	Percentage Change in first month	
	1st Month	Annual	1st Month	Annual	1st Month	2015/2016	2016/2017
Goods Export FoB	77.6	988.1	71.6	703.9	70.7	-7.8	-1.2
Goods Import FoB	588.2	7657.6	596.2	7092.5	645.3	1.4	8.2
Trade Balance	-510.6	-669.5	-524.6	-6388.6	-574.5	2.8	9.5
Total Trade Current Account Balance	665.8	8645.6	6678.8	7796.3	716	0.3	7.2
Travel Credit	12.8	1067.3	79.5	1338.8	-21.6	-	-
Remittance	22.7	536.7	23.6	392.7	33.7	-14.7	42.7
BOP (-Surplus)	434.9	6192	520.1	6253.4	484.6	19.6	-6.8
	-28.6	-1437	-46.6	-1779.8	19.8	-	-

Source: (Nepal Rastra Bank, 2017b)

- **Foreign exchange reserve**

Total foreign exchange reserves of Nepal show an increasing trend. The foreign exchange reserve of Nepal reached its low of US\$ 983 million in Nov 2002 while it reached all time high of US\$ 8.7 billion in May 2017. Recent reports from NRB revealed that Nepal's Foreign Exchange Reserves equalled 11.0 Months of Import in May 2017. Similarly, its Money Supply M2 has increased by 17.5 per cent on a year-on-year basis.

Similarly, Nepal's Domestic Credit has reached to 19.4 USD billion in the same period, which represents an increase of 22.8 per cent year-on-year. (CEIC Data, 2017b)

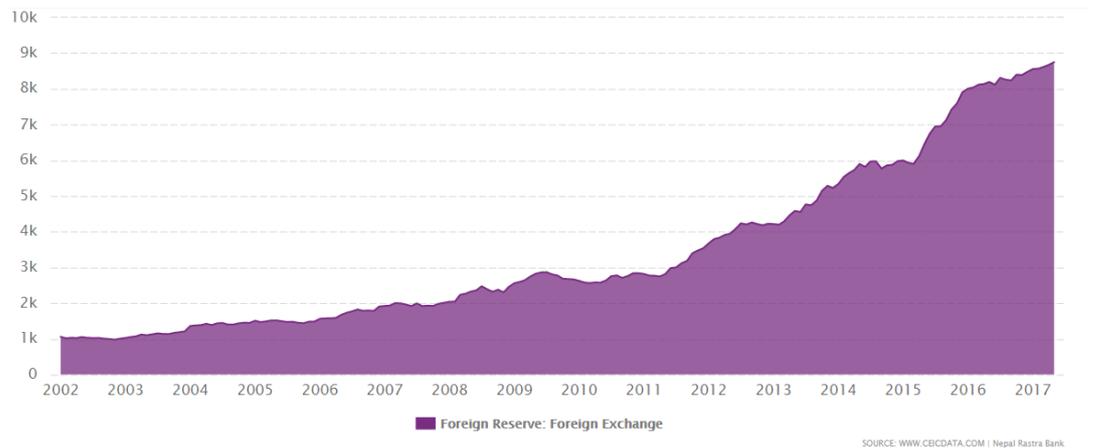


Figure 2-9: Nepal Foreign Exchange Reserve (USD in billion): 2001 - 2017

Source: (CEIC Data, 2017a)

2.3.3 Use of technology in the banking sector in Nepal

The use of technology in banking is increasing tremendously and has improved all the operations of the banking. Not more than two decades ago, it would tentatively take around two hours to withdraw funds from the banks. This gives an insight into the banking sector in Nepal during those days. The technological development in Nepali banking sector started crawling forward after the establishment of the first joint venture banks, for example, the Nepal Arab Bank Limited (now Nabil Bank) in 1984. Until that time, the banks maintained their records by a manual system. They brought the computerised software system to record and maintain the client information. Alongside the computerised software, the Nabil Bank further contributed to technological

development by introducing credit cards in Nepal in the early 1990s (Khanal, February, 2017).

2.3.3.1 Credit Card

The credit card facility was limited to only high net-worth customers especially those residing in the capital city (Kathmandu) having significant minimum balances in their accounts or for the employees working in some international organisations. Today many commercial banks are providing credit cards to 52,014 customers residing at various places in Nepal (Nepal Rastra Bank, 2016a).

2.3.3.2 Debit Card

Today all the commercial banks are providing a debit card that can be used to withdraw money from ATMs and for EFTPOS valid only in Nepal and India. However, the number of debit card holders in Nepal has decreased from 4,146,237 in 2014 to 4,142,390 (Nepal Rastra Bank, 2016a) in 2016 due to various fraud cases during the year (Ekantipur, May, 2017; Himalayan Times, (November), 2016; Nepali Times, (May), 2000).

2.3.3.3 Prepaid Card

Some Nepalese commercial banks also provide prepaid cards, which is especially popular with customers who are travelling abroad. Its use is increasing year by year. As of June 2015, there were 82,797 prepaid card holders in Nepal.

2.3.3.4 Automatic Teller Machine (ATM)

Another joint venture bank of Nepal, Himalayan Bank Limited, was the pioneer in introducing the Automatic Teller Machine (ATM) in 1995 (Shrestha, April, 2013). Today, all the commercial banks have installed ATMs in various locations across the country. There are 1,661 ATMs installed in Nepal (Nepal Rastra Bank, 2016a). In the same way, another step of modern banking tele-banking was also introduced by Himalayan Bank in the same year (Himalayan Bank Limited, February, 2017).

2.3.3.5 Internet Banking

Moving forward, Kumari Bank was the first private sector bank of Nepal and it also took the lead in establishing internet banking in 2002. After that, slowly and gradually all the commercial banks have provided internet banking facilities to their customers. As of mid-July 2016 there were 489,835 internet banking users in Nepal. With internet banking, the banks provide various services such as funds transfer within and between selected banks only in Nepal, account statements and utility payments (Nepal Rastra Bank, 2016a). Although people may have registered themselves for internet banking, many people may not be confident enough to use it.

2.3.3.6 Mobile Banking

In 2004, after two years of implementing internet banking in Nepal, another commercial bank of Nepal, Laxmi Bank Limited, introduced mobile banking for the first time in Nepal. Initially, it started with the SMS banking for notifications of transactions, but these days it provides other services as well such as balance enquiry, mini-statements, last transactions information,

chequebook enquiry/request, interbank and intra-bank fund transfers, mobile banking, utility banking and so on. As of mid-July 2016 there were 1,6 04,578 mobile banking users in Nepal.

2.3.3.7 Branchless Banking

During the period of Maoist insurgency, the Maoists robbed various bank branches by coming to the branch at night or during the evening. So, during this period to provide facilities to rural people without establishing branches in the villages, some of the banks started the branchless banking services, and many banks are continuing it. In branchless banking, they provide services through the point of transaction machine with the help of smart cards. They provide the facilities for deposit, withdrawal, balance enquiry and fund transfer. As of July 2016, there are 812 branchless banking centres and 213,084 branchless banking customers in Nepal (Nepal Rastra Bank, 2016a).

Table 2-4: Electronic Banking in Nepal: 2012 - 2016

SN	Particulars	Mid-July				
		2012	2013	2014	2015	2016
1)	Number of branchless banking centers	74	205	504	503	812
2)	Number of branchless banking customers	76	30383	1,51,066	1,97,493	2,13,084
3)	Number of mobile banking customers	1,63,246	4,52,909	7,68,424	9,97,463	16,04,578
4)	Number of Internet banking customers	1,44,763	2,86,732	3,28,434	3,96,362	4,89,835
5)	Total number of ATM machines	1054	1239	1303	1483	1661
6)	Number of debit card holders	23,55,976	31,93,137	36,41,960	41,46,237	41,42,390
7)	Number of credit card holders	27921	38587	57898	43895	52014
8)	Number of prepaid card holders	46083	57453	66204	69322	82797

Source: (Nepal Rastra Bank, 2016a)

From the information given, it seems that Nepal is also good at using modern technology in banking on a par with other developing countries. However, most of these services are present and used mostly by the customers who reside in the major cities of Nepal. The Nepal Telecommunications Authority (2017) notes that 55.82 per cent of people have access to the internet either through mobile GPRS or through ISPs. However, only around 1 per cent (199,272) of the population have subscribed to the internet through an ISP. Although people have connected the internet via mobile service provider, they mainly use it for Facebooking. There are around 21.04 per cent monthly active users of the overall population in Nepal (Neupane, February, 2016).

Many people still lack trust in internet banking in Nepal. Through media stories, the public are aware of cases where the customers are said to have tried to withdraw money via an ATM, and the sum is deducted from the balance in their accounts but no cash is dispensed. Incidents like this have hindered the growth of ATM users in Nepal. To restore customer confidence, banks now provide an SMS alert on cash withdrawal for a nominal price to customers. It is proposed that the central banks prepare a policy to require all banks to offer such a service free of cost (Subedi, November, 2016).

Internet banking is popular only in major cities such as Kathmandu, Pokhara and Biratnagar, and more than 50 per cent of internet banking users are inside the Kathmandu Valley (Khatri & Dhungel, 2013). It would be good if central banks and the government introduced a policy for the banks to implement and

provide education about internet banking to reach the people living in remote areas who have to walk for hours to access their banks.

However, with the development and implementation of modern technology like ATM, EFTPOS, debit and credit cards, internet banking, mobile banking and so on, today the banking sector is more systematic, managed, modernised and robust than in the last decade.

2.4 Political interference in banking sector of Nepal

The worldwide governance indicators published by World Bank show that corporate governance in Nepal is very poor, sitting between the 16.19 to 35.58 percentiles. Also, the two indicators, governance effectiveness and regulatory quality, decreased to the 13.46 and 25.00 percentiles in 2015 compared to the 22.44 and 34.31 percentiles respectively during the year 2005 (World Bank, February, 2015b). This clearly shows that the government is not governing effectively and the implementation of regulatory rules and regulations is lacking. This is not in only one sector but in almost all industries, including banks.

In accordance with the Nepal Rastra Bank Act (2002) section 14, the board of the central banks of Nepal consists of seven members including the governor, appointed by the Government of Nepal, Council of Ministers. As these are mainly political appointments, indirectly they are linked and obliged to the political party, and hence there are strong grounds for political interference in financial institutions in Nepal.

Additionally, the Bank and Financial Institution Act, 2006 requires the banks to have a board of directors of from 5 to 9 members; among them, one board member must be appointed to the board from the list of a professional experts maintained by the Nepal Rastra Bank (BAFIA, 2006). This policy seems to be quite justifiable if it is implemented properly. However, it also provides the grounds for political interference on the board of every commercial bank, as they are indirectly appointed by the central bank's board which is formed by the government (political parties).

For the public sector banks, there is high political influence, including the appointment of the CEO and management, lending decisions, budgeting and planning. It has even been noticed that there were some people on the banks' boards of directors without any banking background. Also, even in middle and lower level employees, there are several unions affiliated to several political parties which exercise strong influence over the management and board. This has resulted in lower ROE for those banks.

Political interference had started before 1985. There was a serious problem of government intervention in the financial sector of Nepal as two public sector banks, RBB and NBL, had more than 70 per cent of the total assets and there was also weak supervision by the central banks (Ozaki, 2014).

Due to the deep economic crisis in 1985, the government requested help from international donors and, for the first time, it signed a credit agreement with the International Monetary Fund (IMF) for the economic establishment program. In the same year, the government entered into the Structured

Adjustment Program (SAP) with the World Bank of which the main objective was to reduce government intervention in the economy. There were two SAPs. The financial sector reforms were implemented in the second SAP (1989-1992) which developed the infrastructure and helped to formulate the key financial legislation. Additionally, some technical assistance was provided to NRB for effective supervision and inspection. Even then, it did not improve the management, operations and portfolio quality of two public sector banks (Ozaki, 2014).

However, removing the entry barriers for private sector banks and opening the door for the establishment of joint venture banks created more competition in the market. Additionally, the central banks also deregulated the interest rates on loans by introducing several other prudential norms like capital adequacy requirements, loan loss provision, loan classification, and so on. After that, the situation was slightly improved from the economic perspective.

But the situation of public sector banks was getting worse and worse. In 2003, both RBB and NBL reported the net loss of NRs.4.84 billion and NRs.0.3 billion respectively. So, to improve their financial situation, the World Bank provided US\$16 million of Financial Sector Technical Assistance Project (FSTAP) in December 2003. The main objective behind FSTAP was to help with the restructure and re-engineering NRB; implement stronger bank management in both RBB and NBL to protect financial integrity; and support a better

environment of financial reform in areas such as enhanced credit information, financial reporting, and staff training (World Bank, 2002).

With the support of ADB and World Bank, various financial reforms was withdrawn, but at the same time, political intervention is still prevailing. Additionally, the Commission for the Investigation of Abuse of Authority charged the governor and one executive of NRB with corruption regarding the recruitment of a consulting firm (Himalayan Times, (December), 2007). Although the charges were cleared, it demoralised the NRB staff and they refrained from proposing further strict reforms.

2.5 Interlink between political governance and bank governance in Nepal

The literature on the caste system shows that in Nepal ancient kings had divided work according to the caste a person was born in: Brahmin, Kshatriya, Vaishya or Sudra. The Brahmin were at the top of the ritual orders and were given the opportunity to study, work as a teachers, priests and advisors. Kshatriya were beneath them and were the kings and warriors. Hence, they were allocated the responsibility to rule and protect the country. So, their jobs would be in the police and army. The next caste was Vaishya, allocated to work as a merchants. Beneath everyone else were Sudra who were mainly peasants and labourers. Theirs was the most dominated group and they were regarded “impure” and “untouchable” (Department for International Development, 2006).

During the nineteenth century, wealth was measured in terms of land. The groups of people who had more land were thought to be powerful. As Brahmins and Kshatriya were quite close to power, (kings) and were engaged in relatively good jobs, they would please the King and receive ownership of land or buy it. Vaishya, having business minds, also held some portions of land. However, the Sudras were quite poor and had to work as labourers for their living (Gellner, 2007).

The Brahmins were given opportunities to in Nepal and abroad (Czarnecka & Toffin, 2011). Due to their knowledge, they worked as advisors to the kings, priests of temples, and teachers for all other castes. During the period of the autocratic Rana's regime (1846-1951) the country's rules and regulations (Muluki Ain) were formed using the Orthodox Hindu notions (Hofer, 1979).

Similarly, Kshatriyas were close to kings, and accustomed to traveling to various places for training; they had the opportunity to nurture their knowledge and realised the importance of education and slowly and gradually they nurtured their skills and abilities as well. They did not limit this to their generation, but also created a good family and educational environment for their children. Thus, these two castes were comparatively better off both in terms of their education and wealth. Being more educated and close to power (Kings), Brahmins were seen more often in the civil services, political parties, judiciary system and universities, as well as on boards of directors of many private and public organisations. Despite having a population of only 31 per cent, it was found that Brahmins and Kshatriyas held two-thirds of the jobs.

This prevailed not only in the central levels but also through to local levels. Even then, central directly nominated and appointed officers as there had been no elections for the previous 20 years (*Himalayan Times*, 2017).

Hence, while forming any constitution, rules, regulations and policies for the country or for t organisations, these are more likely to be biased towards or in favour of these dominating castes of people. Additionally, due to the lack of proper transportation, communication and technological systems, even in these castes, the dominating voice was that of the people who were living in the capital or some major cities of Nepal rather than there being inclusive participation from all areas and all groups of people. This is probably one of the reasons for formulating a rule-based governance mechanism rather than a principle-based governance system.

Realising these conditions, some lower caste activists attempted to form an alliance to oppose this scenario. This was captured by the Maoist party who played the ethnic card for their revolution and civil war. The Communist Party of Nepal (Maoists) launched its “people's war” on 12 February 1996 by giving the people hope to eradicate these caste differences. After ten years of Maoist civil war, finally, through the peace process, the war was ended and Nepal was declared a federal democratic republic and the autocratic monarchical rule was ended in April 2006. Then the interim government was formed and, in November, 2006 the eight-party alliance, including Maoists, signed the agreement that led to the formation of the interim government, interim constitution and interim parliament. During this period, the leading Maoist

party argued that all castes, including Sudras, should be proportionately represented in the constitutional assembly. This can be seen as a major milestone for the uplifting of the various deprived and backward groups, such as women, in Nepal. Although there had been some quotas previously, these had not been implemented properly.

Although lower caste and deprived groups have received some additional benefits from this constitution, still the major beneficiaries were the people living in cities or town areas. Even today, people living in the eastern Terai of Nepal, who refer to themselves as *Madeshi*, are revolting against the prevailing government by demanding that both *dhoti* and *topi* (terai man and hillman's cap) should have equal opportunities and receive equal respect. Due to the revolt from Madeshi group, at the end of 2015, the India border was blocked for more than two months, and as a result there was a crucial shortage of fuel, food, including medicines, and other necessary items in Nepal (*Guardian*, November, 2015).

2.6 Corporate Social Responsibility of banking in Nepal

Corporate social responsibility (CSR) is a comparatively new concept in Nepal and there is no compulsion for commercial banks to invest in CSR practices. However, most of the banks are voluntarily investing funds in CSR and report this on their websites and in annual reports (Upadhyay-Dhungel & Dhungel, 2013). The top level managers of commercial banks of Nepal, noting the expansion of CSR in the Indian financial sector, assume there is first-mover advantage for a win-win relationship between CSR and banks' longer-term

financial performance, given the government's penchant for regulating in such directions. Chapagain (2008) suggested nearly two decades ago that banks could subscribe to CSR and profit maximisation, as two of their goals. Additionally, banks not only influence the profit and loss of their shareholders but help drive the economy of the whole country, so, they should be more socially responsible than other industries. As the banking sector is one of the most profit-generating industries in Nepal, it not only comes under pressure from stakeholders to carry out business in a socially responsible and ethical manner but also perceives the constant threat of further government intervention.

Due to the lack of rules and regulations to report CSR expenditure, it is very difficult to determine the total amount invested by each bank in CSR. Nevertheless, from the individual banks' websites there is disclosure of their involvement in the education, training, development and welfare of deprived people and the areas of funding for health care and support, cultural, arts and heritage protection, education and development of children and women's games, blood donations, and so on. A potentially surprising observation to be discussed in the analysis chapter is that many private sector banks seem to be more eagerly engaged in CSR than public sector banks.

On their own initiative, banks have tried to contribute to the betterment of society; it would be better if the government of Nepal or central banks promulgated policies and guidelines concerning investment in CSR activities.

It is apparent that CSR activities are concentrated in cities and urban areas vis à vis rural areas, where the most needy people reside.

The banks can also be socially responsible in various other ways like encouraging green finance, putting restrictions on the loans to businesses that produce more carbon emissions, conducting environmental audits, subsidizing interest rates for green financing products and so on. If the banks would take all these initiatives then, in the long run, they will contribute to environmental protection in the long term (Acharya & Locke, 2016).

2.7 Conclusion

This chapter provides the background about Nepal from a wider perspective covering its geography, history, economic and political systems, and providing a context for the contemporary settings that influence governance directly and indirectly. The evolution and the development of the Nepalese financial system was discussed and the adoption of technology in the banking sector indicates an urban bias. Corporate governance practice in Nepal was introduced, including when and how it emerged, and the endemic political interference in the banking sector. Finally, the emerging areas of CSR and Green Finance are observed and the challenges these may provide to corporate governance in the Nepali finance sector are noted for further discussion.

The following chapter will review the literature and outlines the changes and trends of corporate governance. It also tries to explore the corporate governance relationship on the financial performance of the firms, especially relating to the banking institutions.

Chapter Three

Corporate Governance Mechanism

3.1 Introduction

This chapter provides an overview of the internal and external corporate governance mechanism. It also provides a brief overview and development of corporate governance practices in Nepal including the supervisory framework, various acts and directives of central banks and the legal framework for dealing with problems in banks and financial institutions.

3.2 Corporate Governance Mechanism

Corporate governance mechanism refers to the way an organisation is monitored and controlled to protect the interest of its shareholders. In other words, it is the formal mechanism developed to ensure that the agent who is working on behalf of the shareholders is performing and will perform for the best interest of their principals (Hill and Jones 2004). There are different corporate governance mechanisms that have been developed to govern the company, which can broadly be classified as internal and external governance mechanisms or the rule-based and the principle-based corporate governance mechanism. The Anglo-Saxon model, which has the unitary board model of corporate governance, is used in the U.S.A and believes that there needs to be a strong external corporate governance mechanism to control the behaviour of the agents. Countries like United Kingdom, Canada, Australia, New Zealand and some Commonwealth countries have principle-based models where they

believe that the code of corporate governance determines the board responsibilities rather than the rule of law. Companies are supposed to report the governance practices they have followed and if they have not followed them, they have to give reason. Similarly, countries like Japan believe in the corporate governance mechanism where there need to be more internal controls to govern the company (Tricker, 2011). Thus, the corporate governance mechanism can be broadly classified as external and internal.

3.2.1 External Governance

The external corporate governance mechanism includes various mechanisms for monitoring and control by the stakeholders who are outside the organization and have less access to company information. It also includes the various rules and regulations formulated by the government or regulatory authority that the companies must comply with (Shi, Connelly, & Hoskisson, 2017). The various types of external corporate governance mechanisms are briefly explained below:

i. Ownership Structure:

Ownership structure simply refers to the distribution of equity of the firm. The several dimensions of ownership structures, which have implications for corporate governance, are discussed below:

ii. Concentration:

Literature suggests ownership concentration as one of the mechanisms to mitigate agency problems and results from the

separation of ownership and control. (Michael C. Jensen & William H Meckling, 1976; Nguyen, Locke, & Reddy, 2015; Reddy, 2010). This is based on interest alignment which states that larger shareholders have strong incentives and power to monitor the company's performance at low cost (Grossman & Hart, 1986). However, the nature and level of ownership concentration is extremely different around the world (Porta, Lopez de Silanes, Shleifer, & Vishny, 1998)

iii. Identity:

The identity of shareholders plays an important role for the implementation of corporate governance of firms. Different shareholders have different interest in the firms; some want profits, dividends, good capital structure, growth, etc. which is reflected by the shareholders (Thomsen & Pedersen, 2000). The literature suggests four major categories of the shareholders, which are briefly discussed below:

iv. Debt Holders:

The debt holders such as banks and debenture holders will have huge interest in a company as their return on investment is directly linked with the company's performance; this motivates them to closely monitor the company's financial performance. This helps to reduce the agency cost and leads to minimising risky investment and availability of free cash flow. In several countries banks play an

important role while formulating various decisions for the company. This helps to minimise the risk, information asymmetries and capital misallocation (Lopez-de-Silanes & Zamarripa, 2003). However, in some countries, the debt holders are in a dominating role, which might lead to the agency problem.

v. Family Holding

Family holding refers to family members holding a significant portion of equity of a company. The family holding is quite common in Asian countries as compared to other countries (Claessens, Djankov, & Lang, 2000). The research by Shleifer and Vishny (1986) found that family holding was more than 33 per cent in fortune 500 firms and those firms have poorly diversified portfolios, have long term investors who hold the senior management positions, and as a result their performance is different when compared to non-family firms. Similarly, Fama & Jensen(1985) have shown how large undiversified shareholders have different investment decision rules where they focus on firm growth, technological innovation or firm survival rather than focussing on enhancing shareholders' value, while the diversified shareholders evaluate market value by using market value rules to maximise the value of firm's residual cash flow.

On the contrary, the research also suggests that family holdings can positively influence competitive advantage. Demsetz and Lehn

(1985) noted that concentrated investors have large economic motivations to reduce agency conflicts and maximize firm value. As the family is closely linked to the firm, they have additional incentives to monitor manager's moves and minimise free-rider problems. In the same vein, Burkart, Panuzi, and Shleifer (2002) suggest that those families with a presence in the firm have additional competitive advantages. Furthermore, as the family has long-term investment horizons, companies suffer less from managerial myopia and are less likely to forgo good investment to boost the earnings of the company (Stein, 1988).

vi. Block holders:

Adam Smith (1776) was quite concerned about the separation of ownership and control; however he did not state exactly the extent of this separation. In the research conducted by Holderness and Sheehan (1988), New York and American stock exchanges have 27 per cent of the block holders more than 30 per cent of the votes. The major reason behind holding blocks of shares is that they share the benefits of control and substantially influence company decision making. The block holders have interest in profit maximisation which helps to minimise the problem of separation of ownership and control, as stated by Michael C. Jensen and William H Meckling (1976). On the contrary, the research has found large block holding firms minimise risk taking, have a more monitoring role and influence organisation control. This might

increase the conflict between the minority shareholders and block holders (Allen & Phillips, 2000; Barberis, Shleifer, Boycko, & Tsukanova, 1996; Dharwadkar, George, & Brandes, 2000; Stulz, 1988). However, these problems are mainly seen in the developing economies where there are weak regulatory and legal structures.

vii. Foreign Holding:

There is a lot of empirical literature focussed on foreign holding and firm performance. Some researchers have also undertaken comparative studies of the productivity of foreign holding firms versus domestic holdings (Aitken & Harrison, 1999; Arnold & Javorcik, 2005; Robert E. Baldwin, 1998). This literature suggests that the productivity of foreign firms is comparatively higher because they accumulate firm-specific advantages such as good managerial skills, transfer of technology, huge capital advantage, coordinated relationships with suppliers and customers, export relations and so on. Generally the foreign holding institutions have long-term investment horizons and focus on market-based performance measures and at the same time diversify their investment to different industries and sectors.

viii. External Audit:

External audit not only helps to overcome the agency problems that arise from separation of ownership and control but it is also one of the most reliable ways to build investors' confidence and other stakeholders about the company. The external audit helps to ensure

that the company is transparent; reliability enhances the quality of financial reporting and reduces information asymmetries between the shareholders and managers. This audit process also helps to boost investors' confidence, builds trust that the reported financial statements are truthful and presented in the proper way (Sikka, 2009). As per the Company Act, 2006, all the listed companies in Nepal, including the banks and financial institutions, need to conduct an external audit by an external auditor and make it publically available to the general shareholders.

3.2.2 Internal Governance Mechanism

The internal corporate governance mechanism includes board of directors, internal audits, and executive compensation schemes, which are briefly discussed below:

3.2.2.1 Board of Directors:

The board of directors represents shareholders. Shareholders of the company nominate their board. They play a mediator role between the principals who are the investors for the company and the agents or the managers who are responsible for allocation and deployment of resources for the wealth maximisation of the company. The board performs responsibilities such as appointing and terminating top-level managers, advising top management, determining their compensation and so on (Denis, 2001). The board of directors can be further classified as inside and outside directors. The inside

directors are generally expert in that particular business and mainly perform the monitoring role. In other words, they are responsible for controlling the inside activity of the firm, like controlling the top-level managers. Outside directors are not directly related to the company but they have good knowledge about the external business environment. Outside directors are also known as independent directors or non-executive directors. All the board directors are generally focused on achieving the vision, mission and objectives of the company (Monks & Minow, 2001, p. 81). They are also responsible for conducting the internal audit of the company to reveal the actual financial performance of the company.

3.2.2.2 Internal Audit:

The internal audit plays a significant role in contemporary corporate governance and many researchers have acknowledged internal audit as a part of an effective corporate governance mechanism (Carcello, Hermanson, Neal, & Riley, 2002; Gramling & Myers, 2003; Holt & Dezoort, 2009; Paape, Scheffe, & Snoep, 2003). Historically, internal audit is taken as a monitoring function (Morgan, 1980), however it is an independent appraisal function and plays an important element of organisational control i.e., important for the achievement of corporate objectives (Institute of Internal Auditors, 2012). Similarly, the Institute of Internal Auditors (2004) states that the internal audit is used to evaluate the company's performance and contributes to the improvement of risk

management, control and governance, and recognizes the assurance and consulting role of internal auditing in corporate governance.

The board of directors of the company are responsible for formulating the audit committee or conducting the internal audit of the company to reveal the company's actual financial performance (Hill, 2013). The internal audit is equally important for public and private sector companies (Cohen, Krishnamoorthy, & Wright, 2002). The internal audit provides the information about any fraudulent practices of the company, points out any discrepancies and ensures the company has strictly abided by the legal rules and regulations.

3.2.2.3 Executive Compensation Schemes

Modern agency theory, which is taken as the basis determining compensation schemes, suggests that managers are egoistic and they must be given good incentives to act for the best interest of the firms for which they work. This theory suggests that managers must be given enough monetary compensation and equity compensation (stock options) to attract and motivate managerial interest towards the accomplishment of the organisational goals. Kaplan (Jurow et al.). Providing stock options will directly provide additional incentives for the managers to perform better (Denis, 2001).

3.3 Governance Practices in Nepal

The capital market of Nepal is relatively small compared to other nations. The development of a capital market has been delayed due to a lack of proper rules

and regulations for investors' protection and good governance (World Bank 2005). The banking sector plays an important role for the development of capital markets, however in Nepal, compared to other developing nations, the banking sectors seems to be less efficient due to an increase in NPL, shortfall in capital, ineffective supervision, and slow recovery rate . The average daily turnover at Nepal Stock Exchange (NEPSE) was Rs. 892.7 million (approx. 8 million USD) during the year 2017. Nepal had embraced a dematerialised share trading system by replacing the traditional paper based system only during January 2015 (Republica, 2017). The dematerialised process has led to an increase in the number of retail investors and volume of trading.

Due to the pressure from the various donor agencies, general public and other stakeholders, central banks came up with some policies, such as decentralisation, interest rate deregulation, and provision for private as well as foreign banks during the Financial Sector Reforms (FSR) of the 1990s. Similarly, due to the pressure from IMF, the government also entered into an agreement with World Bank for a financial sector restructure project in 2004 (Ozaki, 2014). Following this agreement, the government and central banks implemented corporate governance standards, accounting and auditing standards for banks and other financial institutions (World Bank, 2005).

During the year 2000, the Asian Development Bank approved the corporate and financial governance project with the long-term goal to promote sustainable growth and reduce poverty in Nepal. Similarly, the medium-term objective was to improve corporate governance and efficiency in the financial

sector by firstly, strengthening the capacity of the Securities Exchange Board (SEBON), the Nepal Stock Exchange (NEPSE), and the Companies Registrar's Office (CRO). Secondly, to improve legal enforcement capacity by establishing the National Judicial Academy (NJA), legal information sector and secure transactions registry, and thirdly, by improving payment and settlement infrastructure. This project came into effect on 28 November 2001. However, during the first stage, the project to improve corporate governance and efficiency proved to be ineffective but the members agreed to refocus on developing governance and capital markets (Asian Development Bank, 2010).

The financial and technical assistance from World Bank led the development of financial sector reform project in 2002. The main objectives of FSR was to reduce direct government intervention as an owner while strengthening the supervision and regulatory role; develop strong corporate governance in government banks; strengthen the role of central banks (NRB) and provide sufficient autonomy for formulating monetary policy, banking system regulation, supervision and licensing of banks and non-banks by drafting a new Act; improve auditing and accounting standards; and improve financial discipline through adequate disclosure and competition. As a result, the NRB Act 2002, Companies Act 2006 and Bank and Financial Institution Act 2006, were approved (World Bank, 2002).

The NRB ACT 2002 provides the sufficient autonomy and full authority for licensing, supervision and regulation over t banking. The Nepal Rastra Bank Act (2002) has made several provisions regarding the formation of boards of

directors which includes their education qualifications and experiences, criteria for disqualification of directors, duties and responsibilities, board meetings and so on for the good corporate governance of banks. Later, the Bank and Financial Institution Act (Bank and Financial Institution Act), 2006 came up as a single umbrella Act by amending and consolidating all other laws to protect the interest of the investors, depositors, provide reliable banking and intermediary services and to minimise banking and other financial risk. This act made central banks more powerful. Additionally, the Institute of Chartered Accountants in Nepal started to formulate and issue various accounting and auditing rules and standards based on the International Accounting Standards and International Financial Reporting Standards, which must be followed by companies while preparing their financial statements (World Bank, 2005). Similarly, the The Companies Act (2006) and Securities Act (2007) have also emphasised developing good corporate governance in companies. It has mainly focused on investor protection, transparency and accountability; promoting good corporate governance in Nepal to bring dynamism for the economic development of country.

3.4 Development of Corporate Governance in Nepal

While organisations and banks in Nepal have been governed in one way or another since their incorporation, the financial sector reform of 1990s can be taken as a pioneer step for the establishment of a formal governance mechanism. The central bank of Nepal, NRB, repeatedly issues several corporate governance guidelines for the banking sector. The FSR, along with the governance mechanism, helps not only to protect the interest of the shareholders, boosts

investors' confidence and capacity building but also helps to foster networking opportunities with various developing and developed economies. To achieve the same objectives, the NRB has issued the unified directives 6 which includes guidelines for boards of directors, managers and shareholders, role of internal auditor, external auditor and internal control, compensation schemes, etc, to foster good governance (BAFIA, 2006). These guidelines were prepared based on the recommendations and guidelines made by the BASEL committee on corporate governance and the OECD's principles of corporate governance (McGee, 2010). The key points discussed in the guidelines handbook for good governance are related to the board of directors, management, financial disclosures and auditors, which are briefly discussed below:

3.4.1 Board of Directors

As per the Bank and Financial Institutions Act, 2006 all banks must have a board of directors of between five to nine members including one professional director from the list provided by the NRB. The directors are appointed at general or annual general meetings of the banks and financial institutions. In the event of vacancy of the post before the general meeting, the existing board of directors may appoint the directors for the remainder of the term. Similarly, the professional director is appointed by the existing board of directors from the list of professional experts provided by the Nepal Rastra Bank. Among the chosen directors, the chairperson of the board is chosen by the majority of votes (Bank and Financial Institution Act, 2006). Further, there is a single-tier board structure in Nepal and generally there are no two members related from

the same family, and chairman and managing director positions are separated in most companies (World Bank, 2005).

Similarly, Chapter 3, section 13 and 18 of BAFIA 2006 defines the criteria for a board of directors and includes the following:

- The professional directors must have at least a master's degree in management, banking, finance, money, economics, commerce or trade; however, there are no restrictions for directors who are elected from the public.
- A candidate must be a normal person who is not blacklisted or insolvent.
- The candidate is not the director of any other bank or financial institution;
- The candidate is not a partner in any kind of contract with particular banks, and so on.

Similarly, the new Bank and Financial Institution Act 2017 has set the tenure for the managing director and chairman for two terms each of four years, while the term of the professional directors is only one term on the board of directors, however other directors can be elected for several terms (Nepal Rastra Bank, 2017a).

In the same way, directors are allowed to receive only meeting allowances unless specified by the bank's articles of association. Additionally, the company must hold its board meetings at least 12 times a year; with the interval between any two meetings not exceeding more than two months. The board meetings may be called at any time when at least two thirds of directors

provide a meeting request in writing to the chairman of the board; but to conduct any board meeting there must be at least 51 per cent of the total number of directors. If any directors have any personal interest in the resolution to be discussed at the meeting, then they are not entitled to take part in that meeting.

BAFIA 2006 has also pinpointed some specific responsibilities to the board of directors, which are pinpointed below:

- No board directors are entitled to derive any personal benefits from the bank or financial institutions while performing the role.
- If any director is found to have derived personal benefit, then the financial institution has the right to recover that amount from the director.
- If any directors take any decision beyond his/ her responsibility and cause harm to the bank, the bank or financial institution will not be responsible for any action taken by that director.
- The board should prescribe the remuneration and benefits of the chief executive.

3.4.2 Management

Since BAFIA 2006, there has been a slight change in the appointment criteria for the CEOs of banks and financial institutions in BAFIA 2017. A bank CEO must have completed a Master's degree in management, banking, financial,

monetary and economics, commerce, auditing, statistics, or law. Or, alternatively, they may have a Bachelor degree and at least 10 years working as an officer in these areas to be eligible to become a bank CEO. Furthermore, just as it is for the board of directors, for any individual to be appointed CEO, he/she must be a normal person, and should not have been declared bankrupt or have any fraud or dishonest offence. Beside this, the person should not have been blacklisted (or have completed three years from being released from blacklisted).

The chief executive officer of a bank can have a two-year tenure. The CEO is accountable to the board and is responsible for supervising and controlling the activities of the bank or financial institution that have been passed by the board of directors. Additionally, the CEO is responsible for the preparation of the annual budget and action plan which he/she presents to the board for approval before implementation. (Nepal Rastra Bank, 2017a).

3.4.3 Audit Committee

The Companies Act (2006), Bank and Financial Institution Act (2017), and Unified directives (2017), issued by the central banks have specified the requirements to have an audit committee, and outlines duties and responsibilities and the size of audit committee. The Companies Act (2006) requires all the listed companies with the paid up capital of NPR 30 million, which is fully or partly owned by the government, to have an audit committee under the chairmanship of a non-executive director who is not involved in the day to day operations of the company. Further, this Act prohibits any close

relatives of the CEO to be the members of the audit committee. Additionally, this Act requires at least one experienced person with professional certificates in accounting or with experience in the accounting and financial fields, after having obtained at least a Bachelor's degree in accounting, commerce, management, finance or economics.

In the same vein, the Unified directives (2017), issued by the central banks regarding the code of corporate governance, specifically states that CEOs of banks or financial institutions cannot be members of the audit committee, however they can participate if necessary. The directives also require the audit committee to evaluate the financial condition of the institution and their internal control mechanism, issue necessary guidelines for management of the institution, as well as provide their findings in respect of the accounts and financial management to the board of directors for necessary action. The board of directors are responsible for implementing the suggestions provided by the audit committee and if they are unable to implement them, they must provide appropriate reasons for not doing so.

The Companies Act (2006) has highlighted the responsibilities of the audit committee as:

- To review the accounts and financial statements of the company
- To review internal financial control and risk management systems
- To supervise and review internal auditing activity of the company
- To recommend the names of potential auditors for the appointment of the auditor of the company and fix their remuneration and terms and conditions
- To review the remarks contained in the external audit report and take

necessary actions if required.

- To provide board of directors about the accurate information about the company.
- To prepare accounts related policy of the company and enforce it.

3.4.4 External Auditors

As per the Companies Act, 2006 all the listed companies must appoint an external auditor and have their accounts audited. In cases where the company has a branch office outside Nepal, the appointed auditor audits the accounts of that branch as well, if the foreign county's law allows. The company can appoint any auditor among the persons holding an auditor licence. However, the auditor must be approved by the general meeting of the company or in accordance with the conditions mentioned in the articles of association. However, for the banks and other financial institutions, the auditor must be appointed from amongst an auditors list approved by the NRB (BAFIA, 2017). The auditor for the commercial banks, development banks and finance companies should a chartered accountant, while for the class D financial institutions, such as co-operatives, auditors can either be chartered accountants or registered auditors. The NRB may remove any authorised auditors at any time if the auditors fail to fulfil their duty. Additionally, banks and financial institutions can appoint same auditor for a maximum three consecutive terms.

3.5 Supervision Framework

The banks and financial institutions play a crucial role in the economic development of the country. The monitoring, control and supervision of these institutions should be robust as compared to other industries because they use other people's money. If there is any problem in the banking sector then it will not only affect the business it will also affect the economy of whole country or even the whole world. The recent example was the global financial crisis of 2008. So, in every country, as compared to other institutions, the banking sector has to comply with additional regulations from the central banks. The government along with the central banks always try to keep updated and develop effective supervision to ensure a safe and efficient banking sector. So, in the , context of Nepal, the central bank of the country, the Nepal Rastra Bank has adopted several monitoring and control mechanisms to ensure good governance, market discipline and build investors' confidence. The current status of supervision system implemented by NRB are discussed below:

3.5.1 Supervision System of Banking in Nepal

The central bank of Nepal, Nepal Rastra Bank, carries out the supervision of banks and financial institutions in two different ways i.e., on-site monitoring and off-site supervision and inspection.

I. On-site Monitoring:

Nepal Rastra Bank at any time may conduct on-site inspection and supervision of banks or financial institutions. The reputed officer of the central bank or an expert designated by NRB carries out such

inspections. It is the legal duty of all the banks or financial institutions to provide the statement, data, record and information as asked for by the officials to review or examine within a time prescribed by them (Nepal Rastra Bank Act, 2002). Generally, the on-site monitoring and inspection is carried out once a year for the bank's head office and at least once in three years for a branch office (Sahayogee, 2017).

II. Off-site supervision and inspection:

Along with the on-site monitoring, the NRB conducts off-site supervision and monitoring of the banks and financial institutions by asking banks for necessary documents and information. The central bank conducts the capital adequacy, asset quality, earnings, liquidity and sensitivity (CAELS), by calculating various ratios such as capital adequacy ratio, credit to deposit and core capital, non-performing loan to total loan, net liquid assets to total deposit, return on assets and return on equity on a quarterly basis (Nepal Rastra Bank, 2014).

This method is comparatively less expensive compared to onsite inspections. Along with CAELS analysis, NRB also assesses the policies, directives and regulations to see if they are sufficient to meet current monetary policy and fulfil the national objectives of economic development.

In the same way, the Nepal Rastra Bank has formulated various Acts to guide and maintain good governance in banks and financial institutions. A brief description of them are given below:

3.5.2 Nepal Rastra Bank Act, 2002:

This Act was formulated with the objective to strengthen supervision of banks and financial institutions. This Act gives independence and autonomous rights to the central banks, free from government intervention, to formulate monetary and foreign exchange policies to maintain price stability, balance of payment, develop a secure, healthy and efficient payment system, appropriately regulate, inspect and supervise banks and financial systems and enhance public credibility towards banks and financial systems (NRB Act, 2002). This Act has also stated several requirements to prevent political intervention and maintain professionalism in Nepal Rastra Bank by specifically mentioning the criteria for the formation of boards of directors including appointment of governor and deputy governor, their qualifications, code of conduct, terms of directors and remuneration and other benefits of directors. Further, it mentions the constitution, functions and duties of the inquiry committee, meetings of the board, their functions, duties and power and professional code of conduct and official responsibilities (NRB Act, 2002). These all help to enhance the good corporate governance in the central banks. In the same way, the Act has also formulated various provisions required for effective supervision including on-site and off-site inspection, specified times for submission of reports, provision for inspection of reports and legal penalties in case of non-compliance by the banks and financial institutions. This Act has also provided ultimate power of cancellation of operating licences, authority for suspension of the board of directors, and take-over by central banks for problematic commercial banks and financial institutions.

Additionally, it also mentions the provision for a fine for violation of bank regulations.

3.5.3 Bank and Financial Institutions Act, 2006:

The Bank and Financial Institutions Act, 2006 was formulated to promote trust amongst the general public in the overall banking and financial system, protect and promote rights and interests of depositors, provide quality and reliable banking and financial intermediary services to the general public, develop healthy competition among the banks and financial institutions, minimise risks related to banks and the financial sector, and boost and consolidate the economy of the State of Nepal by liberalizing the banking and financial sectors and make necessary legal provisions relating to the establishment of banks and financial institutions in Nepal. This act provides four types of licences for the BFIs: commercial banks (class A), development banks (class B), finance companies (class C) and micro finance development banks (class D). It has also mentioned the provisions relating to the board of directors and chief executive officer, including their functions, duties and power, criteria for their appointment, their remuneration, and facilitates meetings and their responsibilities and duties. Similarly, it has also included the provision related to capital, operating and financial transactions, supply and recovery of credit, accounts, records return and reports, appointment of auditors, along with their functions, duties and power, provisions related to mergers and provisions related to offenses and punishments. (BFIA Act, 2006). Based on the international banking norms and standards, NRB has issued more than 22

directives for the regulation of banks and financial institutions. Some of the major directives issued by the central banks include directives regarding capital adequacy, loan classification and provisioning, credit concentration and single obligor limits, risk management, corporate governance, provisions related to investments, cash reserve ratios, deprived sector lending, knowing your customers, electronic banking, and so on (Nepal Rastra Bank, 2016b).

3.5.4 Unified Directives, 2017

For the proper and smooth operation of the banks and financial institutions, all the fragmented provisions related to supervision was brought into one place in the unified directives to avoid any regulatory slipup in the operation of the banks and financial institutions. The first unified directives were formulated in 2010 and after that every year they have been revised to meet the changing regulatory requirements. This has eased the supervision process for the NRB. The unified directives include supervision by-law, on-site and off-site inspection manuals, procedures to review a bank's overall performance based on the CAMEL ratings, and so on. This helps to strengthen the surveillance of banks and financial institutions and provides early warning for unforeseen possible actions.

In the same way, unified directives have also incorporated various international guidelines from BASEL II and BASEL III, with some customisation. It has also promulgated stress-testing guidelines for class A commercial banks to gauge the strengths of the banking sector against possible shocks. Similarly, it has also incorporated Internal Capital Adequacy Assessment Process (ICAAP)

guidelines to identify the unique risk of each bank and set the capital requirements according to this risk. In the same way, “Prompt Corrective Action” (PCA) was implemented with several triggers for capital deficiency, liquidity shortfall and non-performing loans (Nepal Rastra Bank, 2016b).

3.6 Prudential Regulations:

In addition to the above Acts and directives, the central bank of Nepal issues several prudential regulations related to disclosure, assets quality, loan classification, corporate governance, code of conduct, periodical reporting requirements, mechanism for divestment of shares by promoters, and so on, to mitigate several financial risks and to bring regulations in line with various international standards. In the same vein, NRB also amends the licensing requirements and capital adequacy requirements time and again to promote strict standards. NRB experts formulate all these regulations after consultation with world banks and following the guiding Principles of Bank Supervision by the Bank for International Settlement (BIS).

3.7 Legal framework for dealing with problems in banks and financial institutions

As in other companies, there is always the possibility of problems arising in banks and financial institutions. As banks use other people’s money to maintain their solvency and liquidity risk, they need to improve their financial resources, improve their risk management capabilities, and risk profile. The government and central banks have formulated some Acts to guide and protect banks from problems that may occur. The various Acts formulated to deal with

the remedial actions for problematic banks include; The NRB Act, 2002, Companies Act, 2006, BAFIA, 2006, The Solvency Act, 2006 and Unified Directives, 2017. With the help of all these Acts the central bank of Nepal, NRB, have an ultimate power to declare the bank as problematic under section 86 B of the NRB Act, 2002.

3.8 Responsibilities of regulatory bodies for the resolution of problem banks:

Two institutions in Nepal are mainly responsible for the resolution of problematic banks. The first is Nepal Rastra Bank and the second is the Debt Recovery Tribunal. The roles and responsibilities of these two institutions are briefly discussed below:

3.8.1.1 Nepal Rastra Bank

As the central bank of the country, the role of NRB is to identify problems early, ensure preventive and corrective measures and formulate a resolution strategy if required. The NRB Act, 2002 provides full legal authority and power for the NRB to deal with a problem bank. The central bank tries to avoid situations where they may have to intervene by developing strict screening tests when allocating licences to banks and financial institutions. To control their behaviour, even after establishment and during their operations, the central bank has formulated various guidelines, rules, regulations, and supervision systems including on-site and off-site inspections to ensure the soundness of the banks and financial institutions. However, even with these

regulations and guidelines, if the NRB finds some issue in terms of a bank's functionality or liquidity, then the central bank will intervene and their resolutions will come into effect.

The NRB Act, 2002, states various corrective actions that need to be taken for a problem bank. The NRB provides guidelines, instruction, strategies and plans to be discussed with a problem bank's board and gives a specific period to implement them. If the bank is unable to take the corrective actions then the NRB takes additional steps to save the bank from liquidation (Dhungana, 2008), discussed below:

- i. NRB declares the bank as problem bank as per section 86(B) of NRB Act, 2002 and initiates corrective actions and for the banking and financial institutions pursuant to section 86 (C) of the NRB Act, 2002.
- ii. The NRB initiates restructuring actions by taking control over the bank as per section 86 (d and e)
- iii. If that does not work, then finally the NRB appeals in court for liquidation. The BAFIA, 2006 and Insolvency Act, 2006 clearly state the provision for liquidation.

3.8.1.2 Debt Recovery Tribunal:

Nepal has a complex and lengthy process to recover the bad loans of banks and financial institutions. In order to facilitate this process and make it more standardised, an institutional framework was introduced in 2002. To deal with the loan recovery process, under the Nepal financial sector reform, the government has established the Debt Recovery Tribunal (DRT). The DRT has

the legal authority to acquire borrowers'/ guarantees' additional other assets that are not pledged to the concerned banks and have the power to dispose of it through the auction process for the recovery of loans. The problem bank will bring its case to the DRT and the DRT will help to solve it.

Furthermore, to solve this issue, the court should provide timely and quick support for the banks and financial institutions. Till the time the bank is able to recover its loans, it may not be able to meet depositors' claims. To deal with such problems, adequate and skilful commercial lawyers are required. Moreover there should be special courts or lawyers to deal with such cases (Dhungana, 2008).

3.9 Conclusion

This chapter provided a brief overview of the corporate governance mechanism in Nepal. Additionally, it also discusses the regulatory and supervisory framework for banks including the legal framework for dealing with problems in banks and financial institutions.

The following chapter will review the literature and outline the changes and trends in corporate governance. It also tries to explore the relationship between corporate governance and financial performance of firms, especially relating to banking institutions.

Chapter Four

Literature Review

4.1 Introduction

In this chapter, prior research into the governance of banking institutions in low-income countries is reviewed. Attention is focussed on the issues examined, the methods and data used in the empirical analyses and the key findings in these prior studies.

Theory and testing of research questions in corporate governance have developed into a substantial body of knowledge. With advancements in financial econometric research, banks and financial institutions receive less coverage than other industrial sectors, perhaps due to the different nature of their balance sheets. The majority of literature concerns publicly listed companies, using data available from large databases. Not surprisingly, this has meant the majority of work stems from the more mature financial markets of Western Europe and North America.

The concern for public sector performance has increased the volume of material dealing with governance in the organisations and institutions other than corporations. Small businesses, non-government organisations (NGOs), family businesses and mixed ownership enterprises where government and private equity are present are benefitting from careful analyses.

Low-income countries (LIC) have many problems, and corporate governance is unlikely to be accepted. Research in these countries, which is often

hampered by a paucity of data, especially reliable and complete data, remains less-well developed. The lack of regulatory frameworks, under-developed financial markets, and lack of interest from scholars in more mature economies has limited the volume of robust research published in the area. Nevertheless, knowledge gained in other countries provides a useful starting point where no LIC research is available for engaging with the research questions being examined in this thesis.

The remainder of this chapter is organised as follows, first it discusses the chronological development of corporate governance, then the corporate governance in low income countries, followed by corporate governance in banks and finally it identifies the research gap and concludes the chapter.

4.2 Introduction and Early Approach of Corporate Governance

There have been extensive studies in the field of corporate governance. Yet it persists to be of interest among the academicians and a matter of public concern due to the various corporate governance scandals that have occurred in Europe, USA and in various places throughout the world (Allen, 2005). The chronological development of corporate governance is given below.

4.2.1 Foundation for study of Corporate Governance

The root of corporate governance can be traced back to 1622 when a conflict of interest arose between the shareholders and multiple directors in the Dutch East Indies Company (Jongh, 2011). In 1776, Adam Smith raised concerns

about the separation of ownership from control in a large corporation. In Smith's view, the separation of ownership and control in corporations created poor incentives for professional managers to operate companies efficiently. Smith postulated that if shareholders wanted managers to operate companies in their own best interest, then they needed to devise ways to control managers' actions (Reddy, 2010).

4.2.2 From 1850 to 1950

This century can be recognised as the beginning of the formation of various legislation related to corporate governance as different rules and regulations were propounded during this period:

- **1870:** German Company Law introduced the dual board structure to govern the organisation;
- **1890:** The UK government developed the UK's Directors Liability Act which states that the company directors are liable in damages for 'untrue statements';
- **1899:** With the aim to attract more investment; Delaware, US ¹ formulated the General Incorporate Act; and
- **1933:** The Security Act 1933 was developed in the UK, which defines the responsibilities of directors and shareholders in the articles of association of the company.

¹ Delaware is a U.S. state located on the Atlantic Coast in the North-eastern and Mid-Atlantic regions of the United States

Later, following the Smith's view, in their seminal work Berle & Means (1932) examined the large modern organisations with separate ownership and control. From their studies, they showed that in large corporations with many investors, due to their lack of interest, knowledge, time or money to handle the company, managers are hired and are provided with discretionary power to manage the corporation. However, frequently, the company will become concentrated, and ownership will be separated from control, and these two trends undermine the fundamental assumptions of Adam Smith's capitalism. The interests of the owner and of the ultimate manager may, and often do, diverge. Consequently, many of the checks which formerly operated to limit the use of power tend to disappear (McCraw, 1990).

Shareholder's theory is the traditional theory of corporate governance, and it traces its links to the works of Adam Smith (1776) and Berle and Means (1932), which was acknowledged by the seminal paper by Michael C. Jensen and William H. Meckling (1976). This theory was initially proposed by Milton Friedman. According to Friedman (1962):

There is one and only one social responsibility of business: to use its resources to engage in activities designed to increase its profits so long as it stays within the rules of the game, which is to say, engages in open and free competition, without deception or fraud.

This theory proposes that managers are the hired agents of shareholders to run the business and increase their profits. This theory has the greatest influence among the theorist and academicians.

4.2.3 During 1970s

During that period there were three significant developments in corporate governance thinking: the significance of independent outside directors was recognised and the audit committees were introduced in the United States, and the two-tier board was promoted in the United Kingdom (Tricker, 2011).

Michael C. Jensen and William H. Meckling (1976) identified the existence of an 'agency problem' between managers and shareholders. As the managers (agents) do not own the company resources, there is a possibility that they will commit moral hazards (hiding losses, shirking duties, etc.) to increase their individual wealth at the cost of the shareholders.

In all these studies it was found that there is a possibility of a conflict of interest between the managers and shareholders. Since there are many shareholders in the organisation, they need to hire the managers and nominate the board of directors to run the organisation. But the big challenge was developing the mechanism to control their actions for the better performance of the organisation.

During this period, the popular theory of corporate governance, agency theory was developed.

4.2.4 During 1980s

The focus of the organisation during this phase was to increase the shareholders' value. The directors began to be concerned only with the profit of the organisation. At this time, many state-run enterprises were privatised in the UK and gradually in other countries. However, massive corporate failures were faced in US, UK, Japan, Australia and other nations due to huge junk-bond finance, insider dealings, and dubious corporate governance. For all these reasons, corporate governance has been the focus of attention of many investors, academicians and researchers.

As a result, Earl (1983) published a paper in *Perspectives on Management*; the American Law Institute (1984) published a report on Principles of Corporate Governance; Williams and Findlay (1984) studied the problems that might arise due to the organisational hierarchy and the self-interests of the agents; Mintzberg (1984) conducted research on who should control the organisation; Nader (1984) studied how an organisation can reform its governance practice to make it more efficient; and Baysinger and Bulter (1985) studied corporate governance by looking at its effect on corporate performance and board composition. Williamson (1988) combined the corporate finance with corporate governance, arguing that debt and equity are treated not mainly as alternative financial instruments, but rather as alternative governance structures and also compares and contrasts the transaction-cost approach with the agency approach to the study of economic organisation.

After extensive research related to agency problems in US markets, researchers diverted their interests into Europe and other developed markets, including France, Germany, Japan and the UK. The research topic was slightly diverted towards the capital markets and corporate control and mainly focused on the changes associated with takeovers (Ball, 1987; Franks, Mayer, Hardie, & Malinvaud, 1990).

During this period, another theory of Corporate Governance was developed; stakeholders theory. The background of this theory can be traced to the concepts of the co-operative movement, mutuality and the intellectual foundations which describe the company as a bundle of human assets and relationships (Clarke, 1984; Penrose, 1980). According to this theory, the organisation should not only maximise the interests of the shareholders but also those of other different stakeholders of organisations, such as employees, customers, creditors, suppliers and community (Evan & Freeman, 1988).

Stakeholder theory owes its development to Edward Freeman's seminal text *Strategic Management: A Stakeholder Approach*. Freeman's study not only defined the concept of stakeholder but also provided the explanation that a corporation takes responsibilities for its stakeholders (Guo, 2011).

Freeman (1984) defines the stakeholder as "Any group or individual [who] can affect, or is affected by, the achievement of a corporation's purpose. Stakeholders include employees, customers, suppliers, stockholders, banks, environmentalists, government and other groups who can help or hurt the corporation."

4.2.5 During the 1990s

There were major developments for corporate governance during the 1990s:

1992: The Committee on the Financial Aspects of Corporate Governance, chaired by Adrian Cadbury in the UK, published the Cadbury Report which is deemed a crucial turning point in global corporate governance. This report has influenced the development of corporate governance not only in the United Kingdom but also in many other countries such as India and Russia (United Nations, 2003).

1994: Following the Cadbury Report, the group chaired by Paul Ruttman developed new guidelines for 'internal control' and 'financial reporting' which should be followed by the directors of listed companies registered in the UK (Davitt, 2006).

1995: The Greenbury Report was developed by Sir Richard Greenbury to tackle the growing concern about directors' remuneration (Jones & Pollitt, 2001). In the same year, to improve the pension schemes in the UK, the United Kingdom Legislation developed the Pension Act.

1999: Turnbull published the report on internal control where he advised the directors on combined code (Tricker, 2011).

The 1990s was also a period when corporate governance came forward as an issue both for public policy and management practice (Deakin, Konzelmann, Hobbs, & Wilkinson, 2005). In the period from 1990s to 2003, there were several research studies on corporate governance around the world (Denis &

McConnell, 2003). The US companies and boards of directors were facing a competitive threat from Japanese and German companies because of rising competition existing between governance systems along with their products, and the US corporate governance system was declining at that time. This drew attention to the importance of corporate governance in US firms, so they began to improve it and it quickly gained momentum in several other developed countries (Gilson & Roe, 1993).

Shleifer and Vishny (1997) have studied corporate governance systems around the world in regard to the importance of the legal protection of investors and of ownership concentration. At that time, many researchers studied the relationships between corporate governance and the equity prices (Claessens, 1997; Slovin & Sushka).

During this period, there were many studies on the different models of corporate governance and their comparative analysis (Allvey, 1995; Grunbichler & Oertmann, 1996; Schaede, 1995). Various research studies have also been conducted on the relationships between the corporate governance structures and firm performance in developed and transitional economies. De Jong (1997) has described the governance structure of groups of large European corporations: the Anglo-Saxon, the Germanic and the Latin types of firms. He used the four performance evaluation criteria: productivity, growth, employment and total compensation to shareholders, and found that continental corporations have a performance equal to or better than that of the Anglo-Saxon group.

The collapse of the Maxwell business empire, and other corporate failures and scandals in the UK have led to demands for reforms and better regulations in the field of corporate governance (Porporato & Robbins, 2008). In 1991, a committee was established to study the financial aspects of corporate governance by the London Stock Exchange and the Financial Reporting Council to regulate accounting standards in the UK (Cheffins, 2011). As a result, Sir Adrian Cadbury (1992) published the first report on corporate governance about the financial aspects of corporate governance in the UK. In this report, he focused on the importance of independent non-executive directors and its code of best practice. But this report did not become so popular because soon after the Cadbury Committee was established, various prominent British public companies collapsed due to lack of accountability of top executives.

Although there had been some criticism in this report, it had a significant influence around the world. With reference to this report, many reports were published by various countries: the Australian Committee Report on Corporate Governance (1993), King Report (1995) from South Africa, Vienot Report (1995) from France, report on corporate governance from Hong Kong Society of Accountants (1996), the Netherlands Report (1997) and others (Tricker, 2011). They all focussed on corporate governance and the potential abuse of corporate power. The major concerns of all these reports were the use of independent outside directors; the use of audit committees as a bridge between the board and external auditor; the separation of the role of chairman and chief executive; and more checks and balances to protect the rights of small shareholders.

At this period, another popular theory of corporate governance, stewardship theory, was developed by L. Donaldson & J. Davis (1991) as a counter strategy to agency cost theory. Stewardship theory looks at governance through a different lens from agency theory, reflecting the original legal view of the corporation. This theory assumes that the managers always try to maximise a firm's performance because while doing so, along with the organisational goals, their personal needs are also met.

According to this theory, managers' legal duty is to their shareholders not to themselves or to other interest groups, and they act responsibly with independence and integrity (Tricker, 2011). So, there would not be any conflict of interest between the owners and the managers, as in agency theory.

Advocates of stewardship theory advise that managers should be fully empowered to operate their organizations effectively. For example, combining, rather than separating, the role of board chairman and chief executive officer (CEO) in a sole position, known as the CEO duality (Donaldson & Davis, 1998).

4.2.6 During the Twenty-first Century

In the twenty-first century, there have been many corporate disasters such as the collapse of Enron, Worldcom, and Tyco in the US; British Rail, Tomkins, and Independent Insurance in Britain; Vodafone, and Mannesmann in Germany; which were all the result of bad corporate governance practice. These tragedies have emphasized the importance of good governance. As a result, corporate governance best practice has been developed throughout the world; many countries have changed their listing rules, shareholders must approve

their plans for directors' stock options, subsidised loans for directors have been forbidden, independent directors can be the part of audit and remuneration committee, and other changes.

This century, corporate governance policies and practices have been developed not only for the listed companies but also for another types of organisations, such as education, charities, medical, sports, professional institutions, and non-government organisations.

The major corporate governance changes that were developed during this period are given below.

2003: After the various corporate scandals, Higgs released the report advocating the use of 'comply or explain'.

2004: The Pension Act 2004, was established to assist regulators to regulate all work-based pension schemes in the UK. Influenced by the UK legislation, USA developed the Sarbanes-Oxley Act, which is the most significant corporate governance law in the USA and it has also made a huge international impact.

2006: The Company Act 2006 was brought in the UK, which is the longest Act brought into force by parliament; it was presented by revising much of the existing legislation.

2010: The UK corporate governance legislation formally merged into 'The Code'. In the US, more stringent corporate governance legislation was introduced through the Dodd Frank Wall Street Reform and Consumer Protection Act.

2012: A revised edition of The Code was published in the UK. Among other changes, boards are now expected to explain why the annual report is fair, balanced and understandable.

4.3 Concept of Corporate Governance

The term corporate governance is derived from the word 'gubernare' which means "to rule or steer" (Bhasin, 2010). Corporate governance is as old as a corporate entity, and it is practised in several countries. The definition of corporate governance varies accordingly to culture and countries (Armstrong & Sweeney, 2002). However, the definitions are broadly classified as 'narrow' and 'broad' (Agle et al., 2008; Rossouw, Van der Watt, & Rossouw, 2002). In the narrow classification, corporate governance is mainly focused towards shareholders because they think that companies are primarily responsible to them. In contrast, the broader perspective extends the responsibility of companies to their stakeholders. Generally, the narrow model is quite common in Anglo-American countries (the UK and US) while the broader model is usually adopted in European and Asian countries (Aguilera & Cuervo - Cazorra, 2009).

Cadbury (1992) has defined corporate governance from a narrow perspective; his definition being that corporate governance "is the system by which the companies are directed and controlled." Similarly, (Norman, 2004) has defined corporate governance as the system that ensures that the agent action is directed towards achieving the corporate objectives.

From the broader perspective, corporate governance ensures that the company is operating efficiently and it is using society's resources properly (Allen, 2005). The Organisation for Economic Co-operation and Development, (2001) defines:

Corporate governance ... [as referring] to the private and public institutions, including laws, regulations and accepted business practices, which together govern the relationship, in a market economy, between corporate managers and entrepreneurs (corporate insiders) on the one hand, and those who invest resources in corporations, on the other (2001, p.130).

In a recent view, Solomon (2010), defines corporate governance as both the internal and external systems which ensure that firms discharge their accountability to all their stakeholders.

4.3.1 Theories of Corporate Governance

The theory describes what is possible and what is not possible in particular contexts (Chambers, 1996). Several theories have been developed in relation to corporate governance. The objective of this section is to achieve a comprehensive understanding of corporate governance and identify the theories relevant to this study. The most popular theories of corporate governance are discussed below: agency; stewardship; stakeholder; resource dependency; institutional; social contract; and legitimacy.

4.3.1.1 Agency theory

The core of agency theory is the separation of ownership and control, that is, shareholders through their board of directors delegate the authority and responsibility to the top executive (CEO) to manage their organisation (which is also the crux of the Anglo-American model) (Berle & Means, 1932). (Bagley, 2015) states that:

In an agency relationship, one person – the agent – acts for or represents another person – the principal. The principal delegates a portion of his or her power to the agent, and the agent then manages the assigned task and exercises the discretion given to him or her by the principals; the agency relationship is created by an express or implied contract or by law. (p.44)

Generally, the agency relationship will benefit both the parties; agents as well as the principal; if the principals can create appropriate incentives to motivate the agents to work in their best interest. However, they will also have to incur additional costs for monitoring the activities of their agents (Fama, 1980; Michael C. Jensen & William H Meckling, 1976).

Brennan (1995) notes that the agency problem has emerged due to a lack of perfect incentives for agents. In addition, the objectives of management may be different from those of the shareholders as there are many shareholders in a publicly listed company and they are widely scattered; it might be challenging for them to influence management in their way. This may provide

an opportunity for the management (agent) to exploit and fulfil their own interest rather than that of their shareholders. Adam Smith raised a question as far back as 1776 on the vigilance of managers in a publicly listed company. He stated that the separation of ownership and control had created the poor incentives for managers to operate their corporation efficiently.

The directors of such [joint-stock] companies, however, being the managers rather of the other people's money than of their own, it cannot well be expected, that they should watch over it with the same anxious vigilance with which the partners in a private co-partner frequently watch over their own. Like the stewards of a rich man, they are apt to consider attention to small matters, not for their master's honour and very easily give themselves a dispensation from having it. Negligence and profusion, therefore, must always prevail, more or less, in the management of the affairs of such a company. (Smith, 1776, pp. 264,265)

Thus, agency theory assumes that the separation of ownership and control in listed companies provides the incentives for the agents (managers) to act in a self-interested and opportunist manner, which in turn induces principals (shareholders) to invest in formal governance mechanisms to alleviate the agency problem through minimization of agency costs (Michael C. Jensen & William H Meckling, 1976).

The agency relationship formed after the delegation of authority to the agents (managers) from the principals (shareholders) might result in an agency problem because firstly, the owner (principal) and the manager (agent) have different interests; secondly, the principal cannot properly monitor the actions of the agents without incurring costs; and thirdly, the principal cannot perfectly monitor and acquire the information available to or possessed by the agent without incurring costs (Denis, 2001). The agency problem derives from two limitations, one cognitive and the other behavioural, on the human ability to make allocative decisions. The cognitive limitation is “hidden information” (also known as “adverse selection” or “bounded rationality”) that prevents investors from knowing a priori whether the managers whom they have employed as their agents are good or bad resource allocators. The behavioural limitation is “hidden action” (also known as “moral hazard” or “opportunism”) that reflects the proclivity, inherent in an individualistic society, of managers as agents to use their positions as resource allocators to pursue their own self-interest and not necessarily the interests of the firm’s principals (Lazonick, 2008).

To minimise the effect of an agency problem in a company, the shareholders of a company should bear the costs, known as agency costs. The cost regarding this conflict was identified by Stephen Ross (1973) and was further explored by many economists and research scholars. The agency costs mainly occur between the principal and principal (PP) and between principal and agent (PA). The cost associated due to the PP relationship is relatively more recent

but there are many research studies to be found on the PA aspects of agency costs.

4.3.1.1.1 Principal – Agent Problem

The principal and agent problems arise when the desires and the goals of the principals and agents conflict, and the agents pursue their own goals instead of those of the principal. It is the result of conflicting interests among managers and owners, and asymmetric information (Chrisman, Chua, & Litz, 2004). In many cases, an agent will typically possess more or better information than the principal about the situation or the consequences of actions (Ross, 1973). The major problems that may arise due to this are moral hazard, information asymmetry, and adverse selection.

4.3.1.1.2 Principle- Principle Problem

The principal and principal problem arises in a company where the few large shareholders influence and exercise substantial control over the firm's resources at the expense of the minority of shareholders. The principal–principal problem refers to the appropriation of value from minority shareholders by majority shareholders, often by influencing board-level decisions such as asset sales and purchases (Su, Xu, & Phan, 2008).

However, the level of agency cost depends on several other factors, such as the law of the land, human ingenuity in implementing the contracts, corporate and securities laws, historical dealings for ill behaviours and so on.

4.3.1.2 Stewardship theory

In contrast to agency theory, stewardship theory states that the managers or agents are good stewards and they always act in the best interest of their shareholders. The roots of this theory are based in psychology and sociology (L. Donaldson & J. H. Davis, 1991). Stewards always try to work for the betterment of their shareholders and the organisation, and they will not depart from this even when their interest is conflicting with the principal's interests (Davis, Schoorman, & Donaldson, 1997). It is believed that stewards' utilities are maximised only when the shareholders' wealth is maximised, so stewards always try to serve in the best possible way. Therefore, it is believed that stewards help to increase a firm's performance and maintain good governance in the organisation (Smallman, 2004).

The supporter of this theory argues that managers are trustworthy and loyal not opportunistic and they act in the best interest of the company. They not only work for the financial benefits but also for the recognition, respect and their satisfaction which they can receive only if they maximise the organisation's wealth (Herzberg, 1966; McClelland, 1961). The theory further argues that there must be only one person as CEO and chairman, and the power to formulate strategy should be in the hands of a single person. The focus of this theory is on structure and facilities that empower managers rather than monitoring and control (Davis et al., 1997).

4.3.1.3 Stakeholder theory

Stakeholder theory has been continuously developed. Freeman (1984) was one of the first theorists to give a view on stakeholder theory. He argued that

all the firms should be accountable to their broad stakeholders (Freeman, 1984; Solomon & Solomon, 2004), and defines stakeholder as "any group or individual who can affect or is affected by the achievement of corporation's purpose" (p. 37). Solomon (2010) has minutely pinpointed the stakeholders as shareholders, employees, customers, suppliers, creditors, communities, government and public.

Stakeholder theory has three branches: descriptive, instrumental and normative. The descriptive branch is concerned with how the manager will deal with their stakeholders' interest, what managers and board members think, the nature of the company and how companies are actually managed. The instrumental branch evaluates the consequences of including the stakeholders' management perspective with that of traditional corporate goals of profitability and growth. The third normative branch views and addresses the objectives of the company, its philosophical guidelines and its link with the activities of the companies (Donaldson & Preston, 1995). According to Ansoff H. Igor and McDonnell (1965), the organisation should achieve its objective by balancing the conflicting interests of its various stakeholders.

Stakeholder theory is an extension of agency theory whose main aim is to protect shareholders' wealth and interest, while stakeholder theory tries to protect the interest of its different stakeholders (Clarke, 2004; Letza, Sun, & Kirkbride, 2004). Thus, this theory states that the organisation should be managed for the benefit of all the parties who have a direct or indirect stake in the company. The narrow focus of shareholders has widened to a broad group

of stakeholders whose interests are linked to environmental, social and ethical considerations (Donaldson & Preston, 1995; Freeman, 1984; Freeman, Wicks, & Parmar, 2004). However, stakeholder theory has not provided any guidance for the board about its legitimate stakeholders (Donaldson & Preston, 1995).

The stakeholder model states that corporate governance is concerned with how effectively organisational governance systems are encouraging for the long-term commitment towards an organisation's various stakeholders (Maher & Anderson, 2000). Hence, stakeholder theory is an important theory of corporate governance, and it clearly influences the functional mechanism around stakeholders, which affects firm performance (Abu-Tapanjeh, 2009; Clarkson, 1995).

Therefore, stakeholder theory enables the nurturing of a good relationship with the broad range of its stakeholders; underpins corporate efficiency; and emphasises shareholders' wealth maximisation objectives.

4.3.1.4 Resource Dependency Theory

Resource dependency theory states that the firm's survival depends upon its ability to gain control over its resources (Salancik & Pfeffer, 1978). However, resources are limited and firms need to compete with each other for them (Hessels & Terjesen, 2010). To remedy this situation they need to establish either coalitions or contacts (Van Witteloostuijn & Boone, 2006). These coalitions may be internal (e.g. board, employees and shareholders) or external (e.g. suppliers, government) and each group will have the means to use and control those resources for the firm's survival (Sheppard, 1995).

According to resource dependence theory, the board of directors bring resources like information, skills, and their links to various external key constituents, i.e. buyers, suppliers, social groups, media, government, and various stakeholders, that will reduce uncertainty (Gales & Kesner, 1994). Therefore, linking the firm's external factors will help to reduce its transaction costs (Hillman, Cannella, and Paetzold (2000). Thus, this theory suggests appointing a variety of board directors with broadening external linkages to resources and information to improve the firm's performance (Dalton, Daily, Johnson, & Ellstrand, 1999; Provan, Beyer, & Kruytbosch, 1980).

4.3.1.5 Institutional theory

Institutional theory has its roots in sociology, political science and economics (Aguilera & Jackson, 2010). Ahrens et al. (2011) have categorised his theory into two major branches. The first is political science and economics oriented institutional theory; from this perspective, the institution is defined as “the humanly devised constraints that structure political, economic and social interaction. They consist of informal constraints (sanctions, taboos, customs, traditions, and codes of conduct), and formal rules (constitutions, laws, property rights)” (North, 2005). The second, sociology and organisational theory branch of institutional theory emphasize how the organisational and individual behaviour is guided less by formal rules and regulations and more by social procedures.

Regarding the role of institutional theory in corporate governance, many researchers have found that applying the corporate governance mechanism varies from one country to another and is mainly influenced by its institutional

environments such as legal rules and regulations, financial system, economic system, culture and corporate ownership pattern (Aguilera & Jackson, 2003; Ahrens et al., 2011; Davies & Schlitzer, 2008; Zattoni & Cuomo, 2008).

4.3.1.6 Social Contract Theory

Similar to stakeholder theory, social contract theory views the responsibility of an organisation from a broad perspective. Social contract theory views society as the sequence of social contracts between the society and its members (Gray, Owen, & Adams, 1996). The integrated social contract theory was first proposed by Donaldson and Dunfee (1999) as guidance for managers when making an ethical decision by way of reference to their communities, their expectations from the business, and their specific form of involvement. The notion of social contract theory is that, as the firm operates in a society, it uses all the resources of that society; so it is ultimately accountable to its society (Deegan, 2013).

4.3.1.7 Legitimacy theory

Like social contract theory, legitimacy theory is created out of the concept of a social contract between the organisation and the society in which it operates. Legitimacy is defined as “a generalised perception or assumption that the actions of an entity are desirable, proper, or appropriate with some socially constructed systems of norms, values, beliefs and definitions” (Suchman, 1995). In brief, legitimacy theory states that the organisation should not only consider the rights of its investors but also the rights of the public at large, or they may have several restrictions on the operations and the use of resources imposed on them (O’Donovan, 2002). Ramanathan (1976) argues that profit

maximisation is used as a measure to evaluate corporate performance but in legitimacy theory, profit is seen as a comprehensive measure of a firm's legitimacy. Corporate governance helps to identify the legitimacy gap between society and an organisation and tries to strike a balance between the organisational objectives and the firm's legal responsibility towards its society.

4.4 Corporate Governance model in Nepal

There are very few formal codes of Corporate Governance in Nepal. The central banks of Nepal have developed some codes of conduct for banks and financial institutions. Similarly, the accounting and auditing standards have also been developed with a financial sector reforms program (World Bank, 2005). The financial sector reforms project helped the development of the NRB Act – 2002, Bank and Financial Institutions Act – 2006, and the Companies Act – 2006 (Adhikary, Pant, & Dhungana, 2007).

Similarly, the Company Act 2006 and Securities Exchange Act have helped to protect the interests of general shareholders by making the company more accountable, responsible and transparent. Also, the Securities and Exchange Board of Nepal (SEBON) insurance boards have developed some rules, regulations, policies and procedures for good governance of organisations. The general model of corporate governance prevailing in Nepal is quite similar to the Anglo-Saxon model of corporate governance. The corporate governance model of Nepal is shown in Figure 3.1 below

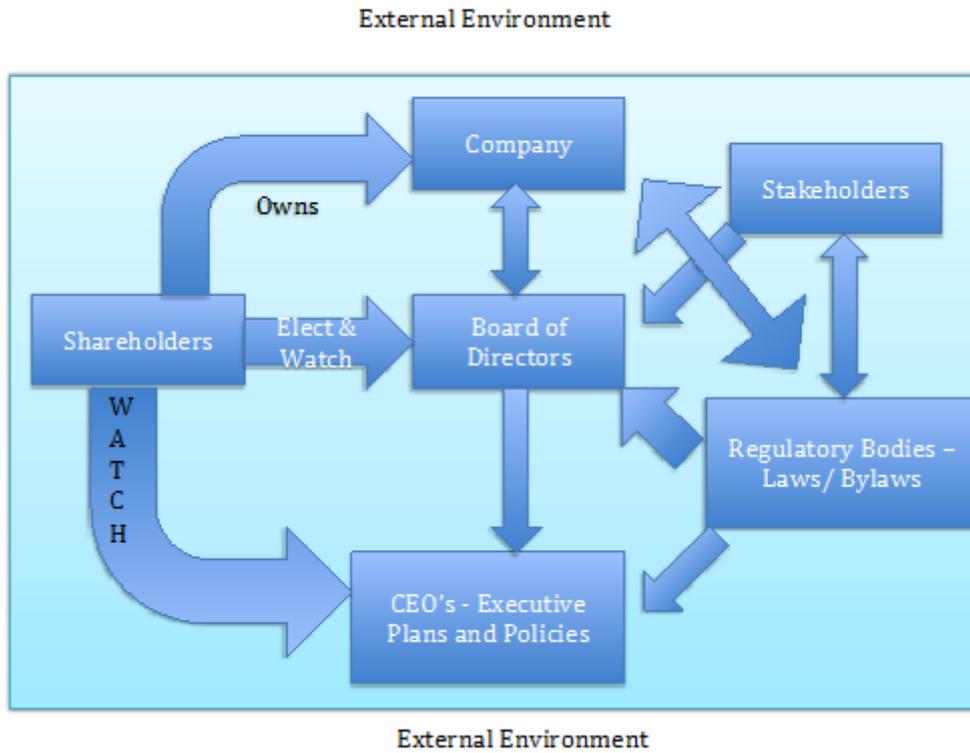


Figure 4.1 Nepal's corporate governance model

As shown in Figure 4.1, shareholders own the company. There are two broad categories of shareholders: promoter shareholders and public shareholders. From these shareholders, the board of directors of the company is elected to work as the watch dog and lead the company in a better direction. Then the board of directors appoints the CEO for the day-to-day management of the company. The management of the company is accountable and responsible for leading the company by following all the rules, regulations and guidelines.

4.5 Corporate Governance in Low-Income Countries (LIC)

As discussed earlier, corporate governance has gained prominence all around the globe for more than two decades. In developed nations, the study on corporate governance started with questionable business practices and

several corporate scandals. There has been extensive research on corporate governance and its impact on the performance of both the financial and non-financial sectors. Even in low-income countries, there is no shortage of frequent scandals and questionable business practices. So, slowly and gradually the research on these markets has gained the attention of the researchers (Reed, 2002).

Willingly or unwillingly, developing economies started to impose good governance practices due to the pressures from international bodies such as IMF and world banks. Loans to developing countries like Brazil and Mexico have frequently resulted in a debt crisis, and as a condition for renegotiating the loan, the international bodies designed structural adjustment programs which require changes in governance (Biersteker, 1990). However, even now, in some low-income countries like Nigeria, there are some constraints for implementing good governance, due to lack of proper shareholders rights, weak regulatory framework, weak monitoring, lack of transparency and disclosure, lack of enforcement and ineffective boards of directors (Okpara, 2011).

Now the question might arise whether good governance will help to increase firm performance in developing nations. Numerous studies have been conducted on this topic. In the study by Kyereboah-Coleman (2007) in Africa it was found that there is a positive influence of corporate governance on firm performance. Zheka (2006) studied this relationship in more than 5000 firms and reported there is strong evidence to support this argument. The

researcher further mentioned that that one point increase in overall corporate governance index would result in around a half per cent increase in a firm's performance

Javid and Iqbal (2008) examined the 50 non-financial firms listed in the Karachi stock market and found that there is a statistically significant positive relationship between the quality of firm, the level of corporate governance, and firm performance.

In the study conducted to compare the impact of corporate governance between developed countries and developing countries, Shah (2009) collected the data for 1035 listed companies in USA (developed economy) and 120 listed companies in Pakistan (developing economy) for the period 2002 to 2007. His study finds that there is a positive relationship between corporate governance score and dividend pay-out, and corporate governance score and firm performance, in both the countries. But there is a negative relationship between leverage and CGI in Pakistan, while in the USA it shows a positive relationship.

In the same vein, a study was conducted to investigate the relationship between corporate governance and firm performance of twenty firms listed on the Karachi Stock Exchange by using Tobin's Q to measure the performance of corporate governance and return on assets (ROA) and return on equity (ROE), to measure the firms' performance from 2005-2009. Through multiple regression models, it was found that leverage and growth have a positive relationship with Tobin's Q, which confirms a significant effect in measuring

the performance of the firm. It means that firms having good corporate governance measures perform well compared to the firms that have no or fewer corporate governance practices (Khatab, Masood, Zaman, Saleem, & Saeed, 2011).

Chugh, Meador, and Kumar (2011) investigated the relationship between corporate governance and firm performance in India; the research found that an excessively autonomous board (high proportion of independent directors) lowers the performance.

The research by Cunat, Gine, & Guadalupe (2012) to identify the effect of corporate governance on shareholders' value found that by adopting one governance proposal, shareholder value was increased by 2.8 per cent. The market reaction was larger in firms with more anti-takeover provisions, higher institutional ownership, and stronger investor activism for proposals sponsored by institutions.

Varshney, Kaul, and Vasal (2012) constructed a corporate governance index based on internal and external corporate governance mechanisms in India, and as a performance measure investigated its impact on the value-based performance measure Economic Value Added (EVA), traditional measures such as Return on Net worth, Return on Capital employed, and Tobin's Q to evaluate the linkage between corporate governance and firm performance. The study concluded that there is a positive linkage between the two, i.e., better-governed firms exhibit better financial performance.

However, a study conducted by Young (2003) researching the relationship between the corporate governance and firm performance found that there was no relationship between these two variables. Alhaji, Yusoff, and Alkali (2012) compared the influence of board characteristics and firm performance in Malaysia. For the study, three board characteristics were measured: the number of independent directors, board size, and leadership structure. The firm performance was considered in terms of return on equity (ROE) and earning per share (EPS). They used a sample of 86 companies from Trading services and Consumer products listed on Bursa Malaysia for the fiscal year 2011. The study found no relationship between the three board characteristics (independent non-executive, board size and leadership structure) and firm performance (ROE and EPS).

However, a study conducted to measure the impact of corporate governance on private and state banking sectors in Sri Lanka found there was a moderate impact of corporate governance on banks' performance (Ajanthan, Balaputhiran, & Nimalathashan, 2013). Their study focused on four aspects of corporate governance: board size (BS), board diversity (BD), outside directors percentage (OSDP), and board meeting frequency (BMF). They measured banking performance through return on equity (ROE) and return on assets (ROA).

Zabri, Ahmad, & Wah (2016) investigated the top 100 publically listed countries in Bursa Malaysia and their relationship between corporate governance practices and firm performance by using board size and board

independence as governance variables and return on assets (ROA) and return on equity (ROE) as performance variables, and found that there is a significant negative relationship with ROA and an insignificant relationship with ROE.

Overall, the empirical relationship between corporate governance and firm performance is mixed. Several studies found that corporate governance enhances firm performance (Ehikioya, 2009; Kota & Tomar, 2010; Kyereboah-Coleman, 2007; Locke & Duppati, 2014; Zheka, 2006). However, many researchers (Cheng, 2008; Chugh et al., 2011; Dey & Chauhan, 2009; Jackling & Johl, 2009; Ujunwa, 2012) have found a negative relationship between corporate governance and firm performance.

The research above makes it difficult to conclude the relationship between corporate governance and firm performance in low-income countries. The nature of general firms is quite different from that of banks. So, the following discussion explores whether the relationship is inclusive, even in banks, or whether there is some pre-stated relationship.

4.6 Corporate Governance of Banks

Before discussing empirical results on the relationship between corporate governance and banks performance, the following discussion identifies the major corporate governance differences between banks and other firms.

4.6.1 How corporate governance differs in banking sector

Banks and the financial institutions are very different from other industries, manufacturing for example, as they utilise other people's money. The banks

assure their depositors' specific return on their investments (Shleifer & Vishny, 1997). The governance of banks may be different from other non-financial firms for several reasons. First, the number of stakeholders is higher in banks than in other institutions. Secondly, the investors, depositors, as well as regulators, have a direct interest in the financial institution's performance because the health of the overall economy is directly correlated with their performance (Adams & Mehran, 2003). Banks stimulates economic growth by efficient allocation of funds that might even lower the cost of capital (Levine, 2004).

Banks also play a monitoring role for their borrowers, especially when there is an information asymmetry between the two parties i.e. borrowers and lenders (Diamond, 1984; Fama, 1985; Freixas & Rochet, 2008). Banks could perform monitoring cost at a lower price because banks delegated monitors (Diamond, 1984) and banks have information advantages (Fama, 1985).

Another reason for proper governance of banks is investors are less informed than bankers about the utilisation of their funds deposited in the banks (Caprio Jr & Levine, 2002). Furthermore, the loan quality of banks can be easily manipulated for a longer period of time, and the banks can easily adjust their risk of loan more quickly than other non-financial firms (Furfine, 2001).

Banks are liable to provide liquidity at a point of time for their depositors while they provide loans with longer maturities (Diamond & Dybvig, 1983). Also, the capital structure of the banks is different compared to other firms because generally, banks have little equity when compared to other firms. Around 90

per cent of a banks' funding is from debt, which is rare in other industries (Macey & O'hara, 2003).

In summary, the two different characteristics of banks, when compared to other organisations, require the regulators to develop a separate corporate governance mechanism for them. First, the information asymmetries are higher in banks than other non-financial firms (Furfine, 2001). For example, banks can more easily amend/hide the risk composition of assets and loans than a non-financial institution. Banks have high leverage which leads to increasing the possibility of agency problems as well. Morgan (2002) finds investors generally prefer to buy the bonds issued by non-financial institutions. Second, the banks are heavily regulated due to their importance in the economy. Also, the requirements for the economy to implement various international standards, formulated by BIS, World Bank and IMF, requires the involvement of governments in banks' governance process.

4.6.2 Empirical Research on the Corporate Governance of Banks

Especially since the global financial crisis, concern regarding good governance of banks has increased tremendously (United Nations, 2010).

Romano, Ferretti, and Rigolini (2012) analysed the interaction between corporate governance and the performance of Italian banks for the period 2006 to 2010 by using the fixed-effect model on a panel data set on the seven corporate governance variables: board size, board composition, existence of board committee, control and audit committee size and membership, board remuneration and women directorship. The research found the positive

influence of board composition on the profitability variable ROA and ROE. It was also found that board size did not affect performance, while a smaller audit committee showed better control over the firms, thus enhancing the bank's profitability. The research also shows that there is a significant positive relationship between women directorship on both ROA and ROE.

In the comparative study on the impact of corporate governance and the banks' performance in 30 foreign and local banks in Pakistan during 2001-2009, it was found that there was a significant positive impact of corporate governance variables on the performance of the overall banking sector in Pakistan. But there was no significant impact of corporate governance practices on the performance of foreign banks (Rehman & Mangla, 2012).

Pandya (2011) investigates the implications of the corporate governance structure on company performance in another Asian country, India, by taking board structure and CEO duality as the governance variable and ROA and ROE as the performance variable. Using the multiple regression analysis, it found there is no relationship between the corporate governance structure and firm performance in Indian banks. Similarly, Thuraisingam (2013) investigated the relationship between corporate governance and financial performance of financial institutions of Sri Lanka from 2008 to 2011 by using the simple linear regression model. The researcher concluded that there was no significant relationship between the corporate governance variables (board size, board composition and audit committee) and the firm performance variables (ROA and ROE).

A study was conducted to explore the relationship between the ownership structure and corporate governance and its effects on performance of firms in Kenya with reference to banks. It was found that there was no significant difference between the type of ownership and financial performance and between banks' ownership structures and corporate governance practices. Further results showed that there was a significant difference between corporate governance and financial performance of banks (Unyi, 2011).

However, Ajanthan et al. (2013) investigated the relationship between corporate governance and the banking performance of the private and public sector banks in Sri Lanka by focusing on four aspects of the corporate governance variables: board size, board diversity, percentage of outside directors, and board meeting frequency, while the banking performance was measured by return on assets and return on equity. The researcher used multiple regression methods and found that there was a negative significant relationship between all the corporate governance variables and ROA variables, except for board meeting frequency.

In another study conducted to identify the performance persistence of the agency cost and performance of banks in India, it was found that the agency cost of the banks did not decline during the period 2005 to 2013 (Acharya, Dupatti, & Locke, 2015).

This discussion clearly shows that there is no exact consensus on the relationship between the corporate governance and banks' performance.

Also, although there have been several types of research undertaken on the importance of corporate governance in developed countries, the corporate governance issues in developing economies which have just emerged from wars and/or various political and natural calamities are yet to be explored. This study fills the gap in the existing literature.

4.7 Conclusion

This chapter briefly describes the evolution of corporate governance as the start of the literature review on the corporate governance. The literature review has been presented in chronological order. A brief introduction of corporate governance is given, followed by the theories of corporate governance. For a clear understanding of the topic, the corporate governance practices in low-income countries were discussed rather than the corporate governance in the banks. And finally, a discussion of the research gap concludes the chapter. The following chapter will discuss the hypothesis and empirical model development.

Chapter Five

Hypotheses and Empirical Model Development

5.1 Introduction

In this chapter, an examination of the relationship between governance and performance of banks in Nepal is built upon the prior studies discussed in Chapter Three. Several hypotheses consistent with an underlying agency theory of governance are proposed and empirically tested.

Nepal, as a low-income country (LIC), faces many challenges as noted in Chapter Two. The long periods of political unrest involving Maoist insurgents, disestablishment of the monarchy and the 2011 earthquake contributed major shocks to the financial system. Prior research suggests that the impact of corporate governance on bank performance differs between countries due to the individual difference in economic, social and legal rules and regulations of the countries (Aslan & Kumar, 2014; Globerman, Peng, & Shapiro, 2011; Thrikawala, 2016). Not surprisingly, the institutional factors in Nepal are likely to play a significant role and will add to the limited research on corporate governance and banks' performance in developing countries.

Section 5.2 of this chapter discusses the hypotheses based on research questions and the theoretical and empirical links between corporate governance and banks' performance. Similarly, section 5.3 describes the conceptual framework. The sections 5.4, 5.5 and 5.6 provide a brief description

of independent, dependent and control variables respectively used in the study. Section 5.7 provides the conclusion of the chapter.

Agency theory emphasises the importance of governance as a central instrument to provide for longer-term sustainable achievement of stakeholder goals. These goals, while including financial performance, also incorporate outreach, development and social goals.

5.2 Hypotheses Development

Corporate governance plays a critical role in long-term survival of the firm (Stanwick & Stanwick, 2010). The well-developed financial institutions reflect the growth and prosperity of the nation while weak performances hinder the economic growth of a country (Khan & Abdelhak, 2001). The failure of banks leads to economic turmoil and destabilises the economic growth process. The consequence of these banking failures in the economy leads to a reduction in the credit flow in the country, which ultimately affects the efficiency and productivity of the business units (Chijoriga, 1997; Saunders & Wong, 2011). Banks and financial institutions require a well-developed governance mechanism to address the public's desire for banks to be safe, innovative and transparent, and increase market discipline and information production (Mehran & Mollineaux, 2012).

The board plays a significant role in formulating, monitoring and rectifying the critical decisions, ensuring various control mechanisms, and developing transparent and sustainable policy (Andrews, 1980; Fama & Jensen, 1983; Ghasemi & Ab Razak, 2016; Huse & Rindova, 2001). In connection with this,

the previous researchers have identified important variables that help to promote good corporate governance practices, like board size (Salim, Arjomandi, & Seufert, 2016), CFO (Javaid & Saboor, 2015), percentage of minority directors (Carter, Simkins, & Simpson, 2003), percentage of female directors (gender diversity)(Pathan & Faff, 2013) and percentage of outside directors (Yermack, 1996). These variables fit for the study of corporate governance and banks' performance. The previous researchers have provided evidence that there may be positive, negative or no relationship in relation to these variables. However, their relationships with the Nepali banks are yet to be investigated. Therefore, it is important to examine these board characteristics in terms of their impact on the performance of commercial banks in Nepal.

5.2.1 Board Size

Zahra and Stanton (1988) argued that board size is an essential instrument for effective control and good corporate governance. However, most firms, especially the banks, are required to maintain a board size as prescribed by the law, regulations and as per the requirements of the stock exchange. Even then, there is no clear consensus among researchers on the appropriate board size and its impact on a firm's performance. Agency theory suggests smaller board size minimises the agency cost by having effective control over the management (Jensen, 1993) and suggests that board size should not be more than eight members. Similarly, Lipton and Lorsch (1992) and Jensen (1993) have advised eight to nine members on the board. If there are more than nine

members, the board is less likely to criticise top management, and it is subject to CEO control. Further, if there is a large board, it becomes difficult to achieve cohesiveness, there are delays in decision making, and because of time limitations, a large board faces difficulties in members expressing their opinions (Sonnenfeld, 2002; Yermack, 1996).

Resource dependence theory predicts a positive relationship between board size and performance (Dalton et al., 1999). Likewise, Firstenberg and Malkiel (1994) argued that the large board provides diverse managerial experience, knowledge, diversity in gender, nationality, and has its own capabilities for stimulating various perspectives. Also, Anderson and Reeb (2003), Klein (2002), (Johnson, Daily, & Ellstrand, 1996); Monks and Minnow (1991), and Hillman et al. (2000) find that a larger board provides an increased pool of expertise, environmental linkages and greater freedom for optimal committee assignments and thus, improves the quality of monitoring.

The optimal board size is continuously debated, as researchers provide mixed results. Some researchers argue that the optimal board size is situational and it depends upon the nature of company and market (Boone, Field, Karpoff, & Raheja, 2007; Coles, Daniel, & Naveen, 2008; Linck, Netter, & Yang, 2008). Empirical studies on board size and performance have also provided inconclusive results. Some researchers (e.g. (Andres & Vallelado, 2008; Ghasemi & Ab Razak, 2016; Kiel & Nicholson, 2003; Mohamed, 2009) have found a positive relationship, while others (Dalton & Dalton, 2005; Mak & Kusnadi, 2005) have estimated a negative relationship. In a different view, an

insignificant relationship between these two variables is found by Reddy, Locke, & Scrimgeour (2010); Wintoki, Linck, & Netter (2012); and Schultz, Tan, & Walsh (2010).

In the Asian market, Jackling and Johl (2009) studied the impact of board size on top Indian companies and find that the larger board size provides greater exposure to external resources and improves firm performance. Similarly, in a Nepalese context, Poudel and Hovey (2013) have found a positive relationship between the board size and efficiency in Nepali commercial banks. Some researchers (Chatterjee, 2012; Mak & Kusnadi, 2005; Wellalage, Locke, & Scrimgeour, 2012) have found an inverse relationship between board size and firm value. In summary, from both theoretical and empirical research, the relationship between board size and a firm's performance is inconclusive. Given these conflicted views, a neutral null hypothesis is proposed:

H1: There is no relationship between board size and bank performance in Nepal.

5.2.2 CFO

The CFO plays a vital role in developing sustainable financial policy, safeguarding the long-term existence of a firm, formulating various credit policies, risk-mitigating policies and other financial policies of the banks. However, there have been numerous studies on the influence of executive characteristics on firm performance (Barker III & Mueller, 2002; Bertrand & Schoar, 2003), but very few research studies on the relationship between the CFO and a firm's performance. In the study on S&P 500 firms for the period

2001 to 2011, Girigori (2013) finds a significant positive relationship with the firm's performance. Chava and Purnanandam (2010) emphasise that CFOs play a significant role in corporate risk-taking and they directly influence a firm's financial policies. The influence of CFO can be compared to CEO when it comes to the financing decisions of the firm (Frank & Goyal, 2007).

The study by the Javaid and Saboor (2015) of 58 manufacturing firms in Pakistan finds the existence of CFO means firms can perform better and they can have a sound implementation of corporate governance practices. Similarly, in the study investigating whether a family firm hires an external CFO, it was revealed that a non-family CFO could reduce the risk by adding valuable resources to the firm (Lutz & Schraml, 2011). A study conducted in Italian family firms Gordini (Gordini, 2016) found that a non-family CFO has a positive effect on a firm's performance. Di Giuli and Caselli (2008) also report similar findings from the sample of 708 small and medium Italian firms from 2002 to 2004. Based on these empirical studies on CFO and firm's performance, this study proposes the following hypothesis:

H2: There is a positive relationship between the existence of a CFO and bank performance in Nepal.

5.2.3 Percentage of minority of directors

Agency theory states the nature of agency conflict varies with and without large shareholders. When there is concentrated ownership then the agency conflict is more between the controlling shareholders and minority shareholders, in other words, it shifts from principal-agent to principal-

principal conflicts (Bebchuk & Weisbach, 2010; Filatotchev, Jackson, & Nakajima, 2013; Young, Peng, Ahlstrom, Bruton, & Jiang, 2008). In his research Gugler, (2001) finds that the block holders take private benefits at the cost of a minority of shareholders. In an underdeveloped market where government regulations are not properly developed, the block holders' ownership is even more important because they can be actively involved in the monitoring and management of the firm (Filatotchev et al., 2013; Heugens, Essen, & Oosterhout, 2009).

While digging into corporate governance literature, the major benefits of block holders' ownership are direct monitoring of their agents, reduction of free riding by minority shareholders (Michael C. Jensen & William H Meckling, 1976; Shleifer & Vishny, 1997), while the costs for block holders' ownership include lower liquidity, increase in principal-principal conflict and lower management initiatives (Chordia, Subrahmanyam, & Anshuman, 2001; Shleifer & Vishny, 1986; Simon & La Porta, 2000). The empirical research on the existence of minority directors could not find any clear evidence to support the benefits and costs associated (Bohren & Odegaard, 2003; Pham, Suchard, & Zein, 2011; Schultz et al., 2010; Xu & Wang, 1999) with financial performance. Similarly, Zahra and Stanton (1988) reported no statistically significant relationship between the percentage of a minority of directors and a firm's performance, while others have found a negative relationship (Haniffa & Hudaib, 2006; Hu, Tam, & Tan, 2010).

As block holder is a common feature of companies in Nepal, this research assumes the existence of minority directors has a negative effect on a bank's financial performance.

H3: There is a negative relationship between the percentage of minority directors and bank performance in Nepal.

5.2.4 Percentage of outside directors

For good governance, firms must have a mix of inside and outside directors on their boards. Outside directors can independently evaluate managerial performance, decide their remuneration and replace them if necessary (Fama & Jensen, 1983; Morin & Jarrell, 2000; Weisbach, 1988; Zahra & Pearce, 1989). Their presence on the board improves board vigilance and controls managers' self-interest and opportunism (Cadbury, 1992; Rhoades, Rechner, & Sundaramurthy, 2000) as inside directors may be less effective in monitoring the CEO (Daily & Dalton, 1994). In parallel, (Baysinger & Hoskisson, 1990) find that inside directors are loyal to the CEO, and they consider CEO evaluation as being a sensitive issue. Similarly, scholars (Mizruchi, 1983; Zahra & Pearce, 1989) argue that an effective board consists of a higher proportion of outside directors. In an early study by Baysinger and Butler (1985) to establish the relationship between the proportion of independent directors and return on equity finds that boards with more outsiders outperformed other firms.

In contrast, other scholars (Baysinger, Kosnik, & Turk, 1991; Boeker & Goodstein, 1991; Byrd & Hickman, 1992; Gales & Kesner, 1994; Mace, 1971) argue that more outside directors from diverse backgrounds politicise the

board process which in turn weakens effective leadership(Adams & Ferreira, 2009); increases team conflict and reduces the firm's economic flexibility (Chaganti, Mahajan, & Sharma, 1985). Similarly, Agrawal & Knoeber (1996) find a significant negative relationship between outside directors on the board and firm performance. Hermalin and Weisbach (1991) compared the percentage of outsiders on boards with the performance variables using Tobins' Q and found no relationship between them. Likewise, Bhagat and Black (2000) also find no relationship between long-term market returns and board independence. In the research by Ponnu and Karthigeyan (2010), there is no benefit from having outside directors on the boards of listed companies.

On the other hand, research by Kiel and Nicholson (2003) and Chatterjee (2011) reported no evidence for a positive relationship between the outside members and the firm's performance.

An early study by Baysinger and Butler (1985) tests the relationship between the percentage of independent directors and a relative measure of return on equity. They find that boards with more outsiders outperformed other firms.

Despite these contrasting views, it is accepted that outside directors bring various skills, experiences and networking, enhance the organisational problem-solving techniques and monitor effectively (Milliken & Martins, 1996; Mizruchi, 1983; Pfeffer & Salancik, 1989). Complementing it, resource dependence theory also suggests that the board represented by outside directors enhances the flow of information, reduces uncertainty, and secures

firms' resources (Pfeffer & Salancik, 1989). In line with this empirical research and agency theory, the proposed hypothesis for the study is:

H4: There is a positive relationship between the percentage of outside directors and bank performance in Nepal.

5.2.5 Percentage of female directors

In recent years, gender diversity in management and on boards has become a subject of empirical studies, and it is also an important indicator for good governance (Erhardt, Werbel, & Shrader, 2003; Smith, Smith, & Verner, 2006). In Norway, since the end of 2005, the law has required boards to have 40 per cent female directors, and in Spain, they have had to maintain this percentage since the beginning of 2015 (Adams & Ferreira, 2009; Rose, 2007). Similarly, sixteen countries now require quotas to increase women's representation on boards, and many more have voluntary quotas in corporate governance codes (Rhode & Packel, 2014). Thus, this reform also indicates that female directors provide new insights and perspectives that help to enhance firm performance. In a similar vein, Brennan and McCafferty (1997) have concluded that female directors can increase firm value for two reasons: women are not part of the old-boys network, which allows them to be more independent; and they have better understanding of consumer behaviour, their needs and the opportunities to meet those needs. They can enrich boardroom dynamics with different values and perspectives (Ruigrok, Peck, & Keller, 2006). Adams and Ferreira (2009) confirm this by emphasising that more women on the board has a direct relationship with the firing of poorly performing CEOs. Recent

evidence also suggests that gender diversity in the top management and board has a positive effect on financial performance (Carter, D'Souza, Simkins, & Simpson, 2010; Garcia-Meca, Garcia-Sanchez, & Martinez-Ferrero, 2015; Pathan & Faff, 2013; Wellalage & Locke, 2013). In support, more gender diversity on boards acts as a “substitute mechanism for corporate governance that would be otherwise weak” (Gul, Srinidhi, & Ng, 2011) and leads to improving the firm's performance.

Board diversity can also promote more effective global relationships and increase board independence because people of different gender, ethnicity or cultural backgrounds might ask questions that would not come from directors with more traditional backgrounds (Arfken, Bellar, and Helms (2004).

But scholars like Hillman and Dalziel (2003); Terjesen, Sealy, & Singh (2009), and D'Aveni and MacMillan (1990) argue that it is not the board diversity that impacts performance but the depth and breadth of knowledge, resources, experience, linkages and prestige of the board of directors. Rose (2007) observed Danish listed companies and found no significant relationship of gender diversity with firm performance. Their findings were in line, even in the cross-country analysis, with Denmark, Norway and Sweden (Carter et al., 2010; Randøy, Thomsen, & Oxelheim, 2006).

Critics, however, contended that the existence of female directors on a board has a negative relationship on firm performance. In the study of US firms, Adams & Ferreira(2009) have found a negative relationship between the

proportion of female directors and Tobin's Q. Similarly, in the study by (hern & Dittmar (2012), there was a negative association between female directors and firm performance.

Thus, it is difficult to establish the relationship between female board representation and firms' performance. Agency theory and resource dependence theory provide some insight and predict the possibility that board gender diversity affects firm outcomes but the nature of the relationship is unclear (Carter et al., 2010; Erhardt et al., 2003). Based on these views, it is important to further explore the relationship as it does not suggest a clear outcome. This study is based on the Nepali banks' governance contexts. On the basis of these arguments, the hypothesis for this study is:

H5: There is no relationship between the percentage of female directors and bank performance in Nepal.

5.3 Conceptual Framework

This section provides a conceptual framework for this study based on the theoretical and empirical research on corporate governance and banks' performance. On the left-hand side of Figure 5.1, there is the list of corporate structure governance variables suggested from the prior studies, corporate governance principles and guidelines: board size, the existence of CFO, female director, outside director and minority director. These corporate governance variables are linked to banks' financial performance variables presented on the right-hand side of the figure. The performance variables of this study are return on assets, non-performing loan to total loan, loan to deposit, deposit to

total assets, operating expenses to interest income, and operating expenses to total loan. The relationship between corporate governance and bank performance may be affected by several other variables as well. Therefore, as suggested by the extant literature, various control factors are used: firm age, number of branches, gross domestic product, real interest rate, bond rate, interbank settling rate, inflation, public sector bank and joint venture bank.

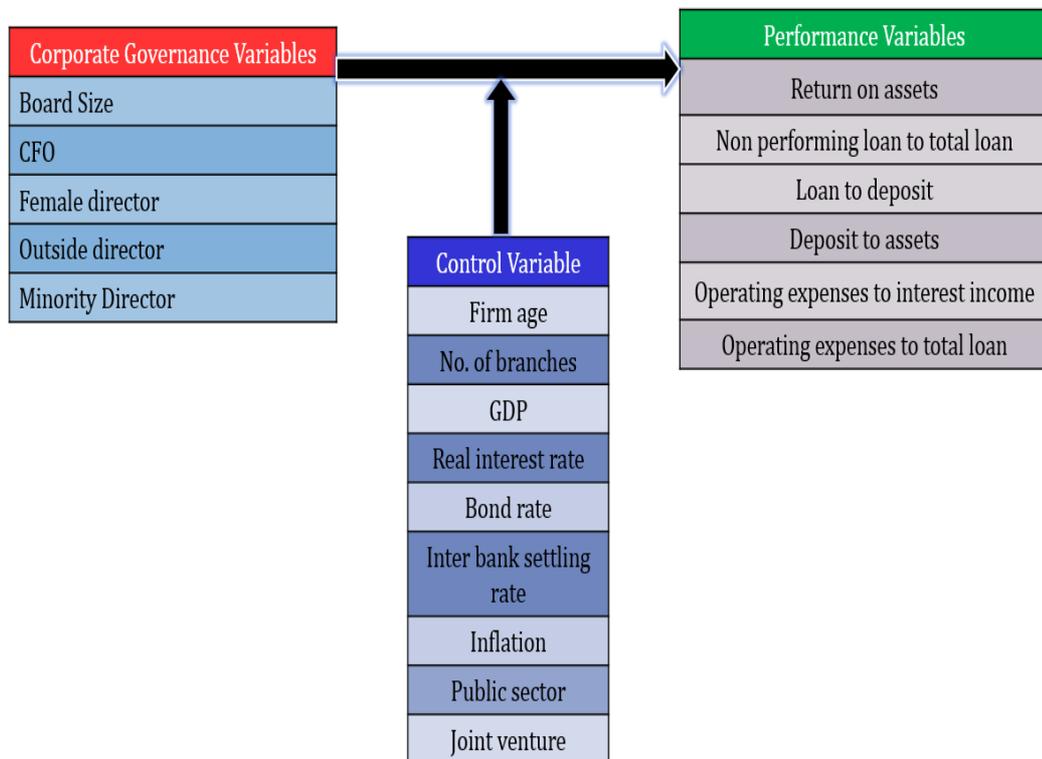


Figure 5-1: Conceptual framework

5.4 Data Sources

This study comprises an unbalanced panel dataset of all (30) commercial banks of Nepal for a period of 10 years, 2003 to 2012. The data for the study related to banks' performance and governance variables were hand-picked from the banks' annual reports. The interest rate, interbank settling rate and

bond rates are collected from the publications of central banks and the data for the macroeconomic variables were taken from the World Bank database.

Data Treatment

There were 27 missing observations. The time-series is relatively short covering 10 years and it is preferable to estimate missing observations rather than delete. Various approaches were proposed in the literature, among them are likewise deletion, pairwise deletion, extrapolation, hot deck imputation², last observation carried forward, multiple imputation and mean substitution (Howell, 2008). Among the various methods, last observation carried forward method was used to fill the missing data. As a robustness check, imputed value was checked with a three-year moving average and there was no significant difference in values.

This is not surprising given many of the missing observations related to governance variables. As directors are appointed for four year terms, which are often renewed, there is little variability in these data. Similarly, where banks were merged, the continuing banks are taken into the study and for those financial institutions that have been upgraded from B and C categories to A category (commercial banks), the data have been taken from the date they have received approval as commercial banks.

² Hot deck imputation is a method for handling missing data where each missing value is substituted with an observed response from a similar unit.

5.5 Dependent Variables

Most of the corporate governance literature has incorporated profitability, deposit and assets utilisation variables, and market price in the study as the performance variables. Following the empirical measures, this research has also included the common set of variables in this study. They are Return on Assets (ROA); Non-Performing Loan to Total Loan (NPL/TL); Loan to Deposit (LTD); Deposit to Total Assets (DTA); Operating Expenses to Interest Income (OEII); and Operating Expenses to Total Loan (OETL). Although Tobin's Q is commonly used as a performance measure in corporate governance literature, this research could not incorporate it because not all the banks (the government banks) are listed on the Nepal Stock Exchange. A summary of various financial performance variables used in the study is given below.

5.5.1 Return on Assets (ROA):

In prior studies of financial performance of banks several metrics have been applied, including Tobin's Q, ROE and ROA, which are the most common. In the absence of robust data for calculating Tobin's Q this was not a realistic option. The choice of ROA over ROE was based on a concern about the central bank setting the banks' liability to assets ratio as a monetary tool. The ROA was thought to be a better measure of the banks' performance in each time period, giving an idea of how efficient existing management is in using its assets to generate its current earnings. This ratio measures how efficiently the company can manage its assets to generate the profit during the year. It tells the operating efficiency of the business. The companies that have higher ROA

are considered to be utilising their assets properly and can generate higher earnings for their shareholders; while the companies that have lower ROA are judged to be poorly using their assets or they are generating less income when compared to their investment.

5.5.2 Non-Performing Loan to Total Loan (NPL/TL):

NPL/TL is another measure to evaluate the banks' performance. This ratio is used to determine the quality of a bank's outstanding loans. Non-performing loans refer to overdue loans with the less probability of repayment (Somoye, 2010). It refers to the risky assets, which are not generating any income. A high level of NPL/TL indicates that a bank's management is not efficient in credit risk management and creates larger losses for the bank when it writes off a loan. Increasing NPL/TL of banks creates higher probability of default risk.

5.5.3 Loan to Deposit (LTD):

Loan to deposit ratio is taken as the proxy for the liquidity ratio. This ratio is used to show the long-term solvency of the bank. Deposits provide liquidity to the banks, which can be utilised for investment in loans, treasury bills, mutual funds and stock markets. During a recession period, the loan to deposit ratio goes down; banks have more deposits, which creates an intense pressure on them to reduce interest rates which leads to a decrease in profitability.

5.5.4 Deposit to Assets (DTA)

This ratio indicates the leverage, as the deposits are the main sources for banks' funding. This ratio is used to evaluate the influence of a bank's liability upon

its profitability and how well it has used its liabilities. This ratio is calculated by dividing the total deposit by the bank's total assets. Agency theory (Michael C. Jensen & William H Meckling, 1976) suggests that a higher level of this ratio suggests the deposit holders need to monitor the CEO.

5.5.5 Operating Expenses to Interest Income (OEII)

Operating expenses to interest income indicates the bank's efficiency (Sinkey, 1975). A bank has several other operating expenses apart from its liability to pay interest to its deposit holders. This ratio provides information between the bank's expenses and earning capacity and whether or not the bank has optimised its potential. The management of the company must try to minimise this ratio.

5.5.6 Operating Expenses to Total Loan (OETL)

OETL ratio is used to analyse the bank's efficiency. Banks with a good reputation can control their operating costs and are efficient at evaluating their loans. As the business matures, this ratio will fall because of the experience, economies of scale, negotiating power and ability to find better sources of funds (Miller, 2013). This ratio also helps to predict the future profitability of a bank.

5.6 Independent Variables

The independent variables used in this study are taken from the theoretical perspective and from empirical researchers who have identified the governance variables which have an influence on a bank's performance. Most

of the variables taken have either positive, negative or no relationship with the bank's performance. Several variables have a positive relationship in one market while negative in another or vice versa. The variables taken into this study are (i) board size; (ii) CFO; (iii) female director; (iv) outside director; and (v) minority director. The brief description of these variables is given.

5.6.1 Board Size

Board size is one of the corporate governance variables most used in the corporate governance literature. It refers to the total number of directors on the board. Agency theory states that a smaller board size is more effective for good governance and may increase firm performance (Jensen, 1993; Yermack, 1996). In contrast, resource dependence theory suggests that larger board size will positively contribute to firm performance (Dalton et al., 1999). Prior empirical research has not shown any clear consensus on the relationship between board size and bank performance. In the context of Nepali banks, as per the Bank and Financial Institution Act, 2006, all the banks should have a board size between five and the maximum of nine members. This study explores the relationship in the Nepal market.

5.6.2 CFO

To establish whether the existence of a CFO in banks influences a firm's performance, a proxy for CFO is used; a binary variable "1" is allocated if there is a chief finance officer in the bank, otherwise "0" is allocated. The rationale for using this variable is anchored in resource dependency theory. Resource dependency theory suggests that the skilled resources in the organisation

affect the behaviour of the organisation (Salancik & Pfeffer, 1978). This suggests that the existence of a chief finance officer provides a different perspective on corporate investment, financing and dividend decisions, which positively influences the firm's performance and reduces the possibility of a bank's failure.

5.6.3 Female Directors

This study has used the percentage of female directors as the proxy for board diversity. Both agency theory (Michael C. Jensen & William H Meckling, 1976) and resource dependence theory (Pfeffer, 1973) postulate that female directors have a positive influence on firms' performance (Carter et al., 2010). Principally, agency theory suggests boards with at least one female director are less likely to rubber stamp CEO decisions (Adams & Ferreira, 2009). Following the studies by Dezsö and Ross (2012) and Liu, Wei, and Xie (2014), this research has used female director, measured by number of female directors divided by the total number of board members as board gender diversity. Several empirical research studies have used this variable; however, the percentage of female directors on a board and their influence in emerging markets is still unclear.

5.6.4 Outside Directors

Outside directors refers to the board of directors who are from outside the organisation and are independent from management (Ajinkya, Bhojraj, & Sengupta, 2005). Outside directors have a direct relationship with the quality of decisions as they help in effective monitoring of the organisation's decisions

(Bhagat & Jefferis, 2005; Hartarska, 2005). Generally, outside directors are used as a proxy for board independence. There is a large proportion of outside directors in banks when compared to other organisations (Adams & Mehran, 2003) although previous studies have found positive and negative relationships between governance and performance. Following Chancharat, Krishnamurti, & Tian (2012), and Weisbach (1988), the outside director is calculated by dividing the number of outside directors into the total number of board members. In agency theory, outside directors play an important monitoring role as they are independent from the organisation (Fama, 1980).

5.6.5 Minority Directors

The existence of minority of directors has attracted several research interest. Normally the conflicts of interest between the block holders and minority directors can be found. This is also stated in agency theory. Therefore, the existence of minority directors helps to control for the principal–principal agency conflicts. Past research has found both positive and negative influence by minority directors in various markets (Thomsen, Pedersen, & Kvist, 2006). In this research, the percentage of minority directors is calculated by dividing the number of minority directors into the total number of members on the board of directors.

5.7 Control Variables

Several factors beyond the corporate governance variables affect a bank's performance. With the objective to control the potential bias, this research has controlled for the unobservable firm-specific characteristics (including age of

firm, number of branches, public sector, joint venture), and macro-economic variables (gross domestic product, real interest rate, bond rate and interbank settling rate).

5.7.1 Age of Firm

Many empirical research studies show that the age of a firm is an important factor behind a bank's performance. Generally, old banks are more transparent than new banks: they have developed their goodwill and built confidence among their customers, which helps them to earn higher profits than new banks (Antoniou, Guney, & Paudyal, 2008). In addition, old banks have learned what governance mechanism works best for their institution. Sine, Mitsuhashi, and Kirsch (2006) have shown that young ventures have a higher failure rate than old ones. However, some researchers have argued that the liability of newness mainly depends upon the industry lifecycle (Agarwal & Sarkar, 2002; Bruderl & Schussler, 1990). Thus, the impact of a firm's age on performance is a pragmatic question. In this research, age of firm is calculated as the difference between last period of study (2012) and the date of incorporation.

5.7.2 Number of Branches

This variable is the count of the total number of branches of the bank. The inclusion of this variable is motivated by an argument of agency theory (Michael C. Jensen & William H Meckling, 1976), that agency costs are more substantial in larger firms due to free rider problems (Yermack, 1996). In the same way, a higher number of branches helps the bank to function more

efficiently, manage environmental turbulence, and reduce the probability of business failure (Aldrich, 1979; Argenti, 1976; Sutton, 1997).

5.7.3 Gross Domestic Product (GDP)

GDP is an important indicator to assess a country's economy. It is stated as a comparison with last year or previous quarter. GDP has a large impact on every sector of the economy including banks. When GDP has an increasing trend, there is low unemployment, wage rates will increase, there will be more demand for investment, and a lower probability of default, which positively affects banks' performance. A decreasing GDP rate will reverse these effects.

5.7.4 Real Interest Rate

Real interest rate is an inflation-adjusted interest rate. It states the real return to lender and the real cost to the borrower. It is calculated by subtracting the inflation rate from the nominal interest rate. Generally, banks are able to circulate more loans and earn higher profits when the real interest rate is lower as there will be more demand for loans.

5.7.5 Bond Rate

The bond rate is the return an investor receives from an investment in corporate or government bonds. Generally, there is an inverse relationship between bond rate and the bank interest rate. A lower bond rate indicates a stable economy, more opportunities for business expansion and growth which is the favourable environment for the banks.

5.7.6 Inter Bank Settling Rate

Interbank settling rate is the interest rate between the banks for their short-term borrowings. Banks borrow and lend funds between each other from the interbank market to manage the liquidity and to meet the reserve requirements.

5.7.7 Inflation

Strong empirical evidence suggests that inflation affects bank performance (Athanasoglou, Brissimis, & Delis, 2008; Demirguc Kunt & Huizinga, 2010). Many researchers have found that profitability of a bank increases during a period of inflation (Bourke, 1989) while Mirzaei, Moore, and Liu (2013) have suggested that there is a negative relationship between profitability and inflation. However, the effect of inflation on banks depends upon their capacity to forecast the inflation.

Table 5.1 below shows the variables used in this research.

Table 5-1: Variables used in this study

Variable type	Variable	Formula
Dependent	Return on Assets (ROA)	Net income/ Total assets
	Non-performing loan to total loan	Non-performing loan/ total loan
	Loan to Deposit	Total loan/ Total deposit
	Deposit to Assets	Total deposit / Total assets

	Operating expenses to total loan	Operating expenses / Total loan
	Operating expenses to interest income	Operating expenses / interest income

Independent	Board size	Total number of members in the board.
	Percentage of female director	Total number of female directors in the board/ Total number of board of directors
	Percentage of outside directors attendance in the board meeting	(No. of Outside directors / board size) X 100%
	Existence of position of CFO (CFO)	1 if there is a CFO: otherwise 0
	Percentage of directors representing the minority of shareholders	(No. of minority shareholders on board / board size) X 100%
Control	Age of Firm	Age of bank
	Number of branches	Total number of branches
	Inflation rate	Total inflation rate of the country
	Ownership Structure	Private, joint venture or public
	GDP (%)	GDP interest rate of the country
	Real interest rate (%)	Real interest rate of the country
	Bond rate	One year bond rate
	Real interest rate	Inflation adjusted interest rate
Interbank settling rate	364 days	

5.8 Conclusion

This chapter has provided a brief explanation of models used for the development of the five hypotheses above. The hypotheses developed will be tested in the next two chapters to understand the relationship between the corporate governance mechanism and bank performance in Nepal. Chapter Six discusses the data collection and research methods used in the study, and Chapter Seven discusses the empirical results and discussion derived from testing the hypotheses.

Chapter Six

Data Collection and Research Method

6.1 Introduction

This chapter covers the data collection process, empirical model and research techniques used to investigate the research questions. There has been extensive research into corporate governance and firm performance in developed markets, but there are limited prior studies focusing on the comparative study of corporate governance and bank performance in developing and less developed countries. This study empirically investigates the nexus between corporate governance practices and bank performance in Nepal.

Various methods, used in prior research, have been considered as potentially suitable for this analysis in the Nepali context. A panel data-based regression approach is used to identify associations between governance and bank performance.

The chapter is organised as follows: section 6.2 presents the data collection process, and section 6.3 describes the data collection process.

6.2 Research Method

The research question has guided the research method used in this study. Saunders, Lewis, and Thornhill (2000) have stated that the research philosophy will depend on the research questions. To find the relationship between

corporate governance and bank performance, because of the nature and demand of the data, positivist methodology has been used. Several research questions were postulated in Chapter One (section 1.2) and these are addressed using an empirical research method. The underlying methodology is positivist and the data are examined to discover the underlying relationships.

6.2.1 Description and Sources of Data

The data used in the study comprise an unbalanced panel dataset of (30) commercial banks in Nepal from 2003 to 2012. The data has been studied up to 2012 because of its availability. Generally, the previous year's data should be made available at the end of July. But, because of political turmoil, earthquake and other reasons, the data was available only till that period. As there is no database covering all commercial banks in Nepal and all the data needed for the study are not available to the public from the central bank's website, the data were manually extracted from annual reports on the banks' websites. Also, in the context of banks not listed, request letters were sent to the CEO and directors of respective banks to collect data. In a few instances visits to individual bank premises were required to collect information. As most of the banks' annual reports are in the local language (Nepali), online search functions do not function. Accordingly, every variable selected is chosen after reviewing all annual reports of banks for 2003 to 2012. It is necessary to determine that a likely variable appearing in one bank is also present in the other 29 banks. Additional information was obtained from the central banks (i.e. Nepal Rastra Bank) and data for macroeconomic variables

were extracted from the World Bank database. This sample includes all the banks operating during the decade. The data are drawn from secondary sources.

The period 2003 to 2012 finishes with the last year in which a relatively complete set of financial reports are available. The earthquake of 2011 disrupted both commercial and governmental data collection and distribution. Prior to 2003, the data are patchy and it is only with the end of the Maoist insurgency that government and commerce focussed on production and dissemination of financial data. It is after 2002 that almost 50 per cent (15 out of 31) of commercial banks of Nepal were established. The 2008 global financial crisis, provides an interesting midpoint for the time series.

A careful process of data checking to maximise the integrity of the database prepared commences with searching for missing data and outliers. Several diagnostic tests were conducted.

6.2.2 Data cleaning and editing

To conduct the statistical analysis, some of the missing values were substituted using the previous year's value. In the context of the banks that were merged, the data of the continuing banks was taken. Similarly for those financial institutions that were upgraded from finance companies to development banks to commercial banks. The data has been taken from only the year they was upgraded to commercial banks.

6.2.3 Data outliers and Winsorising

The outliers in the dataset will have a disproportionate effect on statistical analysis and may provide misleading results (Salkind, 2010; Stock & Watson, 2011). To test the existence of outliers in the dataset, Grubb's test has been conducted. As outliers existed in the dataset, the dataset was winsorised at 1 per cent and 99 per cent to control for the noise effect.

6.2.4 Normality Test

An assessment of normality of data is prerequisite for several statistical tests; it helps to decide which statistical tests will be appropriate: parametric or non-parametric. If the data are not normally distributed (bell-shaped), then the variables are highly skewed and may have large kurtosis. There are two main methods of assessing for normality: graphic and numerical. A check can be made graphically by using histograms, frequency polygons, normal probability plots and box and whisker plots. Among these, the frequency polygon is considered as an appropriate and easy method to interpret the shape (Bernard (2013).

While doing the normality test for the given dataset, it was found that the data were not properly bell-shaped and there was skewness and kurtosis in the dataset, so the non-parametric methods should be used for this study.

6.2.5 Methodology

This section discusses the research models that have been used to test the relationship between corporate governance and bank performance in Nepal

and the data analysis techniques used for this study. The analysis techniques discussed in this study are descriptive statistics, panel OLS regression analysis, MANOVA, Friedman test, Roy Zellner probability test, Breusch-Pagan test for heteroskedasticity, and Wooldridge test for autocorrelation. To investigate the corporate governance mechanism and its impact, quantile regression analysis was used. Figure 6.1 below shows the concept map of the methodology used in this study.

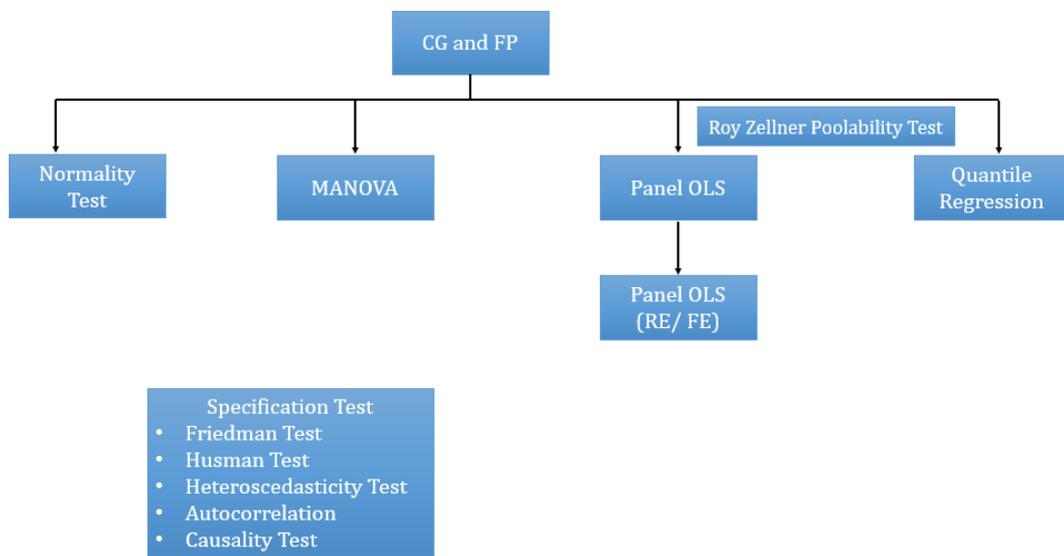


Figure 6-1: Concept map of the methodology used in this study

6.3 Model specification for bank governance and performance

This research sample consists of both cross-sectional and time series data. Thus, it is probable that a panel dataset can be used. Panel data analysis uses multiple entities of data where each entity is observed at two or more time

periods and allows the exploration of the dynamic effects which are difficult to detect with the cross sectional data (Stock & Watson, 2011).

So, to decide whether the data are poolable or not, the 'Roy Zellner poolability test' was conducted. The null hypothesis for poolability test is that the slopes are the same across various groups of banks over the period (Vaona, 2008), that is:

$$H_0: \beta_i = \beta \quad (\text{Eq. 1})$$

suggesting the slopes remain constant in both the fixed and random effect models. While doing the poolability test the null hypothesis is rejected, so the panel data are not poolable. Hence panel regression has to be used for the analysis.

6.3.1 Panel data OLS regression

Panel data analysis is the most efficient statistical method, widely used in econometrics, social science and epidemiology for several reasons. First, the panel data consists of both the cross sectional and time series data. It allows taking into account the unobservable and consistent heterogeneity that might exist in the selected company. Second, it may be possible to exploit dynamics that are difficult to detect with cross sectional data. The third reason is they typically provide large observations (Maddala & Lahiri, 1992).

The commonly used multiple regression analysis is initially used in panel data analysis. Following Hartarska (2005); Reddy (2010); Thrikawala (2016) and Wellalage Hewa (2012), this study has adopted panel data estimation

methodology. For the analysis, the basic panel data regression equation can be written as:

$$\begin{aligned} \text{Performance}_{it} = & \alpha + \beta_1 \text{Board Size}_{it} + \beta_2 \text{CFO}_{it} + \beta_3 \% \text{ of} \\ & \text{minority directors}_{it} + \beta_4 \% \text{ of Female directors}_{it} + \beta_5 \% \text{ of} \\ & \text{outside directors}_{it} + \beta_6 \text{firm age}_{it} + \beta_7 \text{No. of branches}_{it} + \\ & \beta_8 \text{Ownership Structure}_{it} + \epsilon_{it} \end{aligned} \quad (\text{Eq. 2})$$

where i indicates firm observations which take 1 to 30, t indicates time which takes the values of 2003 to 2013, α denotes the intercept of the straight line and β denotes the slope of the regression line.

The dependent variables for this study are non-performing loan to total loan; loan to deposit; cash flow to deposit; deposit to assets; loan to total assets; operating expenses to interest income; operating expenses to total loan; and return on equity and return on assets are used as a proxy for company financial performance. As the establishment of each bank is different, and about 50 per cent of the banks were established after 2007, there is unbalanced panel data. Hence, before proceeding with the unbalanced panel data analysis, the individual and time effects (two-way error components) are considered. Thus, a Breush-Pagan LM test for unbalanced two-way error components based on Baltagi and Li (1990) modelling was run.

6.4 Conclusion

This chapter has provided the framework for the econometric analysis used to test the hypotheses. The chapter discussed the research methods, data collection methods, data cleaning procedure, normality test and the specific data analysis techniques used in this study.

The following chapter will discuss the findings and examine the important corporate governance variables for financial performance, applying the data analysis methods discussed in this chapter.

Chapter Seven

Corporate Governance and Bank Performance in Nepal: An Empirical Investigation

7.1 Introduction:

This chapter presents the data analysis techniques and empirical findings for the relationship between corporate governance practices and bank performance of commercial banks in Nepal. First, section 7.2 discusses the data analysis techniques, and provides an interpretation of the descriptive statistics for visualising the behaviour of the data in a more meaningful way. Secondly, it reports the relationship between the corporate governance variables and bank performance variables by using panel data techniques. Then it discusses the regression model used in the study and its findings. It concludes the chapter by identifying the corporate governance practices that appear most significant for improving the performance of banks in Nepal.

7.2 Data analysis techniques

The hypotheses presented in Chapter Five are tested by using sequences of data analysis techniques discussed in the following sections.

7.2.1 Descriptive analysis of data

Descriptive statistics help to describe, show or summarise the data in a meaningful way making them more useful for analysis. Descriptive statistics are very important because they enable the presentation of the data in a more

meaningful way, which allows for simple interpretation of the data. They summarise the mean, median, variance, standard deviation, histograms and pie charts of the data as suggested by Bernard (2013).

Typically, descriptive analysis can be used to describe the data in two different ways, first, with the help of measures of central tendency that are used to describe the central position of the given data using the number of statistics such as mean, median and mode. However, the mean will be heavily influenced if data are missing or have outliers. The median might be better when the data is skewed as it gives the midpoint of distribution. Half of the observations are above the median; half are below it, while the mode helps to identify the value that occurs most frequently in a set of observations. Second is the measure of spread that helps to identify how spread the scores are, whether the data are homogeneous or heterogeneous can be seen by using standard deviation. Also the minimum and maximum value of variables can be seen to establish which data are most scattered.

Thus, the careful analysis of descriptive statistics helps to identify the overall behaviour of the data. After careful observation of the descriptive statistics, it was found that the non-parametric procedures were appropriate for this study.

The descriptive analysis of the data is shown in Table 7.1 below.

Table 7-1: Descriptive statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
Non-Performing loan to total Loan	239	0.05	0.09	0.00	0.58
Loan to deposit	239	0.78	0.17	0.05	1.30
Deposit to Assets	238	0.82	0.17	0.06	1.30
Loan to Assets	237	0.62	0.15	0.06	0.83
Operating expenses to interest income	239	0.89	1.22	0.07	17.92
Operating expenses to total loan	238	1.86	27.04	0.01	417.33
Return on assets	239	0.01	0.03	-0.21	0.20
Board size	239	7.30	1.33	4.00	11.00
% of outside directors	239	0.13	0.05	0.00	0.03
CFO	236	0.11	0.32	0.00	1.00
% of minority directors	239	0.20	0.11	0.00	0.25
% of female directors	239	0.04	0.07	0.00	0.29
Age of firm	239	15.24	16.17	1.00	78.00
Branches	234	33.67	39.77	1.00	241.00
Employee	237	690.08	965.40	34.00	4123.00
Inflation Rate	265	0.08	0.03	0.04	0.13
GDP	239	4.30	0.86	3.36	6.10
Real Interest Rate	239	4.35	2.58	0.37	7.00
Bond Rate	239	0.05	0.02	0.03	0.09
Interbank Settling Rate	239	0.04	0.02	0.01	0.06
Ownership Structure	246	2.19	0.63	1.00	3.00

From the descriptive statistics above, it can be seen that there is a huge difference in the ages of the firms i.e., the minimum being 1 and maximum 78 years. This is because the first commercial bank of Nepal was established in 1937, before the establishment of central banks in Nepal. After the Maoists (revolutionary party) came into the peace process in 2006, 13 of the total 30 commercial banks were established.

Also, it can be seen that from Table 7.1, the minimum board size was between four (minimum) and eleven (maximum) members during 2003. These extremes occurred before the implementation of the Bank and Financial Institution Act, 2006. This Act requires that all the banks should have their board size of between five (minimum) and nine (maximum) members.

Similarly, there is a vast difference in the number of branches across the banks. For example, Century Bank Limited, established in 2011 with only one branch has slowly and gradually increased its number of branches, until in August 2017 it had 67 branches across the country. While one of the public sector banks, Agriculture Development Bank of Nepal, had the highest number of branches, with 241, to fulfil its objective to provide banking facilities to rural people, especially farmers.

In the same way, there are huge differences in other variables, for example, the number of employees. The minimum number of bank employees was 34 in the NMB bank during 2007, the first year of its establishment; while the Agricultural Development Bank had the highest number of employees, being 4123 during 2003, which was mainly due to the greater number of branches in rural areas. However, due to development and adoption of several banking technologies, the number of employees in this bank is gradually decreasing.

The descriptive statistics shown in Table 7.1 show that the data are not normally distributed. So, this study used Spearman rank correlation, MANOVA, Kurskal Wallis test and quantile regression for further analysis.

7.2.2 Inferential analysis of data

Inferential statistics allows using samples to make a generalisation about the populations from which samples are drawn. It is used to assess the strengths of the relationship between the independent variables and the dependent variables. This study has used MANOVA, correlation, bivariate regression and multivariate regression to identify the association between independent and dependent variables.

7.2.3 Covariations

Covariation identifies the variation between two random variables. It indicates how changes in one variable are associated with changes in another variable. Specifically, covariation is used to measure the direction and shape of the relationships. The direction of covariation deals with the positive or negative signs of the covariation, but the shape of covariation refers to the linear or non-linear relation of the covariation. Scatterplots can be created to identify the shapes and directions of the relationships (Bernard, 2013).

7.2.4 Statistical significance of the study

Statistical significance provides an indication that the relationship between two or more variables is caused by something, not due to random chance. A simple way to discover statistical significance is to look at the p-value. The p-value shows how probable the results were due to random chance. A p-value of 0.10 means that there is 10 per cent probability that the results were due to luck. This study employs three levels of statistical significance. The most

commonly used level of statistical significance (p-value or probability value) in hypotheses testing is 0.05 (**) significance level (Bernard, 2013). P-values of 0.10 (*) and 0.01 (***) are also considered in this study as moderately significant and very significant, respectively.

7.2.5 Correlation and multi- collinearity diagnostic

The Spearman correlation indicates the strengths and direction of association among various dependent and independent variables. The Spearman's correlation works by calculating Pearson's correlation on the ranked values of the data. Like the Pearson's correlation, it is denoted by r_s and lies between ± 1 . This helps to identify the perspective multicollinearity in the dataset. Gujarati and Porter (2009) and Field (2009) state that the if correlation coefficient between two variables is less than 0.8 the multicollinearity issue is unlikely to be the serious problem.

The Spearman rank correlation matrix for the dependent and independent variables is given in Table 7.2 and Table 7.3 below. Initially, while doing the Spearman rank correlation, it was found that there is a strong correlation (0.855) between the number of branches and number of employees. So, the number of employees' variable is dropped, and again correlation was conducted. The correlation matrix presented no correlation coefficient greater than 0.8, which Gujarati and Porter (2009) suggest as the maximum acceptable correlation for two explanatory variables. The highest degree of correlation is shown between the firm age and number of branches, suggesting that the old companies open more branches.

Table 7-2: Spearman rank correlation of independent variables

	Board size	% of outside directors	CFO	% of minority directors	% of female director	Firm age	Branches	Inflation Rate	Ownership Structure	GDP	Real Interest Rate	Bond Rate	Interbank Settling Rate
Board size	1.0000												
% of outside directors	0.2956	1.0000											
CFO	-0.2352	-0.1469	1.000										
% of minority directors	0.0684	0.1475	0.011	1.0000									
% of female director	-0.0433	-0.0205	0.147	0.1944	1.000								
Firm age	-0.1440	-0.1396	0.305	-0.1881	-0.077	1.000							
Branches	-0.0189	-0.1305	0.073	-0.1407	-0.075	0.785	1.000						
Inflation Rate	0.1156	0.0420	-0.009	0.3216	0.052	0.032	0.188	1.000					
Ownership Structure	0.0483	0.0838	0.469	0.1797	0.125	-0.019	-0.146	-0.031	1.000				
GDP	0.0779	0.0205	-0.017	0.0833	0.028	0.027	0.119	0.662	-0.019	1.000			
Real Interest Rate	0.154	0.033	-0.027	0.1730	0.0108	0.0583	0.2279	0.4136	-0.0360	0.380	1.000		
Bond Rate	0.001	-0.022	-0.01	-0.0837	-0.0038	-	0.0307	-0.0211	-0.3092	-0.122	0.039	1.0000	
Interbank Settling Rate	-0.027	0.007	0.002	0.1143	0.0220	-	0.0369	-0.0074	-0.0026	-0.166	-0.124	0.6491	1.0000

Note: Data related to banks such as board size, CFO, percentage of minority of directors, percentage of female directors, firm age and branches are collected from annual reports of the banks. Similarly, data related to ownership structure, bond rate and interbank settling rate are collected from central banks database, and data related to inflation rate, GDP, real interest rate and bond are collected from the World Bank database.

Similarly, while conducting the Spearman rank correlation of dependent variables it was found that the loan to deposit and loan to assets variables are highly correlated, i.e. 0.75. The loan to assets ratio was dropped instead of loan to deposit, because I have another variable in my dataset, deposit to assets, which gives some insights of how effectively the bank is able collect deposits in relation to its assets. Another variable, loan to deposit, tells us whether the bank is efficient in utilising its deposits. As a robustness check, the loan to assets variable was used and the loan to deposit variable was dropped, board size was statistically positively correlated at 5% with the loan to assets variable. However, there was no significant relationship between board size and loan to deposit variable.

The Spearman rank correlation for dependent variables are given in Table 7.3

Table 7-3: Spearman rank correlation of dependent variables

	NPL to TL	Loan to Deposit	Deposit to Assets	Loan to Assets	OEII	OETL	ROA
NPL to TL	1.000						
Loan to Deposit	-0.218	1.000					
Deposit to Assets	0.209	-0.4530	1.000				
Loan to Assets	-0.362	0.7493	-0.222	1.000			
OEII	-0.015	-0.124	0.189	-0.079	1.000		
OETL	0.294	-0.259	0.299	-0.327	0.606	1.000	
ROA	0.140	-0.183	-0.019	-0.213	-0.248	0.021	1.000

Note: Data related to banks like board size, CFO, percentage of minority of directors, percentage of female directors, firm age and branches are collected from annual reports of the banks. Similarly, data related to ownership structure, bond rate and interbank settling rate are collected from central banks database and data related to inflation rate, GDP, real interest rate and bond are collected from the World Bank database.

7.2.6 Multicollinearity:

Multicollinearity is a phenomenon where another correlated variable influences one predictor variable in multiple regression. This increases the standard errors of the coefficient by making some variables statistically insignificant when they should be significant (Bernard, 2013). The most common method of measuring the multicollinearity is variance inflation factor (VIF) which quantifies the severity of multicollinearity in the estimated regression and provides an estimate of how much variance has increased because of collinearity (Field, 2009). A VIF of 10 or more indicates the existence of multicollinearity among the independent variables, and it needs to be addressed (Nguyen, Locke, & Reddy, 2014). However, while compiling the VIF, the data in Table 7.4, it was found that all the variables are less than 3.17. Overall, the matrix indicates that multicollinearity is not an issue.

Table 7-4: Variance inflation factor

Variables	VIF
Board size	3.04
% of outside directors	3.174
CFO	3.1
% of minority directors	3.05
% of female director	3.15
Firm age	2.58
Branches	2.82
Inflation Rate	2.3
Ownership Structure	2.34
GDP	2.32
Real Interest Rate	1.92
Bond Rate	1.77
Interbank Settling Rate	1.8

Note: The table reports the VIF coefficients for explanatory variables

7.2.7 Multivariate analysis of variance (MANOVA):

MANOVA is simply an ANOVA with several dependent variables. ANOVA tests for difference in means between two or more groups, while MANOVA tests for the difference in two or more vectors of means. The null hypothesis of MANOVA is that the multivariate means of all groups are equal:

$$H_0: = \mu_1 = \mu_2 = \dots = \mu_k$$

The MANOVA was done to check if there were differences between the mean of two or more than two subgroups and it was found that all the subgroups of a different category of banks are different.

Table 7-5: MANOVA

Source	Statistics	F(df1	df2)	F	Prob >F
Ownership Structure	W 0.5363	12	460	14	0
	P 0.5189	12	462	13.5	0
	L 0.7619	12	458	14.5	0
	R 0.5864	6	231	22.6	0
Residual			235		
Total			237		

Kruskal-Wallis Test

Table 7.6 shows whether the mean rank is the same among the three different groups of banks, that is, public sector banks, joint venture banks and private sector banks. The Kruskal-Wallis Test was conducted for all the dependent variables taken into the study. Its results show that the means of all the groups are statistically significantly different from each other for the variables taken into study.

Table 7-6: Kruskal-Wallis Test

S.N.	Dependent Variable	P-value	Findings
1	Non-performing loan to total loan	0.001	Statistically significant difference
2	Loan to deposit	0.001	Statistically significant difference
3	Deposit to Assets	0.001	Statistically significant difference
4	Loan to Assets	0.001	Statistically significant difference
5	Operating expenses to interest income	0.001	Statistically significant difference
6	Operating expenses to total loan	0.001	Statistically significant difference
7	Return on assets	0.004	Statistically significant difference

7.3 Selection of Analysis Techniques

While reviewing various literature on corporate governance, it was unclear which were the appropriate universal statistical techniques to be used when there are dichotomous/categorical and interval/continuous variables in the study. However, in most of the literature, the multiple regression equations have been used. So, following the trend, the multiple regression techniques have also been used for further analysis.

To decide which regression method should be used for the study either cross sectional or the panel, the Friedman test and the Roy Zellner poolability test were conducted.

The Friedman test results show whether or not the performance of each group of banks is identical. While conducting the test, it was found that the performance of each group of banks is different for all the variables. The results of the Friedman test are given below in Table 7.7.

Table 7-7: Friedman Test - ownership structure to dependent variables

Variables	Friedman	Kendall	P.value	Interpretation
NPLTL	177.9107	0.3753	0.9984	Rejected
Loan to Deposit	168.9036	0.3563	0.9997	Rejected
Deposit to Assets	218.3865	0.4607	0.8017	Rejected
Loan to Assets	169.9398	0.36	0.9996	Rejected
Operating Exp to Interest Income	144.097	0.304	1	Rejected
Operating Exp to Total Loan	169.4412	0.3575	0.9997	Rejected
Return on Assets	198.3505	0.4185	0.4185	Rejected

Since the p-value for all the dependent variables is greater than 0.1, the null hypothesis (the performance of each group of banks is identical) is rejected which means that there is a difference in performance of all groups of banks.

The Roy Zellner poolability test was conducted to discover whether the data could be pooled and the cross sectional regression analysis used. For most of the variables, it was shown that the data are not poolable, so the panel data regression methods were used. The results of the Roy Zellner poolability test are shown in Table 7.8 below.

Table 7-8: Results of Roy Zellner Poolability Test

Variable	Chi 2 (74)	Prob >Chi2
Non-Performing Loan to Total Loan	369.73	0
Loan to Deposit	761.29	0
Deposit to Assets	134.55	0
Loan to Assets	289.44	0
Operating Exp. To Interest Income	37.35	0.99
Operating Exp. To Total Loan	1.50E+07	0
Return on Assets	37.82	0.998

7.3.1 Selection of regression model

7.3.1.1 Multiple linear regression analysis

Multiple linear regression is used to predict the relationship between one dependent variable and a set of independent variables. The most widely used method to analyse the effect of corporate governance is OLS regression which estimates the unknown parameters in multiple linear regression (Stock & Watson, 2011; Thrikawala, 2016).

The following regression equation is used to establish the impact of the explanatory variable (X) on the dependent variable (Y) for the given n observation:

$$Y_i = \beta_0 + \beta_1 X_{it} + \beta_2 Z_{it} + \varepsilon_{it}$$

In this equation i indicates various banks; t indicates the period, that is, from 2003 to 2012; X is the corporate governance variables; and ε_{it} is the error terms; and β is the coefficients.

In panel data, two types of residual error can occur. The first is the unobserved firm effect where the residuals of the banks may be correlated across years (time series dependence) for a given firm (Wooldridge, 2010). The second is that the residual of a given year may be correlated across different banks (cross-sectional dependence); this is called time effect. Due to the presence of unobserved heterogeneity in the data set, the independent variables may be endogenous and correlated with the error term (ε) in the regression model. The panel data methodology allows for overcoming the problem of heterogeneity through individual effects by capturing all time-invariant variables that might affect dependent variables “Y”. The two techniques to diagnose unobserved characteristics in the panel model are fixed effect and random effect models.

7.3.1.2 Fixed-effect and random effect model

The fixed effect model is used to establish the impact of variables which vary over time. It explores the relationship between the dependent and independent variables within an entity, as each entity may have its own

distinguishing characteristics and may or may not influence the independent variables. So, the fixed effect model removes the effect of time-invariant characteristics and accesses the net effect of a dependent variable on the independent variable. Also, the FE model assumes that each has a unique impact to the time-invariant characteristics and hence it should not be correlated with other individual.

The fixed effect model may be written as:

$$Y_{it} = \beta_1 X_{it} + \alpha_i + \mu_{it}.$$

where α_i ($i=1 \dots n$) is the unknown intercept for each entity (n entity-specific intercepts), Y_{it} is the dependent variable (DV) where i = entity and t = time, X_{it} represents one independent variable (IV), β_1 is the coefficient for that IV, and μ_{it} is the error term.

Unlike the fixed effects model, the random effect model assumes the variation to be random and uncorrelated with the independent variables included in the model. The advantage of a random effect model is that time-invariant variables can be included, while in the fixed effect model time-invariant variables are absorbed by the intercept. RE assumes that an entity's error term is not correlated with independent variables and allows the time-invariant variables to act as explanatory variables.

The equation of random effect model is:

$$Y_{it} = \beta X_{it} + \alpha + \mu_{it} + \varepsilon_{it}$$

where, $i = 1, \dots, N$ firms, $t = 1, \dots, T$ time period with k regressors in X_{it} and μ_{it} is a normal error term, and Y_{it} is the dependent variable.

7.3.1.3 Hausman test

To decide which regression method is appropriate, fixed effect or random effect regression, the Hausman test was conducted. The Hausman test is additionally helpful in the presence of reverse causality; the possibility of reverse causality as a potential component of endogeneity. Reverse causality is one of the three causes of endogeneity along with missing variable and simultaneity. A direct test such as Granger does not work, due to the shortness of the time series and cannot be reported as a robustness test.

The shortness of the time period is a problem when considering the efficacy of using lagged variables as a means of reducing endogeneity as has been common in prior research but was not considered in this study.

Testing directly for endogeneity provides the basis for choosing between fixed effect and random effect models. The null hypothesis is that the preferred model is random effect while the alternative hypothesis is the fixed effect model (Greene, 2008). The Hausman test results suggest the use of the random effect model for three equations and the fixed effect model for four estimations as presented in Table 7.9.

Table 7-9: Selection of fixed or random effect model

Variable	Prob>chi2	Hausman Test Result
Non-Performing Loan to Total Loan	0.0012	Fixed- effect model
Loan to Deposit	0.0214	Fixed- effect model
Deposit to Assets	0.0804	Random – effect model
Loan to Assets	0.00	Fixed- effect model
Operating Exp. to Interest Income	0.0511	Random – effect model
Operating Exp. to Total Loan	0.0174	Fixed- effect model
Return on Assets	0.2488	Random – effect model

7.3.1.4 Test for Heteroscedasticity

Heteroscedasticity is a situation where the variance of error term varies across all levels of independent variables (Stock & Watson, 2011). Most of these arise with the cross sectional data, and it provides the biased standard errors. The OLS regression assumes that the error term is constant across all the observations. If the error terms are not constant and they vary variously across the levels of independent variables, then there is heteroscedasticity in the data (Stock & Watson, 2011). To test for the presence of heteroscedasticity of the data, the Breusch-Pagan test of heteroscedasticity is conducted. The result shows that there is the presence of heteroscedasticity in the data for all dependent variables except for deposit to assets and loan to assets (see Table 7.10).

Table 7-10: Breusch- Pagan test of heteroscedasticity

Variable	Prob.>chi2	Heteroskedasticity/ Homoskedasticity
Non-Performing Loan to Total Loan	0.000	Heteroscedasticity
Loan to Deposit	0.0163	Heteroscedasticity
Deposit to Assets	0.0574	Homoskedasticity
Loan to Assets	0.6419	Homoskedasticity
Operating Exp. to Interest Income	0.000	Heteroscedasticity
Operating Exp. to Total Loan	0.000	Heteroscedasticity
Return on Assets	0.000	Heteroscedasticity

The serial correlation, that is the residuals being correlated with each other, are often encountered in economic models (Jung, 2005). The consistent estimation of the panel data estimators requires that the error term should be serially uncorrelated (Wellalage Hewa, 2012). So, to check for the presence of autocorrelation in data, a Wooldridge test for autocorrelation was conducted and found an autocorrelation in the data for all the variables except operating expenses to interest income. The results of the Wooldridge test for autocorrelation of the data are show in Table 7.11.

Table 7-11: Wooldridge test for autocorrelation

Variable	Prob.>F	Autocorrelation
Non-Performing Loan to Total Loan	0.0003	Autocorrelation
Loan to Deposit	0.0035	Autocorrelation
Deposit to Assets	0.0051	Autocorrelation
Loan to Assets	0.0444	Autocorrelation
Operating Exp. to Interest Income	0.7597	No Autocorrelation
Operating Exp. to Total Loan	0.000	Autocorrelation
Return on Assets	0.0262	Autocorrelation

The results from tests suggest the use of different regression techniques for different variables taken into study. The regression method used for various variables are given shown in Table 7.12.

Table 7-12: Regression Methods

Variable	Autocorrelation	Hetro/ Homoskedasticity	FE/ RE	Regression Techniques
Non-Performing Loan to Total Loan	Autocorrelation	Heteroscedasticity	FE	reg, xtreg cluster()
Loan to Deposit	Autocorrelation	Heteroscedasticity	FE	reg, xtreg cluster()
Deposit to Assets	Autocorrelation	Homoskedasticity	RE	reg, re
Loan to Assets	Autocorrelation	Homoskedasticity	FE	reg, re
Operating Exp. to Interest Income	No Autocorrelation	Heteroscedasticity	RE	reg, xtreg robust
Operating Exp. to Total Loan	Autocorrelation	Heteroscedasticity	FE	reg, xtreg cluster()
Return on Assets	Autocorrelation	Hetroskedasticity	RE	reg, xtreg cluster()

7.4 Empirical Findings

Table 7-13 shows a summary of the panel data regression results used in the study. The sign of coefficients is expected, and it shows that many are statistically significant in relation to the financial performance of banks in Nepal, which is predominantly aligned with the prior studies on developing economies.

The regression results, reported in Table 7-13, are interesting. The sign (+ or -) on the coefficients indicates whether the variable contributes in a positive or negative way to the returns and the * indicates whether it is statistically significant. Considering if the board size is statistically negatively correlated with non-performing loan to total loan and operating expenses to interest income, and is statistically positively significant at 10 per cent and 1 per cent for loan to deposit and loan to assets variable taken into study, the reason for

this might be that if there are more board members they can make a sound decision related to credit quality, and hence the NPL will low. Also, many directors on the board will be able to assign more people to supervise and advise on the managers' decisions. Having more supervisors and advisors makes it easier to detect more opportunity in the market and provide more quality loans in the market. This is consistent with the previous research conducted by Andres & Vallelado (2008); and Yermack (1996). Thus, this research confirms the empirical findings of Eisenberg, Sundgren, & Wells (1998), and Fernandez Alavarez, Gómez Ansón, & Fernández Méndez, (1997) in non-financial organisations. However, these results contradict the findings of Adams & Ferreira (2007).

The existence of a CFO is negatively significant at 10 per cent with loan to deposit the probable reason. It might be that the CFO needs to properly analyse the risks of loans more appropriately and may want to have more liquidity to cover any unforeseen circumstances.

The percentage of a minority of directors has a negatively significant relationship at 5 per cent when measured against operating expenses to interest income. This may be because the minority directors may be more conservative with spending and try to reduce several bank expenses. In contrast, minority directors have a negative significant relationship at 10 per cent with return on assets. This finding is contradictory to that of Dwyer, Richard, & Chadwick, (2003); Wellalage Hewa (2012) who argue that minority

directors positively affect firms' strategic decisions and organisational cultural developments and positively influence company financial performance.

The existence of female directors on the board is significantly negatively correlated at 5 per cent level of significance with non-performing loans to total loans and loan to assets, and this finding is in line with the study conducted by Adams & Ferreira (2009; Thrikawala (2016); Wellalage & Locke (2013). This suggests that the banks having fewer female directors on their boards have better financial performance than other banks. This is because in most of the south Asian countries females have a domestic responsibility and because of their cultural differences this impacts women's managerial activities especially in Nepal's male-dominated society.

Similarly, the percentage of outside directors is statistically negatively significant at 10 per cent with loan to deposit, while it is statistically positively significant at 10 per cent and 5 per cent respectively with a non-performing loan to total loan and operating expenses to total loan respectively. This may be because the outside directors may not be very effective in the management of the company, they may be participating just as their retirement plan, and their remuneration may be very high. Also, the outside director is the tougher monitor; the CEO may be reluctant to share information with them. Thus, due to limited information, they may not be able to contribute positively to the banks (Adams & Ferreira, 2007; Bhagat & Black, 2002). However, this result contradicts the finding of Andres and Vallelado (2008).

7.4.1 Dynamic System Estimation Regression:

The dynamic system regression approach is being used more frequently in the empirical research literature relating to corporate governance, however, for this present study it is not applicable given the nature of the data. There is little rank correlation between the dependent variables and, given the non-parametric properties of the data, a quantile regression is more appropriate.

7.4.2 Quantile Regression

The quantile regression introduced by Koenker and Bassett (1978) splits the sample into various quantiles based on the performance variables to obtain a more comprehensive picture. It models the relationship on a set of predictor variables and specific quantiles (or percentiles) of the response variables and shows the changes in the quantiles of response variables. The quantile regression works better than OLS regression when the data are skewed, and there is the existence of heteroscedasticity and outliers in the data (Wellalage & Locke, 2014).

As the data are skewed, there is the existence of outliers, so the data has been divided into seven different quantiles (i.e. 0.10, 0.25, 0.40, 0.50, 0.60, 0.75 and 0.90 quantiles). Table 7.13 below shows the corporate governance and bank performance variables across various quantiles.

7.4.2.1 Board size and quantile regression:

Table 7-14 shows that board size has a significantly negative correlation with the upper quantile banks for the variables NPL/TL, similarly, Table 7-17 and

Table 7-18 shows that board size is negatively significant correlated with operating expense to interest income and operating expenses to total loan, while it is positively correlated with loan to deposit for the banks that fall between 0.25 and 0.75 quantiles. This indicates that higher board size leads to an increase in the performance of middle- and average-performing banks. This might be because the larger board may bring diverse knowledge and ideas into the meeting, which facilitates better decision making and facilitates good monitoring and supervision (Andres & Vallelado, 2008). These findings are in line with resource dependent theory that states a larger board provides more specialist knowledge from different fields and therefore contributes to better decision making (Kiel & Nicholson, 2003; Mohamed, 2009; Pfeffer & Salancik, 1989; Salim et al., 2016; Zahra & Pearce, 1989). However, it is negatively significant with the upper middle quantile with ROA for the quantiles 0.5, 0.6 and 0.75. This also indicates that the larger board size is most appropriate for middle- and higher-performing banks which seems to be quite controversial because the banks with high profitability can appoint efficient corporate governance mechanisms by attracting highly qualified board members. This finding is similar to that of Eisenberg et al. (1998); Mollah & Zaman (2015).

7.4.2.2 CFO and quantile regression:

Table 7-14 reveals that the appointment of a chief financial officer has a significantly negative effect on NPL/TL for average- and above-performing banks (Q0.5 and Q0.75), while Table 7-15 reveals that it has a significant negative effect on loan to deposit for average- and below-performing banks. A

possible explanation for this might be that CFOs are good at evaluating the risks, so they are focused on providing the quality loans which results in reducing the NPL and also the loan to deposit ratio. These findings are supported by the studies by Javaid and Saboor (2015) and Lutz and Schraml (2011). In the same way, there is a significant negative relationship at 5 per cent with the quantile 0.60, but it has a significant positive relationship at 1 per cent with the highest performing banks. This might be because CFOs might encourage the higher performing banks to be more involved with research and development which have huge initial investments, while they may restrict these types of investment in lower- and average-performing banks. Similarly, there is a negative relationship between CFO and ROA for the bank that falls into the quantiles 0.50 and 0.60. Girigori's (2013) study has also found a negative effect of CFO expertise and a firm's performance. In contrast, Defond, Hann & Hu (2005); Francis, Hasan & Wu (2012) and Kirkpatrick (2009) have found an insignificant relationship between the existence of CFO and a firm's performance.

7.4.2.3 Percentage of minority directors and quantile regression:

The quantile regression tables 7-15, 7-16, and 7-17 indicate that the percentage of minority directors has a significant positive relationship between the performance of banks in Nepal with the performance variables loans to deposit (with quantiles below 0.60), deposit to assets (with the quantiles 0.10, 0.75 and 0.90), OEII (with only 0.75 quantile) and OETL (with lowest quantile) respectively. The posit diversity in the board increased the quality of thought and the strategic decisions of the firm (Ameer & Rahman,

2009; Crano & Chen, 1998). Interestingly, there is a significantly positively correlation with the average and above average quantiles with the NPL/TL performance variables. This might be because minority directors may be more likely to be risk takers and, to increase the profitability of banks, they may be interested in providing more loans without considering the risk of investment. These findings contradict the findings of Zahra and Stanton (1988) that there is no statistically significant relationship between the percentage of minority directors and a firm's performance.

7.4.2.4 Percentage of female directors and quantile regression:

The quantile regression Tables 7-16 below shows that having female board directors has a significant influence, mostly around the average- and higher-performing banks (Q 0.6 to 0.9) for the variable deposit to assets. On the contrary, Table 7.14 shows that percentage of female directors has a significant negative relationship with the NPL to TL for the quantiles below 0.60. The thinking patterns of males and females may be quite different; the female directors may add value by bringing new ideas and different perspectives to the board. Also, females may be less reluctant to decide on risky loans. As a result, their NPL/TL is reduced. This result is consistent with the findings of Adams & Ferreira (2009); Carter et al. (2003); Garcia-Meca et al. (2015) and Pathan & Faff (2013). However, they are positively correlated with OEII for the quantiles 0.6 and 0.75 and negatively correlated with ROA. A tentative explanation for this may be that as female directors are more conservative in providing the loans, interest income is reduced. So before providing loans they may request several checks and verifications which

increases their cost and which results in a decrease in net income and ROA. A similar result was found in the research by Adams & Ferreria (2009) and Smith et al. (2006).

7.4.2.5 Percentage of outside directors and quantile regression:

The quantile regression tables 7-14 and 7-17 below reveal that the percentage of outside directors has a positive influence on NPL/TL and OEII respectively for the middle and above quantiles at 0.75 and 0.90, and Table 7.18 revealed that it is significantly positively correlated at 5 per cent with 0.25, 0.75 and 0.90 with the variable operating expenses to total loan. In contrast, Table 7.19 shows that percentage of outside directors is negatively significant with ROA at 5 per cent with 0.10 quantile. This indicates that it has a negative relationship with the performance variables above. The negative impact of outside directors is consistent with previous studies (Bhagat & Black, 2002; Coles et al., 2008; Pathan & Faff, 2013; Yermack, 1996). It also supports the notion of Subrahmanyam, Rangan, and Rosenstein (1997) that independent directors in the bank are chosen more for regulatory and compliance purposes. However, for other performance variables, deposit to assets and ROA, it is significantly positively correlated at 5 per cent with 0.75 quantile and 1 per cent for deposit to assets with 0.90 quantile. These findings are in line with the research of Bhagat and Black (1999), that is, outside directors behave differently for different firms.

7.4.2.6 Conclusion

In summary, tables 7-13 – 7-19 below displaying quantile regression results indicate that corporate governance variables have significantly different

effects in different banks for performance proxy taken in this study. It is interesting that in some cases what is shown as the relationship for the average (50%) performers is different from the lower and higher performing banks. This suggests that some banks are doing better than others.

Table 7-13: Regression results

	NPL/TL	LTD	DTA	OEII	OETL	ROA
	xtreg cluster()		xtreg, re	xtreg robust	reg, xtreg cluster()	
Board size	-0.0114** (-2.57)	0.00880 (0.97)	-0.0130 (-1.24)	-0.0836** (-2.04)	-3.689** (-2.06)	-0.00208 (-1.03)
CFO	-0.0304 (-1.34)	-0.0968 (-1.59)	-0.0641 (-1.35)	-0.154 (-0.68)	0.429 (0.05)	-0.000308 (-0.03)
% of minority directors	0.0349 (0.64)	0.0761 (0.75)	-0.264* (-1.95)	0.624 (0.53)	-44.34* (-1.88)	-0.0385 (-1.45)
% of female director	-0.192** (-2.47)	-0.109 (-0.72)	0.00766 (0.04)	0.156 (0.25)	1.538 (0.05)	0.00302 (0.08)
% of outside directors	0.216** (2.24)	0.173 (0.78)	-0.0613 (-0.29)	0.367 (0.81)	102.6*** (2.91)	-0.00444 (-0.11)
Firm age	-0.000965 (-1.16)	-0.00747*** (-3.54)	0.00305* (1.71)	0.0215 (0.80)	-0.152 (-0.51)	0.000470 (1.41)
Branches	0.0000649 (0.28)	-0.000541 (-1.30)	0.000357 (0.62)	-0.00300 (-0.95)	0.0515 (0.51)	0.000122 (1.07)
GDP	0.0183** (2.42)	0.00853 (0.64)	-0.0385** (-1.97)	-0.0231 (-0.36)	2.793 (0.81)	-0.00352 (-0.90)
Real Interest Rate	-0.00410 (-1.38)	-0.00954* (-1.81)	-0.00221 (-0.29)	-0.0328 (-0.59)	1.906 (1.41)	0.0000392 (0.03)
Bond Rate	0.144 (0.29)	2.222*** (2.59)	0.850 (0.66)	-1.038 (-0.23)	-274.8 (-1.21)	-0.112 (-0.44)
Interbank Settling Rate	-0.378 (-0.64)	-2.110** (-2.07)	-1.798 (-1.18)	0.185 (0.03)	346.4 (1.28)	0.204 (0.67)
Inflation	-1.247*** (-4.34)	0.122 (0.24)	0.225 (0.30)	-6.254 (-1.29)	-205.0 (-1.57)	0.368** (2.51)
Public	0.181*** (3.59)	0.247** (2.07)	-0.182 (-1.61)	0.246 (0.37)	-8.781 (-0.46)	-0.0370* (-1.70)
Joint Venture	0.0372** (2.29)	-0.0345 (-0.80)	-0.0133 (-0.39)	-0.180 (-1.21)	-5.191 (-0.91)	0.00218 (0.34)
_cons	0.163*** (3.86)	0.786*** (9.76)	1.134*** (10.93)	2.040*** (3.33)	37.60** (2.08)	0.00948 (0.47)
N	205	205	205	205	205	205

(Note: This table presents the results of the relationship between corporate governance and banks' performance in Nepal. Asterisks indicate significance at 10% (*), 5% (**), and 1% (***). p-Values are presented in parentheses. The data related to banks such as board size, CFO, percentage of minority of directors, percentage of female directors, firm age and branches are collected from annual reports of the banks. Similarly, data related to ownership structure, bond rate and interbank settling rate are collected from central banks' database and data related to inflation rate, GDP, real interest rate and bond are collected from the World Bank database).

Table 7-14: Quantile regression for non-performing loan to total loan

	Q(0.10)	Q(0.25)	Q(0.40)	Q(0.50)	Q(0.60)	Q(0.75)	Q(0.90)
Board Size	0.0000352 (0.10)	-0.00181 (-1.33)	-0.000257 (-0.22)	-0.00121* (-1.75)	-0.00236 (-1.31)	-0.00605*** (-2.79)	-0.0218* (-1.92)
CFO	0.000456 (0.34)	-0.00352 (-0.59)	-0.00636 (-1.24)	-0.00654** (-2.14)	-0.00761 (-1.01)	-0.0256*** (-3.07)	-0.0752 (-1.61)
% of minority directors	-0.00251 (-0.64)	0.000954 (0.05)	0.00631 (0.38)	0.0166* (1.80)	0.0294 (1.24)	0.0770*** (3.14)	0.342*** (4.07)
% of female director	-0.0106* (-1.85)	-0.0175 (-0.79)	-0.0372* (-1.75)	-0.0424*** (-3.54)	-0.0544* (-1.90)	-0.0642 (-1.65)	-0.127 (-0.59)
% of outside directors	-0.00335 (-0.42)	0.0209 (0.72)	-0.00387 (-0.16)	0.00878 (0.65)	0.0274 (0.82)	0.119*** (3.07)	0.408** (2.11)
Firm age	0.00000902 (0.23)	0.0000551 (0.24)	0.000123 (0.62)	-0.0000821 (-0.73)	-0.000337 (-1.13)	-0.000657* (-1.78)	-0.000131 (-0.08)
Branches	0.000102*** (8.17)	0.000104 (1.44)	-0.000135** (-2.00)	-0.0000605 (-1.52)	-0.0000526 (-0.53)	0.000206* (1.93)	0.0000727 (0.16)
GDP	0.000269 (0.56)	0.00413 (1.64)	0.00472** (2.08)	0.00654*** (4.89)	0.0124*** (3.55)	0.0114*** (2.72)	0.0220 (1.05)
Real Interest Rate	-0.000130 (-0.54)	-0.0000193 (-0.02)	0.000399 (0.45)	0.000601 (1.18)	0.000784 (0.59)	-0.00192 (-1.24)	-0.0109 (-1.27)
Bond Rate	-0.00444 (-0.10)	0.0633 (0.38)	0.0545 (0.37)	-0.0168 (-0.19)	-0.137 (-0.61)	0.139 (0.52)	0.388 (0.29)
Interbank Settling Rate	0.00735 (0.16)	-0.0895 (-0.45)	-0.120 (-0.68)	-0.121 (-1.18)	0.0116 (0.04)	-0.325 (-1.01)	-1.407 (-0.89)
Inflation	-0.0358** (-2.11)	-0.308*** (-3.35)	-0.380*** (-4.41)	-0.483*** (-9.45)	-0.782*** (-5.95)	-0.902*** (-5.82)	-2.544*** (-3.27)
Public	0.0400*** (14.86)	0.0373*** (3.06)	0.106*** (9.00)	0.118*** (15.72)	0.129*** (6.26)	0.176*** (7.31)	0.341*** (3.28)
Joint Venture	0.00671*** (5.79)	0.00758* (1.79)	0.0113*** (3.10)	0.0132*** (6.04)	0.0163*** (2.88)	0.0310*** (4.56)	0.0749** (2.21)
_cons	0.00147 (0.36)	0.0265* (1.83)	0.0270** (2.29)	0.0385*** (5.49)	0.0534*** (2.92)	0.102*** (4.70)	0.365*** (3.19)
N	205	205	205	205	205	205	205

(Note: This table presents the results of the relationship between corporate governance and banks' performance in Nepal. Asterisks indicate significance at 10% (*), 5% (**), and 1% (***). p-Values are presented in parentheses. The data related to banks such as board size, CFO, percentage of minority of directors, percentage of female directors, firm age and branches are collected from annual reports of the banks. Similarly, data related to ownership structure, bond rate and interbank settling rate are collected from central bank database and data related to inflation rate, GDP, real interest rate and bond are collected from the World Bank database).

Table 7-15: Quantile regression for loan to deposit

	Q(0.10)	Q(0.25)	Q(0.40)	Q(0.50)	Q(0.60)	Q(0.75)	Q(0.90)
Board Size	0.00657 (0.99)	0.0221*** (3.43)	0.0229*** (4.51)	0.0222** (2.27)	0.0199** (2.19)	0.0247* (1.80)	0.0195 (1.50)
CFO	-0.218*** (-7.41)	-0.185*** (-6.31)	-0.198*** (-8.52)	-0.141*** (-3.20)	-0.0370 (-0.97)	0.00206 (0.04)	0.00815 (0.12)
% of minority directors	0.423*** (6.05)	0.438*** (5.73)	0.290*** (4.37)	0.351*** (2.62)	0.278** (2.34)	0.202 (1.20)	0.195 (1.01)
% of female director	-0.0455 (-0.43)	-0.0418 (-0.42)	-0.124 (-1.35)	-0.170 (-1.03)	-0.242* (-1.70)	-0.421* (-1.89)	-0.669*** (-2.93)
% of outside directors	0.160 (0.87)	0.137 (1.01)	-0.0235 (-0.22)	-0.00694 (-0.03)	-0.0172 (-0.10)	-0.122 (-0.55)	0.317 (1.39)
Firm age	-0.00285*** (-2.77)	-0.00339*** (-3.28)	-0.00368*** (-4.22)	-0.00460*** (-2.87)	-0.00546*** (-3.82)	-0.00809*** (-3.99)	-0.0119*** (-4.35)
Branches	0.00103*** (3.68)	0.000500* (1.78)	-0.000238 (-0.88)	-0.000589 (-1.03)	-0.000542 (-0.99)	-0.000844 (-0.91)	0.000759 (0.62)
GDP	0.0239** (1.98)	0.0162 (1.31)	0.0194* (1.92)	0.00961 (0.50)	0.0132 (0.80)	0.0126 (0.52)	0.00774 (0.27)
Real Interest Rate	-0.00928* (-1.77)	-0.0129** (-2.58)	-0.0100** (-2.52)	-0.0132* (-1.79)	-0.0156** (-2.50)	-0.0243** (-2.54)	-0.0106 (-0.89)
Bond Rate	2.399*** (3.31)	2.070** (2.41)	2.143*** (3.29)	2.495** (2.02)	2.558** (2.39)	3.143* (1.94)	0.767 (0.37)
Interbank Settling Rate	-2.195** (-2.18)	-1.866* (-1.85)	-1.705** (-2.14)	-2.179 (-1.47)	-2.481** (-1.98)	-3.259* (-1.71)	-1.157 (-0.50)
Inflation	0.406 (1.06)	-0.432 (-0.91)	-0.557 (-1.45)	-0.240 (-0.33)	0.0950 (0.15)	0.0571 (0.07)	-0.896 (-0.84)
Public	-0.197*** (-3.56)	-0.110* (-1.73)	0.000935 (0.02)	0.118 (1.11)	0.194* (1.91)	0.441** (2.60)	0.468** (2.43)
Joint Venture	-0.0669*** (-3.66)	-0.0640*** (-3.24)	-0.0544*** (-3.28)	-0.0498 (-1.60)	-0.0325 (-1.19)	-0.0213 (-0.49)	-0.00897 (-0.16)
_cons	0.446*** (7.28)	0.518*** (8.26)	0.581*** (10.98)	0.631*** (6.32)	0.662*** (7.29)	0.763*** (5.85)	0.956*** (7.58)
N	205	205	205	205	205	205	205

(Note: This table presents the results of the relationship between corporate governance and banks' performance in Nepal. Asterisks indicate significance at 10% (*), 5% (**), and 1% (***). p-Values are presented in parentheses. The data related to banks such as board size, CFO, percentage of minority of directors, percentage of female directors, firm age and branches are collected from annual reports of the banks. Similarly, data related to ownership structure, bond rate and interbank settling rate are collected from central bank database and data related to inflation rate, GDP, real interest rate and bond are collected from the World Bank database).

Table 7-16: Quantile regression for deposit to assets

	Quantile Regression -Deposit to Assets						
	Q(0.10)	Q(0.25)	Q(0.40)	Q(0.50)	Q(0.60)	Q(0.75)	Q(0.90)
Board Size	0.0206 (0.30)	-0.000164 (-0.02)	-0.00380 (-0.73)	-0.00589 (-1.32)	-0.00548 (-1.26)	-0.00495** (-2.11)	-0.0135** (-2.34)
CFO	0.00559 (0.02)	-0.0237 (-0.67)	-0.0248 (-1.06)	-0.0335* (-1.74)	-0.0233 (-1.24)	-0.0161 (-1.49)	-0.0422 (-1.39)
% of minority director	0.0331 (0.03)	-0.0398 (-0.37)	-0.0306 (-0.45)	-0.0541 (-0.99)	-0.0687 (-1.31)	-0.0500* (-1.83)	-0.219*** (-2.95)
% of female director	-0.344 (-0.26)	-0.172 (-1.21)	-0.120 (-1.36)	-0.0739 (-0.94)	-0.0513 (-0.69)	-0.0462 (-1.14)	-0.159 (-1.58)
% of outside director	0.413 (0.32)	0.127 (0.92)	0.137 (1.53)	0.0316 (0.42)	0.0221 (0.30)	0.00389 (0.10)	0.357*** (3.21)
Firm age	0.00499 (0.46)	0.00248* (1.96)	0.00154* (1.90)	0.00161** (2.46)	0.00105 (1.64)	0.000581 (1.56)	-0.00171*** (-2.73)
No. of Branches	-0.000992 (-0.19)	-0.000245 (-0.46)	0.000302 (0.96)	0.000292 (1.25)	0.000594*** (2.90)	0.00120*** (12.63)	0.00255*** (11.80)
Inflation	-1.512 (-0.34)	-0.130 (-0.27)	-0.191 (-0.66)	-0.307 (-1.30)	-0.230 (-0.96)	-0.346** (-2.53)	-0.491* (-1.86)
Real Interest Rate	0.0331 (0.62)	-0.00359 (-0.64)	-0.00104 (-0.28)	0.000790 (0.25)	-0.000252 (-0.08)	-0.00206 (-1.14)	-0.0135** (-2.44)
Bond Rate	0.933 (0.10)	0.543 (0.62)	-0.322 (-0.55)	-0.630 (-1.32)	-0.756 (-1.59)	-0.783*** (-2.74)	-0.566 (-0.84)
Inter Bank settling rate	-1.116 (-0.11)	-0.940 (-0.89)	0.315 (0.44)	0.560 (0.95)	0.761 (1.30)	0.496 (1.45)	-0.143 (-0.16)
Ownership Structure	0.0629 (0.32)	0.0323 (1.36)	0.0191 (1.24)	0.0121 (0.96)	0.00862 (0.70)	0.00997 (1.41)	0.0281 (1.23)
_cons	0.310 (0.35)	0.779*** (8.84)	0.836*** (15.29)	0.910*** (19.50)	0.918*** (19.79)	0.944*** (36.38)	1.107*** (17.70)
N	209	209	209	209	209	209	209

(Note: This table presents the results of the relationship between corporate governance and banks' performance in Nepal. Asterisks indicate significance at 10% (*), 5% (**), and 1% (***). p-Values are presented in parentheses. The data related to banks such as board size, CFO, percentage of minority of directors, percentage of female directors, firm age and branches are collected from annual reports of the banks. Similarly, data related to ownership structure, bond rate and interbank settling rate are collected from central bank database and data related to inflation rate, GDP, real interest rate and bond are collected from the World Bank database).

Table 7-17: Quantile regression for operating expenses to interest income

	Q(0.10)	Q(0.25)	Q(0.40)	Q(0.50)	Q(0.60)	Q(0.75)	Q(0.90)
Board Size	-0.0567* (-1.74)	-0.0229** (-2.02)	-0.0322*** (-3.21)	-0.0297*** (-3.04)	-0.0339*** (-5.16)	-0.0323*** (-2.91)	-0.0315* (-1.82)
CFO	-0.102 (-1.07)	-0.0533 (-1.14)	-0.0349 (-0.82)	-0.0457 (-1.06)	-0.0680** (-2.42)	0.0377 (0.80)	0.426*** (5.90)
% of minority directors	-0.399 (-0.90)	-0.111 (-0.68)	-0.0592 (-0.42)	-0.0810 (-0.64)	-0.0831 (-1.01)	-0.271** (-2.11)	-0.240 (-1.17)
% of female director	0.249 (0.52)	0.110 (0.53)	0.103 (0.58)	0.131 (0.75)	0.230* (1.89)	0.442** (2.15)	0.194 (0.78)
% of outside directors	-0.362 (-0.72)	0.272 (1.33)	0.404** (2.02)	0.455** (2.33)	0.446*** (3.43)	0.510** (2.50)	1.088*** (2.74)
Firm age	-0.00904*** (-2.69)	-0.00184 (-1.03)	0.000153 (0.09)	0.00231 (1.42)	0.00286*** (2.65)	0.00839*** (4.47)	0.00271 (0.89)
Branches	0.000551 (0.27)	-0.00124 (-1.62)	-0.00226*** (-3.70)	-0.00179*** (-3.27)	-0.00199*** (-5.88)	-0.00249*** (-4.82)	-0.00139* (-1.93)
GDP	-0.0105 (-0.19)	-0.00931 (-0.45)	-0.0223 (-1.13)	-0.0221 (-1.18)	-0.0145 (-1.15)	-0.0272 (-1.27)	-0.0553* (-1.82)
Real Interest Rate	-0.00166 (-0.09)	0.0195** (2.49)	0.0218*** (2.93)	0.0194*** (2.63)	0.0213*** (4.31)	0.0233*** (2.63)	-0.00225 (-0.16)
Bond Rate	-6.041** (-2.16)	-1.014 (-0.77)	-0.411 (-0.33)	0.0984 (0.08)	-0.0317 (-0.04)	-0.429 (-0.29)	-1.086 (-0.51)
Interbank Settling Rate	5.771 (1.57)	2.782* (1.75)	1.819 (1.22)	1.095 (0.75)	1.257 (1.27)	1.780 (1.00)	2.273 (0.82)
Inflation	-0.568 (-0.29)	0.387 (0.49)	0.868 (1.14)	0.690 (0.97)	0.722 (1.54)	0.648 (0.83)	1.195 (1.00)
Public	0.272 (0.91)	0.127 (0.98)	0.258** (2.14)	0.120 (1.18)	0.0997 (1.55)	-0.0884 (-0.88)	0.649*** (3.91)
Joint Venture	0.0779 (0.79)	-0.0440 (-1.25)	-0.0249 (-0.78)	-0.0503 (-1.61)	-0.0611*** (-2.96)	-0.112*** (-3.25)	-0.104* (-1.76)
_cons	1.279*** (4.65)	0.844*** (7.66)	0.936*** (9.11)	0.954*** (9.65)	0.969*** (14.76)	1.056*** (9.11)	1.342*** (7.18)
N	205	205	205	205	205	205	205

((Note: This table presents the results of the relationship between corporate governance and banks' performance in Nepal. Asterisks indicate significance at 10% (*), 5% (**), and 1% (***). p-Values are presented in parentheses. The data related to banks such as board size, CFO, percentage of minority of directors, percentage of female directors, firm age and branches are collected from annual reports of the banks. Similarly, data related to ownership structure, bond rate and interbank settling rate are collected from central bank database and data related to inflation rate, GDP, real interest rate and bond are collected from the World Bank database)

Table 7-18: Quantile regression for operating expenses to total loan

	Q(0.10)	Q(0.25)	Q(0.40)	Q(0.50)	Q(0.60)	Q(0.75)	Q(0.90)
Board Size	-0.00767*** (-3.50)	-0.00385** (-2.11)	-0.00410** (-2.49)	-0.00503*** (-2.75)	-0.00723*** (-3.48)	-0.00863*** (-3.72)	-0.0113** (-2.30)
CFO	-0.00719 (-0.64)	-0.00460 (-0.63)	-0.00135 (-0.19)	-0.00629 (-0.78)	-0.00881 (-0.95)	-0.00321 (-0.34)	0.0125 (0.68)
% of minority directors	-0.106*** (-2.70)	-0.00970 (-0.40)	-0.00445 (-0.21)	-0.00257 (-0.11)	0.00485 (0.18)	-0.00535 (-0.19)	0.00622 (0.15)
% of female director	0.0566 (1.36)	0.0275 (0.93)	0.000449 (0.02)	-0.0231 (-0.76)	-0.0159 (-0.40)	0.0218 (0.54)	0.0562 (0.93)
% of outside directors	-0.00452 (-0.10)	0.0739** (2.25)	0.0478 (1.48)	0.0574 (1.59)	0.0593 (1.47)	0.102** (2.35)	0.182** (1.98)
Firm age	0.000959*** (3.44)	0.000489* (1.69)	0.000269 (0.99)	0.000293 (0.97)	0.000787** (2.18)	0.00172*** (4.41)	0.000920 (1.36)
Branches	0.0000486 (0.52)	-0.000384*** (-3.56)	-0.000471*** (-5.24)	-0.000530*** (-5.21)	-0.000500*** (-4.61)	-0.000516*** (-4.65)	-0.000537*** (-2.80)
GDP	-0.00356 (-0.71)	-0.00479 (-1.45)	-0.00686** (-2.21)	-0.00566 (-1.61)	-0.00386 (-0.94)	-0.00555 (-1.32)	0.00185 (0.25)
Real Interest Rate	0.00284 (1.53)	0.00536*** (4.32)	0.00652*** (5.42)	0.00668*** (4.85)	0.00671*** (4.13)	0.00703*** (4.08)	0.00618* (1.72)
Bond Rate	-0.491 (-1.47)	0.319 (1.63)	0.230 (1.13)	0.416* (1.77)	0.444 (1.61)	0.753** (2.50)	0.446 (0.90)
Interbank Settling Rate	0.0900 (0.23)	0.0416 (0.18)	0.156 (0.65)	-0.135 (-0.49)	-0.174 (-0.53)	-0.321 (-0.92)	-0.131 (-0.21)
Inflation	0.248 (1.38)	0.236* (1.79)	0.306** (2.58)	0.281** (2.14)	0.189 (1.25)	0.176 (1.14)	-0.361 (-1.29)
Public	-0.0343* (-1.95)	0.0408** (2.15)	0.0628*** (3.57)	0.0731*** (3.91)	0.0615*** (2.79)	0.0369* (1.73)	0.248*** (6.44)
Joint Venture	0.00110 (0.14)	0.00400 (0.71)	0.00134 (0.26)	0.00211 (0.37)	-0.00121 (-0.18)	0.000443 (0.06)	-0.00401 (-0.35)
_cons	0.120*** (4.69)	0.0653*** (3.59)	0.0762*** (4.62)	0.0887*** (4.88)	0.104*** (4.87)	0.113*** (4.77)	0.181*** (3.39)
N	205	205	205	205	205	205	205

((Note: This table presents the results of the relationship between corporate governance and banks' performance in Nepal. Asterisks indicate significance at 10% (*), 5% (**), and 1% (***). p-Values are presented in parentheses. The data related to banks such as board size, CFO, percentage of minority of directors, percentage of female directors, firm age and branches are collected from annual reports of the banks. Similarly, data related to ownership structure, bond rate and interbank settling rate are collected from central bank database and data related to inflation rate, GDP, real interest rate and bond are collected from the World Bank database).

Table 7-19: Quantile regression for ROA

	Q(0.10)	Q(0.25)	Q(0.40)	Q(0.50)	Q(0.60)	Q(0.75)	Q(0.90)
Board Size	0.00365 (1.08)	-4.47e-19 (-0.00)	1.60e-18 (0.04)	-0.000423* (-1.66)	-0.00126*** (-2.89)	-0.00254*** (-4.06)	-0.00337 (-0.73)
CFO	-0.00634 (-0.48)	8.97e-18 (0.02)	-2.71e-17 (-0.16)	-0.00820*** (-7.24)	-0.00413** (-2.10)	-0.00320 (-1.15)	-0.0220 (-1.11)
% of minority directors	-0.0407 (-1.08)	1.98e-17 (0.02)	-1.25e-16 (-0.26)	-0.00457 (-1.36)	0.000817 (0.14)	0.00178 (0.21)	-0.000601 (-0.01)
% of female director	0.0111 (0.25)	4.36e-18 (0.00)	9.88e-17 (0.17)	-0.00574 (-1.22)	-0.0148* (-1.84)	-0.0204* (-1.94)	-0.0325 (-0.40)
% of outside directors	-0.120** (-2.37)	2.51e-17 (0.01)	8.94e-18 (0.01)	-0.00117 (-0.23)	0.00664 (0.73)	0.0242** (2.00)	0.0984 (1.50)
Firm age	0.000454 (0.95)	-1.55e-19 (-0.01)	2.87e-18 (0.44)	0.000290*** (6.78)	0.000464*** (6.60)	0.000354*** (3.65)	0.000225 (0.36)
Branches	-0.0000216 (-0.13)	1.19e-20 (0.00)	5.90e-19 (0.24)	-0.0000538*** (-3.85)	-0.000120*** (-4.83)	-0.000134*** (-3.18)	0.00000769 (0.02)
GDP	-0.0000878 (-0.01)	1.55e-18 (0.01)	1.42e-18 (0.02)	-0.000883* (-1.78)	-0.00231*** (-2.63)	-0.00273** (-2.17)	0.00119 (0.12)
Real Interest Rate	0.00139 (0.66)	-6.17e-19 (-0.01)	-3.36e-18 (-0.12)	0.0000573 (0.30)	-0.000145 (-0.43)	0.000564 (1.11)	-0.000218 (-0.07)
Bond Rate	-0.152 (-0.51)	1.51e-17 (0.00)	6.34e-18 (0.00)	0.0187 (0.57)	0.0888 (1.56)	0.0630 (0.82)	0.0966 (0.20)
Interbank Settling Rate	0.228 (0.60)	-4.95e-17 (-0.00)	2.68e-17 (0.01)	-0.0255 (-0.66)	-0.101 (-1.49)	-0.0680 (-0.72)	-0.152 (-0.25)
Inflation	0.114 (0.50)	-1.67e-16 (-0.02)	-3.75e-17 (-0.02)	0.0587*** (3.13)	0.143*** (4.27)	0.165*** (3.53)	0.0963 (0.24)
Public	-0.0173 (-0.45)	1.82e-17 (0.02)	0.01000*** (2.44e+13)	0.00241 (0.87)	0.0108** (2.43)	0.0164** (2.54)	0.0123 (0.31)
Joint Venture	-0.00622 (-0.68)	-4.66e-18 (-0.02)	-2.15e-17 (-0.19)	0.00663*** (7.99)	0.00535*** (3.71)	0.00790*** (3.49)	0.0258 (1.59)
_cons	-0.0346 (-0.90)	0.01000*** (9.47e+12)	0.01000*** (2.71e+13)	0.0126*** (4.97)	0.0184*** (4.22)	0.0284*** (4.69)	0.0317 (0.77)
N	205	205	205	205	205	205	205

(Note: This table presents the results of the relationship between corporate governance and banks' performance in Nepal. Asterisks indicate significance at 10% (*), 5% (**), and 1% (***). p-Values are presented in parentheses. The data related to banks such as board size, CFO, percentage of minority of directors, percentage of female directors, firm age and branches are collected from annual reports of the banks. Similarly, data related to ownership structure, bond rate and interbank settling rate are collected from central bank database and data related to inflation rate, GDP, real interest rate and bond are collected from the World Bank database).

7.5 Conclusion

This chapter provided the framework and empirical results for the econometric analysis used to test the hypotheses along with the research methods and the specific data analysis techniques used in this study. It also discussed the findings and examined the importance corporate governance variables for financial performance, applying the data analysis methods discussed in the previous chapter.

Chapter Eight

Summary and Conclusion

8.1 Introduction

The research undertaken and reported in this thesis, as indicated in Chapter One, examines the research question, “Does the corporate governance structure impact on the financial performance of banks in Nepal?” This research was undertaken using a robust research method, ensuring the veracity of the findings. The findings point to several potential changes in bank governance, which may be undertaken to enhance the performance of banks. Suggestions concerning implementation are now made. Finally, further questions arising through the research suggest several areas with potential for future research.

The structure of the chapter is organised as follows: Section 8.2 reviews the focus of the study. Section 8.3 summarises the empirical results. The significance and contribution to knowledge and literature of this research is noted in section 8.4, and section 8.5 discusses the policy implications. Section 8.6 covers limitations of the study suggesting issues for future research. Section 8.7 makes some concluding comments.

8.2 Overview of Research Hypothesis

Five hypotheses were tested. The empirical results are shown in Table 7.1.

Table 8-1: Summary of Hypothesis results regarding corporate governance variables and bank's performance

Hypothesis	Relationship Tested	Sign		Different Results
		Expected	Empirical	
H1	Board size & bank's performance	∅	+	Eisenberg et al., 1998; Mollah & Zaman, 2015
H2	CFO and bank's performance	+	+	Javaid & Saboor, 2015 Lutz & Schraml, 2011
H3	Percentage of minority of directors bank's performance	-	+	Zahra & Stanton, 1988
H4	Percentage of outside directors & bank's performance	+	-	Bhagat & Black, 1999
H5	Percentage of female directors & bank's performance	∅	+	Adams & Ferreira, 2009 Smith et al., 2006

Note: Symbols (+),(-) and (∅) represent positive, negative and no significant relationships, respectively.

Nepal is a land of opportunities. Many of the opportunities available in the country are yet to be capitalised. Capital is one of the major catalysts for development. The banking sector plays a vital role in the growth and development of the country by supporting the business organisations with capital. Good governance in, and successful operation of, the banking sector not only attracts local investors but also investors from abroad which ultimately increases the productivity and growth of the country.

Despite having US\$6.65 billion of remittance inflows (only from formal sources) that contributed 29.6 per cent of the country's GDP (Shrestha, August, 2016), most of those funds are spent on regular expenditure rather than being saved or invested as capital (Pant, 2016). Developing trust in banks and other investment sectors would motivate the public to use their funds wisely. Realising that fact, regulatory reforms in corporate governance were developed by central banks in 2006 with the introduction of a code of best practice. However, the outcome was not as expected and time and again the government and central banks have had to create several regulations to protect the interest of shareholders with criteria, rules and regulations on the board of directors. This research investigates whether the given governance variables have a significant role in bank performance.

8.3 Focus of the study

The study was motivated by increasing public interest, especially after the various corporate failures and scandals that have occurred both internationally and in Nepal. The literature supported the importance of this motivation. There were more than 127 systemic banking crises during the period 1970 to 2007 (Laeven & Valencia, 2008). The Asian financial crisis was more severe. In addition, the global financial crisis which started in the United States' with the sub-prime mortgage market collapse has also increased public pressure for proper governance, at least in the banking sector (Greenidge & Grosvenor, 2010). Research by Honohan & Klingebiel (2000) has found that 14.3 per cent of developing countries' GDP is used only to clean up their

financial system due to the results of such crises. The first step for the foundation of a strong financial system is to have a good governance structure.

Several corporate governance failures in Nepali banks, such as Nepal Development Bank Limited, First Commercial Banks of Nepal, Nepal Bank Limited, Nepal Bangladesh Bank, Lumbini Bank Ltd., Gurkha Development Bank, United Development Bank and several other financial institutions (Kumar & Upadyaya, 2011) have increased the demand for greater transparency and accountability in the way banks are controlled and managed. To improve the status of governance practices in Nepal, the central bank (NRB) of Nepal has issued several directives, guidelines and principles for good governance practices. It was expected that adopting good corporate governance practice would increase the financial performance of the banks. To do this, the board of directors can play a significant role to improve a bank's performance by proactively acting on various issues. The NRB has issued several directives for making boards independent by formulating rules to appoint independent directors, professional directors, audit committee, remuneration committee and risk management.

This research first studied whether the good corporate governance mechanisms adopted by the commercial banks in Nepal has led to an increase in financial performance. To identify the effect of various corporate governance mechanisms, the variables considered were board size, CFO, percentage of minority directors, percentage of outside directors and percentage of female directors. Similarly, with regard to the performance

variables, return on assets, non-performing loan to total loan, loan to deposit, deposit to assets, operating expense to interest income, and operating expenses to total loan were studied.

The data for the study were collected for the period 2003 to 2012 and the data regarding corporate governance and performance variables were handpicked from annual reports of banks, while the data for macro-economic variables were taken from the World Bank database, and remaining control variables' data were collected from the central bank. Ordinary Least Squares (OLS) regression techniques and the quantile regression techniques, analysing the pooled dataset were used to test the hypotheses. The findings of the study are significant and there is a way forward to benefit from the existing research.

8.4 Empirical Results

Table 8.1 shows a brief summary of hypotheses tested in respect to corporate governance and banks' performance in Nepal and how these findings are different from previous research.

Board size and financial performance: Table 8.1 shows that this research found board size has an overall significant positive relationship with the financial performance of banks in Nepal. This indicates that a larger board leads to increase in the performance of middle- and average-performing banks. This might have arisen from larger boards bringing diverse knowledge and ideas forward, which facilitates better decision making, good monitoring and supervision (Andres & Vallelado, 2008). These findings are in line with resource dependence theory that states a larger board provides more

specialist knowledge from different fields and therefore contributes to better decision making (Kiel & Nicholson, 2003; Mohamed, 2009; Pfeffer & Salancik, 1989; Salim et al., 2016; Zahra & Pearce, 1989). However, it should be noted that the banks should focus not only on the quantity of board members but also their quality in terms of their qualifications, experiences, enrichment of skills and diversity. Government regulations concerning boards' requirements to meet monitoring needs have not been updated for some time and formulating requirements for directors to participate in training and development programmes do not exist.

CFO and financial performance: The research finds that the appointment of a chief financial officer has a positive effect on a bank's financial performance. This finding is supported by the research conducted by Javaid and Saboor (2015) and Lutz and Schraml (2011) who stated that with a CFO, the board can perform better and provide sound implementation of good corporate governance practices. The main reason for this might be that a CFO is good at evaluating potential risks. Thus, the Government should create regulations to include a chief financial officer on the board as they contribute positively while creating sustainable financial policies and help to safeguard the long-term existence and independence of the firms (Di Giuli & Caselli, 2008).

Percentage of minority directors and quantile regression: It is found that the percentage of minority directors has a significant positive relationship on the performance of banks. The positive diversity on the board increased the quality of thought, and the strategic decision making of the firm (Ameer &

Rahman, 2009; Crano & Chen, 1998). It might be because minority directors may suggest new avenues for investment which in turn helps to increase the profitability of banks.

Percentage of outside directors and quantile regression: The research found a negative relationship between the percentage of outside directors and a bank's performance. The negative impact of outside directors is consistent with previous studies (Bhagat & Black, 2002; Coles et al., 2008; Pathan & Faff, 2013; Yermack, 1996). It also supports the notion of Subrahmanyam et al. (1997) that independent directors in the bank are chosen more for regulatory and compliance purposes. Also, the outside directors might be regarding their position as just another avenue for income and part of their retirement plan. Hence, it would be wise for the government to determine specific additional responsibilities for outside directors as well as choosing them based on their key skills and abilities.

Percentage of female directors and quantile regression: The research shows that the female directors on a board have significant influence, mostly around the average- and higher-performing banks. This result is consistent with the findings of Adams & Ferreira (2009); Carter et al (2003) ; Garcia-Meca et al. (2015) and Pathan & Faff (2013 who argued that a diverse board offers strong monitoring and plays a significant role in good corporate governance. Further, the way males and females think is quite different; the female directors may add value by bringing new ideas and bringing different perspectives to the board. Also the female directors are more conservative

when providing loans to the risky projects, hence they may request several checks and verifications that ultimately reduce the risks and foster good governance in the organisation (Adams & Ferreira, 2009; Smith et al., 2006). This implies that incorporating female directors in the board will potentially benefit the financial performance of the banks. Hence, the central banks and Nepali government should adopt policies to include female directors on their boards.

8.5 Contribution to knowledge

The contribution of this study to the corporate governance literature is threefold. First, this study helps to fill the gap by understanding the corporate governance practices in Nepal, separately and comprehensively. The research shows that there is no clear understanding of the corporate governance and performance relationship in a developing nation that has just overcome war and repeatedly faces political turmoil.

Second, this study has extracted knowledge mainly from the agency theory and less from stakeholder theory, resource dependency theory and stewardship theory. Empirical investigation into how corporate governance practices enhance financial performance, with special consideration given to its various categories of performance variables, are reported. This study has used the quantile regression techniques where the performance variables have been categorised into various quantiles. The major advantages of dividing the data into various quantiles in comparison to normal regression is that in quantile

regression the performance of banks in relation to their individual quantiles can be identified clearly.

Thirdly, the empirical evidence from this study supports the emergent proposition, that governance effectiveness influences firms' performance. Thus, it helps to enrich the understanding of various governance variables that have an influence on a bank's performance. Given that Nepal is a developing country, the governance systems, their variables and findings may be generalizable to other similar developing economies.

8.6 Policy Implications and Recommendations

The empirical findings of this study have some policy implications for banks in Nepal, and potentially other similar developing nations. An increase in the number of board members has a positive relationship with bank performance, so the central banks should adopt directives and policies regarding increase in board size along with board diversity in terms of education, skills, experiences, culture, etc., rather than just diversity in terms of gender. While looking at the composition of board of directors for the year 2012, there is some evidence to suggest that in terms of caste it was found that the majority of board members are Brahmin followed by Newars and others; however, the records are incomplete. Incomplete data concerning directors' names and titles at this point prevents a reliable analysis of caste diversity on boards. Potentially more information will become available and this would be a useful area of investigation in future research.

The findings point to several changes that will impact positively on performance. In order to strictly implement the four pillars of corporate governance (transparency, accountability, fairness and responsibility), thorough regulation will be necessary. Improvement of public sector bank performance, especially through reduction in agency cost is an obvious target.

1. Given the commercial and social culture in Nepal, it is unlikely in the short term that effective changes in governance will occur without government involvement. So, the government and central banks should work collaboratively to formulate various policies and guidelines for the banks that help to mitigate the short-term problems as well as long-term issues.
2. To enhance their performance, different corporate governance mechanisms could be developed for different groups of banks, based on their financial performance.
3. Research findings show that the presence of a CFO has a positive influence on a bank's performance. Formulation of regulatory requirements to require there to be a CFO for each bank and suggesting general guidelines concerning their qualifications, skills, and knowledge requirements has merit.
4. To improve the accountability and transparency in the banks, additional directives and recommendations should influence the selection of the board of directors. Currently, they have only educational qualifications and job experience as the selection criteria; however, there are many other skills, training and development

programmes that might help to enrich their experience. It is common for the same individual to be on the board of directors of various banks and other organisations, which may give rise to conflicts of interest and, where there are many directorships, divide focus and negatively influence the quality of decision making. Regulatory guidance is needed on the maximum number of directorships and circumstances where multiple directorships of financial institutions are acceptable. The membership of Audit Committees is an important role and conflicting interests can arise, suggesting the government could enhance performance through providing guideline and monitoring.

In Nepal there is no professional association for directors. In many countries there are institutes of directors, which are committed to developing the professional competency of directors. Government support for the formation of an institute of directors is recommended. A viable approach would be to approach a friendly donor country to sponsor a joint initiative between its institute and local directors of enterprises, including banks. Regulation may be required and this should be considered by parties involved. The formulation, implementation, monitoring and advancing of good corporate governance processes in Nepal will help attract investment from foreign and local investors, building confidence in the sustainability of enterprises. The government needs to be proactive in developing policies, guidelines, boards' capacity and regulations as required. The government could also introduce a requirement for board members to

undertake continuing professional development through attendance at institute of director's seminars and programmes. Building capacity in the pool of directors and increasing professionalism may prove valuable in enhancing the quality of governance and performance.

8.7 Limitations and Suggestions for Future Research

Despite the contribution of this study, it has some limitations; however, these indicate some positive avenues for future research. The first limitation is the availability of the data. Due to the lack of a good database, the study could not be conducted for a longer period of time. Also, the earthquake has hindered getting recent data. As suggested by Wintoki et al. (2012), a data set covering a longer period of time will open up the opportunity for addressing other questions regarding change and its impact.

This study is based mainly on the data extracted from the annual reports of the banks. However, there are some limitations to the financial reports. They are subject to manipulations, the assets might be systematically undervalued, due treatment of certain revenues and expenditures, alternation in value due to the method of inventory valuation, method of depreciation and so on.

The second limitation is that rules and regulations, the variables relating to the board structure, will change over time which might potentially reduce the efficacy of the study. Additionally, this research could use one of the popular variables in corporate governance research, 'Tobin's Q', because of the lack of availability of the total market value of firm. Using this financial metric, along

with other accounting-based performance measures, would provide different conclusions.

The third limitation stems from the lack of data on attributes relating to bank directors which is readily available in many countries. It would be interesting to see whether other observed diversity characteristics of board directors, such as their qualifications, age, education, background and experiences, play a vital role in performance. In the future these forms of data may be readily available.

Future research may have more data with which to work. A longer time-series is the most important opportunity for future research. The introduction of inter-quantile comparisons to highlight changes in specific variables and the importance between the lower and upper quantiles will be interesting. Stata `sqreg` command can provide standard errors via bootstrapping, to estimate the results for the multiple quantiles simultaneously. This facilitates comparing coefficients of different quantiles.

Additional corporate governance and control variables could reveal new relationships between corporate governance and bank performance. In addition, relationships between board members and the audit committee, banking efficiency, political regimes, CEO characteristics and executive compensation could also provide meaningful avenues for future research.

Many commercial banks in Nepal have merged, or are in the phase of merging with, class A, class B and class C financial institutions. These changes may

provide interesting opportunities to analyse how governance pre- and post-restructuring impacts upon returns of the banks involved.

Additionally, the case study approach to understand the inner working of the board would enable the capture of shifting ideas, paradigms, social norms and modes of thinking emerging in the prevailing board.

8.8 Conclusion

This chapter concludes the thesis with the summary of the findings, implications of results, and conclusions from empirical analysis.

This research contributes to the corporate governance literature in several ways. It is the first study to explore the relationship between corporate governance and bank performance incorporating all Nepal's banks. It has also used quantile regression to identify the impact of various performance variables to gain a comprehensive picture. The findings support the view that there is a positive relationship between corporate governance and bank performance. Additionally, this study leads to important policy implications for corporate governance practices in financial institutions in Nepal and other similar emerging economies. Finally, this research suggests ample scope for future research, by expanding time periods, studying the non-financial sector, using case based analysis, and studying the effect of mergers and acquisitions in banks' performance.

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Appendix 2: List of Commercial Banks in Nepal

S.N.	Name of Bank	Estd. Date
1	Nepal Bank Ltd.	15/11/1937
2	Rastriya Banijya Bank Ltd.	23/01/1966
3	Agriculture Development Bank Ltd.	2/01/1968
4	Nabil Bank Ltd.	16/07/1984
5	Nepal Investment Bank Ltd.	27/02/1986
6	Standard Chartered Bank Nepal Limited	30/01/1987
7	Himalayan Bank Limited	18/01/1993
8	Nepal SBI Bank Ltd.	7/07/1993
9	Nepal Bangladesh Bank Ltd.	5/06/1994
10	Everest Bank Limited	18/10/1994
11	Bank of Kathmandu Ltd.	12/03/1995
12	Nepal Credit and Commerce Bank Ltd.	14/10/1996
13	Lumbini Bank Ltd.	17/07/1998
14	Nepal Industrial & Commercial Bank Ltd.	21/07/1998
15	Machhapuchhre Bank Ltd.	3/10/2000
16	Kumari Bank Ltd.	3/04/2001
17	Laxmi Bank Ltd.	3/04/2002
18	Siddhartha Bank Ltd.	24/12/2002
19	Global IME Bank Ltd.	2/01/2007
20	Citizens Bank International Ltd.	21/06/2007
21	Prime Commercial Bank Ltd	24/09/2007
22	Sunrise Bank Ltd.	12/10/2007
23	Grand Bank Nepal Ltd.	25/05/2008
24	NMB Bank Ltd.	5/06/2008
25	Kist Bank Ltd.	7/05/2009
26	Janata Bank Nepal Ltd.	5/04/2010
27	Mega Bank Nepal Ltd.	23/07/2010
28	Sanima Bank Nepal Ltd.	20/09/2010
29	Civil Bank Ltd.	26/11/2010
30	Century Commercial Bank Ltd.	10/03/2011

Appendix 3: Definitions of Variables

Variable	Acronym	Description
Dependent Variables		
Return on assets	ROA	This ratio measures how efficiently the company can manage its assets to generate the profit during the year.
Non-performing loan to total loan	NPL/TL	An indicator of the quality of bank's outstanding loans.
Operating expenses to interest income	OEII	It describes the banks operating efficiency.
Operating expenses to total loan	OETL	It analyses the banks efficiency.
Loan to deposit	LTD	It shows the long term solvency of the banks.
Deposits to assets	DTA	This ratio is used to evaluate the influence of a bank's liability upon its profitability
Independent Variables		
Board size	BS	It refers to the total number of directors in the board.
CFO	CFO	It indicates the existence of CFO-"1" is allocated if there is chief finance officer in the bank, otherwise "0" is allocated.
Board diversity	% of female directors	Percentage of the female directors serving on the board
Percentage of minority directors on the board	% of minority of directors	Percentage of the minority directors serving on the board
Percentage of outside directors on the board	% of outside directors	Proportion of outside directors attendance in the meetings

Control Variables		
Ownership type	Owner	1 for the government banks, 2 for the private banks and 3 for the joint venture banks
Firm age	Age	It is the difference between the bank's establishment date and the last period of study.
Number of branches	No. of Branches	It is the total count of number of branches of the bank.
Gross Domestic Product	GDP	An indicator to assess the country's economy
Real interest rate	Real interest rate	It is an inflation adjusted interest rate
Bond rate	Bond rate	One year bond rate
Interbank settling rate	Interbank settling rate	Interbank settling rate is the interest rate between the banks for their short-term borrowings.
Inflation	Inflation	It is an indicator of the rate of inflation of the bank
