

**Infrastructure: an emerging asset class for
institutional investors**

**Working Paper presented at
The Societal Function of Investment Asset Classes:
Implications for Responsible Investment Conference,
Initiative for Responsible Investing at Harvard University**

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ABSTRACT

The topic of infrastructure investment has emerged as a critical public policy issue over the last thirty years as governments grapple with an infrastructure deficit that has become one of the great global challenges of our time. Through the simultaneous processes of neo-liberalisation and globalisation, the urban infrastructure landscape has emerged as an attractive investment area for private institutional investors. In this context, infrastructure is defined as the physical assets in the transportation, telecommunication, electricity, water sectors, which are considered fundamental for economic and social development. There is consensus within academic and policy circles that investments into infrastructure can provide far-reaching benefits for the economy.

This paper explores how the wider economic benefits of infrastructure investment might be affected by the shift in ownership and financing structures from the public to the private sector. It is argued that private investment into infrastructure leads to wider economic and societal benefits under the right regulatory and governance conditions. This argument is developed by drawing upon two asset-based case studies to investigate the factors influencing the private infrastructure investment decision-making process. From the case study on Auckland International Airport Ltd., it is shown that through a relational form of light-handed regulatory contract, the government plays a central role in affecting the favourable investment and wider economic performance of an economically significant asset. The explication of the Spanish-led ADI consortium acquisition of UK airport operating company BAA illustrates the need for infrastructure governance to incorporate a wider stakeholder perspective as well as an appropriate shareholder wealth maximisation strategy.

In an age where infrastructure investment has been recognised by many nations around the world as the most important growth lifting strategy, this paper provides valuable insights for how private institutional infrastructure investment can be shaped in the future.

1.0 Introduction

A global infrastructure deficit is currently being faced as nations around the world have struggled to come to grips with the growing demand placed on their infrastructure assets. In this context, infrastructure is generally understood as assets in the transportation, telecommunication, electricity, water sectors, and are considered vital for economic and social development. Rising populations into urban areas, increasing economic growth and the internationalisation of economies have all placed increasing demands on infrastructure facilities.

A natural solution to the problem has been for governments to make the infrastructure sectors more accessible for private investors to cover a portion of the investment needed. Throughout history, the provision of infrastructure services around the globe has fluctuated between the domains of the public and private sectors with varying degrees of success. The modern era of Public-Private Partnerships was brought about by the neo-liberal privatisation schemes of governments in the 1970's and 1980's. The decrease in government spending on infrastructure coupled with an increase in demand for infrastructure investment has led to the growth of a global infrastructure market for private investors. In wake of the Global Financial Crisis (GFC), with governments facing the dual problem of unprecedented levels of debt on their balance sheets, and the desperate need to stimulate their economies to avoid a lost decade of stagnant growth, the need to learn more about private infrastructure investing is more apparent than ever.

The importance of infrastructure investing for the wider economy is evident in several ways. Infrastructure investments can help to increase the employment rate, by enabling a greater proportion of the population to participate in the economy, for example through improved transport and communication links, enable businesses to sell products to customers more efficiently and can act as an important source of employment during the construction phase of projects. Within economics literature, numerous studies have found a positive relationship exists between infrastructure investment and economic growth.

This paper is concerned with how the wider economic and societal benefits of infrastructure investment might be affected by the shift in ownership and financing structures from the public to private sector¹.

While the process of privatisation was accompanied by a significant retreat of the State from the role of producing infrastructure assets, this however has not meant that governments have ceased to exercise certain elements of control. Where natural monopoly infrastructure industries have been privatised, governments must instil regulatory frameworks that protect consumers against abuses of monopoly power while still assuring investors that they will be fairly treated and address broader equity concerns. The privatisation process has also been the main driving force behind infrastructure governance reform, with the Anglo-American corporate entity structure now the predominant decision-making organisational structure for the provision of

¹ The paper does not exhaustively analyse how infrastructure investing leads to wider benefits for the economy, instead a short summary of the key academic evidence provides the basis for the assumption in this paper.

urban infrastructure services. Two asset-based case studies are examined in this paper to analyse the factors that contribute to the investment performance of private infrastructure investments and the ensuing effects of these decisions on other stakeholders. It is argued that successful² private infrastructure investments can lead to beneficial wider social and economic outcomes under the right regulatory and governance conditions. This argument is illustrated by looking at the two asset case studies, which provide contrasting examples of private infrastructure investment performance.

The paper is structured as follows. In the next section, the emergence of infrastructure as a financial product and the distinct characteristics that have evolved for the asset class are analysed. This is followed by a discussion as to why infrastructure can be categorised as a societally beneficial asset class. The contrasting case studies are then illustrated in sections 4 and 5 before the conclusions are drawn in section 6.

2.0 The Emergence of Infrastructure as a financial product

Over the last three decades, as public sector investment into infrastructure has declined in OECD countries, there has been a shift in the political economic views of urban infrastructure provision. Private actors are being allowed access into previously monopolistic public infrastructure entities largely due to the idea that privately run enterprises, subject to the discipline of the market, will be more efficient. Stemming from the extensive infrastructure privatisation program initiated by the United Kingdom in the 1980s, a colonisation of public infrastructure by global finance capital has occurred since, leading to many transnational corporations and financial institutions reshaping the provision of infrastructure networks around the world (Graham and Marvin 2001).

The private provision of urban infrastructure is not new as railways, bridges and canals were not only built but owned and operated privately during the 19th Century. Motivated by entrepreneurialism and the ‘free market’, ‘laissez-faire’ economic ideas of the time, the majority of city infrastructure services in the 19th Century were provided by private operators. However by the end of the 19th century it was widely viewed that infrastructure networks needed to be delivered by social institutions based on public monopoly control (O’Neill 2009). Infrastructure networks became an essential focus of power and legitimacy for the emerging nation state with policies providing the central way in shaping capitalist territorial organisation (Brenner 1998). The Keynesian model of state policy and demand management that accompanied the nation state, was predicated upon providing universal access to publically regulated or controlled infrastructure networks (Sawnhey 1992).

² Success for the purpose of this paper is defined as investment performance from the perspective of investors and is used to contrast the two asset case studies looked at. The research in this paper is focused primarily in OECD countries. The asset case studies are designed to provide illustrative examples and highlight lessons that may be apparent for assets included under the economic urban infrastructure banner located in different jurisdictions. They are not however aimed at comparing similarities or differences on the ground.

Since the 1970s oil shocks however, through the processes of privatisation, liberalisation and globalisation, the way urban infrastructure networks are provided has changed dramatically. The neo-liberal policies of governments have led to the offering of infrastructure investment opportunities to private actors in the form of trade sales or various public private partnership leasing arrangements. The leasing contracts offered by governments have moved from DBM (design, build and maintain) contracts to DBFM (design, build, finance, manage) contracts and are offered over the long-term stretching from 10, 15 to 50 years and beyond (Torrance 2006). Urban Infrastructure assets are increasingly being packaged into financial product offerings for large global institutional investors to pool their capital into.

Investors are interested in purchasing infrastructure assets to diversify their portfolios due to the low correlation of infrastructure with traditional asset classes. The investment characteristics of infrastructure are associated with predictable and stable cash flows over the long-term, and are inflation hedged. Infrastructure investments thus provide liability matching for investors like pension funds, who have become more aligned to investments with long-term results and defined outcomes as opposed to speculative short-term results prone to high volatility (OECD 2011). The heterogeneous nature of infrastructure has provided investors with a range of risk and return profiles within the asset class. Investments in new greenfield developments usually have high risk and higher returns compared with mature brownfield assets that are associated with low risk and return. Due to the low risk characteristics, brownfield assets have been more popular with institutional investors and are the focus of this paper. Infrastructure assets should generally have low return volatility due to the monopolistic nature, high barriers to entry and relatively inelastic consumer demand for the services. Figure 1 below shows where infrastructure might fit on the risk/return spectrum. Other risks of infrastructure investments can include government regulation, construction, liquidity, demographic, currency and management risks (Beeferman 2008).

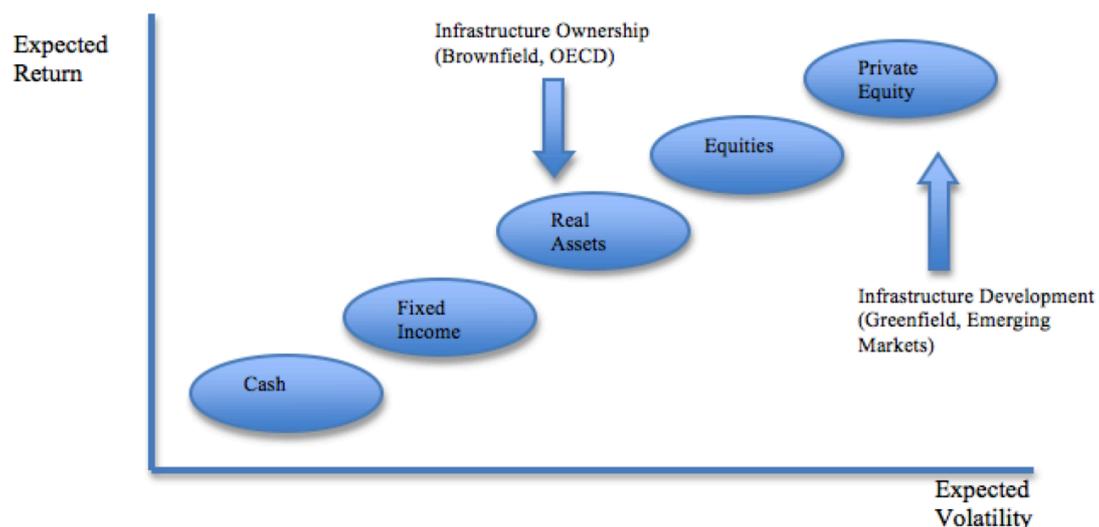


Figure 1: Infrastructure Risk/Reward Profile
(Source: Lazard 2007)

The methods of investment into infrastructure can take one of many forms. Listed infrastructure companies contained in well-established stock market indices globally have provided opportunities for retail investors for a number of years. The unlisted vehicle either through an infrastructure fund managed by a general partner or directly investing into assets has also provided institutional investors the opportunity to play a major role in this new phase of private infrastructure investment. Figure 2 illustrates the different methods associated with infrastructure investing. The first asset case study in this paper on Auckland International Airport Limited (AIAL) represents an infrastructure company that was listed on the stock market through an IPO privatisation process. The second case study provides an example of a consortium of institutional investors directly acquiring a majority share of a publically listed company (BAA) which was subsequently delisted following the transaction.

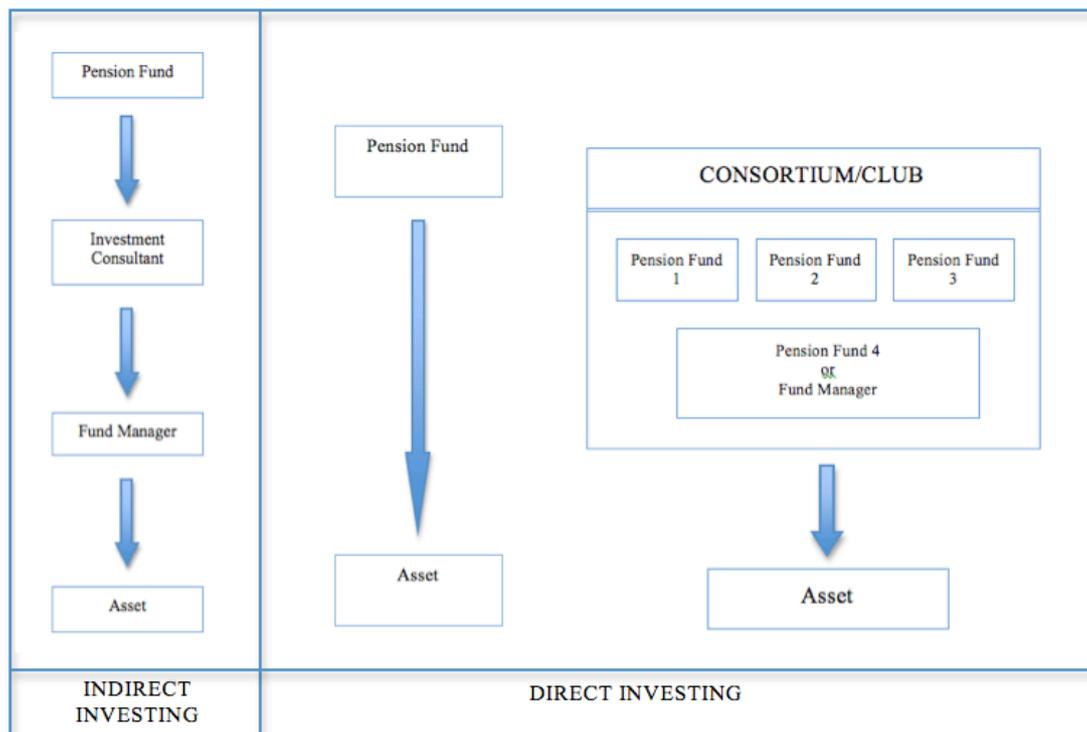


Figure 2: Structural forms of the Infrastructure Investment Process
(Source: Author)

Having outlined some of the key characteristics of the infrastructure asset class and attractiveness for private institutional investors, the next section discusses the wider economic and social implications of private infrastructure investment.

3.0 Infrastructure: the wider benefits and private ownership

In the broadest sense, infrastructure services are those physical facilities that provide the building blocks of a functioning society. Within this broad concept, social infrastructure (e.g. health and education) can be distinguished from economic infrastructure, which is the focus in this paper. Economic infrastructure relates to the channels, pipes, conduits and apparatus that deliver power and water, provide protection from floods and take away waste. It also includes the roads, railways,

airports and harbours that allow the safe movement of people and goods between communities. These services directly support the well being of households as well as production activities of enterprises at various points of the value chain, and is thus directly relevant to the competitiveness of firms and to economic development (Morley 2002).

Specifically, the power industry comprising of generation, transmission and distribution form an integral part of the backbone of a modern economy. Without adequate investment and a reliable supply of power, an economy is unable to function efficiently, economic growth targets are difficult to achieve due to outages and blackouts. An integrated transport infrastructure that includes roads, railways, airports and seaports makes it possible to link underdeveloped parts of a country and regions into the global economy. Investments in transport infrastructure allow goods and services to be transported more quickly and at lower costs, resulting in both lower prices for consumers and increased profitability for firms. Water infrastructure relates to the delivery, treatment, supply and distribution of water to its users as well as for the collection, removal, treatment and disposal of sewage and wastewater. Investment into water infrastructure is crucial for sustaining the central role that it plays in human societies while also protecting aquatic ecosystems which is critical for the environment (United Nations 2008).

The impact of infrastructure investments for the wider economy has been formalised by studies carried out in the social sciences. Within macro-economics literature, there have been a number of studies to show the relationship between infrastructure investment and economic growth. Most of the research in this area has been based on the production function approach where the output elasticity with respect to public capital (regarded as a synonym for infrastructure) is calculated to determine if higher rates of government expenditure, can increase long run growth rates. Early work indicated that a positive relationship exists between private sector output and infrastructure investment (Romer (1986), Lucas (1988), Aschauer (1989)). The direction of causality and quality of data were highlighted as limitations of the early studies, nevertheless further work has also shown a positive relationship between public capital and private output (Munnell (1992), Gramlich (1994), Lau and Sin (1997), Berechman et al (2006), Sun and Zhu (2009)). Using an annual time-series growth regression, Égert et al (2009) provide additional evidence showing that the contributions of infrastructure have a positive impact on economic growth.

Given the evidence in academia as well as in policy circles, it is assumed in this paper that the concept of investing into infrastructure is inherently beneficial for society. Of interest here, is to examine how the new private operators of infrastructure, in their pursuit of maximising profits, might influence the wider stakeholder interest and economic benefits of infrastructure assets. The changes analysed in this paper relate to the new ownership and governance structure of private infrastructure companies, as well as the changing role of the government as a regulator for infrastructure industries.

3.1 Private Infrastructure Considerations

This section introduces some of the new dynamics and relationships that have been formed as a result of the shift from public to private provision of infrastructure. A

useful starting point in this discussion is to understand the motifs behind governments carrying out the shift. There are several reasons for the public sector to incorporate the private sector in infrastructure investment with the reasons varying for different countries. Within the UK, widely regarded as the pioneer of the neo-liberalisation movement in the 1980s, the objectives of privatisation by HM Treasury were summarised as follows – to maximise value obtained for the taxpayer; improve competition, leading to better quality services and lower prices for consumers; improve the management of resources; extend and deepen share ownership among the general public (Bush 1995).

The different modes of privatisation (trade sale, IPO, leasing arrangement) entail different responsibilities for the private and public sectors. This refers to the ownership of assets, financing and control of revenues, costs, maintenance and renovation. The mode of privatisation employed will depend on a number of factors including political consensus, capacity of the private sector, types of assets and services offered, quality of services offered, quality of service prior to private sector involvement (Vives 1997).

Under a privatised infrastructure arrangement, one of the core responsibilities of the private sector is the service it provides to consumers. Previously, this had been the domain of the public sector. Consumers had been accustomed to receiving free of charge or rates below cost for the use of infrastructure services. The private sector must thus be sensitive to the demands of consumers. It needs to be aware of and prepared for this new relationship given that the privatisation of public services has been questioned on the social front. The public sector, on the other hand has to represent the interest of consumers and users while also looking after the interests of the private sector (Vives 1997). The relationship between the private and public sectors is established through a ‘public-private contract’, which includes the actual contract (for management services, concession or sale of assets) and all relevant legal and institutional regulations, including the overseeing of management by a government agency or independent regulatory entity (Vives 1997). The government plays a crucial role in ensuring that consumer interests are protected under privatised infrastructure arrangements. The government must adopt legal and institutional mechanisms to ensure that the service is provided efficiently and the responsibilities assumed by the private sector are fulfilled. The responsibility of the government is not given up, instead, it is redefined, which creates certain technical and political complexities (Vives 1997).

The role of government and its regulatory tools are thus crucial for affecting both the financial and operating performance of privatised infrastructure assets. This paper provides an illustrative example of how the role of government has changed for privatised infrastructure assets and the resulting effects on performance.

The governance strategies of private infrastructure firms also play a crucial role for affecting the performance and treatment of customer stakeholders. The corporate Anglo-American entity structure is now a predominant decision making organisational structure for the provision of urban infrastructure services. The primary participants which make up the corporate ‘tripod’ of the Anglo-American governance model are shareholders, management and the board of directors (Monks and Minow 2001). A key theme of corporate governance is to reduce the effect of agency

problems between managers and stakeholders and to hold management accountable for their decisions (Kent Baker and Powell 2009). While the consistency of results from reports has been mixed, there is sufficient evidence in the literature to suggest that good corporate governance leads to superior financial and operating performance (Barbu and Bosean 2007, Shivdasani and Zenner 2005, Vafeas 1999, Farber 2005, Gompers et al 2003). This paper examines the corporate governance structures of privatised infrastructure companies to highlight the lessons learned from both good and bad examples of infrastructure governance.

Along with corporate governance, under the private ownership model, the method of financing of infrastructure investments and level of financial leverage has been identified as a contributing factor affecting the company's subsequent overall performance. A company may use leverage (debt financing) for investments with the intent to earn a greater rate of return than the cost of interest. Leverage allows greater potential returns to the investor that otherwise would have been unavailable but the potential for loss is also greater because if the investment becomes worthless, the loan principal and all accrued interest on the loan still need to be repaid (Brealey et al 2006). It has been noted that within the infrastructure sectors, prior to the GFC, mature toll roads have used leverage levels of 40-80%, water infrastructure 60-90% and 50-80% for mature gas and electric power distribution, and transmission (Beeferman 2008). For infrastructure companies where regulators calculate the allowed rates of return based on the weighted average cost of capital (WACC), a marginal cost of debt below the WACC would enable an arbitrage opportunity to be exploited (Helm and Tindall 2009). By extracting a return from the difference between the WACC and the marginal cost of debt, the resulting gain represents a transfer of wealth from customers to shareholders. In this way, equity in infrastructure companies has been replaced with debt by opportunistic investors. This short-term financial engineering strategy employed by private equity type investors was badly exposed during the GFC because of debt repayment issues, severely compromising the ability to make capital investments into the assets. Such investors had little or no regard for the long-term quality and robustness for the infrastructure networks and have come under heavy scrutiny from stakeholders as an inappropriate way of financing infrastructure companies (Helm and Tindall 2009). The BAA case study illustrated in Section 5 of this paper highlights the detrimental effects of using excessive financial leverage for the financing of privatised infrastructure investments.

4.0 Case Study 1: Auckland International Airport Limited

Transportation infrastructure forms a key constituent of the wider definition of infrastructure assets currently providing opportunities for institutional investors. Within the transportation grouping, airports around the world have been opened up by neoliberal policies and are increasingly becoming part of the investment portfolios of institutional investors. Airport infrastructure is a fundamental contributor to the economic development of cities and nations making them highly sensitive to public perceptions and government decision-making. An efficient, functional airport is crucial for a city to attract and retain visitors for tourism; for corporations with national and global ties; and for the individuals and firms that work internally within them.

Airports are attractive for institutional investors because of their core economic characteristics, which includes having a long operational life, showing monopolistic qualities and having predictable cash flows. The level of each of these features depends on the unique social, economic, political and geographic characteristics associated with the individual airport. Major airports in the UK, Australia, NZ, Europe and Asia are now privately owned by global institutional investors.

Auckland International Airport Limited is an example of such an asset that has been opened up to the private sector for ownership and management responsibilities. As the major international gateway, more than 70% of international travellers to NZ arrive or depart through the airport making the asset particularly important for the economy but also more politically sensitive for government authorities. NZ's isolated location and island geography provide underlying stability to AIAL's business base. As a result investors in the asset have been able to generate stable returns above that of the market.

The favourable financial performance of the company since becoming corporatised is illustrated in Figure 3.

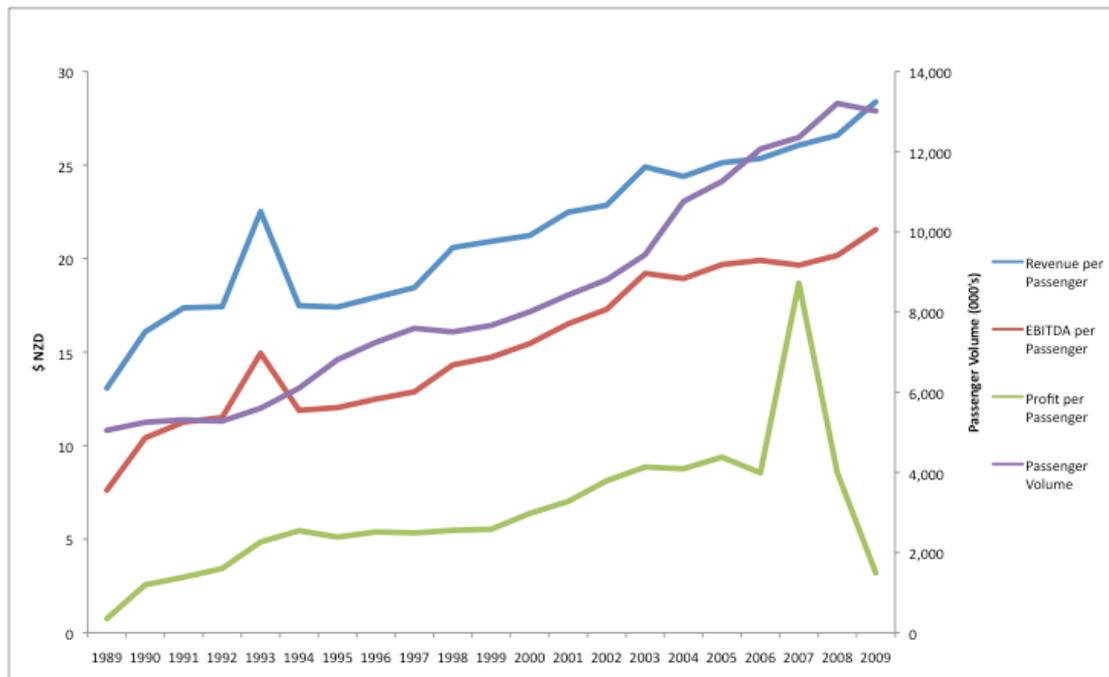


Figure 3: AIAL Financial Performance (1989-2009)

Source: AIAL Annual Reports

The share price appreciation and investment performance since being privatised, shown in Figure 4 and Figure 5 also highlights AIAL's standing as a well performing private infrastructure company.

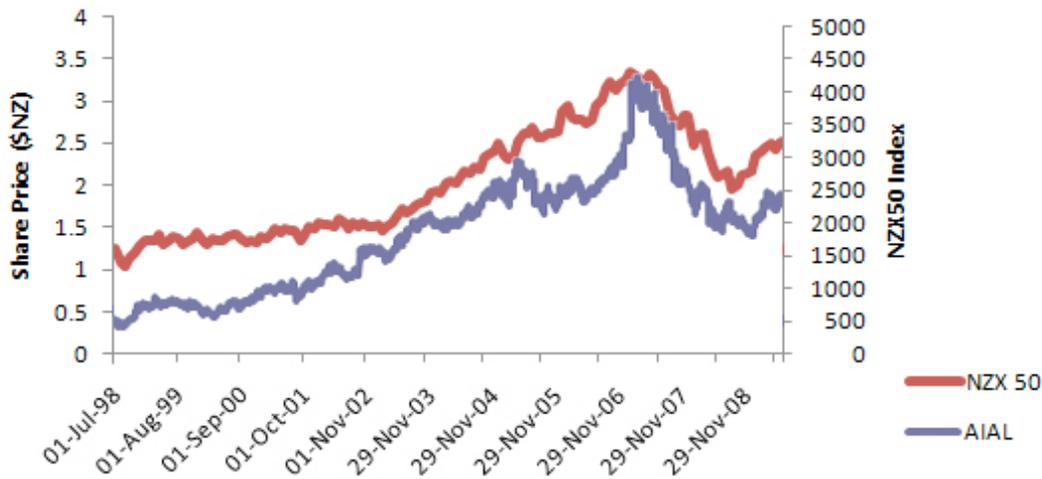


Figure 4: AIAL Share Price against NZX50 (1998-2009)
Source: Datastream

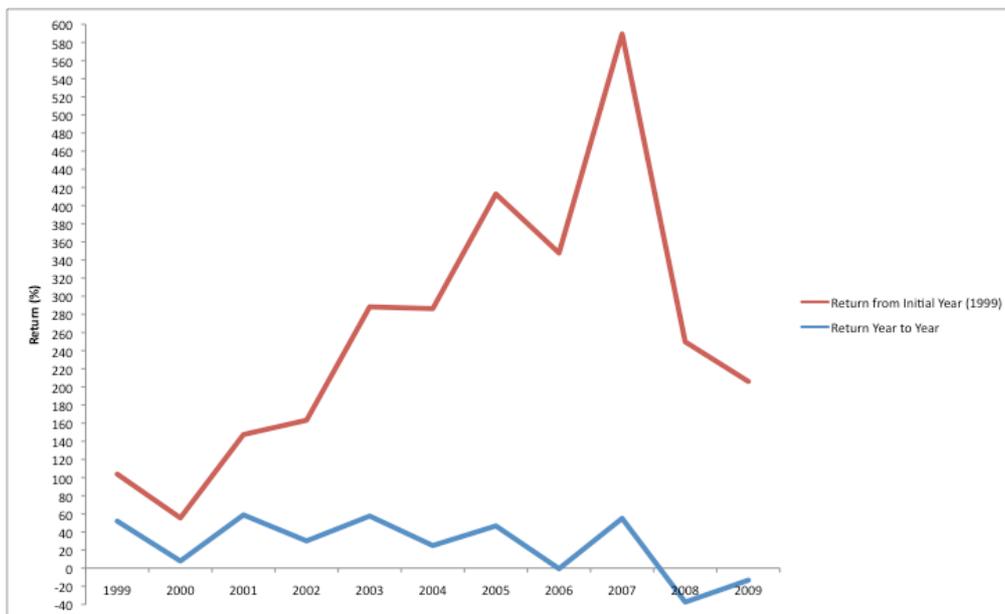


Figure 5: Return on Investment (1998-2009)
Source: Author's Calculations

On top of the financial and investment performance of AIAL, it is also interesting to look at the effect of the company’s business on the wider economy. Economic impact assessment studies have been conducted for AIAL by the independent consulting firm Market Economics. The preliminary study conducted in 2007 measured the economic impact of the activity associated with AIAL based on 2006 data while the 2010 report documents the projected economic significance of the company. The key findings of the studies, showing the contribution of AIAL to GDP in absolute dollar and percentage terms are given in Table 1 below.

	NZ GDP (\$NZ/ % GDP)	Auckland GDP (\$NZ/ % GDP)	NZ Employment	Auckland Employment
2006	\$19bn (13%)	\$10.7bn (21%)	319,000 (15.3%)	174,000 (28%)

2021 (est)	\$26-32bn (14-16%)	\$14-18bn (22-24%)	441,000- 539,000	236,000-291,000
2031 (est)	\$30-44bn (14-19%)	\$17-25bn (22-27%)	528,000- 756,000	251,000-363,000

Table 1: AIAL National and Regional Economic Contribution

Source: Market Economics (2010)

While acknowledging that these types of reports tend to overestimate potential effects, it can be seen from Table 7 that AIAL has a significant impact on the New Zealand economy. The report uses three scenarios for its projections, business as usual, high growth and low growth scenarios to provide an array of possible futures, and assumes that no major structural changes take place in the national and regional economies. The calculations for GDP contribution are based on data sets on each key driver of the airport's impact including International and Domestic passenger projections; airport activity projections (capital and operating expenditure), other industry projections, export and import volumes. The data was collated from AIAL passenger forecasts, trade projections, Tourism New Zealand arrival and domestic travel forecasts and AIAL operating expenditure and capital work forecasts. The report observes that the GDP impact from AIAL's operation has grown consistently since the mid-1980s, including substantial growth since 2000. At the national and regional level the activity facilitated by AIAL has increased both in dollar value and relative to the economy, which indicates that growth in the air transport sector is increasing at a greater rate than the economy as a whole. It is noted by the studies that the direct manifestation of AIAL is most noticeable in the Airport Corridor, which represents the economic activity located either within or in close proximity to the airport and its major access routes. The wider economic significance is less obvious and is represented by the flows of people and goods to and from the airport.

The AIAL case provides an example of an infrastructure company that has not only performed well financially but has also contributed to the wider economy in a significant way. The rest of this section of the paper examines the factors that have enabled the company to achieve its favourable performance.

4.1 The Privatisation Process

The New Zealand government first signalled its intentions to sell its 50% stake in the airport just a few months after the corporatisation of AIAL when an announcement was included in the 1988 Budget. This did not eventuate until ten years later in 1998 when the government announced that it would sell its 51.6% shareholding (216,762,152 shares) and publically list the company on the stock market through an IPO (Initial Public Offering). This decision was brought about as AIAL considered the development of a second runway. The government felt there was no logical reason to retain its shareholding and was reluctant to shoulder the burden of funding major development projects and related contingent liabilities (Thompson and Clements 2003).

Investment management firm, Merrill Lynch conducted the sale process through an open price book-build share float as opposed to the more traditional fixed-price share float. This involved inviting selected institutional investors to bid for shares through a tendering process with competing bids to determine the final share price. The New

Zealand general public were also invited to apply to purchase shares by dollar value rather than by number of shares (AIAL Annual Report).

When the IPO was opened, it was five times oversubscribed with 65,837 New Zealanders wanting to purchase a part of the airport, surpassing the previous record of 35,000 retail NZ investors when Telecom NZ listed on the stock market in 1991. Within a month of opening the share offer, AIAL had become a publically listed company with private ownership and market capitalisation placing it in the top ten companies on the NZ Stock Exchange (NZSE) (AIAL Annual Report).

AIAL was only the fifth airport company in the world at the time to be publically listed and remained 80% owned by New Zealanders. The Government Ministers overseeing the sale agreed that the objectives of the float had been not only achieved but exceeded (Interview A, Senior Management, AIAL).

The obvious advantage of listing on a stock exchange through an IPO is the ability to access capital. In the case of AIAL, this was achieved successfully. The key transformation after the float in 1998, was the make up of investors and ownership in the company. Ownership of a company can influence performance because different owners pursue different goals and have distinct incentives (Oum et al 2006). Under government ownership, firms are run to primarily satisfy social goals and political agendas (Levy 1987, De Alessi 1983). Under private ownership, firms are run to maximise profit and shareholder's wealth (Back et al. 2002). Shifting from government ownership to private retail and institutional investors has had a positive effect on the performance of AIAL. Certain institutional fund manager investors have brought an element of expertise in airport ownership. This has contributed to not only efficiency improvements in the running of the airport but also in ensuring growth opportunities are identified and acted upon (Interview B, Senior Management, AIAL).

The corporatisation of the airport enabled a shift in management thinking towards financial incentives and improving profitability which has been depicted in the subsequent performance results. Prior to the corporatisation, the joint venture arrangement between the local and central government had led to numerous inefficiencies including disagreements over badly needed capital expenditure projects. After the privatisation process, the airport has been subject to the scrutiny of public markets. There has been a further shift towards a commercial focus with the thinking of the business aligned with growing revenues, margins, innovating on product offerings and competing for market share. This evolutionary transformation process from government ownership and control (where providing a service was priority and financial metrics were nearly irrelevant) to corporate structure (bringing financial and operational objectives more in balance) followed by complete privatisation (where the main objective is to maximise profits) has been a key driver for achieving superior outcomes (Interview B, Senior Management, AIAL).

There is a great emotional connection to airports, particularly in smaller countries and this has been clearly evident in the case of AIAL through its historical development to the current day (Interview C, Board Member, AIAL). The public share offering was patriotically promoted with All Black rugby players as an opportunity for New Zealanders to own a piece of 'their' airport. A lot of the investors that joined the company at the time of the float have continued to hold their investment to this day.

The loyal retail shareholder base since listing has strengthened the overall investor perception of the airport which has been helped through delivering positive results during this time. This has enabled the airport to achieve favourable outcomes when entering into the bond and capital markets for financing purposes as well as from rating agencies (current S&P credit rating of A-) (Interview C, Board Member, AIAL). The IPO process in New Zealand can be compared with the success of the sale of British Telecom in 1984, which also involved a large advertising campaign to promote widespread share ownership among the public and more generally the promotion of ‘popular capitalism’ (Larner and Walters 2000). The sale was five times over subscribed and produced an 86% premium on the first day of trading.

4.2 Price Regulation

Following the process of privatisation, governments are able to exercise control of infrastructure assets through the tools of pricing regulation. The shift in ownership has been accompanied by government regulation in order to restrict airport owners with substantial market power. Governments have attempted to set up independent regulating agencies while in certain jurisdictions like New Zealand, government ministers are still able to influence pricing regulation through legislative provisions.

AIAL operates under the dual-till model which means that only aeronautical revenues are used to set airline charges (all airline related services) as opposed to a single till model where both commercial (non airline related services) and aeronautical revenues are used in the determination of the price cap. It can be argued that the ‘light-handed’ pricing regulatory framework that AIAL operates under has contributed to the favourable performance of the company. Through the various regulatory provisions, this framework allows the government to have influence on how airport prices are regulated and subsequently the performance of the company.

4.2.1 Light-handed Regulation

Under the dual-till regime for NZ airports, aeronautical activities at AIAL are subjected to light-handed regulation. A key aspect of the NZ regulation is the lack of explicit regulatory control for the setting of airline charges. The light-handed regulation of NZ airports is conveyed through Section 4 of the Airport Authorities Act which states that ‘airports must consult with major airline customers when setting aeronautical charges or undertaking major capital expenditure’. The legislation calls for consultation, as opposed to negotiation, of aeronautical charges, after which, airports are able to implement charges as they see fit. In addition, AIAL is required to consult with its substantial airline customers before embarking on any capital expenditure where the amount of the expenditure is equal to, at least the value of 20 per cent of the assets (AIAL Annual Report).

AIAL is also subject to the Commerce Act, which is the key legislation governing competition law in NZ. The Commerce Act prohibits a number of restrictive trade practises and provides for the imposition of price control in a market in which competition is limited (AIAL Annual Report).

When AIAL was privatised in 1998, under the agreement of the Mixed Member Proportion elected coalition government, support was required from the minority coalition party, NZ First before the privatisation could go ahead. NZ First agreed to the privatisation, as long as the Commerce Commission (CC) was satisfied that airline prices were fairly charged. As a result, the Commerce Commission conducted an inquiry in 1998 to determine whether regulatory control was required at the three major airports in New Zealand, Auckland, Wellington and Christchurch. Following the Commerce Commission's inquiry in 2002, it was recommended that price controls should be introduced at AIAL. The recommendation was made after three commissioners believed that AIAL's assets should be valued at historical cost and airline prices controlled compared to the view of two commissioners who believed that assets should be periodically revalued and no price control should be enforced. Despite the overall recommendation for price control at AIAL, the Minister of Commerce did not support it, stating that 'the current regulatory mechanisms were sufficient to facilitate the industry relationships between the Airport and the significant customers'. The dual-till, light-handed regulatory environment where AIAL was able to revalue its assets in whatever way they liked for airline price charges was maintained. The consultation process for setting airline charges continued with the airports ultimately able to price as they saw fit. The Commerce Commission inquiry has since been criticised by economists who believe the review was economically flawed and that the wrong section of legislation was referred to by the review which effectively would have prevented regulatory control being enforced (Forsyth 2006, Mackenzie-Williams 2004).

The light-handed regulatory environment governing NZ airports has enabled AIAL to earn substantial revenues from its Aeronautical activities and thus contribute to its successful financial performance (Mackenzie-Williams 2004). Aeronautical activities have contributed a significant proportion of the total revenue growth for the company over the last two decades enabling the airport to be consistently ranked at the top end of major airport performance comparative studies.

Since becoming privatised, AIAL has set airline charges four times, 2000, 2002, 2006 and 2009 (Interview B, Senior Management, AIAL). The consultation process undertaken by the airport before setting its airline charges usually takes around a year with the airport publicising three or four proposals for its charges. Each time a proposal is put out, the airlines and representative bodies conduct their own analysis with expert advisers before responding. Through this process, airlines have had an effect in reducing the initial pricing proposals set out by the airports, but have not achieved the desired result that they believe is fair or in line with the findings of the initial Commerce Commission inquiry in 2002. The airlines express their frustration at the consultation process by comparing it to the inquisition of price control that the Commerce Commission undertakes. The main difference between the two processes, is that the final outcome in the consultation process for airline charges is determined by the airport. The situation can be likened to a Commerce Commission review where one of the submitters to the process actually has the final say in the discussion. This appears to be the main difference between the process of consultation and negotiation in practice and is a drawback from the perspective of airlines (Interview D, Airline Representative Body, Auckland).

As a result, it appears that the consultation process of aeronautical charges favours the stance of airports, with limited threat of regulatory control. The airport is a lot more wary of the threat of a Commerce Commission pricing inquiry. However, the fact that the Commerce Commission's recommendation following an inquiry, requires the support of the Minister in charge, means that an inquiry is unlikely to take place if it is believed that there is a small political will for pricing control. Unless AIAL acted in a radical way, the threat of pricing control under the current regulatory environment is quite small.

While benchmarking aeronautical charges with airports around the world is difficult due to the unique set of characteristics relating to capital expenditure, aircraft and passenger mix, operating costs and foreign currency conversion, AIAL's charges are comparable with other similar airports in the Australasian region and globally (Forsyth 2006, Mackenzie-Williams 2004). However, AIAL's costs are one of the lowest in the world, which means that the ratio of revenue to costs has consistently been one of the highest. Airline bodies have argued that the favourable profitability performance of the company has been a direct result of its aeronautical charge, revenue generating ability. This scrutiny and challenging by the airlines has resulted in a second review to be conducted by the Commerce Commission for an amendment to the way airline charges are treated.

4.2.2 The Relational Aspect of Light-handed Regulation

It can be seen that the light-handed pricing regulation that AIAL operates under is influenced by certain political relations. The nature of the framework requires the company to approach regulation in a co-operative, relational way with its key stakeholders.

The lack of political will for explicit pricing control at AIAL was evident after the first recommendation by the Commerce Commission in 2002 was over turned by the Minister of Commerce. To understand why the government disagreed with the Commission's inquiry requires an appreciation of the government's objective at the time of privatisation. One of the key aims of any government going through a privatisation process is to generate as much revenue as possible from the sale process. In order to maximise the sale of AIAL, the government needed to minimise the restrictions on airport pricing, to make the airport appeal as an attractive investment opportunity that would perform well. As mentioned, the privatisation process was a resounding success with the IPO oversubscribed, attracting over 50,000 retail investors into the airport. The political importance of the 50,000 'mum and dad' investors was clearly visible in the government's lack of action towards pricing regulation for AIAL post privatisation. It would have been very hard for the government to enforce price controls on the airport, which would affect the company's revenue stream and investment performance especially after receiving a record amount from its investors during the privatisation tendering process. The vested interest of the government to ensure the successful performance of one of its strategic assets, and the political incentive to keep its large shareholder base on side, can be seen to have influenced the regulatory environment of AIAL after privatisation (Interview D, Airline Representative Body, Auckland).

The light-handed regulatory system used for NZ airports has also been employed in Australia following the privatisation of its airports in the late 1990's and early 2000's. Previously, Australian airports had been subjected to a CPI-X form of price cap regulation. The system adopted following privatisation, was one in which the Australian Competition and Consumer Commission (ACCC) was required to monitor prices, costs, profits and quality over a period of five years. The difference between the NZ and Australian light-handed regulatory system was that a periodic review would be undertaken by the Productivity Commission every five years to determine whether explicit price regulation should be re-introduced in order to discourage airports from using their market power excessively (Forsyth et al 2004). There have been a number of interesting observations from the Australian light-handed regulatory experience. From the Productivity Commission's review in 2006, it was concluded that the light-handed regime had delivered a better environment for investment, productivity was higher than the international average and regulatory compliance costs were reduced (Schuster 2009). It did not find evidence of misuse of market power by airports in setting aeronautical charges. A key finding from the review by the Commission was that successful commercial outcomes relied on the parties involved recognising the need for a certain amount of compromise which can translate into a range of reasonable price outcomes rather than a single price solution based on a regulatory precedent (Schuster 2009). The light-handed regulatory framework facilitated the development of strong commercial relationships between airports and their airline customers leading to enhanced investment, increased responsiveness and value for money for airport users (Schuster 2009). If all parties to the regulation contract approached the negotiation purely to maximise their own respective utilities, it would be very hard for an outcome that promotes both market and social efficiencies to be achieved. The light-handed regulatory environment can be seen as an implied relational contract between the airport and its relevant customer stakeholders, placing an emphasis on the relationship between the parties and the need for a deeper understanding of each respective party's requirements in order to achieve a mutually beneficial outcome. The Australian example has not been without its own disputes as was shown when the airline company, Virgin Blue filed a formal complaint against Sydney Airport over the calculation of landing charges. By resolving the dispute in a mutually effective way, without the need for official arbitration, a landmark resolution was achieved by the aviation industry in Australia, with Virgin Blue chief executive, Brett Godfrey exclaiming 'This is the first time since the removal of price capping at major airports by the Productivity Commission that an airline/airport dispute has been resolved constructively to the mutual satisfaction of both parties' (Fiddian 2007).

In sum, it appears that the neo-liberal, free market policy of the NZ government to privatise AIAL has been distorted by its political incentive to extract revenue from the privatisation sale process. It has been argued by airline representatives that an absence of competitive forces has compromised the NZ Government's free market economic efficiency goals at the expense of its ulterior political motives. While the latest Commerce Amendment Bill would indicate that the regulating bodies are warming to the idea of enforcing explicit control, the economic significance of AIAL for local and national economic growth may provide further impetus for maintaining the light-handed regulation framework that is currently in place. In order to dispel the doubts that the government may have for the current regulatory framework, it is clear that

AIAL must continue to approach the regulation issue by maintaining strong, open relationships with its customer stakeholders.

4.7 Corporate Governance

Since becoming a corporation in 1988, the corporate governance of AIAL has fallen under the responsibility of the company's Board of Directors. Before becoming privatised, each fifty percent shareholder (Central government and local government) provided three members to the Board of Directors. The company's subsequent constitution (2004) states that the maximum number of board members is eight and appointments can be made by shareholders (by ordinary resolution) or by Board appointment (AIAL Annual Report). The Board's nomination committee has the responsibility of identifying the capabilities required and recommending potential candidates for nomination as Directors (AIAL Annual Report). The current board is made up of six non-executive directors, five of which are independent with one substantial private shareholder as a non-independent director. The Board has the responsibility for hiring the CEO, who is in charge of the senior management and overall direction of the company. Directors hold office for an initial term of no longer than three years after which they may offer themselves for re-election by shareholders. Each year the performance of individual directors is evaluated by the chairman, whose own contribution is discussed with the rest of the board. The board receives regular briefings on the company's operations and tours of the company's facilities from senior management (AIAL Annual Report).

The Board and Management of AIAL regard corporate governance to be absolutely critical and explicitly state that the highest level of governance practise is employed by the company (Interview C, Board Member, AIAL). This is facilitated by being listed on both the NZ Stock Exchange and Australian Stock Exchange, which stipulate specific reporting guidelines as well as complying transparently with regulatory bodies. These guidelines are sensibly honoured by the company who have the aim to be one of the leading listed companies as opposed to being a 'follower' in governance issues (Interview C, Board Member, AIAL). The company's corporate governance constitution and social responsibility initiatives for the community, environment and sustainability are contained on the company's website. A corporate governance section, which outlines AIAL's compliance with the fundamental principles of good governance recommended by the ASE Corporate Governance Council has been included in the annual reports for the company since 1999.

In the case of AIAL, good corporate governance has been crucial in order for the company to maintain and prosper operating under light-handed regulation. With such a large stakeholder base, from local schools and residents, local indigenous people, local and central government officials, having the support of its community has been critical for the success of the airport. From a governance perspective, this has meant setting the right tone for the business by the Board of Directors which in turn is reflected in the style of the CEO and his/her management team. 'If the tone and standards are not right at the senior management/Board level, questionable policies will manifest itself in other areas of the business' (Interview E, Former CEO, AIAL). The tone for the business starts at the top with the Chairman and the Board who have the ultimate responsibility to hire and fire the CEO and so should not be 'hijacked' by the CEO (Interview E, Former CEO, AIAL). The Board must also ensure that as there

is rotation in Board members, the governance standards of existing members are maintained.

With infrastructure companies perceived as having monopolistic characteristics, it is especially important to demonstrate the value that the company brings to the community. Governance strategies must be employed to avoid appearing as a 'tax on people's lifestyles' (Interview B, Senior Management, AIAL). For AIAL, this has meant shifting the focus to their role in tourism development and superior GDP growth through contributing to travel, trade and tourism. Passenger volume and in particular international passengers is a key value driver for the airport. International travellers' impressions of a country are frequently affected by their first and last encounters at the gateway airport such as Auckland. The overall airport experience recollected by international passengers can have a significant impact in promoting or discouraging future international tourism and business activities in the country (Yeh and Kuo 2003). The airport's goal towards producing a world class airport and increasing passenger volume has not only translated into successful financial performance measures, but has also contributed to the economic growth of the country. As part of its strategy to drive passenger volume, the company is looking at increasing its share of the Asian tourism market which is currently dominated by Australia. An acquisition for minority stakes in two North Queensland airports (January 2010) is seen as a stepping stone towards increasing AIAL's exposure to Asian carriers.

Another key strategy employed by the airport to manage the perception of a monopolist is to offer choices to its customer stakeholders. From car parking to food and beverage, passengers are offered a range of choices with 'good, better, best' options for these services. For example, car parking is offered at a range of prices depending on proximity to the terminals and whether covered or not. Similarly, fast food outlets are offered at one end of the customer scale while restaurant grade facilities are also available. Many of the outlets would prefer to charge premium prices at their airport branches, however AIAL does not allow this (even though they would also benefit from the higher prices in terms of return) with prices being pegged to downtown figures. By allowing these choices for customers, the sense of an overpowering monopolist is reduced as there is something available for every budget and the prices and quality compare with similar services provided in the locality (Interview B, Senior Management, AIAL).

The offering of choices also applies for the airline customers. With airlines differentiating their market share, the services provided to each airline are based on what they require with an appropriate cost and value based pricing to match. A contract with one airline may be completely different to another airline. For example, a low cost carrier would only want to pay a per passenger charge with everything bundled into a package, as their business is based on a variable price model. They prefer long-term certainty with their airport charges as they grow. However, a larger national carrier, on the other hand, is looking to differentiate their offering and maintain a disproportionate share of high value customers. They would prefer to pay more to the airport for premium services to offer their customers. For these airline customers, a payment to the airport is a fraction of what can be gained through extra tickets sold to their differentiated customer base. By offering different packages to

different airlines, this helps to ensure that the Airport is not perceived as behaving like a monopolist (Interview B, Senior Management, AIAL).

The mixture of private and public ownership for airports can lead to conflicts of interest between parties with different interests in the same asset. Agency theory literature has looked mainly at the conflicts between shareholders and managers of companies and between shareholders and bondholders. A major governance challenge for AIAL has been satisfying both public and private shareholders in the company.

The major difference between the two types of shareholders is the type of return and strategic interests that each is aligned to. Private, institutional managed funds and retail investors are more inclined towards the total shareholder return, which includes both dividends and share value accretion. The interests of private investors are more strategically in line with those of the company as a long-term infrastructure asset (Interview B, Senior Management, AIAL). Public shareholders on the other hand typically only value cash returns as they never see themselves as sellers due to political and community reasons (Interview B, Senior Management, AIAL). Public shareholders are thus much more yield focused than other investors and would generally be in favour of extracting cash from the asset as it currently stands instead of deploying capital for growth. Such a strategy may be suitable for certain types of infrastructure businesses like water and utilities, however, airports are growth businesses, relying on passenger growth and value extraction (Interview B, Senior Management, AIAL). The above conflict of interest between shareholders can be problematic if there is a large public stake, which can be used to influence Board positions and the overall direction of the company. So far, for AIAL, this has not been the case. The company's corporate governance constitution, charters and policies have ensured that the local council ownership has not overpowered the interests of other shareholders and the overall strategic direction of the company.

Having good governance structures in place has been critical for AIAL to perform strongly in an environment with such a wide stakeholder interest. There will always be a differing of opinions and by play between stakeholders, however AIAL has shown that ensuring transparency, honesty, well managed practises and timely investment will reduce the role play and associated challenges for companies with a dominant market position.

4.8 Capital Structure

AIAL has maintained a conservative approach to leveraging since becoming a corporation in 1989. As can be seen in Figure 6, the level of debt exceeded 50% of total assets on only one year during the twenty year period and the average level of debt to assets for the period was 36.6%.

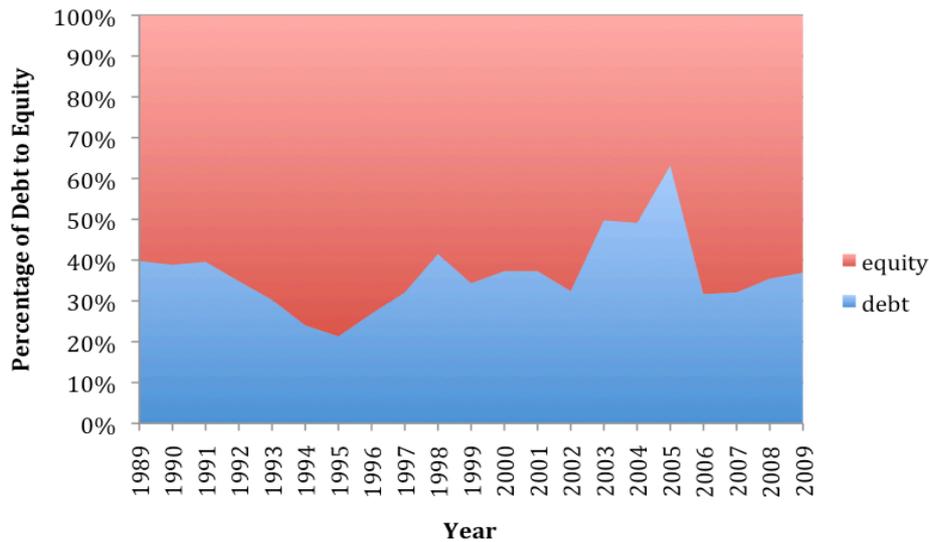


Figure 6: Capital Structure of AIAL

Source: AIAL Annual Reports

With AIAL being publically listed and having a broad shareholder base (including local government councils, long-term retail investors), the amount of gearing the company has utilised has had to accommodate this. Investors in AIAL have traditionally been attracted by the conservative nature of the asset, with a long-term perspective and the company has adopted a capital structure that is appropriate to its ownership structure. This is in contrast to airports that are unlisted and privately owned such as Sydney Airport with the airport fund manager MAP having a majority stake. Private investors in these companies are prepared to take on more financial leverage and risk, enabling management to take on more of a short-term, opportunistic strategy .

AIAL has also maintained relatively lower levels of debt in order to keep a strong credit rating. From the time AIAL was privatised and listed, the company, through its capital expenditure program and distributions to shareholders, has dropped from a credit rating of A+ to A- compared with Sydney Airport's BBB-. It is board policy that AIAL does not fall below an investment grade credit rating of A- to ensure that it reflects and is commensurate with the quality of infrastructure asset that it is (Interview C, Board Member, AIAL). This in turn enables the company to use its debt paper effectively and efficiently and gives it better pricing of debt (Interview C, Board Member, AIAL). This was evident during October and November 2008 when the company raised NZ\$130 million through a retail bond issue which was oversubscribed. This was followed up by a subsequent fully subscribed bond issue which raised a further \$50 million. The company also has access to a syndicate of bank facilities which encompasses nearly 50% of its source of borrowings (AIAL Annual Report).

AIAL had been criticised for its stance on leverage and having a 'lazy balance sheet' for many years prior to 2007 (Interview A, Senior Management, AIAL). The financial risks associated with the high-leveraging model were made apparent during the 2007/2008 credit crisis. During the GFC, when debt was maturing and companies could not replace their debt from the markets, shareholders of companies with high leveraging levels had to use their funds to make up the difference. A number of infrastructure assets financed through the private equity/fund manager, high

leveraging model suffered during the crisis with investors left high and dry from their investments. AIAL, as a publically listed, stand alone entity was able to refinance successfully and retain the active support of its shareholder base. Apart from a general decrease in stock price from the public markets, investors in AIAL were not as badly affected during the GFC.

By maintaining a conservative capital structure, AIAL has not only acted in a way that reflects the aspirations of its shareholder body, but it has also shown to other stakeholders including the regulating bodies, its firm commitment towards the long-term development of the asset. The low leverage levels, has ensured that the airport is in a strong financial position to make investments in physical capital in order to make the most of forecasted passenger growth and continue to provide a high quality efficient asset. The risk of the company falling into a financially distressed state has been kept low providing a further signal to the Government and other stakeholders that the private monopolistic owners are acting in a responsible way. The prudent approach to capital structure thus far, has ensured that AIAL investors have not been as badly affected by the turbulent economic conditions of the last decade, and allowed the true economic infrastructure qualities of the asset to flourish.

4.9 Synthesis of Results

The analysis in this section has illustrated the factors that contribute to the performance of an urban infrastructure investment and examined in detail the various political economic relations that investors need to take into account when investing into infrastructure assets. It can be seen that the common element in all of the success factors for AIAL, is the role of government decision-making. It can be seen that the role of government is still central in affecting the performance of privately owned urban infrastructure assets.

Perhaps the most compelling of the factors in this case and contingencies for the argument above has been the favourable regulatory environment around pricing legislation for the Airport. Since the privatisation process, AIAL is one of the only examples in the world where it has not been subjected to any formal pricing regulation. The dual-till model with light-handed regulation for aeronautical activities has enabled the airport to generate significant revenues from its aeronautical activities and provided the freedom to develop its freehold land for commercial purposes. It can be argued that the lack of formal price control at AIAL was due in part to the Government's political incentive to extract revenue from the privatisation sale process. It can also be seen that the economic significance of AIAL for local and national economic growth provides further impetus for maintaining the light-handed regulation framework that is currently in place. The experience of light-handed regulation in Australia has shown the importance of viewing airport pricing regulation as a relational contract with parties approaching the issues in a co-operative way in order to gain mutually beneficial outcomes. Developing strong commercial relationships with its stakeholders will also be important for AIAL to continue operating under a light-handed framework.

Strong governance structures have been crucial for the airport's success since becoming a private corporation. One major governance challenge for AIAL which is common for most infrastructure companies, has been to reduce the perception of an

overpowering monopolist for its stakeholders. The threat of regulatory intervention has provided the incentive for AIAL not to exploit its market power. Such intervention can not only be financially crippling for the business, but compromise the integrity of the managers and Board members. In response, AIAL has tried to demonstrate the value the company brings to the community and its contribution to trade, tourism and economic development has been central to this. International travellers' impressions of a country are frequently affected by their first and last encounters at the airport through which they arrived and departed. AIAL has been committed to providing a unique NZ experience for travellers at the airport to encourage future international tourism and business activities in the country. Another key strategy for AIAL to detach themselves from the perception of a monopolist has been to offer a range of choices for their public and airline customers in order to cater for a range of needs and budgets. The robust and transparent governance system of the airport, facilitated by stock exchange guidelines, has also ensured agency problems between the private and public shareholders of the company has not affected the overall strategic direction of the company.

The IPO privatisation process of AIAL in 1998 was well received by the general public, which has resulted in a loyal shareholder base for the company and strengthened its overall investor perception. Through the privatisation process and further shift towards a commercial focus, the productive efficiency of the company has been enhanced, which can be seen by the sustained growth in revenue per passenger figures and consistently high ranking in airport productivity survey reports. The privatisation listing on the NZ stock exchange has facilitated the robust, transparent governance structures of the company as well as a prudent approach to leveraging.

Finally, AIAL investors have benefitted from the company's conservative approach to leveraging especially in light of the GFC between 2007-2009. Investors in highly leveraged assets have lost a significant portion of their investment during the global credit crunch. However, the company's conservative approach to capital structure has meant AIAL investors have come away relatively unscathed. By maintaining a conservative capital structure, AIAL has not only acted in a way that reflects the aspirations of its shareholder body, but it has also shown to the regulating bodies, its firm commitment towards the long-term development of the asset.

Infrastructure assets are politically sensitive and economically significant, the extent of which will determine how wide reaching the effect of political decision-making can be on the performance of the asset. In the case of AIAL, the economic significance of the stand-alone asset, has meant that political decision-making has helped contribute to the company's successful performance. The effect of favourable politics has not been made in isolation, this case study has shown that transparent, robust corporate governance and responsible capital structure strategies of the firm have ensured that political decision-making has not affected the company in a detrimental way through regulatory intervention. Such strategies are essential for investors to continue to reap the benefits of the significant standing of the asset.

In sum, it is argued here, that under light-handed regulatory conditions, government decision-making is central in affecting the performance of private infrastructure assets. Not only has the government's privatisation process through an IPO

contributed to the company's successful performance but the analysis has highlighted the 'potential' role of government as a passive overseer of the corporate governance and capital structure strategies of the firm, disciplining the process through the potential threat of regulatory intervention. The regulatory framework and governance model employed at AIAL provides an illustrative example of how privatised infrastructure assets are able to achieve both financial and wider economic goals.

5.0 Case Study 2: ADI consortium acquisition of BAA

In what has been regarded as one of the biggest infrastructure transactions of the last decade, this section looks at the acquisition of UK airport operating company BAA by the Ferrovial-led Airport Development Investment (ADI) consortium. The acquisition, which took place in 2006, was highly publicised and drew much criticism due to the acquirers' subsequent poor handling of the wider stakeholder interests in BAA including the poor conditions of customer services and vulnerability to regulatory interventions. The poor stakeholder management has been influenced by the concentrated focus of the consortium to maximise shareholder wealth, by using excessive financial leverage in the investment acquisition.

BAA was established in 1966 as the initial owner of Heathrow, Gatwick and Stansted airports. The company was then floated on the Stock Market in 1987 and acquired various other airports in the UK and internationally to become the world's leading airport operating company prior to the acquisition in 2006.

Ferrovial, a Spanish construction company, which was borne out of the widespread rebuild following the Spanish Civil War in the 1930s, was the leading figure for the ADI consortium in their takeover of BAA. As the company grew from its early beginnings, Ferrovial progressively moved away from construction to infrastructure concessions, and diversified away from Spanish dominated assets in favour of Anglo-American projects. Ferrovial had also established a working relationship with the pension fund investors, Caisse de Dépôt et Placement du Québec (CDPQ), who were one of the main backers on BAA, along with Singapore's Government Investment Corporation (GIC) (JP Morgan 2006).

The method of investment for the BAA takeover was through a 'club' deal, where two large institutional investors partnered with a leading infrastructure specialist to form a consortium bid. Following an intense bidding war with a rival consortium led by investment bank, Goldman Sachs, the ADI consortium's offer valuing BAA equity at £10.11bn and gave an enterprise value³ of £16.4bn became unconditional on June 26th 2006 after it had won control of 83.4 percent of the shares. The final break down of shareholders in the consortium was Ferrovial 62%, CDPQ 28% and GIC 10%.

Upon completing the acquisition of BAA, a sequence of unfavourable events seemed to transpire, significantly impacting the ambitions of the new ADI consortium owners of BAA. It was mentioned in 2008 by the head of airports division at Ferrovial that while the BAA deal was well thought out and possible scenarios taken into

³ Enterprise value is a measure of a company's value that includes the company's debt, preferred shares as well as the equity value (Brealey et al 2006).

consideration, ‘almost all the negative scenarios have been played out and none of the positive’ (Gordon et al 2008). The next four sections highlight some of the key factors that contributed to the poor performance of the company.

5.1 Governance and Management Changes

Prior to the acquisition by ADI, as a publically listed company, BAA ran a traditional Anglo-American governance model comprising of an executive committee responsible for the day-to-day decision-making, which reported to a Board of Directors. In line with the Financial Reporting Council’s UK Corporate Governance Code and to meet the challenges associated with governing a 10,000 employee strong company, the Board consisted of 12 members, with six independent non-executive directors and six executive directors. All non-executive directors of the company had experience in managing or directing other large British public listed companies, with a number also having specific infrastructure and regulated industry experience (BAA 2011).

Shortly after the acquisition, BAA was delisted from the stock market and while the Board of Directors underwent change to reflect the new ownership structure of the company, the majority of the existing BAA management were initially retained. Ferrovial chairman Rafael del Pino had publically stated his intentions of co-operating with the current management of the company. Despite this however, incumbent CEO, Michael Clasper who was reported to have aligned himself with the rival Goldman Sachs bid, resigned almost immediately after the acquisition. Margaret Ewing, chief financial officer and Ian Hargreaves, corporate and regulatory affairs director left the group a few months later, leaving a significant hole in the executive branch of the company (Done et al 2007).

Existing Chairman Marcus Agius, initially agreed to stay on as chairman but also resigned a few months later, placing Rafael del Pino at the top position. By the end of 2006, the Board had expanded to 14 members with twelve of the existing Board replaced by seven new members from Ferrovial, three from CDPQ and two from GIC (BAA 2011). As the chairman of Ferrovial explained, the company was clearly operating as a ‘UK business but with headquarters based in Madrid’ (Mulligan 2007).

Over the next few years following the acquisition, a deteriorating financial situation, increased security measures and declining service quality seemed to take its toll on the ADI consortium which struggled to cope with the circumstances as top level management and board membership rotated in and out of positions frequently. In 2007, the management upheaval at BAA intensified as the CEO of Heathrow Airport, Tony Douglas, director of safety, security and services, Donal Dowds and head of human resources Peter Blausten all departed within a few weeks. On top of this, BAA’s head of corporate affairs and media relations had also resigned in protest at the growing interference from Madrid in the conduct of public relations in the UK. In an attempt to restore the company’s ailing fortunes, the consortium appointed Sir Nigel Rudd as chairman of BAA, who had gained a reputation as a leading UK business turnaround specialist, having chaired a number of large public company Boards including vice chairman of Barclays Bank and security adviser to former Prime Minister Gordon Brown (Done et al 2007).

In less than two years in the job, Stephen Nelson stepped down as CEO of BAA, in what appeared to be the biggest shock since the ADI consortium took over the company. It was the first big management change to be instigated by Sir Nigel Rudd and the first casualty to have been appointed by Rafael del Pino. Mr Nelson was replaced by Colin Matthews, who had experience as CEO of a number of FTSE 100 companies in both the utility and airline sectors and whose breadth of experience was an important factor in Sir Nigel Rudd's decision in replacing Mr Nelson (Done 2008).

Following the Heathrow Terminal 5 opening debacle on March 27, 2008, Mark Bullock, chief operating officer of Heathrow Airport left the company and was replaced by Mike Brown. The latter lasting only until September 2009, when he returned to London Underground as managing director (Done 2008).

From the latter half of 2009, movements in Board membership and management personnel seemed to settle relative to the previous two years following the acquisition. Despite still including a majority of Spanish based members on the Board of Directors, by 2010, the company has moved to include UK based non-executive independent directors, although the expanded size of the Board remains (BAA 2011).

From the events that transpired following the acquisition, it was quite apparent that the ADI consortium had not put enough thought into the senior management personnel of the company and underestimated the effects of having a majority Madrid-based Board of Directors. It did not appear that the consortium fully understood the true drivers of value for the business and the effect of the wider stakeholder base in extracting value from the company, instead it was very much an acquisition driven by financial engineering, with the idea that the company would be able to run itself.

The fact the consortium had set up an arrangement where the company would effectively be a subsidiary of Ferrovial and therefore sit within the hierarchy of the Spanish-based company shows a lack of foresight into the global-local dynamics and associated tension of non-localness with cross-border acquisitions.

The Code of Best Practice Corporate Governance developed by the Committee on Corporate Governance states that 'the board should include a balance of executive and non-executive directors such that no individual or small group of individuals can dominate the board's decision taking' (FRC 2010). In the case of BAA, following the ADI acquisition, while the Board make up was reflective of the share ownership, it can be seen that Ferrovial's stronghold of the Board seemed to excessively influence the executive decision-making process of the company leading to inefficiencies and poor performance for the firm.

It was the intent of ADI to 'make do' with the incumbent management following the acquisition and yet at the same time, there was a dysfunctional shareholder base sitting above them. It was clear that the decision-making process for the firm was carried out only in Madrid, and certainly not in the UK at the BAA headquarters (Interview F, Former BAA employee, London). As a consequence, a lot of the senior management left the firm in an unsatisfactory way but were given no choice. Most of the management believed in the business and wanted to make a contribution but weren't allowed to because Ferrovial wanted to do things their way, and the only way

to control it was to put in their own people (Interview F, Former BAA employee, London). For the existing staff, to see the CFO leave after three months and then the CEO of Heathrow to follow after six months, a large amount of doubt seemed to set in to their own future at the company. On top of this, for the managers who previously were making decisions and having a direct impact on the company, but then became relegated to being an operating subsidiary of a Madrid-based company was hard to accept affecting their decision to stay (Interview F, Former BAA employee, London). As a result, the company lost a large amount of talent and experience in management (crucially in the areas of public, regulatory and media affairs), which proved to be costly for the firm. If ADI had had the foresight and shown a deeper understanding for the company they were acquiring by basing themselves in the UK and particularly in the South-East of England, a lot of the cross-cultural tensions and subsequent management exodus could have been avoided.

A lot of the incumbent management had material share options in BAA, which until takeover speculation began had been of no meaningful value to them (Interview F, Former BAA employee, London). Following the acquisition, a significant profit on these options was made by a number of the senior executives, which also could have swayed their decision to leave the company having cashed up their options. Furthermore, prior to the acquisition, BAA had been renowned as a leading airport operator and attracted talent because of its global scope and wide ranging career opportunities and clear career path structure (Interview F, Former BAA employee, London). ADI however had made it clear that it had the intentions of selling off a large number of its assets and to solely focusing on its airport operations in the UK. As a result, the same career prospects and ambitions of staff at BAA were somewhat thwarted reducing the incentive for many to stay on.

5.2 Financial Implications

The Ferrovial led acquisition of BAA has not only come under much scrutiny because of its fragmented governance structure and poor operational service, but the ADI consortium have been put under significant financial pressure to the extent where it faced the prospect of severe financial distress (Lex 2007). It can be seen that insufficient regard was given to the stakeholder approach in favour of an acquisition driven by financial engineering. The events following the take over, accentuated by the GFC, have shown that the concentrated strategy to drive shareholder wealth was in fact flawed because of the amount of financial leverage utilised in the take over transaction, which some have reported as being overpriced.

The BAA acquisition was funded with short-term debt with the view of selling non-core assets to pay down principal and refinancing with longer-term debt. However, due to the GFC and the collapse of the credit markets in 2007-2008, the consortium has struggled to sell off assets as well as refinance their debt. The financing problems around BAA pushed the consortium to the brink of financial distress, because of the imminent maturity of the debt (Osborne 2008).

Following the acquisition, the consortium announced its intentions to refinance its debt through an asset backed securitisation process and started to look at refinancing options in 2007. The credit squeeze of August 2007 delayed the refinancing plans with warnings over the ability to refinance existing debt starting in late 2007 and

continuing in early 2008. The GFC had forced interest payments on BAA loans to unsustainable levels with the consortium having to pay annual interests of €2 billion, significantly eating into its EBITDA of €3.04 billion (Gordon et al 2008). The capital expenditure set aside at the time of the acquisition was being used to pay off debt, rather than being invested in the new buildings and improvements required to drive future revenue growth (McNeil 2010). Figure 7 below illustrates the flat performance in revenue and profits for the company before (BAA plc) and after (BAA Ltd.) the ADI acquisition. As detailed in section 5.4, BAA was forced by the Competition Commission to sell Gatwick Airport in 2009 leading to a significant loss for the company. The graph also highlights the exorbitant level of debt used by the acquiring consortium relative to the revenue and profit figures of the firm.

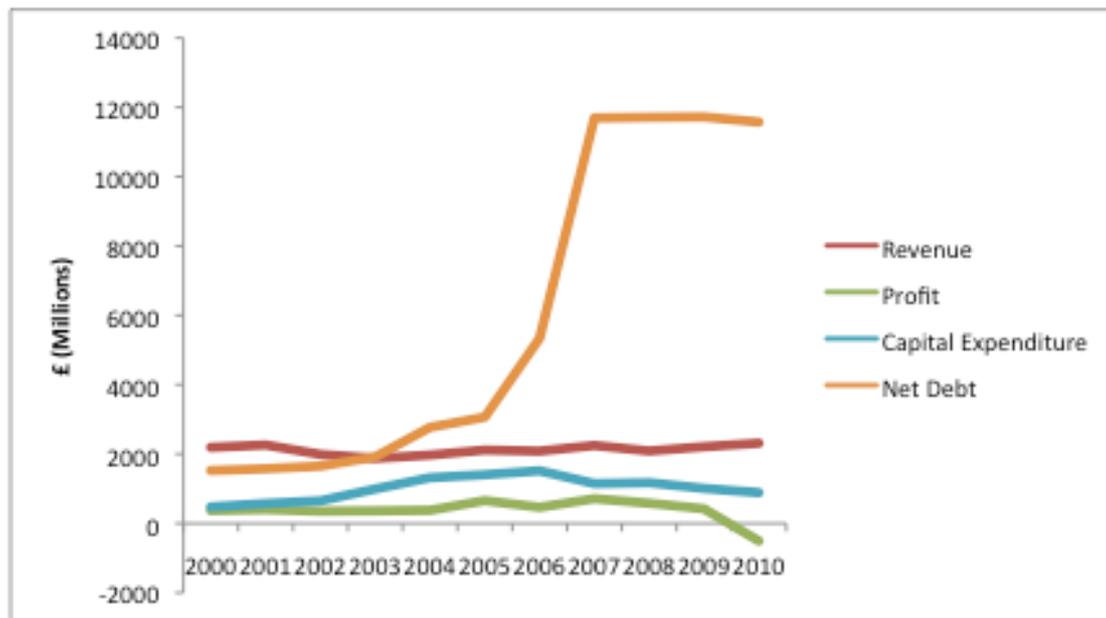


Figure 7: Key financial performance indicators of BAA before and after the acquisition
(Source: BAA Annual Reports)

Figure 8 below shows how the passenger numbers at BAA's airports have evolved over the last ten years, with a significant decline in 2008-2009 following the GFC, contributing to the company's declining financial performance. In the five year period before the acquisition in 2006, the average annual passenger growth was 4.1%, while in 2008 and 2010 (removing the effect of the Gatwick sale), passenger numbers decreased by 2.8% each year.

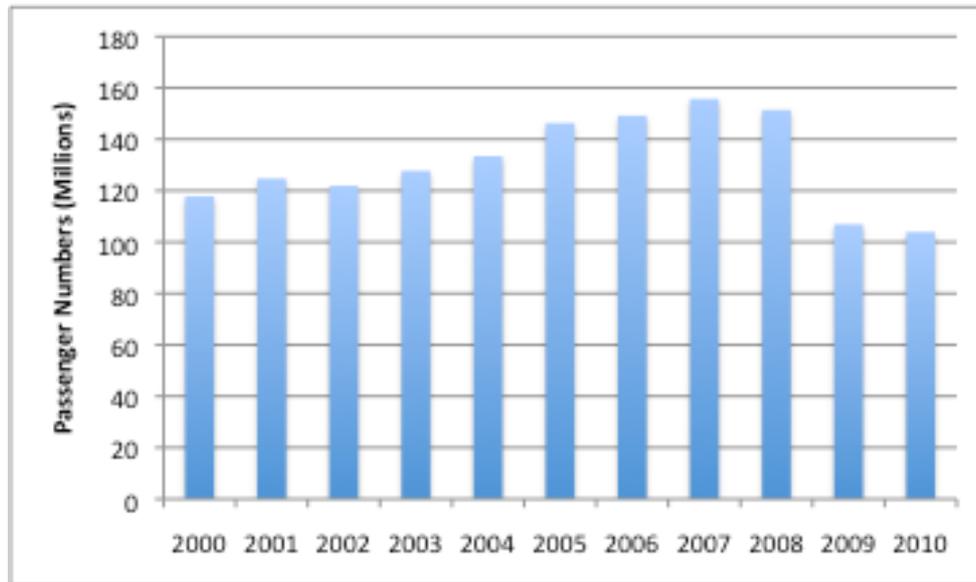


Figure 8: Passenger numbers at BAA airports since 2000
(Source: BAA Annual Reports)

In an effort to address the refinancing issues, ADI proceeded to sell a large number of BAA's assets, with the aim of refocusing the business on its UK assets. This included selling Budapest Airport, all of its Australian Airport interests, two tranches of its Airport Property Partnership, World Duty Free and Four US retail management contracts (Done 2008).

While the company was able to organise a portion of the re-financing, and improve its debt ratios through 2008 and 2009, a signal that the consortium had got their financing plans for BAA wrong came when Ferrovial announced that it was putting its controlling stake in BAA up for sale in 2010 (Mulligan 2010). The sale of its stake in BAA was part of Ferrovial's strategy to regain control of its own finances.

At the time of the acquisition, cheap credit with minimal security or covenant restrictions was abundant. In 2006, the average leveraged loan represented about 5.9 times the borrower's EBITDA compared with the same figure in 2001 of 4.7 times (Larsen 2006). i.e. Companies in 2006, that had a cash flow of about £170m were able to get a £1bn loan. In many respects, the amount of leverage used by Ferrovial, was reflective of the markets and transactions occurring at the time. The deterioration of global credit markets, and the need to refinance the significant level of debt in the company can be seen to have narrowed the focus of management, with other areas of the business and stakeholder management being adversely affected. Ultimately, an indication of how badly the Ferrovial-led acquisition of BAA has turned out can be seen in the destruction in value of equity from the transaction. At the time of the transaction, BAA's equity was valued at £4.6bn. Subsequently a further £900m has been injected into the business to help with financing issues (Interview G, Investment Bank Financial Advisor to Ferrovial, London). Even though the company was delisted, the significant standing of the company in the economy and highly publicised operations has meant that financial analysts have continued to appraise its valuation based on a variety of financial indicators such as earnings, capital structure and projected revenue drivers. Based on the deterioration of the company's value drivers, the general broker consensus value of equity for BAA, at the time that

Ferrovial announced their partial sale (October 2010), was £729 m, which represented an 87% decrease in value from the investment put into the company by the consortium⁴. Given the consortium's improved handling of its debt situation and recovery in passenger growth forecasts, this consensus value subsequently rose to £2.3bn (as at June 2011) still representing a 58% or £3.2bn destruction in equity value⁵ (Interview G, Investment Bank Financial Advisor to Ferrovial, London).

Furthermore, the Ferrovial share price since the acquisition in 2006 has fallen from over €12 to its lowest point of €3 in March 2009 before rebounding to its June 2011 price just below €8.70, as can be seen from Figure 9.

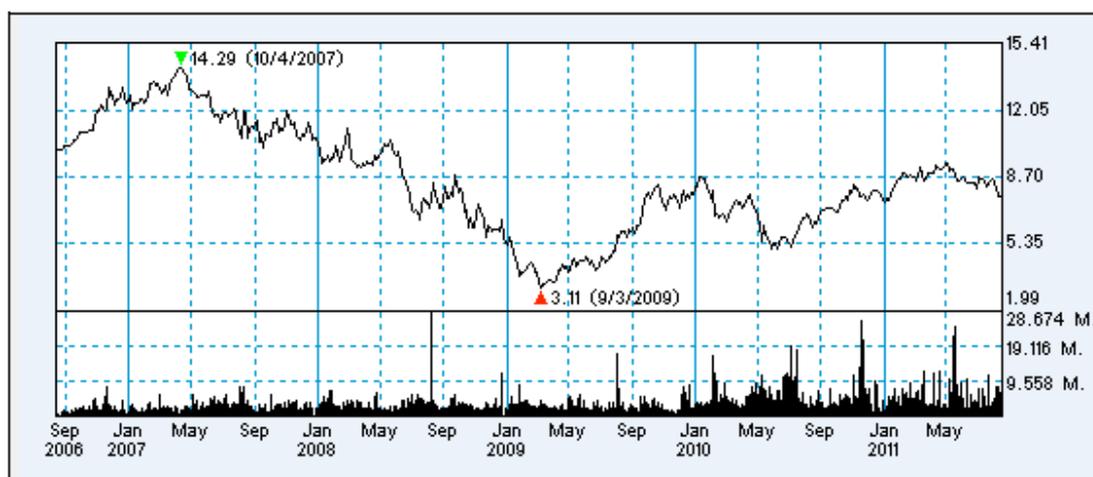


Figure 9: Ferrovial Historical Share Price
(Source: Bolsa de Madrid 2011)

5.3 Deteriorating Terminals, Increased Security and Reputation Threats

While it is argued that the ADI consortium inherited the poor condition of BAA's airports, further deterioration in buildings, service standards and public outcry has plagued the company since the acquisition.

Prior to the acquisition, BAA had focused more heavily on its commercial developments in retail and duty free and in many ways compromised the basic servicing needs of customers in terminals. British economist John Kay highlights the narrow-minded shareholder perspective that ADI employed for its governance of BAA, 'the activities that generate customer satisfaction – providing seats, enough

⁴ Values were obtained from interviews with the financial advisors to Ferrovial, reflecting the general broker consensus at the time.

⁵ At the time of writing, in October 2011, Ferrovial sold 6% of its share in BAA for £280m, implying a £4.8bn valuation of 100% of the company (13% decrease from initial investment). This value was considered a shock to the market given the general consensus values. Some of the reasons for the high price of the sale have included: a large supply of pension fund money seeking long-term infrastructure investments; trend away from Euro denominated assets; the buyer was scaling up its interest into a governance role (so it was strategic). While still representing a considerable loss, the value would indicate that ADI has recovered significantly since arriving in a situation of near insolvency.

security guards, clean toilets and travelators that work – are a cost, not a source of revenue. Profits are derived from landing charges, parking fees and selling Burberry scarves and smoked salmon’ (Kay 2007). Figure 10 below illustrates the significant proportion of revenue that is attributed to commercial ventures of BAA’s UK airports.

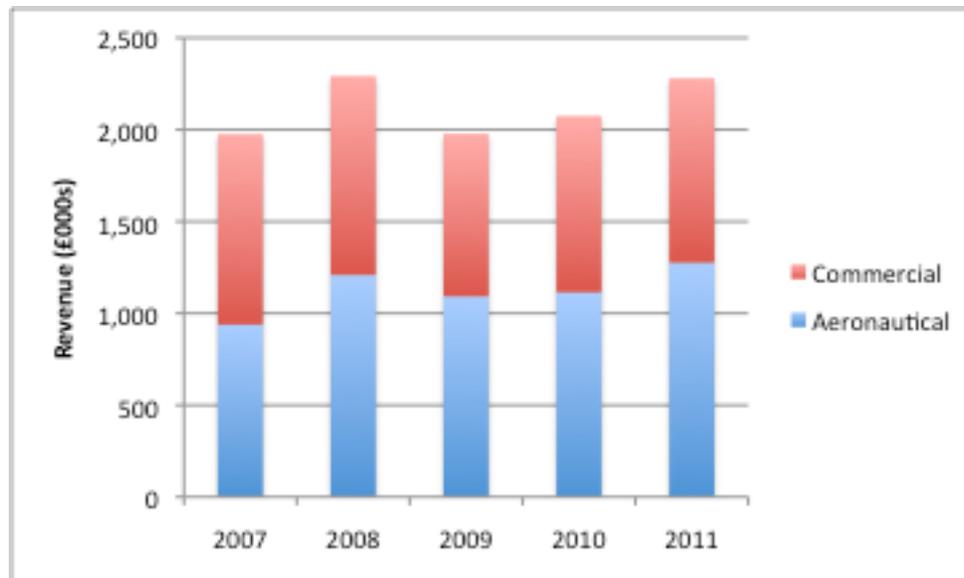


Figure 10: Sources of Revenue at BAA Ltd. UK Airports
(Source: BAA Annual Reports)

As a result, insufficient capital investment had led to maintenance shortfalls, stalled redevelopment projects and subsequent overcrowding and delays. While most of the criticism had been blamed on Heathrow airport, other BAA airports have also come under scrutiny. A Ryanair executive described the standards at Stansted Airport as ‘nothing short of appalling’. The situation had deteriorated so badly that executives were forced to bypass flying out of the UK and were instead taking trains to mainland Europe to catch onward flights. The mayor of London at the time, Ken Livingstone, proclaimed that Heathrow was an embarrassment to the city and country (Done and Sherwood 2007).

Table 2 and Table 3 below illustrate the poor customer performance at Heathrow and Stansted airports by detailing the number of failures and rebates incurred through the service quality rebate scheme introduced by the Civil Aviation Authority in 2003. The service quality rebate scheme penalises the airports for failing to meet certain standards of service quality. The scheme scrutinises queuing times at the airports’ security areas, availability of seating, cleanliness, information display clarity, and efficiency of passenger sensitive equipment such as lifts, escalators, baggage reclaim belts. Table 2 and Table 3 below show the number of failures in service quality for the company and the costs incurred as a result of the failures at both Heathrow and Stansted.

	Heathrow	Terminal 1	Terminal 3	Terminal 4	Terminal 5	Total
2008	Number of Failures	9	24	25	22	80
	Required Rebate	£828,843	£2089602	£1576831	£2562460	£7057736
2009	Number of Failures	5	23	3	18	49
	Required Rebate	£480,841	£2009649	£188697	£1040646	£3719833
2010	Number of Failures	0	12	0	18	30

	Required Rebate	£0	£1612869	£0	£1109052	£2721921
2011	Number of Failures	0	11	0	18	29
	Required Rebate	£0	£1368360	£0	£2493596	£3861956

Table 2: Service Quality Rebates at Heathrow Airport
(Source: BAA 2011)

	Stansted	Total
2009	Number of Failures	29
	Required Rebate	£578,319
2010	Number of Failures	17
	Required Rebate	£204,736
2011	Number of Failures	14
	Required Rebate	£216,630

Table 3: Service Quality Rebates at Stansted Airport
(Source: BAA 2011)

A lack of foresight by ADI to take into account the wider stakeholder interest in BAA has hurt the company badly. In addition, the disjointed governance structure put in place, with half the Board based in Madrid as well as the high frequency of experienced and talented staff leaving has contributed to the sub par performance and public outcry. The managing director of American Airlines described the situation since ADI acquired the company as follows: ‘In the last two years BAA has been less responsive over operational issues and access to senior management has deteriorated’ (House of Commons Transport Committee 2008).

The inefficiencies experienced by BAA customers seemed to culminate with the highly publicised opening of Terminal 5 where poor logistical planning led to the cancellation of more than 500 flights over 10 days, thousands of passengers being stranded and more than 23,000 bags being misplaced. Ironically, the same problems that had plagued Terminals 1 – 4 of the airport previously, and the type of problems that Terminal 5 was supposed to address were apparent from the first day of operation causing significant embarrassment for the company and further frustration for customers (Taylor 2008).

Another major challenge for the ADI consortium affecting the performance and reputation of BAA was the sudden increase in security measures at airports in the UK after a red level severe terror alert. The alarm was raised in the UK in August 2006, after 24 people had been arrested on suspicion of planning to smuggle liquid explosives in carry-on luggage onto flights operated from the UK to the US. As a result, thousands of flights from BAA’s airports were cancelled and tougher security measures were put in place. Increased security procedures meant that full body searches were required on every passenger and all hand luggage was banned, placing severe capacity constraints on airports. BAA’s ability to cope with the exacerbated situation was criticised with some government officials and airline representatives, likening the situation at Heathrow to ‘third world chaos and disorganisation’. The terror alert situation in the UK in August 2006 consolidated BAA’s reputation for poor service and inadequate facilities (Done et al 2007).

While the full extent of the security measures were reduced soon after the initial threat was downgraded, airport security had been significantly tightened compared to before the terror scare, increasing the costs for airport operators. On top of the various compensation suits filed by various BAA stakeholders and a severe dent to its

reputation, the estimated costs of the terror alerts for BAA exceeded £13 million (Done et al 2007).

As a defence to the criticism that ADI has been subjected to, the consortium owners have claimed that a fundamental lack of runway capacity in the London airport system has been at the heart of the failings in service standards that have plagued the airports in recent years (House of Commons Transport Committee 2008). BAA has argued that Heathrow airport has been operating at full capacity and is desperately in need of additional capacity. The company as well as other public figure proponents have argued that the UK economy has suffered due to the global reach of Heathrow decreasing as other European hub destinations with greater capacity have taken a larger portion of the market share. Since the election of the Coalition Government in May 2010 confirming that a third runway would be disallowed, it can be seen that BAA have started to prioritise the improvement of existing facilities at Heathrow. Table 2 and Table 3 show that the situation at both Heathrow and Stansted airports is improving with the number of failures decreasing. The company's 2011 annual report disclosed £900 billion (10% increase from 2010) being invested into Heathrow with Terminal 5C successfully being completed, progress being achieved on the new Terminal 2 and works nearing completion on overhauling the airport's baggage system.

5.4 Regulatory Backlashes

Competition Commission Review

Within days of gaining the majority shareholder acceptance, the UK Office of Fair Trading, true to their word prior to the acquisition completing, launched an investigation into the market structure of UK airports and its effects on customers. By the end of their study, the OFT had referred BAA to a Competition Commission inquiry for a possible break up of the airports group stating that 'there was evidence of poor quality and high charges raising significant concerns among customers.' The Competition Commission (CC) subsequently undertook a comprehensive two year inquiry into the supply of airport services by BAA to determine if any features of the market 'prevents, restricts or distorts competition and, if so, what action might be taken to remedy these' (House of Commons Transport Committee 2008).

The provisional, preliminary findings of the inquiry found that there were competition problems at each of BAA's seven UK airports with adverse consequences for passengers and airlines. The principal cause of these problems was considered to be their common ownership by BAA. The proposed remedies upon which further consultation would take place included ordering BAA to sell two of its three London airports and also, either Edinburgh or Glasgow airport (Done et al 2006).

Pre-empting the final report mandate, the ADI consortium initiated the bidding for Gatwick Airport prior to an official direction from the CC in order to secure the highest price from a bidder. This would allow the consortium to avoid having to take account of other factors sought by the Commission - such as the buyer's expertise in running airports or commitment to expansion with the building of a second runway. It was in the interest of ADI to sell its airports separately rather than grouped together, as might have been the case if left to the CC's direction.

The CC inquiry was initiated as a result of declining service standards at a number of BAA airports but in particular at Heathrow. The public outcry of poor service ranging from long queues, dismal facilities, lost baggage and delayed flights was evident prior to the acquisition but deteriorated significantly under the ADI consortium's ownership.

The final report of the CC Inquiry was released in March 2009, which, as had been expected, ordered BAA to sell both Gatwick and Stansted as well as either Edinburgh or Glasgow (Competition Commission 2009). With the process already under way, Gatwick airport was sold in October 2009 for £1.5bn, which represented a value significantly lower than the owners had suggested it would achieve when it was first put on sale. The company incurred a £225 million loss on the sale of the airport, which was valued for accounting purposes at £1.735bn. The lower than expected sale price was mainly due to declining passenger numbers and cargo at the airport as a result of the economic downturn (Clark 2009).

After the sale of Gatwick, BAA launched an appeal against the sale of Stansted and its Scottish airports due to an "apparent bias" in the CC's investigation. The bias related to one of the six members of the panel looking at BAA's market position also being a strategic adviser to the Greater Manchester Pension Fund, the institution which eventually joined a consortium bidding for Gatwick with the Manchester Airports Group. The appeal was successful with the Competition Appeal Tribunal (CAT) allowing BAA to keep the airports the CC had previously ordered it to sell (Clark and Peel 2010). The Court of Appeal ruling was subsequently challenged by the CC and after a second hearing, the CAT upheld the CC's original order for BAA to sell Stansted and either Glasgow or Edinburgh airports.

CAA pricing regulation round of April 2008

To provide further uncertainty for the ADI consortium, the Civil Aviation Authority, shortly after the acquisition, conducted a separate inquiry into the five year price-cap regime for airline charges at BAA airports for the April 2008 pricing round. Under the existing regime, airline user charges at BAA's London airports were capped by the CAA, using the RPI-X formula and adjusted every five years according to criteria such as the company's profitability and size of its asset base (House of Commons Transport Committee 2008). The CAA was required to gain approval from the CC for its pricing recommendations.

Following the CAA's inquiry for the April 2008 pricing round, the CC recommended that the allowable cost of capital for BAA should be reduced from 7.75% to 6.2%, sparking outrage from the airport operator who believed that the proposals failed to give adequate incentives for badly needed investment (CAA 2008). The reduction in cost of capital was based on what the regulator believed a suitable (lower) level of leverage should be for the company. This had the effect of reducing annual cash flows for the firm by £150 million and severely impacted the ability of the new owners to refinance their £8.5bn of debt (Osborne 2008). Because of the credit crunch, ADI were forced to overlook a lot of the capital investment plans for improving buildings and accommodating future growth in order to pay off debt. However, the consortium was warned by the CAA prior to the acquisition of the level of gearing affecting the required investment. The CAA considered the consortium would be acting disingenuously by assuming that any regulatory changes wouldn't affect the debt

servicing or investment plans (Done 2007). This in fact has been the case further emphasising ADI's lack of consideration given to the regulatory repercussions of acquiring BAA.

5.5 The BAA Governance Challenge

While a 'Perfect Storm' of unfavourable events seemed to materialise following the ADI acquisition of BAA, this case has illustrated some of the wide-ranging influencing factors of infrastructure assets, and the detrimental consequences of not controlling the issues appropriately.

In synthesising the events of the BAA takeover, a useful starting point is to understand why BAA was perceived to be an attractive takeover target. Having always had a dominant position in the running of major airports in the UK, fitting the core economic infrastructure definition perfectly, and then extending its operations overseas to become the leading airport management company globally, the only question for potential acquirers was whether the size of the transaction would be too large for investors. The conservative capital structure and significant opportunities to improve the company's cost-effectiveness provided further financial incentives for a well-resourced takeover consortium.

The form of infrastructure investing illustrated by this case was through a hostile takeover with ownership transferring between two private owners as opposed to a direct sale or auction from the government. It can be seen that through the bid process here, the ADI consortium paid a significant premium in their acquisition of BAA. The first offer by ADI in their takeover bid started at 810p per share before being forced to pay 955.25p per share to close the deal, representing a 50% premium to the average price in the 30 days prior to when a speculation of a possible bid for BAA began. The price paid by ADI for BAA was considered to be at the high end given that the average premium paid in corporate takeovers over the last two decades has varied between 20 and 60% (Bloomberg 2011).

Despite the financial attractiveness and quality of economic assets involved, the ability of BAA's capital procurement left much to be desired, as reflected by the poor quality of customer facilities at its airports. This combined with the vastness of BAA as a complex business to operate has further added to the subsequent sentiment that the price paid was too high.

Prior to the acquisition, it was evident that the buildings and services at BAA's airports were in need of a significant repair and maintenance upgrade. Furthermore, both the CC and CAA had indicated their intentions of investigating the market dynamics and pricing structures of airports in the UK. The ADI consortium seemed to plan poorly for their ownership of BAA and failed to install a robust governance strategy to deal with the ensuing problems, many of which, it would be disingenuous for the new owners to think might not have happened.

Firstly, the idea of using the incumbent management to continue running BAA seemed to backfire when a large number of experienced and talented senior management left the firm because of the disjointed Board structure and inefficient decision-making process of a majority Spanish-led Board of Directors. Despite the

make up of the Board reflecting the new ownership of the company, the installation of a majority of Spanish-based Ferrovial members, seemed to create a certain anxiety amongst senior managers at the firm, due to the cultural and ownership differences between Ferrovial and BAA. Prior to the acquisition, there had been little opposition by the UK government to the foreign ownership of BAA, however once it appeared that the company was going to face a number of difficulties, the tension surrounding foreign ownership of a strategic UK company seemed to come to the fore. From a governance and managerial perspective, the challenges associated with moving from a UK public limited company to becoming unlisted under foreign ownership, the largest shareholder of which being a family owned business, took its toll, leading to a raft of crucial managerial exits. It appears that ADI failed to understand the true ramifications of installing a majority foreign-based board in one of the largest strategic UK infrastructure companies on both the employees in the firm as well as the wider marketplace leading to the resulting detrimental effects on financial and operating performance.

The loss of key personnel with specific experience of dealing with stakeholders and the lack of any contingency plan to invest in the firm's relationships with its key stakeholders was reflected in the escalating public indignation towards the company and subsequent ruling of the CC to break up BAA's monopoly position of UK airports. Prior to the acquisition, BAA had invested a large amount of intellectual capital and monetary resources to manage the relationships with regulators. The ADI consortium on the other hand perhaps failed to recognise the size of the task to gain a favourable regulatory outcome and did not invest the necessary resources adequately enough. There was a lack of appreciation or naivety around what was required to successfully invest into the UK because 'in order to achieve the financial metric, there had to be a strategy in place to consolidate the idea that you were operating a world class facility' (Interview F, Former BAA employee, London).

It could be argued that not all of the regulatory outcomes that BAA were subsequently subjected to could have been prevented by the ADI consortium. Shareholders of regulated assets in the UK had been treated very favourably up until the acquisition of BAA and there seemed to be a regulatory pendulum shift occurring away from the owners towards the consumers and end users of the assets, including the water industry (Interview F, Former BAA employee, London). From an investor's perspective, a key lesson learned is that the regulatory risk for infrastructure assets in the UK is a lot greater than what was previously thought leading to a higher risk premium and discount rate when financially appraising these assets. Also, the events between 2005-2010, would indicate that the risk associated with the airport sector in general has gone up because people now realise that the drivers of value for airports are a lot more volatile to predict.

The ADI/BAA takeover case has highlighted the importance of establishing strong local relationships with the key stakeholders of infrastructure assets, because of the material impact and influence that these stakeholders have on the resulting financial performance. There are additional challenges associated with internationally governed infrastructure assets where cross-cultural tensions must be overcome by global owners to strengthen the required local relationships with stakeholders. As can be seen, the Ferrovial-led ADI consortium failed to understand the dynamics of the local element associated with internationally governed infrastructure assets.

With respect to the financial governance of the takeover, it can be seen that the ADI consortium employed a model of debt financing that was typical of many infrastructure transactions at the time. By using the significant amount of debt in the financing of this transaction, the ADI consortium was forced to focus the governance strategy of the corporation towards cost cutting and profit maximisation, firmly aligning the interests of managers with those of shareholders. However, as global economic conditions started to deteriorate, the high leveraging strategy for the acquisition was becoming exposed with disastrous consequences. Over the last few years since the GFC began, as much as \$1 trillion in infrastructure debt issued between 2005 and 2008 has been coming to maturity (Jacobius 2011). The credit crunch as well as a drop off in air passenger numbers severely affected profit figures and the ability to pay back loans. Because of the magnitude of this transaction and the high proportion of debt used for the BAA deal, the resulting effects on ADI were exacerbated, leading to a sharp decline in value and the company being pushed to the brink of financial distress because of refinancing problems. A number of infrastructure deals that were heavily debt loaded in a similar way have been forced into bankruptcy, including the South Bay Expressway Ltd. toll road in San Diego and Macquarie Atlas Roads to name just two, while many others have been regarded as having unsustainable financial structures (Jacobius 2011).

The following schematic diagram summarises the poor governance approach of the ADI consortium in their acquisition of BAA illustrating the linkages between the various events that propagated as a result of the consortium's actions.

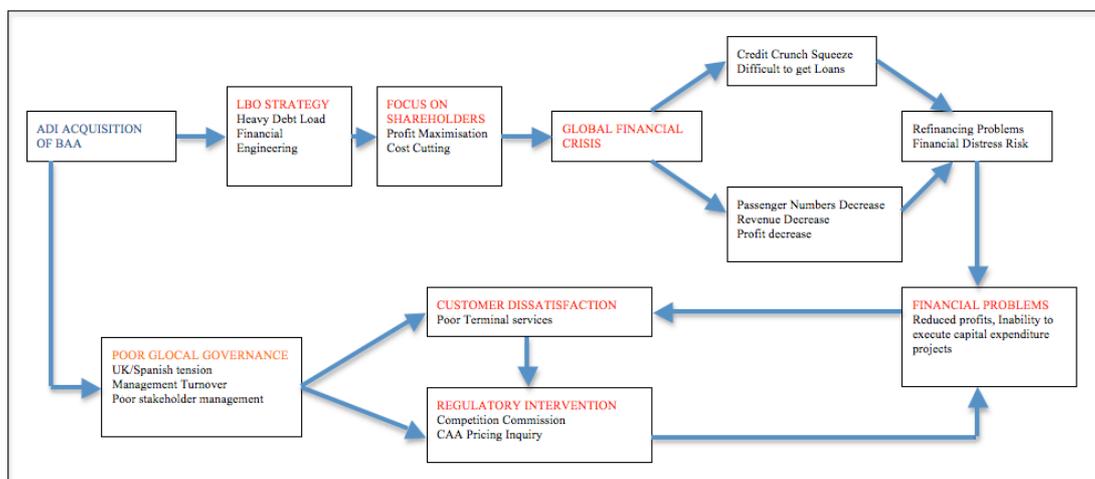


Figure 11: Governance Repercussions for ADI

So what could ADI have done differently? From a governance perspective, it could be argued that a more cohesive Board of Directors that was closer to the everyday activities of the company headquartered in the SouthEast of England (as opposed to being a subsidiary of Spain's Ferrovial headquartered in Madrid) would have enabled decisions to be made in harmony with stakeholders expectations and resulted in less turnover of experienced senior staff. A greater recognition of the stakeholder impact on the company through investing in people and other resources to develop local relationships with regulators and the general public may have reduced the adverse impacts of many of the events that seemed to plague the company following the acquisition.

Perhaps the biggest need for the consortium was an intensive capital investment program to improve the standard of the terminals and general customer services around BAA's airports. This however was compromised by the excessive amount of financial leverage that was used to fund the acquisition. In their attempt to use excessive leveraging to generate superior investment returns, the ADI consortium not only approached their shareholding governance strategy in an inappropriate way due to the untimely global credit crunch, but the shareholder approach has had detrimental effects for the stakeholder governance of its infrastructure assets.

This case study has delineated the different factors that contributed to the company's equity investment valuation being significantly eroded over the last five years following the acquisition. As outlined, a number of governance lessons for infrastructure investing can be deduced from this case study. Despite this, recent governance changes, capital expenditure projects, financial and operating service indicators of the company have shown that BAA has started to make improvements and is on the road to recovery, which indicates that the extent of the failure recognised by this case study may be recovered over the long-term.

6.0 Concluding Remarks

Given the recessionary state of economies around the world, faced with high unemployment, sluggish growth as well as record levels of public debt on balance sheets, the need for private sector infrastructure investment is more apparent than ever. With the shift in ownership of infrastructure from the public sector to private sector, it is of interest to determine how the quality of service for consumers and wider economic benefits of these types of assets are affected by the new organisational, financing and managerial arrangements. This paper has investigated using two case studies, some of the key factors that influence the performance of privately owned infrastructure assets.

From the first case study on Auckland International Airport Limited, an example of a successfully performing privatised infrastructure asset both in terms of financial return as well as providing wider economic benefits for the regional and national economies, it was found that the role of government through the light handed regulatory framework was central in contributing to the company's performance. The governance strategies of the company are influenced by politicians through the threat of intervention if market power is exploited while the government's privatisation process and resulting ownership structure for the company (council shareholding and large retail shareholder base) has contributed to a robust policy on capital structure. While generalisations for the asset class as a whole can be difficult due to the heterogeneity between assets, it has been shown that the AIAL model of infrastructure ownership and investment has translated into wider successful outcomes and provides an illustrative example for other jurisdictions looking to undergo the urban infrastructure privatisation process.

In contrast, it could be seen that the ADI takeover of BAA failed during the period of study both from an investor's perspective with the equity value of the company significantly shrinking since the acquisition as well as from the public user's

perspective as is evidenced by McNeil (2010) highlighting the substantial public and media outcry of poor service at the company's airports. The problems of the Ferrovial-led ADI consortium in their ownership of BAA, can ultimately be put down to a failure in corporate governance on two levels. Firstly, the excessive amount of financial leverage, even by pre-GFC standards, has put the consortium under immense pressure. Under normal economic conditions, excessive leveraging has the effect of concentrating the efforts of managers towards servicing debt and maximising returns from the business for shareholders. This focus was accentuated by the GFC, purely as a matter of survival for the company, leading to the much-needed wider stakeholder management (airport users, regulators, media) being overlooked. Secondly, a cross-cultural lack of understanding associated with the foreign ownership of BAA appeared to have contributed to a governance breakdown. A predominantly Spanish-based board seemed to stifle the decision-making process leading to internal frustrations and the exit of key personnel, particularly those with experience in handling crucial stakeholder issues. The BAA case study shows that an appropriate shareholder wealth maximisation approach to governance must be accompanied by a properly considered relationship-based governance model, taking into account the wider stakeholder interest, in order to achieve a successful infrastructure investment.

This paper has used two contrasting examples to determine how private ownership of infrastructure assets can affect the wider economic benefits of these assets. In theory, the participation of the private sector in the provision of infrastructure services has the potential of increasing the standard of living of societies. It stimulates economic activity and can improve the quality of service. It also allows government funds to be used for social programs and reduces public spending. The extent to which these advantages are realised depends on how the private sector is brought on board, the degree of its participation, the level of commitment from the parties and the efficiency and effectiveness in the management and administration of the process (Vives 1997). While the applicability to other scenarios must take into account specific economic and political considerations, the examples illustrated in this paper provide useful lessons for the governance and regulation of private infrastructure assets.

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