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**Risk Transfer and Uncertainty in  
Privatisation: Cases from Air Transport**

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# **Risk Transfer and Uncertainty in Privatisation: Cases from Air**

## **Transport**

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## **Abstract**

This paper seeks to challenge the notion of risk transference via examples of PPP and privatisation of state owned assets. The paper draws on case studies in air transport operations, in which the private sector has been encouraged to take full / part responsibility for previously state-controlled operations. Cases have been drawn from the UK and New Zealand since these countries have been at the forefront of air transport privatisation, and provide examples of a variety of public/private arrangements and their outcomes. The state cannot avoid uncertainty through such contractual arrangements. The quantified approach to risk sharing has grave limitations under conditions of uncertainty. So, contrary to governments' espoused expectations, although ownership and some benefits have been transferred, some risk elements have ultimately not been transferred. This is in part due to uncertainties surrounding the future prospects of the privatised entities / PPP's. Indeed, the loss of control may result in greater risk, as private sector investors can reap the rewards of financial returns if the market remains buoyant, but at the same time they are protected to some extent by the state from the financial risk of losing their investment.

**Key words:** risk, uncertainty, public/private partnerships, air transport, risk transfer

## **1. INTRODUCTION**

Privatisation became a dominating political theme in the last two decades of the twentieth century and led to the sale of public assets, to deregulation and the establishment of surrogate markets in many economies throughout the world (Jackson and Price, 1994). The role of the private sector was further extended through 'partnerships' between the public and private sectors in the provision of what had been generally considered to be essential public services. The accounting literature has dealt with various aspects of privatisation and partnerships emphasising initiatives such as the Private Finance Initiative (PFI) and Public Private Partnerships (PPPs) (Froud, 2003, Broadbent and Laughlin, 2002; Newberry and Pallot, 2003, Shaoul, 2005) and 'accounting type' regulations (Puxty et al, 1987; English and Guthrie, 2003; Austin, 2005). According to Shaoul (2005) the government now justifies such 'partnerships' partly in terms of risk transference. But she claims that risk transfer is conceptually flawed (ibid, p.453).

The aim of this paper is to further the debate concerning the ambiguous concepts of risk and uncertainty in cases where responsibility is transferred from the public to private sector (see Froud, 2003; Newberry and Pallot, 2003, Shaoul, 2005). The issues are illustrated through cases of private sector involvement within various aspects of air transport operations namely, airlines, air traffic control and airports. This sector was chosen since there are significant national interests involved in the operation of these facilities as well as it being a sector which is forecast to experience significant growth in the years to come. Cases have been drawn from the UK and New Zealand since these countries have been at the forefront of air transport privatisation, and provide examples of a variety of public/private arrangements and outcomes. In the following section, the theoretical and practical contexts for the case studies are outlined. The next section outlines the context of the industry and the forces acting for and against privatisation. The specific examples of private sector involvement are presented, followed by a discussion of general features relating to risk transference before a concluding section.

## **2. PUBLIC-PRIVATE PARTNERSHIPS, PRIVATISATION, RISK AND UNCERTAINTY**

Recent years have witnessed a continuing movement towards what has been referred to as the ‘minimalist state’ (Harrison, 1993, p2). Many services have been taken out of the public sector with justifications such as:

- to introduce commercially focused management in order to improve efficiency (Vickers and Yarrow, 1988; Parker and Wu, 1998; Haskel and Symanski, 1991; Dick, 1987, )
- to provide access to private investment (Broadbent and Laughlin, 2002; Edwards and Shaoul, 2003)
- to gain political advantage (Fine, 1990)
- to reduce government involvement in industry (Pirie, 1985; Haskel and Symanski, 1991; Beesley, 1992; Morgan, 1995),
- to reduce subsidies to the public sector (Francis and Humphreys, 2001) and as such
- to reduce the financial burden on government of the public sector (Newberry and Pallot, 2003)
- to transfer risk (Froud, 2003, Shaoul, 2005).

A prime motive for privatisation has been the belief that private sector ownership is more efficient than public sector ownership (Pirie, 1985). Mixed results have emerged from the many case studies into the outcomes from privatisation (for example Wiltshire, 1987; Morgan, 1995; Aylen, 1994; Green and Vogelsang, 1994; Yarrow, 1994, Parker, 1999). According to Marsh (1991) in his review of the privatisation literature, there is “considerable doubt” as to whether privatisation has increased efficiency (Marsh, 1991), a conclusion reached by Parker (1999) in his assessment of the privatisation of the BAA airports.

The involvement of the private sector increasingly requires the demonstration of value for money in the provision of services (Edwards and Shaoul, 2003). The rationale for using the private sector in the running of public services has become less ideological and more based on demonstrable calculative benefits (ibid, p.397). This is the logic underlying the Private Finance Initiative (PFI) and Public Private Partnerships (PPP) in the UK. Strict criteria and guidelines have been produced by the UK Treasury and the National Audit

Office (NAO) to enable public sector entities to demonstrate the beneficial nature of the transfer of risk and costs to the private sector and thereby justify private sector involvement in public services. The PFI involves the drawing up of contracts that identify, allocate and allow for the management of risk.

Broadbent et al (2005) list the risks identified by the National Audit Office in the UK as follows:

- Design and construction risk
- Commissioning and operating risks
- Demand risk
- Residual value risk
- Technology /obsolescence risk
- Regulation risk
- Project risk
- Risk of contractor default
- Political /business risk

The approach taken by the Treasury and NAO is an accounting based approach relying on the ability to specify the risks as a quantified financial estimate. Broadbent et al (2005) provide a table with sub-categories of each risk class identified and the party (private or state) that carries the risk, some of which are shared. Though elements of all these risk categories are evident in the case studies, we focus on the last risk category political/business risk. Broadbent et al (2005) do not provide entries for risk sharing under political and business risk. We aim to expand on their discussion by examining this aspect and by considering 'reputational risk' to government, and uncertainty as distinct from risk.

Froud (2003) has analysed the types of risks involved. She argues that two distinct concepts have been confused and conflated in the promotion of the PFI and the assessment of value for money. The two concepts are those of risk and of uncertainty. Risk refers to the estimated probability that known events will occur. Such risk can be taken into account in quantified decision making techniques such as cost-benefit analysis or net present value calculations. Such quantified analyses are the basis for decision making in the PFI contracts. What Froud argues (p. 569) is that this approach has no way of dealing with unknown events whose chance of happening lie outside a probability

distribution. In other words, it cannot deal with uncertainty, for which there is no scientific basis on which to form any calculable probability. Ignoring uncertainty is why Froud believes the partnership arrangements between the state and private sectors results in the continuing involvement of the state and the bailing out of private sector partners when the improbable events become a reality. In many respects the future is unpredictable and in this case it seems that mechanisms such as the PFI which attempt to define and share the inherent risks of projects do not work in the longer term. The state cannot avoid uncertainty through such contractual arrangements.

The quantified approach to risk sharing has grave limitations under conditions of uncertainty. As Shaoul (2005) claims "...risk transfer is conceptually flawed. The concept of risk assumes that all possible outcomes of each trial or event can be predicted and weighted so that a complete array of results covering all eventualities can be compiled ...the issue is uncertainty not risk". For irregular, non-repeatable decisions, such as privatisations, in a dynamic and uncertain environment and relating to long-term infrastructural assets, probability distributions are of little assistance. Moreover, the decision to privatise itself will affect systemic change and increase the unpredictability of outcomes. In this context it may be difficult for the state to absolve itself completely of responsibility with respect to assets of a strategic national or international importance.

Though PFI and PPP contractual arrangements go somewhat towards sharing risks, it might be surmised that full privatisation would transfer all risk (and uncertainty) to the private sector. In the empirical examples presented in this paper, that conclusion is not so evident. Given the nature and strategic importance of the infrastructural assets in the air transport industry, governments cannot in the long term divest themselves of responsibility when things go wrong.

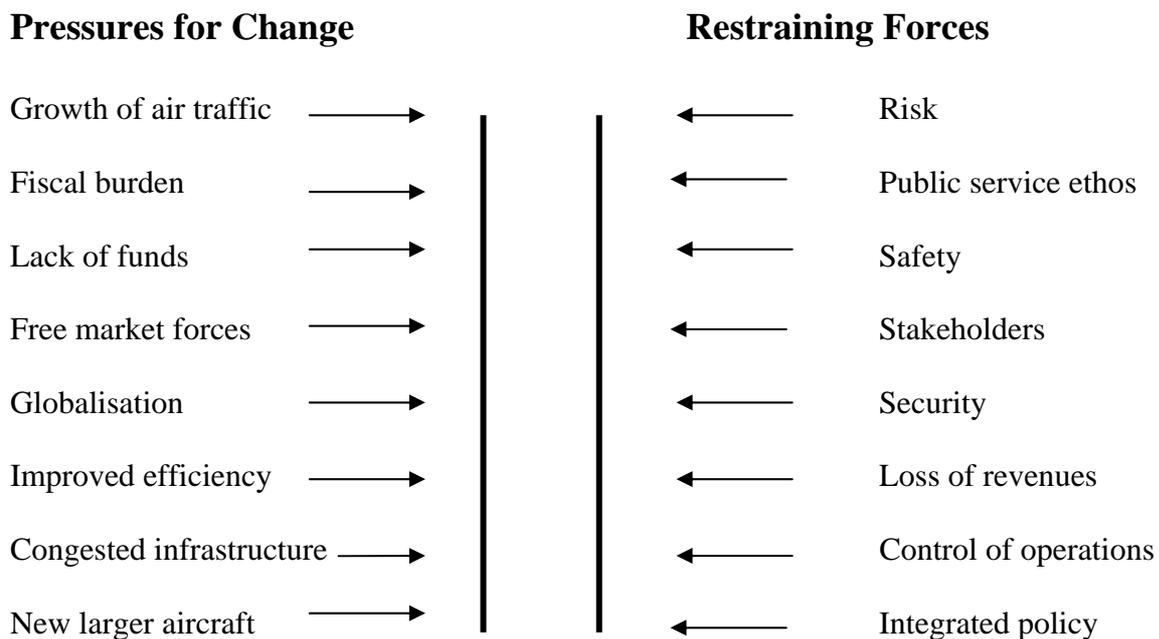
### **3. CONTEXT – PRESSURES FOR PRIVATE SECTOR INVOLVEMENT IN THE AIR TRANSPORT INDUSTRY**

There has been phenomenal growth in the size of the air transport sector, with traffic doubling every 12-15 years since the 1970's. It is forecast to more than double again between 2002-2020 (ACI, 2003). Such expansion in volume has meant that its demand for infrastructural resources has outgrown the willingness of governments to continue public sector provision and there has been a global movement towards the infusion of

private capital. As with other public services, internationally there has been an increasing trend towards deregulated, privatised or commercialised organisations providing the world’s air transport system. More than 80 countries have introduced some form of privatisation or commercialisation to their airports. The cases in this paper are taken from the UK and New Zealand, two countries which have been at the forefront of the privatisation movement (Kissling 1998; Francis and Humphreys, 2001).

The pressures for change and restraining forces for change are illustrated in Figure 1 a force field diagram (drawing upon Lewin, 1951). Such force field diagrams were developed as change management tools, but offer a useful device to portray both the pressures towards privatisation and restraining forces that may inhibit it. It considers the particular social and political pressures as well as economic pressures working for and restraining change. The outcome is dependent on the changing balance of pressures.

**FIGURE 1 Forces for change**



The pressures for change are primarily driven by the large cost of infrastructure provision required to accommodate forecast long term growth of traffic. Many of the world’s major airports are congested and the Airports Council International (ACI, 2001) has estimated that worldwide an investment of over \$500 billion in airport expansion will be required between 1999-2019 to accommodate growth. Despite the impact of September 11<sup>th</sup> (see

Goodrich, 2002) and other events, the FAA in the US has noted the continued importance of airport expansion: “We also recognise that building the infrastructure is very important. If we delay, we’ll be ruing that day two or three years from now” (Field, 2002).

Whilst in some cases privatisation has been a political decision as a result of a wider policy agenda, it is also true that the fiscal burden of funding infrastructural expansion has been a major driver for governments to seek private sector input to air transport infrastructure development. In the US air transport system congestion is still an issue (ACI, 2001). Extra security investment, use of capacity to accommodate new security measures and airport development for new large aircraft have increased the fiscal burden of operating and expanding air transport infrastructure. The lack of funds to support the necessary long term investment required has forced Governments to search for ways of encouraging private sector involvement into the air transport system. Existing airports need to invest at twice the rate of their operating surplus, equivalent to 40% of their annual revenue, in response to the growth of demand. (Caves and Gosling, 1999).

The possibility of reducing (central and / or local) Government spending upon air transport systems is naturally appealing since it leaves Governments with more money for politically attractive targets such as tax reductions and spending on health and education. It has also been argued (see Boyoko et al, 1996; Parker, 2003) that the market forces associated with competition will make privatised entities more efficient. A counter argument is presented by de Fraja (1993), Martin and Parker (1997), and Parker (1999) based on the unsuitability of management practices from the private sector to deal with perceived inefficiencies in the public sector.

In terms of *restraining forces* there are a number of factors that may act as a barrier to government relinquishing control over assets. Commercially viable airports that might be privatised could have afforded a good income stream to their public sector owners. Perhaps a more compelling reason relates to the argument of ‘market failure’. Those smaller airports that may not be commercially viable but have been operated from a public service (economic development) standpoint may no longer attract investment and may even be closed if left to free market forces.

Similarly, government ownership of infrastructure has advantages in terms of long term development and planning, with less need to satisfy private shareholders interested in short-term financial returns. Additionally losing control of airports and air traffic control could have national security and safety implications.

Despite their significance, the above *restraints* to privatisation have frequently been outweighed by the dominant driving force in many countries of the financial burden on governments.

#### **4. ILLUSTRATIVE CASES**

The cases in this section include private sector involvement across the spectrum of air transport namely: an airline, an air traffic control provider and UK regional airports. The contexts and the factors affecting each of these privatisations are different. The common element is the strategic as well as economic importance of air transport and the retention of state involvement after the transfer of ownership. In each case, the risk transference has not been as great as anticipated.

##### **4.1 Air New Zealand**

Air New Zealand was government owned and operated until 1989. In accordance with the free market philosophies of the Fourth Labour Government (referred to as Rogernomics in NZ), Air New Zealand was privatised by the outright sale of shares to the public in October 1989. Initially shares could only be purchased by New Zealand nationals, but from December 1991 the restriction on the nationality of ownership was removed, allowing shares to be purchased by a consortium comprising Brierley Investments, Qantas, Japan Airlines and American Airlines. The privatisation raised NZ\$660m and was considered to be fairly priced (Bowden, 1996). In October 2001, the airline was in financial difficulty and as such required extensive financial government assistance with a rescue package amounting to NZ\$889m (Thomas, 2002; Lockhart and Taitoko, 2005).

The New Zealand government had attempted to restrict outright foreign ownership of its 'national' airline. It opposed ownership by Singapore Airlines, at least until the revelation of the extent of Air New Zealand's financial difficulties. The government later

encouraged Singapore Airlines involvement but it was too late to prevent it from having to bail-out Air New Zealand itself.

The recapitalisation of Air New Zealand was proposed in October 2001, completed in January 2002 and resulted in the Government taking control of 82% of total shares (4.5% remained with Singapore Airlines, 5.5% with Brierley Investments and 8% other) (Air New Zealand, 2003). Lowe (2001) points out that the present value of the original NZ\$660m sale in “today’s money” would have been more than the NZ\$889m rescue package. An important advantage is that the New Zealand government is in a position to benefit from the ‘upside risk’ if Air New Zealand’s share price recovers.

News that Qantas was attempting to take a 35% stake and management control of Air New Zealand had important implications for the New Zealand Government. The financial input would be welcome, but the wider implications of Qantas and Oneworld having a near monopoly of air transport in the region was thought to restrict choice for New Zealand consumers. This could have implications for the cost of air travel, the nation’s airports and the nation’s economy. Qantas might pursue its own interests by using its ownership to remove competition and to put New Zealand’s air transport assets into a secondary role subservient to Qantas's hub operations from Australia. Qantas’ planned investment of up to NZ\$550m was subjected to scrutiny by both New Zealand’s Commerce Commission and Australia’s Competition and Consumer Commission which have indicated that it may be anticompetitive. The draft determination by the New Zealand competition authority (Commerce Commission) suggested that it: *‘would not result in net public benefit to New Zealanders ...[and] ...would likely result in a substantial lessening of competition in a number of markets’* (Commerce Commission, 2003a, p.1).

The New Zealand Government had a political motive not to allow the National carrier to fail, considering air transport is of such importance to New Zealand given its economic and geographical context (see Francis et al., 2000 and Sankaran (2000). Sankaran (ibid) emphasises the importance of air transport to the economy of New Zealand and points out that although less than one per cent by weight, air freight taken in value terms represents 25.1 per cent of New Zealand’s imports and 15.4 per cent of its exports. Additionally the New Zealand economy is highly dependent on tourism, and some 99 per cent of tourists

arrive by air (Ministry of Transport New Zealand, 1995). The transport system in New Zealand is such that there is a high dependence on air transport. There is a developed regional airport network with Air New Zealand providing the vast majority of domestic flights. The airline therefore is regarded as a strategically important asset to the whole New Zealand economy. Thus the perceived national importance of the national flag carrier and the associated reputational risk to the government should it fail meant that some risk and uncertainty continued to be faced by the New Zealand Government after privatisation.

#### **4.2 National Air Traffic Services (NATS)**

The National Air Traffic Services (NATS) case seeks to illustrate that the introduction of private capital in a PPP scheme does not necessarily transfer all of the risks from the public sector. It demonstrates that there is continuing risk and uncertainty borne by the UK government as well as by employees in the Public Private Partnership (PPP).

Amidst considerable public and political objections in July 2001 the UK Government sold a 51 per cent share of National Air Traffic Services (NATS) for £750 million when it entered into a PPP (DETR, 2001). The move was opposed by some air traffic controllers, politicians and members of the public, who felt safety would come second to profits (ATCO, 1999). A consortium of UK airlines<sup>1</sup> had a 46% stake and the remaining 5% was allocated to the employees. Management of the system was transferred to the airline consortium through a shareholders' agreement to operate NATS on a not-for-profit basis for 30 years (Goodliffe, 2002).

The UK government argued that the prime motivation for the PPP was to gain access to the large investment required for the air traffic control system to accommodate the forecast doubling of air traffic for the next 25 years (DETR, 2001). The intention was for the private sector to provide £1.5 billion of investment for new and upgraded facilities, namely a control centre based in Scotland, and for modernisation of the service. Sir Roy McNulty, Chairman of NATS claimed: "The PPP guarantees us the investment we need to deliver an improved service to the flying public for years to come..." (ACI, 2001).

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<sup>1</sup> British Airways, Virgin, BMI, Monarch, Britannia, Airtours International (now Mytravel) and easyJet

NATS appeared to be a safe investment because it was a monopoly provider of navigation services in UK airspace and it had charges set to recover costs by the CAA. There was however uncertainty surrounding the 79 per cent of NATS revenue which comes from en route charges, and the downturn of air traffic in the aftermath of September 11<sup>th</sup>. This left NATS short of the revenue required to meet its investment programme and operating costs. In response to this crisis, NATS was reported to be looking to save £200 million in operating costs.

Just six months after the sale of NATS, the UK Government provided a £30 million emergency loan to 'bail' it out of its financial difficulty and NATS made a 20% reduction in administrative staff. The financial drain on the public purse continued when NATS was given a further £50 million injection in May 2002. There is a fear that *'...money earmarked for safety in the first bail out has gone to make redundancy payments to staff.'* (Mathiason, 2002). In order to save NATS from further financial vulnerability the Government instigated a major refinancing scheme in 2003 to avoid NATS going into administration or making a full return to public sector ownership. In March 2003 the Government gave NATS permission to raise charges in order to cover the mounting debt even though NATS charges are some of the highest in the world. The shortfall has been due to the continued under performance of revenue from charges to aircraft, partly due to decline in traffic as a consequence of the SARS crisis and the second Gulf war. NATS attracted the BAA (the major UK airport group) to invest £65 million in a 4% stake (replacing 4% of the airline consortium stake<sup>2</sup>) and in doing so received a further 65 million in matched funding from the Government, a move that reduced NATS' debt to £600 million and importantly gives NATS access to £300 million for its investment programme. A condition placed on NATS by the Government was to demand that cost savings from staff reductions, savings in pension contributions and fewer holiday allowances for staff amounting to £170 million (around 10 per cent of costs) were achieved by 2005/6. It is unclear what will happen if this target is not achieved. The cost of refinancing NATS was reported to be one third of the cost of putting the initial PPP in place. Such major demands on public finance undermine the very argument for the PPP, namely access to investment, as this has continued to be a responsibility partly borne by Government. Additionally, NATS wishes to delay further investments that could mean

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<sup>2</sup> So that the ownership structure became UK Government, employees 5%, BAA 4% and the airline group 42%.

delays to critical improvements in infrastructure, in particular the announcement of at least a 2 year delay to the proposed Scottish control centre due to open in 2007 (Hayles-Dutton, 2002). In addition, a volume risk sharing mechanism was introduced in 2003 whereby if traffic falls below a certain level then NATS will bear 20 per cent of the revenue risk, a move to ensure NATS long term capital programme is less exposed to short term market fluctuations. NATS can raise its charges to cover half of the losses made as a result of the shortfall in revenue in 2001 and has the power to raise charges to recover 80 per cent of revenue lost due to extreme circumstances that result in traffic reductions.

In conclusion, it appears that the cost of the stake in NATS plus the infrastructure investment created a burden of debt that could not be met by charges until at least year 8 of the contract (Shaoul, 2001), and that is without accounting for the implications of September 11<sup>th</sup>, SARS or the second Gulf War. Under public ownership NATS covered its operating costs. The core reason for the sale was that the Government no longer wished to finance future investment in the system. But the evident deferral of investment in improved service, capacity and reduction of delays to passengers is contrary to the entire purpose of the PPP in the first place. The further investment needed to correct current problems and to achieve the Government's goal of an improved system led to the Government being obliged to provide the finance in order to bail NATS out, an action that appears to emphasise the point that the taxpayer meets the costs but does not share the benefits. This case is well summed up by Shaoul (2001) who is particularly critical of the NATS PPP stating:

“The public (private?) institutions, far from assuming risk ... are set to get income streams in one form or another by the government, while the government, the workforce and the public as individuals carry the risk. At the same time the government has in effect surrendered control of public policy and decision making to the capital markets ... [this] not only threatens the delivery of vital public services but also underlies the increasing alienation of the public from political processes.” (Shaoul, 2001, p.20)

### 4.3 UK municipal airports

This third case focuses on the UK municipal airports. It illustrates that although care may have been taken in terms of who is initially allowed to invest in the privatization, subsequent uncertainties relating to changes in ownership can result in unforeseen ownership structures which will have consequences for government attempting to implement a transport policy. Privatisation and commercialisation of 16 municipal airports was introduced by the 1986 Airports Act and resulted in the airports becoming fully or part owned by a diverse body of private sector companies. Airports were initially transformed into public limited companies and ownership retained by public authorities. The new companies were responsible for being financially self sufficient, tasked with working to commercial objectives and allowed to sell on their shares to the private sector. This has led to the implementation of a commercial business model and a move away from the original public service ethos that prevailed prior to 1986 (Humphreys, 1999; Humphreys et al., 2001; Graham, 2001). One measure of this change has been an increase in the percentage of commercial revenue<sup>3</sup> as a proportion of total revenue at all of the 16 airports, in 14 cases this has increased by more than 10% (Humphreys and Francis, 2002). Commercial pressures and opportunities have resulted in significant changes taking place in the ownership and governance of the majority of regional airports (Table 1).

Table 1 reveals that airports are now owned by a variety of different companies. Between 1999-2001 almost one third of airports changed ownership for the second time. Today the following broad forms of ownership have emerged:

- Local Authority owned (run as a limited company to be financially self sufficient);
- Part private, part Local authority owned (run as a limited company to be financially self sufficient);
- Privately owned.

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<sup>3</sup> Commercial revenue is that revenue that comes from non aeronautical charges (Retail, car parking etc.) as opposed to aeronautical charges to airlines (such as landing fees). The proportion of commercial revenue is seen as symptomatic of the extent of commercialization.

**TABLE 1 Commercialized Municipal Airports in the UK**

Airport	Date of First Privatisation	Changes in ownership since 1986/Part of larger group *	Current Owner	Terminal Passengers (Millions) 1987-2003
Birmingham	1997	2*	Local Authority / Aer Rianta / Macquarie/Employees	2.1-8.9
Blackpool	N/A	0	Local Authority	0.1-0.2
Bournemouth	1995	2*	Manchester Airport	0.1-0.5
Bristol	1997	2*	Cintra / Macquarie	0.5-3.9
Cardiff	1995	1*	TBI	0.5-1.9
East Midlands	1993	2*	Manchester Airport	1.1-4.3
Exeter	Sale in Progress	0	Local authority	0.1-0.4
Humberside	1999	1*	Manchester Airport/ Local Authority	0.1-0.5
Leeds-Bradford	N/A	0	Local Authorities	0.6-2.0
Liverpool	1990	2*	Peel Holdings/Local authority	0.3-3.2
London Luton	1998	2*	Local Authority-(TBI/Bechtel)**	2.0-6.7
Manchester	N/A	0*	Local Authorities	8.6-19.5
Newcastle	2001	1*	Local Authorities / Copenhagen Airport	1.3-3.9
Norwich	2003	0	Omniport plc/Local Authorities	0.2-0.4
Southend	1994	1*	Regional Airports Ltd	0.1-0.003
Teesside	2003	1*	Peel Holdings Limited/Local authorities	0.3-0.7

*Source:* Authors, UK CAA Airport Statistics, and data collected from individual airports.

*Notes:* \*Airports owned as part of a larger group of airports

\*\* Luton Local Authorities own the airport but Bechtel and TBI have a 30 year concession to develop and operate the airport

The uncertainties relating to future ownership are illustrated by the fact that eleven of the airports considered are part of wider airport groups. These range from Copenhagen Airport and the Irish Airports Authority who have stakes in Newcastle and Birmingham respectively, to the airport group TBI owning Cardiff airport in Wales and the concession at Luton. In the first wave of privatisation in the mid-nineties bus companies owned three of the airports, but have subsequently sold their controlling share. An interesting case has emerged at Bristol where the local authority sold a share of the airport to a Bristol based bus company, but 3 years afterwards the airport became 100% foreign owned when it was sold to Cintra, a Spanish Civil Engineering company, and Maquarie, the Australian Investment Bank.

Another group ownership model has been pioneered by Manchester, a publicly owned airport that has been permitted by Central Government to take a stake/ownership of three other UK airports. In late 1999, Manchester bought an 82.7% share of Humberside airport

from the local authorities so that Humberside airport is in effect owned by a public authority in Manchester.

In 2001 East Midlands and Bournemouth, were bought from the National Express bus company. The three airports are now publicly owned but by a geographically distant group of local authorities.

The ramifications of airports being foreign owned and in certain cases owned by larger airport groups are unclear for the UK regional context. Commercial airport operation discourages the development of infrastructure because revenues generated are longer term and might well be less lucrative than pursuing other business opportunities such as global retail management contracts or other alternative investment opportunities in other parts of a company's portfolio. The diversion of profits from the public sector has been highlighted as inequitable by a number of the original Local Authority owners who felt that tax payers, who had funded airport development for the good of a region when traffic volumes were uneconomic, should have been able to reap the rewards of rising traffic volumes and airport profitability. The financial burden of investment has been removed but so has the reward for subsidising airport infrastructure. It is important that a Local Authority selling an airport get a price that reflects the years of subsidy that tax payers have contributed.

Airport Groups and companies that own airports alongside other businesses will seek to improve the shareholder value of the group as a whole. As a consequence certain airports could be used as revenue generators to cross subsidise other airports or even other parts of a global business. This would mean some regions might suffer from an overcrowded and under developed airport facility as funding is prioritised to support alternative business opportunities for private airport companies elsewhere in the world.

The goals of the different airport owners will be determinants of some of the local implications of ownership. How does such a strategy affect the long-term economic plans for a region? It may be important for the protection of public interests that legal restrictions are imposed to maintain the use of existing airports for commercial air transport and to guard against development that might be contrary to the interests of a region. Regulation could be undertaken through airport licensing.

In 2003 the UK Government completed a national consultation to deliver a policy for airport infrastructure to accommodate air traffic for the next 30 years (DfT, 2003). Despite Government identification of new runway sites where it would support the development of infrastructure, the White Paper on the Future of Air Transport (2003) clearly states that the UK Government are no longer responsible for the building of airport infrastructure and that any further development needs to be advanced and paid for by private finance arranged by the airports. Ultimately such decisions regarding new infrastructure will be down to individual airports to decide whether or not there are economic returns from the new infrastructure. Informal communication with two managers from different airports has revealed that if their airport is selected for capacity enhancement the company will ignore the Government plan unless the Government is willing to pay. One manager went on to say that increasing volumes while deferring investment until the last possible moment, was the key to making the commercial airport model work. In a summary of BAA's position by their Economics and Regulation director (Hanks, 2006, p.7) "...an important focus for both BAA and CAA in Q5<sup>4</sup> will need to ensure what is largely discretionary investment is adequately remunerated."

This final case of UK municipal airports has sought to illustrate that once privatized, subsequent changes in ownership can take place that have important policy implications for the former owners. The UK government may find that it has not fully transferred the risks and burden of financial investment in airports to the private sector if airport companies decide that it not financially viable for them to make infrastructure investments in line with government policy. Given Government control is essentially the limited scope of regulation, how far can Government successfully fulfil its role of developing cohesive transport infrastructure in the economic, social and environmental interests of the country without undertaking some such projects itself?

## **5. Theoretical analysis: Risk Transfer**

In each of the cases studied, the state has attempted to transfer risk to the private operators. In return the operators expect negotiated security of future income streams. Whilst the Governments may like to think that all the risk has been passed on, closer

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<sup>4</sup> Q5 referring to the regulator's (CAA's) 'Quinquennium 5' review (for April 2008 onwards)

examination in the above case studies seems to suggest that this is not the case and that unaccounted for uncertainties emerged.

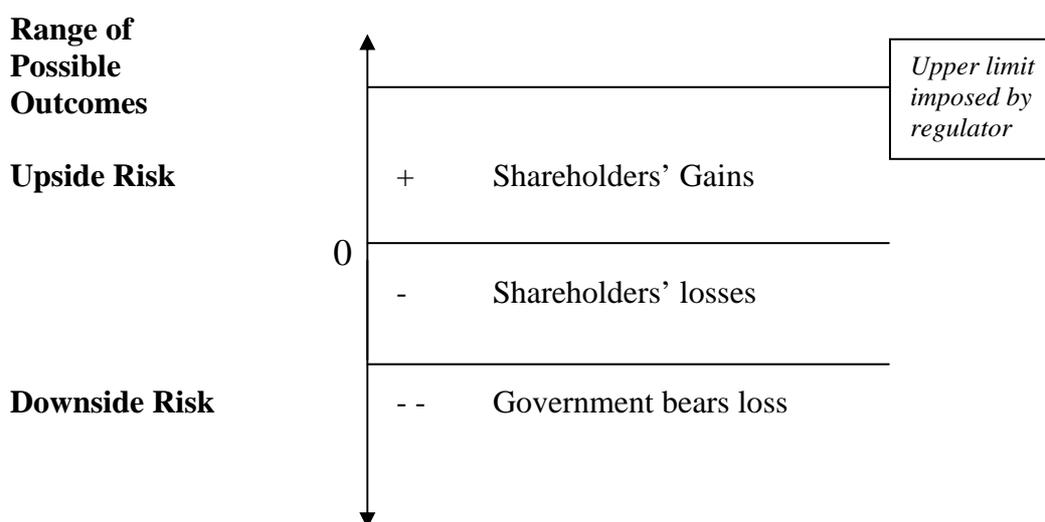
If the goals of private companies who own airports include development to accommodate growth then the national goals of the Government and private goals of stakeholders coincide. The real question will arise when more large-scale investment is required and private firms may choose not to invest in favour of better returns elsewhere. How does the transfer of risk work out in practice? When Government is responsible (or at least held publicly accountable) for the development of air transport infrastructure and private firms operate significant parts of that infrastructure do not deliver desired development, the Government may be obliged to fund new capacity. The broader social goals cannot be transferred or negotiated. What are the implications for countries or regions that have a high dependency on air transport? Risk transference and management clearly varies according to context.

Privatization can be viewed as setting up complex agency relationships. Broadbent and Loughlin (2003) discuss the applicability of such agency theory terminology in the context of public-private relationships such as PPP. Privatisation of air transport infrastructure creates an agency relationship in which the “principals” face a moral hazard of the new “agents” actions. There are clear information asymmetries both between the governments, the regulatory bodies they establish and the managers (agents) of the privatised entity.

The extent to which risk has been transferred has been seen in the preceding cases. The main reasons for private sector involvement are to remove the financial burden from the government (but also lose the potential returns from any upside risk!) and to act as a stimulus to the private sector provider by creating incentives. Historically there have been a number of documented cautionary tails of open ended cost plus contracts which lacked the incentive to be prudent or efficient (Glaister, 1999). Figure 2 attempts to portray what portion of risk is transferred in practice. It illustrates how Governments forgo the upside risk but bear a residual amount of downside risk if things go very badly, when given the political importance of air transport governments are obliged to intervene. Thus Governments have forgone the possibility of good returns but not relinquished the risk of bad returns and so they have taken on more net risk than before.

Where price capping regulation takes place there may also be an upper limit (or cap as it were) on the returns the private investors can achieve. Thus at both extremes the government (or its appointed regulator) gets involved.

**FIGURE 2 The extent of risk transference**



In considering the agency relationships of privatised transport utilities it is noteworthy that while governments may be faced by moral hazard, the other stakeholders such as employees are also exposed to the more tangible hazard (risks) such as potential redundancy. Dionne et al (1997) have linked moral hazard and safety with reference to airlines' financial structure and stress that 'it is not clear that traditional regulatory policies are optimal when regulators knowledge of carriers' safety is limited' (Dionne et al, 1997).

Governments also face so called '*reputational*' risk in that they may continue to be seen as responsible by society – even though they may have given up ownership and control. This was especially evident in the Air New Zealand case where the government undertook the largest ever bail-out of a private company, to save the 'flag ship' airline. So in practice a burden of risk and uncertainty remains even if in theory this has been passed on to the private sector – in reality this has not happened. As Craig (1999) explains:

Risk exists in the privatisation of airports to a greater extent than may be realised, and may affect the concessionaire, the investor and the host

government in different ways and to differing extents. All parties need to be aware of risk and mitigate against this ... All risk elements need to be identified, measured and their impact assessed, while mitigation needs to reduce risk to levels that are as low as can be reasonably accepted. (Craig, 1999, p.17)

Yet it is not possible to identify 'all risk elements' and uncertainty remains. In each of our cases, the state has surrendered direct control of air transport infrastructure entrusting it to a diverse and disparate range of organisations, each with its own goals and strategic objectives. How can governments guide the development of transport and communications infrastructure without direct control? It is likely that the private sector participants will place a greater emphasis on shareholder value than public service. For this reason, the state regulates the activities of the operators, usually justifying such regulation in terms of public interest theory. Unregulated markets would allow monopolistic practice against the good of society. The state recognizes however the legitimate pursuit of a reasonable return as an incentive to attract the private finance. The state attempts to make its own interest coincide with those of its private sector agencies. Practice seems to reveal that despite its efforts, private sector involvement is not consistent with the pursuit of an integrated transport policy.

In the UK, NATS and BAA plc are subject to so-called Price cap regulation to protect consumers<sup>5</sup> from the exploitation of monopolistic positions. A case study of price cap regulation of BAA plc (Francis and Humphreys, 2001) revealed many dysfunctional effects. These included the lowering of landing charges at Heathrow, an already congested airport and shifting management attention to generating so called non-aeronautical revenues. BAA now considers retail activities as a core competency (Francis and Humphreys, 2001). The diversion of investment finance into retail rather than infrastructural capacity is under close review by the regulatory authorities.

Regulation can have some impact with regard to minimising the likelihood of financial distress of the privatised entity (ie. any regulatory control on the price an entity can charge could be relaxed) but may be of limited effectiveness in the face of unforeseen eventualities. The emphasis of most regulation has been to protect 'customers' from the

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<sup>5</sup> The substance of this price cap regulation has been that the consumer(s) whose interests have been safeguarded are the airlines as opposed to the passengers.

impact of unconstrained monopoly forces rather than the pursuit of transport planning objectives. Regulation carries its own risk of dysfunctionalities resulting from such things as the pursuit of non regulated income over regulated income.

## **6. CONCLUDING REMARKS**

Privatisation and commercialisation are ‘political’ forces that are unlikely to disappear. A core reason for privatisation of different parts of the air transport system is the transfer of risk and financial burden from the public to the private sector. The case studies illustrate how contrary to governments’ espoused expectations, although ownership and some benefits have been transferred, some risk uncertainty elements have ultimately not been transferred. Indeed, the loss of control may result in greater uncertainty, as private sector investors can reap the rewards of financial returns if the market remains buoyant, but at the same time they are protected to some extent by the state from the financial risk of losing their investment. If the business fails then it may be down to Government to ‘bail out’ the business in the wider interests of society. The cases demonstrate elements of uncertainty with events that may not have been foreseeable. In these circumstances, the quantified expression of risk on which PFI schemes are justified become flawed, as also argued by Froud (2003) and Shaoul (2005).

Governments face not only exposure to financial risk and uncertainty but also the ‘*reputational risk*’ associated with electorates holding them responsible for failings within the air transport system. Yet their ability to directly control that system may be diminished and direct intervention may have consequences. Government control is restricted and will effectively have to be through regulation. In any form of regulation there will be tensions between private, public and state interests. Governments and the public need to realise that risk in air transport is not fully transferred as a result of ownership change as part of privatisation. Though private interests may bring in extra finance, the direction of the investment may not be congruent with the state’s notion of an integrated transport policy. This needs to be taken into account as the pressures for ownership change continue to increase. While this paper concentrates on risks borne by governments, it also shows that employees face risks associated with private sector involvement.

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