Trust ownership and Vector

Implications, ideas and instances

NZIER working paper 2006/04

An NZIER public discussion report sponsored by the Auckland Energy Consumer Trust

September 2006

Preface

NZIER is a specialist consulting firm that uses applied economic research and analysis to provide a wide range of strategic advice to clients in the public and private sectors, throughout New Zealand and Australia, and further afield.

NZIER is also known for its long-established *Quarterly Survey of Business Opinion* and *Quarterly Predictions*.

NZIER was established in 1958.

Authorship

This report has been prepared at NZIER by Brent Layton and John Yeabsley. The assistance of Sarah Spring, Jessica Matthewson, Tahia Eaqub and Alice Wang is gratefully acknowledged.

NZIER public discussion reports

The objectives of NZIER, which is an incorporated society, are set out in its constitution. To conduct research into economic problems directly or indirectly affecting New Zealand is among the objectives. With this objective in mind, NZIER publishes, from time to time, economic reports on its website on matters of general public interest. Other publications in the series have been on climate change, LNG, the implication of the rise of China as an economic power for New Zealand and electricity contracting.

Usually the publications are funded from NZIER's own resources or from the subscriptions paid by its members and especially the subscriptions of its major members. On this occasion, the Auckland Energy Consumer Trust sponsored preparation of the report in the interests of informing public debate about its structure and functions by making available an independent and impartial economic view. The report was commissioned in May 2006. Responsibility for the contents of the report rest entirely with NZIER.

8 Halswell St, Thorndon

P O Box 3479, Wellington

Tel: +64 4 472 1880

Fax: +64 4 472 1211

econ@nzier.org.nz

www.nzier.org.nz

Executive Summary

NZIER has been sponsored by the Auckland Energy Consumer Trust (the Trust) to prepare an independent and impartial assessment of the implications of certain aspects of the Trust's structure for the electricity lines business Vector Limited (Vector), and for the services received by the customers of Vector.

In view of the size of the assets the Trust controls and the political process by which trustees are elected, it is not surprising that there has been controversy from time to time around its role and activities. The issues dealt with in this report are of considerable public interest, especially in the Auckland area.

The current relationship between Vector and the Trust has been subjected at various times, or is potentially vulnerable, to the following criticisms or allegations:

- lack of tradability of income beneficiaries of the trust's interests;
- absence of listed market discipline on Vector;
- trust control of Vector means the process for the appointment of its directors is essentially political;
- the arrangement gives rise to conflicts of interest for trustees that sit on the Board of Vector;
- the Trust is an impecunious owner and so unable to support Vector's potential growth;
- the Trust will encourage inadequate maintenance of infrastructure by Vector; and
- the Trust will eschew the growth opportunities of Vector.

Any evaluation of structure needs to be done against practical alternatives. We identify the following alternative ownership structures for the Trust's shareholding in Vector for the purposes of evaluation:

- council ownership;
- professional trustee management;
- distributed ownership among income beneficiaries, local and regional government; and
- a special purpose infrastructure investment body.

We then proceed to consider whether the allegations or criticisms of the current structure are valid; whether the alternative arrangements are equally vulnerable or vulnerable to other criticisms. We finally evaluate the alternative arrangements, including the current structure against the following set of criteria:

- the extent to which the arrangements promote the interests of consumers;

- the extent to which the arrangements promote productive, allocative and dynamic efficiency;
- the fairness of the arrangements and the outcomes; and
- the sustainability of the arrangements.

Among the potential criticisms and allegations against the current Trust arrangements the only one which is unequivocally valid is that the income beneficiaries' interests are not tradable and this is inefficient. However, only the distributed ownership option among the alternatives considered does achieve tradability, but it does so at the expense of creating an unsustainable arrangement and one which removes the impact consumers may have over the service delivery of Vector through how they vote for trustees.

Moreover, as a result of our analysis, we show that none of the alternative arrangements or options is completely free from all, or even most, of the potential criticisms and allegations that might be levelled against the current arrangements.

The conclusion we draw from the evaluation of the options against the criteria we have identified is that on almost any measure and against almost any reasonable weighting of the various criteria, the current arrangements are superior. This is in line with the literature on ownership form and performance which we review in Appendix B.

Contents

Appendices

Figures

1. Introduction

NZIER has been sponsored by the Auckland Energy Consumer Trust (the Trust) to prepare an independent and impartial assessment of the implications of certain aspects of the Trust's structure for the electricity lines business Vector Limited (Vector), and for the services received by the customers of Vector.

The Trust was set up in 1993 to own the assets previously owned by the Auckland Electric Power Board (AEPB), an independent statutory body. This change occurred at the time of the initial restructuring of the New Zealand electricity sector and as a result of the provisions of the Energy Companies Act 1992.

The trust deed vested in the Trust all the shares of Mercury Energy Ltd (ME) and established two classes of beneficiary of the Trust; capital beneficiaries and income beneficiaries. The capital beneficiaries are those Local Authorities which, as at the termination date of the Trust (27 August 2073), shall have within their districts or boundaries any part of the area served by the AEPB on 27 August 1993. The income beneficiaries are the end-consumers of the company within the area served by the AEPB on 27 August 1993.

The trust deed further provides that, after the termination date of the Trust, the assets of the Trust will be distributed to the capital beneficiaries *pro rata* with the number of end-consumers each has within its boundaries on the termination date. If there are no Local Authorities the capital will be distributed to the Crown. The dividends of Vector received by the Trust during its existence are to be distributed to the income beneficiaries not less than once a year, except in certain limited circumstances. The termination date of the Trust will be 27 August 2073, unless the trustees unanimously resolve to advance the date because in their opinion "it has become impracticable or impossible to perform the trusts of income" in terms of the deed.

The trust deed sets out that the five trustees are to be appointed by the income beneficiaries by election every three years. It also specifies the general and specific powers of the trustees, their powers to invest and limited power to borrow, and the duties of trustees. The trust deed also makes it clear that the trustees are under no obligation to diversify their investments away from investment in Vector and are "entitled to prefer the interests of [income beneficiaries] over the interests of the capital beneficiaries".

The Trust has now been in existence for approximately 13 years and there have been several developments:

- the Trust managed to have the way that directors of ME (Vector) are appointed changed so that it is now done on the basis of ordinary shareholding. (This means the Trust effectively controls the appointment of all directors of Vector as today it owns 75.1 percent of the company);

- the shape of the industry was changed again in 1998-99 by the forced ownership separation of generation and retailing from lines distribution activities. As a result, ME sold its electricity retail business to the SOE Mighty River Power Ltd and retained its electricity lines business (ELB). It renamed the business it retained Vector Limited (Vector);
- as a result of legislation passed in 2001, the regulatory regime to which ELBs are subjected changed from a light handed information disclosure regime to a threshold regime under the auspices of the Commerce Commission;
- Vector acquired most of the ELB assets of United Networks along with its other businesses, in 2002. This gave Vector customers in areas of Auckland outside the area served by the AEPB, and in Wellington. These customers are not income beneficiaries of the Trust;
- Vector successively acquired NGC Holdings Limited from AGL in two separate tranches and listed 24.9 percent of its capital on the New Zealand Exchange in 2005.

2. Issues

In view of the size of the assets the Trust controls and the political process by which trustees are elected, it is not surprising that there has been controversy from time to time around its role and activities. The power failure that afflicted the Auckland central business district in 1998 and the widespread concern in recent times about the adequacy of Auckland's infrastructural assets, and how upgrades of them can be funded, have increased scrutiny of the Trust.

2.1 What are the questions?

The queries raised about the Trust can, with a degree of "boiling down" and simplification, be grouped around three basic issues:

- whether the best commercial interests of the income beneficiaries are being served by the current arrangements;

- whether the current situation is appropriate to look after the (long run) interests of the customers of Vector, in terms of service and sustainability; and

- whether the capital value of the Trust might not be better employed to finance other infrastructural investments in Auckland, particularly land transport infrastructure.

For the purposes of the remainder of this investigation, we can tease out several actual and potential criticisms and allegations from these issues, to form into a framework that shapes both what is considered, and also the way the results are reviewed.

2.2 The potential criticisms and allegations

We start this process by noting that the income beneficiaries referred to in the initial dot point and the customers in the second overlap to a reasonable degree. The way the Trust is defined means that the "core" customers inside the old AEPB area are its income beneficiaries; as those connected to the Vector system (and lying within the original boundaries of the AEPB region) when the rolls are drawn up for a distribution, are entitled to a share of any distribution.

The current relationship between Vector and the Trust has been subjected at various times, or is potentially vulnerable, to the following criticisms or allegations:

- **lack of tradability of interest** – there is no means by which income beneficiaries can turn the asset represented by the flow of distributions into a saleable property right, able to be cashed up and potentially redeployed. Income beneficiaries are forced to hold the interest whether they wish to or not. The inability of income beneficiaries to alienate their interest means that some of those holding the interest would prefer to hold alternative assets and the current income beneficiaries are not necessarily the parties that value the Trust's interest in Vector shares most highly;

- **absence of listed market discipline** – because the Trust controls Vector and is a long-term holder of its shares, Vector's directors and managers are not subjected to the usual discipline on a listed company. More specifically, if the company performs poorly, the Trust will not sell its shares and depress their market price, making the business vulnerable to a take-over, and the Board and management vulnerable to replacement by new owners. Rather the Trust will hold its shares and so the threat of take over is not motivating the owners or management;
- **political appointment of directors** – the Trust is a body appointed by the political process of holding 'public' elections. Its role is appointing directors to a large, complicated and risky business. This is not an appropriate role for such a body and will inevitably lead to poor performance by Vector; and, related to this criticism,
- **conflicts of interest** – some of the Trustees serve as directors of Vector, which is incompatible with the duty of a director, who has to act in the best interests of the company, not on behalf of the Trust. Moreover, the role of the trustees is to monitor the performance of Vector and hence of its Board. Trustees being directors means they are attempting to monitor their own performance. This is not appropriate and is unlikely to be effective; and
- **the Trust is an impecunious owner** – the Trust has to distribute all the dividends it receives from Vector within twelve months of their receipt. This prevents it from building up investible funds, and thus as an owner it is in no position to fund new activities by the company, without selling down its share of the company. But any thrusting, successful company has to be able to consider all its options, including those that would require additional investment. Vector is, therefore, strategically crippled by having the Trust as its dominant owner;
- **the Trust will encourage inadequate maintenance of infrastructure** – the appointment of trustees by triennial election creates an imperative for trustees to maintain high distributions to income beneficiaries to improve their re-election chances. This will lead to Vector under-investing in the needs of the future (including, vital features such as maintenance expenses) and the quality and reliability of service to Vector's customers will suffer; and, related to this criticism,
- **the Trust will eschew growth opportunities** – that the trustees are elected by the income beneficiaries alone, and are entitled to favour their interests over the interests of capital beneficiaries, means the Trust will inhibit Vector adopting strategies that create long-term growth at the expense of current income.

As we have noted, some of these potential criticisms or allegations overlap to a certain degree. For example, the accusation that the Trust is an impecunious owner and the allegations that it will impose inadequate maintenance and low growth strategies on Vector are closely connected. However, we believe it is useful for our analysis of the validity of the accusations and how the Trust may respond to them to set the various points out separately.

2.3 Comparisons

Logically these criticisms and allegations only make common sense when they are made relative to what would happen under a reasonable and achievable alternative. In other words, for these to be relevant there has to be an optional structure that would overcome the alleged weaknesses implied by these comments. In the case of the Trust, several alternatives have been proposed. These are set out and briefly commented on in the section that follows.

3. Alternatives – defining the options

To be able to consider the issues raised above, definite options must be developed and evaluated in terms of the way they perform in the areas that are of interest. The alternatives examined below are all practical and realistic in the sense that they could be implemented, though several would take changes in legislation to be achieved.

The selection has been made to create a variety of options and thus test the issues against different structures.

3.1 AECT: form and function

The current AECT is constituted by its trust deed. The mechanism at work in the Trust is a multi-tiered responsibility structure:

- the income beneficiaries vote every three years for five representatives who form the Trust knowing they will gain dividends to distribute based on Vector's performance;
- the Trust members monitor the performance of Vector and its board and elect the directors of Vector according to the company's constitution;
- the directors appoint the chief executive of Vector and carry out their normal governance role of monitoring the chief executive and the company's performance and approving the company's strategy[1]; and
- the chief executive hires the management team who run Vector from day to day.

3.1.1 Incentive alignment and transparency

The trustees can be held directly to account for the performance of the company through the voting actions of the income beneficiaries, who can monitor the company's income generating outcomes easily via the income receipts, and in a more strategic sense through a form of "active" behaviour[2] such as close engagement with the company. This includes having trustees on the company board to understand and test the strategy.

The income beneficiaries can also monitor the service performance of the company and its charges through the services they receive themselves, and the charges they pay for those services. The latter is facilitated by Vector having adopted the conveyance form of arrangement between it and its customers in the old AEPB area. The conveyance arrangement means Vector has a direct contractual relationship with its end customers, who are also its income

[1] There have been many recent discussions of the way boards are supposed to carry out their governance function. A useful reference that contrasts the more modern style with the traditional is Hilmer (1993) but there is much other helpful material available. For instance, the New Zealand Institute of Directors has a Code of Practice and other advice on their website.

[2] See discussion of "active ownership" in Appendix B below.

beneficiaries, and the beneficiaries see the charges that Vector levies on them as an itemised amount on their power account.

The capital beneficiaries and ELB and gas distribution customers who are not income beneficiaries have no involvement in the election of trustees and arguably no real ability to influence the performance of Vector, as it is a monopoly in these activities.

3.2 Council ownership

Under this arrangement local authority councils control the operations of the present company, either by directly holding the shares of the company currently held by the Trust, or by owning shares in a holding company which holds the shares in the company currently held by the Trust.

If the trustees voted unanimously to bring forward the termination date of the Trust then this would trigger the allocation of the capital to local authorities and bring about this kind of arrangement. The trustees could only do this, however, if it has become impracticable or impossible to perform the trust of income.

The responsibility mechanism under this arrangement would be:

- local authority electors, whether currently income beneficiaries and customers of Vector or not, vote for councilors with their proposed policies for the company, including what will happen to the company's financial distributions to its council shareholder and to ownership of the shares. Each candidate's policies relating to Vector would be only one plank among many the candidate puts forward;
- the elected councilors vote on the council to which they are elected to decide who to appoint as the directors of Vector or the holding company, as the case may be;
- if there is a holding company, the directors of the holding company appoint the directors of Vector according to Vector's constitution;
- the directors of Vector appoint the chief executive of Vector and carry out their normal governance role of monitoring the chief executive and the company's performance and approving the company's strategy; and
- the chief executive hires the management team who run Vector from day to day.

3.2.1 Incentive alignment and transparency

The situation is anything but transparent and encouraging of direct accountability by councilors. It also inhibits the detailed monitoring of Vector's performance unless the specialised holding company structure is adopted.

Electors do not vote for trustees to control their line company, they vote for councilors who have among their numerous roles and tasks a function of directly or indirectly appointing the directors of Vector. Poor financial or service performances by Vector would have little or no impact on the electoral success of individual councilors and so are not likely to be of material interest to any of them, unless Vector's financial position starts to impinge on the ability of the council entity to fund other priorities or Vector's service deteriorates to the point it becomes a major political issue.

3.3 Professional trustee

Under this option, the elected trustees would be replaced by an appointed professional trustee company. Such an arrangement may be seen as providing ultra conservative stewardship.

The mechanism under this arrangement is:

- the beneficiaries are represented by an appointed professional trustee company. It has the task of overseeing the performance of the company to the benefit of the beneficiaries;
- the trustee company elects the directors of Vector according to Vector's constitution;
- the directors appoint the chief executive of Vector and carry out their normal governance role of monitoring the chief executive and the company's performance and approving the company's strategy; and
- the chief executive hires the management team who run Vector from day to day.

3.3.1 Incentive alignment and transparency

The trustee company cannot be held directly accountable for the financial or service performance of Vector by the income beneficiaries. There is no election of the trustees and no ability to get rid of them except via Court action in the event they manifestly fail to fulfill their obligations under the trust deed. For an individual income beneficiary the cost of Court action against the trustee is unlikely to be financially worthwhile. For the capital beneficiaries it may be. This factor will tend, over time, to pull the behaviour of an appointed professional trustee company towards being more favourable to the capital beneficiaries.

Even if there were to be a more regular mechanism envisaged to change the trustee, this would require some ability for the income beneficiaries to make such decisions. Typically this would be either by the selection of representatives to act on their behalf, or through the passage of some sort of motion, probably in the form of a referendum. Other systems are possible. Whatever the mechanism used it is clear that this would be cumbersome and difficult to engage.

3.4 Distributed ownership (1/3 x 3)

Under this proposal the shares of Vector would be distributed in equal tranches to the income beneficiaries, the Auckland Regional Council, and the local authorities that are the capital beneficiaries at the time of termination of the Trust *pro rata* with their relative share of the income beneficiaries. Each group would gain slightly more than 25% of the shares of Vector from the three-way partitioning of the Trust's current holding of 75.1%.

Two broad outcomes are worth considering. First, if there is no significant on-selling of the shares by those allocated them in the partition. The mechanism then would be:

- the shareholders would vote for directors of Vector, mindful of the implications of their choices for their own objectives for the company;
- the directors appoint the chief executive of Vector and carry out their normal governance role of monitoring the chief executive and the company's performance and approving the company's strategy; and
- the chief executive hires the management team who run Vector from day to day.

Alternatively, and more realistically, there could be significant trading of the shares, with all shareholders seeking to turn their valuable assets into the best position they can. For some this may take the form of continuing to hold Vector's shares, but for others, including most likely the local authorities, it will lie in disposing of all or part of their interest and deploying the capital proceeds elsewhere.

None of the local authorities would individually be able to control Vector with their initial allocation. In the event of active on-selling each would be in the position of either having to finance the purchase of sufficient Vector shares to gain control or risk becoming a minority shareholder like Wellington City Council is in relation to Wellington International Airport Ltd.

Given that Vector is a major infrastructure owner in mature businesses, it is likely to be attractive to a significant investor. So a major investor is likely to be a serious holder of shares.[3]

This would mean that the mechanism would be:

- the major investor monitors Vector's performance and controls the process of appointing directors;
- the directors appoint the chief executive of Vector and carry out their normal governance role of monitoring the chief executive and the company's performance and approving the company's strategy; and

[3] See Appendix D for a review of the ownership trends for New Zealand listed utilities. This provides empirical support for the discussion of the likely outcome if the distributed ownership option were pursued.

- the chief executive hires the management team who run Vector from day to day.

3.4.1 Incentive alignment and transparency

Under the more realistic option of significant trading, the controlling investor that emerges will operate Vector according to its own objectives and, except to the extent the Companies Act 1993 protects the interests of minorities, in the interests of its own shareholders.

If any local authority or individuals remain as minority shareholders then they will be vulnerable to the controlling shareholder looking to flush them out of their holding cheaply by holding down dividends and making rights issues. Significant minority holdings often trade at a discount because of the inability of the minority to control the cashflows.

Even if there is limited on-selling and the tri-partite arrangement endures for sometime, each of the groups will have different objectives for Vector and will vote accordingly.

3.5 Special purpose body

Under this proposal legislation is enacted to transfer the Trust's assets to a special purpose body, so it can use the income and capital of Vector to fund other infrastructure investments in Auckland, like roads, urban rail and other public transport. The special purpose body would have a Board which is appointed either by central government or Auckland based local authorities.

The mechanism would be:

- Board of special purpose body appoints monitors the performance of Vector and appoints the directors of Vector according to the company's Constitution;
- the directors appoint the chief executive of Vector and carry out their normal governance role of monitoring the chief executive and the company's performance and approving the company's strategy; and
- the chief executive hires the management team who run Vector from day to day.

3.5.1 Incentive alignment and transparency

The members of the special purpose body will be accountable to whosoever appoints them for the development of other infrastructure in Auckland they are tasked with providing. They will principally be interested in Vector as a source of funding these other investments and if achievement of these objectives requires them to sell Vector they will do so.

The quality of services to customers provided by Vector will not be a focus of this body unless they reach a state where they become an embarrassment to the politicians that appoint the members of the special purpose body.

Moreover, if the Trust's current assets and income flow were reallocated to a regional body to finance infrastructure this would relieve local, regional and central government from the need to fund these investments. As a result the politicians at the three levels of government would not be required to justify to the groups that elect them the reasons for raising rates and taxes to fund these investments. So the arrangement would undermine the political accountability of local, regional and central government for the tax and rate imposts necessary to upgrade Auckland's infrastructure.

4. Evaluation of options

There are essentially three questions one can ask to help investigate the potential criticisms and allegations listed in Section 2.2:

- are the allegations or criticisms valid or invalid?
- are the alternative arrangements vulnerable to the same allegations or criticisms or others?
- are the weaknesses of the other options in terms of the criteria against which organisational form should be judged such that they are inferior or superior options to the *status quo*?

To answer the first question is usually relatively straight forward, as is answering the second. But the third requires us to decide on the criteria against which to evaluate the various options.

Drawing on provisions in recent legislation relating to electricity and gas supply, we suggest the following set of criteria against which to judge the alternative options, including the current Trust arrangement:

- the extent to which the arrangements promote the interests of consumers;
- the extent to which the arrangements promote productive, allocative and dynamic efficiency;
- the fairness of the arrangements and the outcomes; and
- the sustainability of the arrangements.

Productive efficiency occurs when producers produce services of the desired quality at minimum cost, and production activities are distributed between producers in such a way that industry-wide costs are minimised. Allocative efficiency occurs when resources are allocated to their highest value use. Dynamic efficiency occurs when producers have the appropriate incentives to invest and innovate to maintain productive and allocative efficiency over time.

Fairness is an elusive concept to economists, and is even difficult to define in non-economic terms. We suggest, however, that it is generally thought to cover such matters as not expropriating rights without reasonable compensation and allowing individuals a reasonable opportunity to access resources and goods and services.

Sustainability is about meeting the needs of today, without adversely impacting on the needs of tomorrow. As a term it can be applied across a range of areas, such as the environment, society and the economy.[4] In the current context it is economic sustainability that is likely to vary between the options and so be relevant for evaluation purposes.

[4] http://www.mfe.govt.nz/issues/sustainable-industry/tools-services/definition.php

5. Validity of allegations

5.1 Lack of tradability of interest

It is certainly correct that under the current Trust arrangements the income beneficiaries cannot realise on the assets underlying the Trust.[5] A beneficiary that would prefer to give up the future income flow for a capital sum now is unable to do so, not even in a secondary market for the claims.

There is no such arrangement because there is no guarantee that a current beneficiary will continue to be a beneficiary in future, as the individual or business may shift outside the old AEPB district. To assume that current connections have rights to more than the current dividends on a year by year basis is to alter the nature of the trust. And as all available assets are allocated, it would deprive rights from others, either from future income beneficiaries, or from the capital beneficiaries.

5.2 Absence of listed market discipline

The allegation that there is no discipline on the directors and management of Vector through the threat of an on-market take-over is only partly correct, as the impact of such signals is usually thought to lie at least in part on the information provided through the movements in the price.

Vector is listed, and so the share market price provides a barometer of investor perceptions about its performance and future prospects. It also provides an indicator of market perceptions about the performance of the Trust as its majority shareholder. Decisions by major shareholders that are adverse to the interests of the company and minority shareholders will be quickly reflected in the company's share price.

However, it is correct that while the Trust remains a long-term owner, the directors and management of Vector will not face the actual prospect of a take-over bid succeeding and removing them from their positions. However, there are relatively few companies listed on the New Zealand Exchange for which the pure form of this discipline is relevant – in many cases the people concerned would have to go alone with the process.

Vector is not unusual in this regard. In fact, of the 152 New Zealand-based listed companies for which information on major shareholders is provided in the 2005-06 volume of *The New Zealand Company Register* exactly 50% of them have at least one shareholder with a minimum of 20 percent of the shares.[6] 18% of the

---

[5] See Emmanuel and van Zijl (2006) for a discussion of the technical side of the potential conflict between income and capital beneficiaries.

[6] Where 20% is seen as the equivalent of a 'blocking' holding that would make it difficult for an outside offer to succeed without agreement by the major owner.

companies have a single shareholder with more than 50% of the shares. Of the 12 listed companies that could be broadly described as providers of infrastructural assets, 50% have a single shareholder with more than a 50% stake and 75% have at least one shareholder with at least a 20% stake.

In addition, the current structure does not protect the directors and management from removal by the Trust as its major shareholder. If the share price were to weaken significantly as a result of the market assessing the performance of the directors and managers poorly, the Trust is likely to act to protect its interests by taking action to ensure the Board improves the performance. The fact Vector is listed means there is an outside barometer of performance that can assist the Trust make judgements about whether it needs to act or not.

5.3 Political appointment of directors

Under the current arrangements the directors of Vector are elected by their shareholders in the normal manner for a commercial company. It is correct that the trustees of the major shareholder are elected to their positions. But the functions of the elected trustees are tightly focused on the appointment of directors of Vector and the monitoring of their performance and that of Vector. The usual source of difficulty with 'political' appointments of directors does not arise in the case of Vector and the Trust.

The trustees do not have a wider political agenda to pursue; if the voters are concerned about the way their dividends are going, then their re-election prospects are very tightly aligned with the performance of Vector. This means in turn that they are incentivised to appoint directors whom they think will do the best job for Vector and not because their appointment will fulfil other political objectives. Their role, indeed, has the potential to fulfil the "active ownership" style that is likely to improve performance of the company.

5.4 Conflicts of interest

Under the current trust deed a maximum of two trustees can be directors of Vector. Vector currently has eight directors so there is no possibility of domination of the Vector board by trustees of the Trust. Vector's Directors Code of Conduct requires all directors to act in "the best interests of the company".[7] Vector's Board Charter prohibits a trustee of the Trust from also being the Board Chairperson and sets out strict guidelines relating to the disclosure and management of conflicts of interest, including requirements on directors to excuse themselves from discussions in respect of their interests and not to exercise the right to vote in respect of such matters.[8]

[7] http://www.vector.co.nz/investor_relations/Directors%20Code%20of%20Practice.pdf

[8] http://www.vector.co.nz/investor_relations/Board%20Charter.pdf

It is not unusual for the majority shareholder of an enterprise with over a 75 percent holding to dominate the chairmanship and appoint the majority of directors from among its own governance body. The relationship between the Trust and Vector is remarkably arms-length given the stake the Trust has in the company.

The existence of trustees among the directors of Vector is a prudent way for the Trust to inform itself about the requirements of the company to ensure it has good governance and the right resources and to assure itself of the performance of its Board and management. If the trustees failed to ensure themselves of these matters then they could be held to be not properly discharging their obligations to the Trust. It is arguable that where Stock Exchange rules limit the flow of information about the company's performance directly to the trustees, as is the case with Vector, then the trustees have no option but to ensure they receive it by being on, or by at least by being represented on, the Board themselves.

Since the trustees are a small minority of the directors of Vector and the standard convention is that directors accept collective responsibility and do not disclose outside the Boardroom who voted for what and who dissented, the accusation that people cannot effectively monitor a commercial Board on which they sit is less cogent than thought by those who are unfamiliar with the conventions of Boards.

5.5 The Trust is an impecunious owner

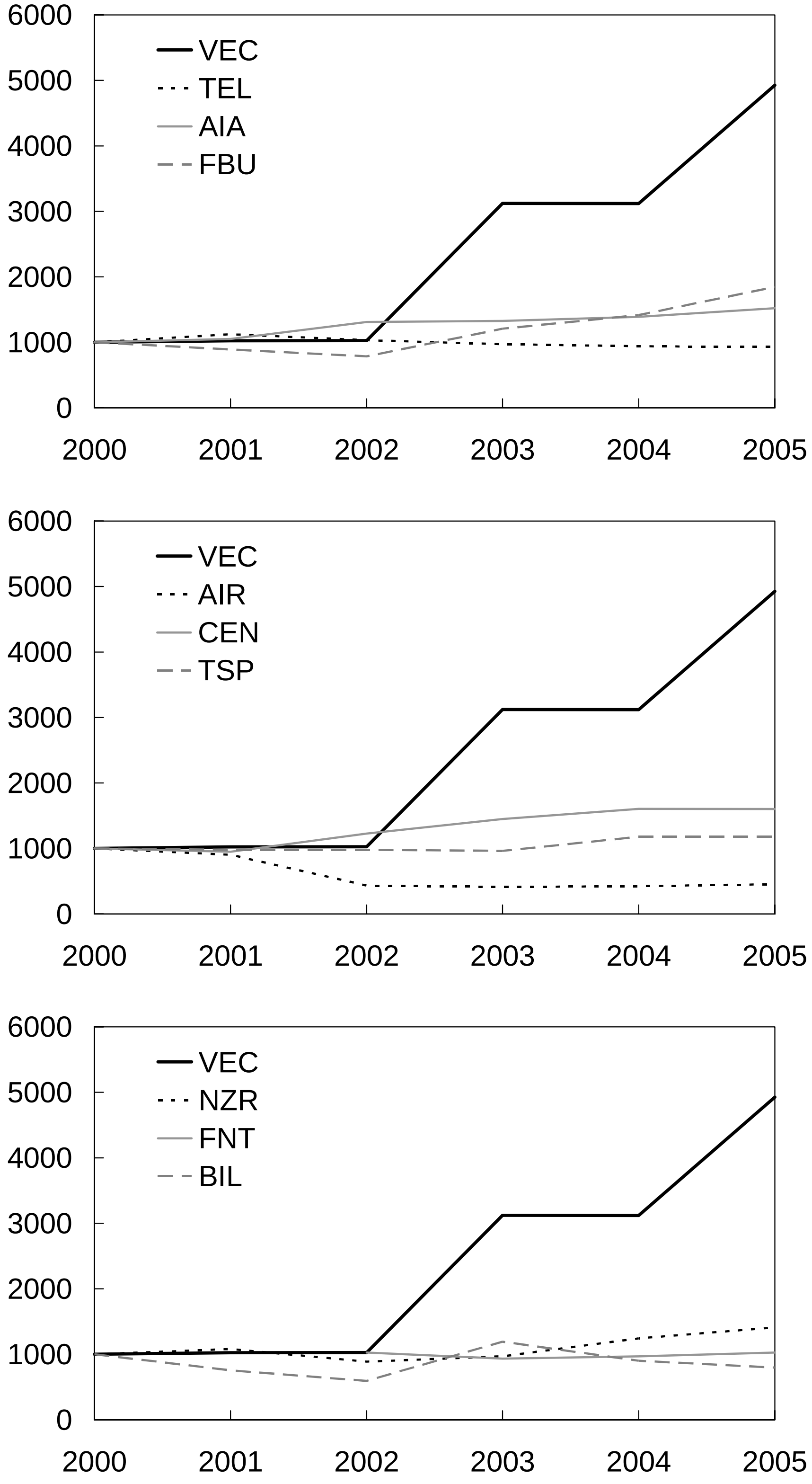
The Trust is required under its current trust deed to distribute to the income beneficiaries all the dividends it receives from Vector. However, this has not stopped Vector growing rapidly even when compared with other sizeable companies in New Zealand. Figure 1 and Figure 2 compare the growth in Vector's (VEC) total assets and revenue over the last five years with the growth achieved by a range of other major companies over the same time frame. The other companies are: Telecom (TEL); Auckland International Airport (AIAL); Fletcher Building (FBU); Air New Zealand (AIR); Contact Energy (CEN); Transpower (TSP); New Zealand Refining (NZR); Fonterra (FNT); and BIL (BIL).

Moreover, Vector has scope to fund further expansion and development through:

- issuing additional equity. The Trust's current holding is 75.1% and it could tolerate significant dilution before it would be in danger of losing control of Vector;
- shuffling its asset holdings. The company at present has a range of different earning streams which are distinct. An efficient operation would be constantly reviewing the portfolio of holdings and making asset trades to ensure that the best possible investments are retained;
- issuing of additional capital notes/subordinated debt – currently Vector has a relatively high debt:debt plus equity ratio when compared with other listed

companies, but this is not unusual or inefficient for a major utility. At balance date in 2005 Vector's leverage was 78.5%.

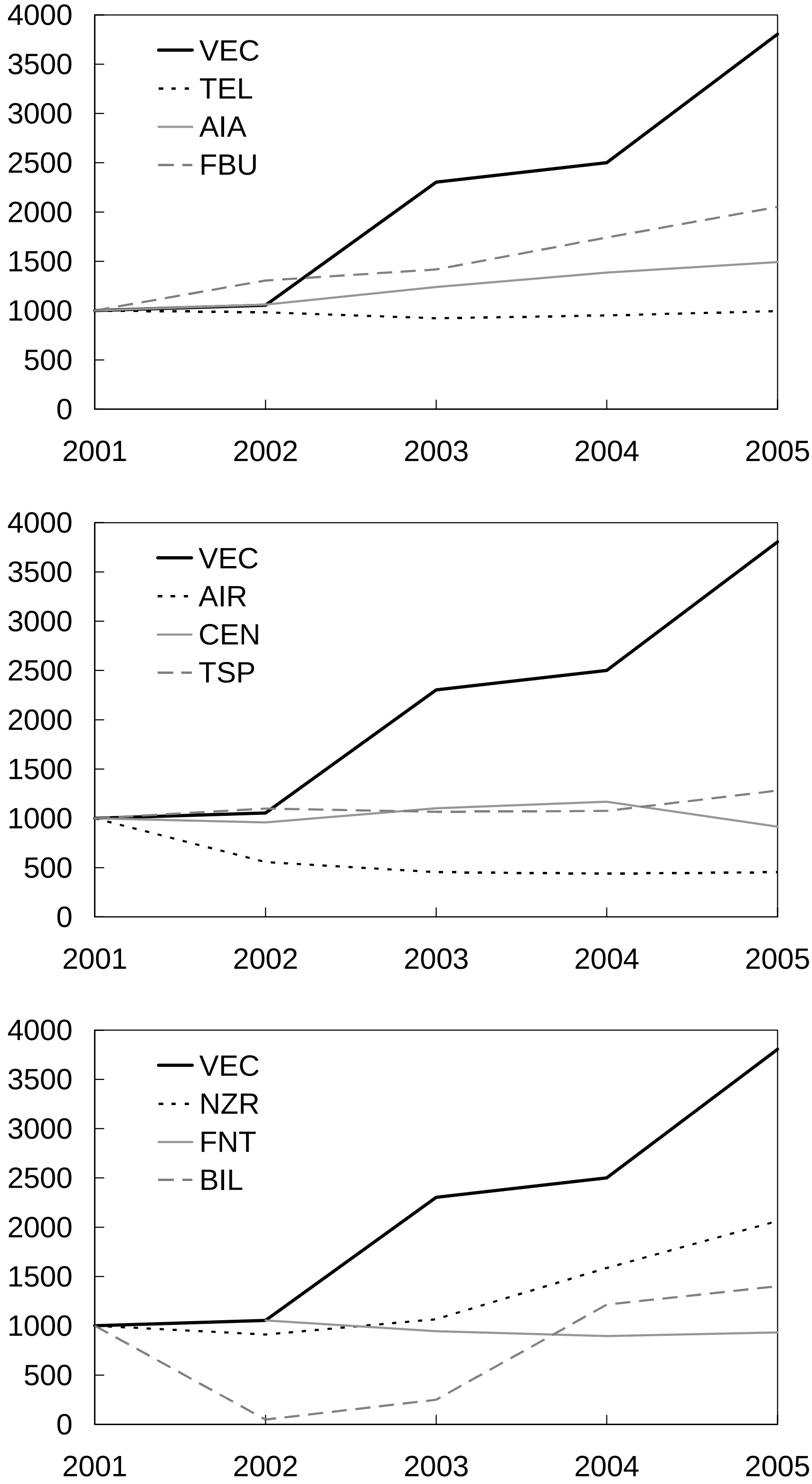
__Figure 1 Total assets__
Index



Source: Various company annual reports compiled by NZIER

Figure 2 Total revenue

Index



Source: Various company annual reports compiled by NZIER

5.6 The Trust will encourage inadequate maintenance of infrastructure

The Trust is elected by Vector's consumers located in the old AEPB area. Those consumers will be interested in the Vector dividends passed through to them as distributions by the Trust, but they will also be very interested in the quality of service they receive. And this is not a vague worry; the events of 1998 are still in people's minds and will remind the voters of the risks about security of supply, and the way this was sheeted home at that time to the required maintenance programmes.

If there are inadequacies in this regard, they are likely to look to the election of trustees as a vehicle for expressing their dissatisfaction. The elected trustees of the Trust are likely to be highly incentivised to ensure that Vector does not neglect maintenance, at least in this region. They would also find it difficult to accept Vector operating a differential maintenance regime in other regions.

5.7 The Trust will eschew growth opportunities

We have already pointed out that Vector has achieved very considerable growth when compared with other ELBs and other sizeable listed companies. We have also noted that, even if the Trust does not want to be diluted further, Vector still has opportunities for growth under current policies. We also note that if the Trust developed an ancillary vehicle to assist its income beneficiaries to re-invest their distributions in Vector through a vehicle controlled by the Trust this capacity could be enhanced. This is a further option which could potentially be developed if and when required.

6. Options and potential allegations

	Council ownership	Professional trustees	Distributed ownership (1/3 x 3)	Special purpose body funding Auckland's infrastructural development
Lack of tradability of income beneficiaries interest	No tradability	No tradability	Tradability of all parties' interests	No tradability because income beneficiaries have 'asset' expropriated
Absence of listed market discipline on Vector	Same as status quo	Same as status quo	Fully listed, at least initially but likely to be subject to take-over bid and could be taken private	Same as status quo
Political appointment of directors of Vector	Indirect political process. No accountability of parties making appointments to consumers or minority shareholders in Vector.	Non-political but no accountability of party making appointments to consumers or minority shareholders in Vector.	Ordinary shareholder elections at least until a party gains control. Accountability to shareholders and not to consumers.	Fully political group making appointments with no accountability of party making appointments to consumers or minority shareholders in Vector
Conflicts of interest among Vector directors between Vector and owners	Depends on Vector's Constitution	No conflicts but also more limited information on which to base monitoring	Depends on Vector's Constitution	Depends on Vector's Constitution
The Trust is impecunious owner	Councils no better placed than Trust and less able to develop mechanisms such as parallel trust	No better placed than Trust and less able to develop mechanisms such as parallel trust	Access to capital raising relatively free until take-over occurs by majority shareholder and will then depend on it	Objectives of special purpose body suggests it will not be keen for Vector to expand and take funds away from fulfilling body's purpose
The Trust will encourage inadequate maintenance	Councils will have no direct incentive to ensure performance standards maintained unless they get very bad and become political issue	Professional trustees will have no direct incentive to ensure performance standards maintained unless get very bad and threatens likelihood of legal challenge as to whether it is discharging the trust deed properly. This is very unlikely because of high cost of doing so for one beneficiary/customer and free-rider problem in getting group together to do so	Initial individual shareholders will be keen to ensure company maintains standards but the other two parties will be less interested. Once significant trading occurs then interest in this among shareholders will diminish. If a majority owner gets control then will depend on the objectives of the majority shareholder	Special purpose body will tend to want to maximise cash returns out of Vector and hence not be interested in its asset maintenance unless it becomes a political issue for the political appointers of the members of the special purpose body

	Council ownership	Professional trustees	Distributed ownership (1/3 x 3)	Special purpose body funding Auckland's infrastructural development
The Trust will eschew growth opportunities	Councils will not want to see Vector grow at the expense of higher dividend payouts	Professional trustees are likely to be risk averse and this will count against growth.	Initial shareholders will tend to have different views. Council owners will not want to see Vector grow at the expense of higher dividend payouts. Some individual owners will and others will be interested in maximising cash returns. If a majority owner gets control then will depend on the objectives of the majority shareholder	Special purpose body, if it retains ownership, will tend to want to maximise cash returns out of Vector so as to maximise its opportunity to finance other infrastructure and hence not be interested in it pursuing a growth strategy.

7. Evaluation of options against criteria

	Retain AECT structure	Council ownership	Professional trustees	Distributed ownership (1/3 x 3)	Special purpose body funding Auckland's infrastructural development
Promote the interests of consumers	Yes	No	To a more limited degree than the directly elected Trust	No	No
Promote productive efficiency	Compatible	Compatible	Compatible	Compatible	Compatible
Promote allocative efficiency	Compatible except ownership interests of income beneficiaries not being tradable	May lead to inadequate maintenance	Compatible except ownership interests of income beneficiaries not being tradable	Compatible	May lead to inadequate maintenance
Promote dynamic efficiency	Compatible	Likely to lead to under investment in Vector	Could lead to under or over investment in Vector. Under investment due to the conservatism of the trustee and over investment if capital beneficiaries threaten trustee	In short-term, the emphasis to be place on growth and income will be a matter of tension between shareholders. Will depend in the end on attitude of majority shareholder	Likely to lead to under investment in Vector and over-investment in other infrastructure
Fairness	Fair. Does not expropriate current property rights of income beneficiaries	Unfair as expropriates current income beneficiaries property rights	Fair. Does not expropriate current property rights of income beneficiaries, but gives them less direct say and influence than the current arrangement	Unfair as expropriates two-thirds of current income beneficiaries property rights and removes their effective decision making rights relating to Vector	Unfair as expropriates all current income beneficiaries property and decision making rights
Economic Sustainability	Sustainable	Highly unstable as an ownership structure as councils will disagree on policies	Sustainable unless gets to very critical state warranting legal action against professional trustee. Legal action more likely from capital beneficiaries than income beneficiary	Highly unstable until investor gains majority control and then remaining minorities may be vulnerable to opportunistic behaviour by dominant party	Unstable. Pressures on special purpose body will lead to on-going tensions between needs of Vector and other needs. Likely to result in eventual disposal of asset by special purpose body

8. Assessment and conclusions

In Section 5 we considered the potential criticisms and allegations against the current Trust arrangements. The only one which is unequivocally valid is that the income beneficiaries' interests are not tradable and this is inefficient. However, only the distributed ownership option among the practicable alternatives identified and considered does achieve tradability, but it does so at the expense of creating an unsustainable arrangement and one which removes the impact consumers may have over the service delivery of Vector as an ELB through how they vote for trustees.

In the tabular material in Section 6 we show that none of the alternative arrangements or options is completely free from all, or even most, of the potential criticisms and allegations that might be levelled against the current arrangements.

The review of the current thinking and research around governance (Appendix B) reveals that there is widespread support for the notion that there is no dominant ownership structure, *per se*. Rather, modern thinking sees a range of situational aspects of the position as determining the way the company will perform. Alignment of the interests of owners and management, together with active ownership emerge as positive features. The current structure provides active ownership and an alignment of the interests of owners and management.

The conclusion to be drawn from the evaluation in Section 7 of the options against the criteria is that on almost any measure and against almost any reasonable weighting of the various criteria, the current arrangements are superior. This is in line with the literature.

Appendix A References

Alchian, AA., and H Demsetz, (1972) “Production, Information Costs, and Economic Organization”, *American Economic Review* 62 (5), p777-795

Battaggion, MR and L Tajoli, (2000) “Ownership structure, innovation process and competitive performance: The case of Italy”, CESPRI WP No 120.

Berle, AA and CG Means, (1932) *The modern corporation and private property,* Commerce Clearing House, New York.

Brickley, JA, and BL van Horn, (2000) “Incentives from non-profit organisations: Evidence from hospitals”, University of Rochester Working Paper.

Demsetz, H and K Lehn, (1985) “The structure of corporate ownership”, *Journal of Political Economy*, 93, p1155-1177.

Doeringer, PB. and MJ Piore, (1971) *Internal Labor Markets and Manpower Analysis*. Lexington, Massachusetts, Heath Lexington Books.

Eisenhardt, K, (1989) “Agency theory: An assessment and review”, *Academy of Management Review*, 14 (1) p57-74.

Emanuel, D and T van Zijl, (2005) “Agency theory and trust ownership of shares”, *New Zealand Economic Papers*, Vol 39 (2) p195–208.

Fukuyama, F, (1995) *Trust: The Social Virtues and the Creation of Prosperity,* Hamish Hamilton: London.

Gedajlovic, E, (1993) “Ownership, strategy and performance: Is the dichotomy sufficient?” *Organisation Studies,* winter.

Gedajlovic, E, T Yoshikawa and M Hashimoto, (2005) “Ownership structure, investment behaviour and firm performance in Japanese manufacturing industries”, *Organisation Studies,* Vol 26, no 1 p7 – 35.

Gillan, SL, (2006) “Recent developments in corporate governance: An overview”, *Journal of Corporate Finance*, 12, p381–402.

Granovetter, M, (1985) “Economic Action and Social Structure: The Problem of Embeddedness”, *American Journal of Sociology* 91:3, p481-510

Green, JR, and NL Stokey (1983) “A Comparison of Tournaments and Contracts”, *Journal of Political Economy*, 91, p349-364.

Hilmer, FG, (1993) *Strictly Boardroom,* The Business Library, Melbourne

Kang, DL and AB Sorensen, (1999) "Ownership, organisation and firm performance", *Annual Review of Sociology*, Vol 25 p121–144 (also Harvard Business School, Working Paper, No 99-028).

Kay, JA and DJ Thompson, (1986) "Privatisation: A policy in search of a rationale", *Economic Journal*, Vol 96, pp18–32.

Kodenda, E and J Svejnar, (2003) "Ownership and firm performance after large scale privatization", William Davidson Working Paper No 471a, University of Michigan Business School.

Laffont, JJ, and J Tirole, (1993) *A theory of incentives in procurement and regulation*, Cambridge, Mass, The MIT Press

Laking, R, (2006) *Selling the family silver: Selling Wellington Airport a case study in local government decision making*, posted on www.vuw.ac.nz/sog/staff/rob-laking/The%20sale%20of%20Wellington%20Airport%20_version%20of%20May%202006_.pdf

Megginson, WL and JM Netter, (2001) "From State to market: A survey of empirical studies of privatisation", *Journal of Economic Literature,* Vol XXXIX No 2 p321–389.

Milgrom, P and J Roberts, (1992) *Economics, Organization and Management*, London: Prentice-Hall

Nikkinen, J and P Sahlström, (2004) "Does agency theory provide a general framework for audit pricing?" *International Journal of Auditing*, 8: November, p253-262.

Pagano M and PF Volpin, (2005) "The political economy of corporate governance", *American Economic Review*, Vol 95 No 4 p1005–1030.

Prendergast, C, (1999) "The Provision of Incentives in Firms", *Journal of Economic Literature* 37 p7-63

Rosen, S, (1986) "Prizes and Incentives in Elimination Tournaments", *American Economic Review*, 76, 4, p701-715.

Sappington, DEM, (1991) "Incentives in Principal-Agent Relationships", *Journal of Economic Perspectives* 5:2 p45-66

Shirley, M and P Walsh, (2000) *Public versus private ownership: The current state of the debate,* World Bank, Washington DC.

Vickers, J and G Yarrow, (1988) *Privatisation: An economic analysis*, Cambridge, Mass, The MIT Press.

Williamson, OE, (1975) *Markets and Hierarchies: Analysis and Antitrust Implications*, New York: The Free Press,

Willner, J and D Parker, (2002) "The relative performance of public and private enterprise under conditions of active and passive ownership", Centre on Regulation and Competition, WP No 22, University of Manchester.

Appendix B What do we know?

"Theory alone is thus unlikely to be conclusive in this respect."[9]

The approach adopted here to working through the issues is to consider both the analytical implications and some selected pieces that are more empirical. For the empirical we have looked more at local examples, as we see those as most relevant to drawing strong conclusions – see[10] below.

The coverage of the analytical approach, given the resources and time available for the project, is largely drawn from a brief sample of the overseas literature. Occasionally this includes a degree of empirical testing as well. For ease of access we cover these together, when appropriate. Before turning to the more detailed literature we examine the broad framework that lies behind the issues under examination here.

B.1 Stylised structure

The key issue that underlies the questions examined here can be formulated as:

"how are the wants and needs of the owners/ beneficiaries (represented through the Trust) of what is now Vector reflected in the way the company operates? And what do these mean for the operational style of the company?"

This issue is one that has been investigated in the literature, where it is seen in various frameworks, for instance as an instance of agency theory which deals with so called agent-principal problems; those relating to the degree of "control" exercised by the principal (owner) on the actor (agent).

B.1.1 Agency theory

In economics, the **principal-agent** problem treats the difficulties that arise under conditions of incomplete and asymmetric information when a principal hires an agent. The focus is on understanding how to align the interests of the agent (the management and staff of Vector) with those of the principal (the beneficieries). Typically the mechanism used will hinge around the selection of a specific form of general "institution" (such as a company) and the specifics of the contract chosen[11]. In this case, as illustrated above, the structure includes the legal construct of the Trust lying between the owners and the company.

[9] See Laffont and Tirole (1993) in the context of a discussion of the relative efficiency of private versus public ownership.

[10] See Appendix D below.

[11] The "contract" is the formal way the actions of the agent are reflected in consequences determined by the principal. See Appendix C: Principles of contract design.

B.2 Governance literature - overview

There is, as might be expected given the importance of the matter in both economic and social terms, a substantial literature (in various subjects, from business to sociology) that have a bearing on the relationship between ownership structure and company performance. The overview that follows is based on a sample of the literature that is nowhere near complete, but rather covers the broad field as it tends to be at present, to show the way current thinking is going. It is also deliberately biased to include a number of empirical studies to try and bed the thinking down to reality.

This section therefore can be seen as a small scale 'survey.' It largely focuses on the questions as sifted out above, with some comments being included where these are thought to be relevant to the subject of the report by analogy or broader implication. It also includes brief results reports from the empirical investigations.

This opening section that contains our take on the review, and the key headlines, is followed by a discussion of the findings of a series of recent articles, one by one. These are considered in terms of the particular approach that they are taking, rather than organising their views in some schema of our own. This is done to economise on resources.

B.3 Survey - broad findings

The general picture that emerges is that the ownership structure of the entity is not as important as other aspects of the way the entity actually functions – incentives and monitoring associated with management, for instance. In this study we can place on one side any interest in such characteristics as market structure, as we are looking at results that might be cogent for the question of the operation of the same firm under a different ownership structure.

Reviewing the literature findings was not straight forward, as the interests of the investigators considered was typically on other questions, such as the effect of ownership concentration, or public versus private ownership. We have reported these findings where we considered they were valuable to cast light on the general position as far as the influence of different types of corporate governance is concerned.

B.3.1 Our take

The general picture that emerges is that simple models stressing one or two elements of the situation, such as the relatively "raw" Berle and Means separation of ownership and control effects, miss important forces that might be at work in any governance situation. What overwhelmingly comes through to us is a more complex picture. Different situations will have different balances of the relevant forces; so while detailed analysis can illuminate the position, general statements are likely to be false.

Thus, for instance, Willner and Parker see the motivation of the enterprise as the critical variable for the determination of its efficiency. They identify **active owners** as an important positive effect in generating the right kind of performance within the firm.

We can summarise our main conclusions from the literature as far as the situation of concern in this report goes, as follows:

- no general conclusions follow from particular ownership structures on their own;
- the main challenges are to align the interests of owners and management; and
- this seems to involve a degree of specificity in the design and execution of a relationship between owners and management including an appropriate structure and a programme of incentives and active monitoring.

Individual papers are summarised below.

B.3.2 Willner and Parker (2002)[12]

The focus here is on the relative performance of public and private enterprise according to the style of ownership. Their paper is part of a larger project researching regulation.

They note that while there is a widespread view[13] that public ownership is inefficient (particularly under monopoly) both the empirical and theoretical literature is "fairly inconclusive." From which they conclude that "a useful theory of ownership should therefore be consistent with the fact that there are both efficient and inefficient private and public enterprises." Their work then proceeds to model different forms of ownership to determine what influences sound outcomes. They define two forms of ownership: passive and active, depending on the level at which strategic choices are made.

The paper argues that the efficiency comparison between public and private ownership can go either way, depending on: whether owners are "active" or "passive" (see below); on the payment schedule; and the conditions under which the owners choose to replace the manager. It further argues that motivation, market structure and institutional details will also affect the relative ranking.

Relevant findings include:

- the way in which a company is organised may be more important than ownership from the standpoint of cost efficiency;

[12] Full details of the references for these papers are contained in Appendix A References, above.

[13] They instance the "usual suspects," such as Kay and Thompson (1986) and Vickers and Yarrow (1988). They also suggest that their conclusions are somewhat controversial as they are not in line with those of others, such as Megginson and Netter (2001), see below. They do point out that the conclusion about the indeterminacy of optimal organisational structure is not new citing a range of earlier research including Laffont and Tirole (1993).

- assessing privatisation requires a sophisticated and cautious treatment of the role of ownership in determining organisational performance; and
- employees can be creative in a certain kind of work environment and they can be ineffective and burnt-out in another kind.

As mentioned, the paper explicitly looks at what it calls “active” and “passive” forms of ownership. These effectively relate to the degree that owners are proactively seeking to monitor management behaviour. More active ownership improves performance, irrespective of other factors.

Overall, they conclude that, given there is a weak chain of causality between ownership and efficiency, organizational performance depends on internal motivation. This, though, can be influenced by various factors, including the way the owners monitor and incentivise management.

B.3.3 Megginson and Netter (2001)

This is a significant and careful review of the effects of one particular type of ownership change – privatisation. It looks at many issues that are wider than the focus here, and considers a mix of theory and empirical work.

They do, however, cover the issues relating to the way the structure of ownership impacts on organizational performance. We can pick out the way they specifically address the following relevant key effects that come from the theoretical literature:

- contracting among owners – ownership diffusion creates costs associated with identifying firm goals. This includes the problems of making contractual arrangements (including monitoring) to align management interests with these aims;
- degree of market failure – the greater the competitive forces the more the firm’s strategy is fixed “in the market” rather than by the owners. An interesting case they note in passing, is the finding that management in both profit and non-profit hospitals behave similarly, facing similar incentives;[14] and
- support from owners – owners with “deep pockets” (e.g. the state) can create a sense of a “soft budget” and thus undermine the competitive alignment forces due to the risk of budget failure.

Turning to the empirical enquiries, they review many studies, from all over the globe. Most of these are comparisons of little interest here.

The relevant “lessons” taken are:

- privatisation “works” in the sense that the firms invest more, become more efficient and more profitable – though little research on the effects on consumers; and

[14] See Brickley and van Horn (2000).

- comparisons of private and otherwise-comparable public firms suggest the former are more efficient and more profitable. Other techniques (such as better incentives) can assist with the drive to efficiency, but would be even more effective coupled with privatization.

Overall, in terms of the impact of ownership structure, these can be seen as cautious optimism that there is an effect. But, for our purposes, because the state is a rather unique owner it is hard to see what conclusions can be drawn about the wider issue of ownership implications.

B.3.4 Hanousek, Kocenda and Svejnar (2004)

This is a large scale examination of the performance of a substantial sample of Czech Republic firms that were privatised. The main findings are that:

- there are instances of dynamic state ownership;
- relatively few types of private ownership improved performance; though
- concentrated foreign ownership was one; and
- those results supported agency theory, based around unleashing managerial autonomy.

Their discussion of the outcome reveals that the situation may have had a significant influence on the results as there were opportunities for opportunistic behaviour which they describe straightforwardly as meaning: “large domestic stockholders … loot the firms.”

Standing back from the detail these results can be seen as vindicating their discussion of agency theory which carefully distinguishes the impact of concentrated ownership from diffuse. While there are potential drawbacks from concentration, e.g. Holmstrom and Tirole’s (1983) weakening of market monitoring point, it overcomes some of the wider agency issues. They also note that foreign owners may have different motives from locals.

They see this as typical of the results of recent investigations of the outcome of many large scale privatisations undertaken at the end of the last century, at least when these are reviewed using micro-datasets. They also point out that it chimes with the macroeconomic results for the countries concerned, which typically suffered an initial fall off in economic activity about the time of the privatisations.

They discuss the controversial nature of their findings compared with the more optimistic findings[15] and peg this among other reasons,[16] to the more limited nature of the earlier data and thus investigations. The heterogeneity they have been able to track in their study uncovers important nuances, hidden previously.

[15] As compared with the cautious conclusions of Meggison and Netter (2001), above, or the more upbeat Shirley and Walsh (2000).

[16] Other parts of their explanation relate to, the short term nature of data, technical issues about the bias potentially related to the selection of firms for the sample, and other data problems.

Overall this study seems to produce a result that "fits" the circumstances, as once the potential for short term "looting" is taken into account we see a variety of outcomes, but no obviously dominant structural influence on performance .

B.3.5 Battaggion and Tajoli (2000)

These two authors have produced a major study of the ownership structure of Italian firms as a possible explanation for their national "weakness in high tech industries." Their approach is to use the agency approach to examine the risk structure of the corporate sector and thereby the attitude to innovation.

Making some heroic assumptions, (such as associating R&D spending and/or probability of patents with innovation) they find ownership structure to be significant in terms of innovative output. This is also robust, as it appears in several of their specifications.

They see agency theory as meaning governance revolves around the "ex-post bargaining over the quasi-rents earned by the firm" and thus impacts on risk distribution.

Their research then uses the distribution of types of ownership that characterises the Italian corporate scene. In particular, there are levels of concentration of ownership, and this seems to undermine the separation of ownership and control that is seen as the modern corporate form. Their analysis suggests that different ownership types do influence the risk structure of the firms.

B.3.6 Gedajlovic (1993)

This is a masterly survey that covers the field laying out the state of knowledge in a number of areas relating to the nexus of ownership structure and firm performance. It comes from an industrial organisation background.

Selected relevant issues discussed (with main proponents identified) include:

- capital market (Jensen) – if the market is efficient, monitoring there will mean takeovers or the threat of them act to align the interests of managers and owners;
- wider influences (Kaulman) – market forces from local or international competitors work like a form of close monitoring to similarly align interests of managers and owners;
- owner shirking (Demsetz and Lehn) – the 'symmetrical theory' of ownership says that the costs of widespread ownership create a form of rational ignorance, where small shareholders with little at stake, become free riders in terms of performance monitoring; this is countervailed by
- diseconomies of scale in ownership (D&L) – cost and risk concentration offsets the concentration advantages for monitoring. This means that related effects which lower risk could further this. They would include:

– stability in the environment;

– firm diversification; and

– high levels of public regulation.

- ownership concentration improves (Berle and Means) or has no relation to (D&L) company performance – this follows from the ideas (B&M) that separation of ownership and control is unhealthy/ (D&L) is complex.

Empirical testing on Canadian firms showed that ownership concentration was not significantly associated with rates of return, though other effects were revealed, including a complicated impact from government ownership.[17]

The overall conclusion drawn is that the simple results that link ownership structures with performance as suggested by earlier analyses are not realistic. The more complicated – situationally determined - outcomes are sensible

B.3.7 Kang and Sorensen (1999)

This paper reviews the literature on ownership influence. It uses a property rights approach to synthesise various different research streams, it notes that the typical agency theory outcome (which assumes a set of uniform shareholders) of a strong ownership structure impact on performance has often been confounded by the empirical testing of this hypothesis.

Their solution is to posit that the shareholders are not homogenous; certain shareholder groups "capture" the firm and thus influence performance. The way this happens may be affected by the characteristics of the industry and the upshot is a contingent theory of ownership organisation.

B.3.8 Gedajlovic, Yoshikawa and Hashimoto (2005)

Following on Gedajlovic's earlier work this is an empirical investigation into the Japanese corporate scene. It looks closely at the extent to which financial performance is affected by ownership structure. The large and lengthy data set is divided into various forms of ownership and the possible relationships explored.

The conclusion is that the link between the ownership type and performance is complex. They stress the need for careful differentiation when seeking to look at such issues.

[17] Given this is Canadian data the selection of industries for state ownership – and possibly the way they are instructed to operate – are likely to be systematically biased.

Appendix C Four principles of contract design

Looking at contract structures, Milgrom and Roberts (1992) identify four basic principles of contract design:

- the Informativeness Principle,
- the Incentive-Intensity Principle,
- the Monitoring Intensity Principle, and
- the Equal Compensation Principle.

C.1 Informativeness Principle

As information is always incomplete, Holmstrom (1979) developed the Informativeness Principle. This says that the best contract will include all performance measures revealing information about the agent's effort level.

C.2 Incentive-Intensity Principle

Making incentives over-intense does not work, as the resulting risk to the agent might have the wrong results. The Incentive-Intensity Principle says the optimal intensity of incentives depends on:

- the incremental profits created by additional effort,
- the precision with which the desired activities are assessed,
- the agent's risk tolerance, and
- the agent's responsiveness to incentives.

C.3 Monitoring Intensity Principle

The Monitoring Intensity Principle complements to the second, as situations calling for high intensity incentives are usually those where monitoring should also be high.

C.4 Equal Compensation Principle

The Equal Compensation Principle, essentially calls for activities of equal value to the principal to be made equally valuable to the agent. Many agents have several actions that they can select among, and this principle is designed to rebalance rewards away from those easy to measure.

Appendix D New Zealand listed utilities

In Section 3.4 we discuss a proposal that the shaes of Vector would be distributed in equal tranches to the income beneficiaries, the Auckland Regional Council, and the local authorities that are the capital beneficiaries at the time of termination of the Trust *pro rata* with their relative share of the income beneficiaries. Each group would gain slightly more than 25% of the shares of Vector from the three-way partitioning of the Trust's current holding of 75.1%.

We suggested that the more realistic outcome of such an arrangement would be:

- significant trading of the shares;
- the local authorities which would each have a minority stake would dispose of all or part of their interest and deploy the capital proceeds elsewhere; and
- the emergence of a significant long term shareholder.

These suggestions have been informed by the history of local authority *minority* ownership in New Zealand utilities following listing with local authorites or trusts holding minority stakes.

D.1 Ports

Five New Zealand ports have been at various times listed: Northland Port, Ports of Auckland, Port of Tauranga, Lyttelton Port and South Port (Bluff).

The Northland Regional Council was originally the only shareholder in Northland Port. It has always retained control of the corporation and still has control of the listed company. However, a 50/50 joint venture with Port of Tauranga operates the port assets and a joint venture with Ports of Auckland provides pilotage and tug services.

Infrastructure Auckland and the Waikato Regional Council were the original shareholders in Ports of Auckland. Waikato had a minority stake (20%) and Auckland the dominant stake (80%). Waikato sold out at the time of listing but Auckland maintained control after listing. The Auckland Regional Council through its 100% owned Auckland Regional Holdings Ltd eventually took the company private again by buying out the monority.

The Bay of Plenty and Waikato Regional Councils were the original shareholders in the Port of Tauranga. Waikato had a minority stake and Bay of Plenty a majority stake. Waikato sold out in 1993 when the company was listed.

Because both Timaru and Lyttelton were in the area served by the Canterbury Regional Council, the shares in the Lyttelton Port Company were originally distributed among the territorial local authorities in the area served by the port: Hurunui DC; Waimakariri DC, Selwyn DC, Banks Peninsula DC, Ashburton DC and Christchurch CC. Christchurch CC had a controlling 65% of the shares. Hurunui, Selwyn and Waimakariri sold out when the company was listed in 1996. Banks Peninsula sold down to a very small holding about one year later and subsequently reduced its holding to nil. Ashburton, which was the second largest shareholder, sold out during a recent take over bid by Christchurch CC. It sold to

Port Otago which mounted an on market raid to spoil Christchurch CC's take over bid.

The Southland Regional Council was the original owner of South Port (Bluff) and it retained control when the company was listed. It still holds 66% of the listed company.

D.2 Airport

The only airport that has been listed in New Zealand is Auckland International Airport. It was listed when the Government decided to sell its majority stake in 1998. All the councils in the Auckland area were shareholders prior to the company being floated but now only Auckland City Council (12.73%) and Manukau City Council (9.54%) remain shareholders. No dominant shareholder owner has yet emerged for the company and its share ownership remains dispersed.

D.3 Power companies

Only a handfull of power companies have been floated: Vector, TrustPower, Powerco, and United Network.

TrustPower took the unusual option following the 1998 forced split between retail and lines business to sell its lines business and focus on retail and generation. Currently, Infratil owns 35% and the Tauranga Energy Consumer Trust owns 28%.

Powerco was formed from the merging of several lines businesses formerly owned by regional bodies, consumer trusts and private investors in the Taranaki/Wanganui area. The private investor holdings had been established by the distribution of shares in some of the constitutent entities to consumers. No local authority or consumer trust had a controlling stake. 100% ownership was eventually acquired by an on-market take over by a listed Australian utility investor, Babcock and Brown Infrastructure Ltd.

United Networks lines business consists of essentially two sets of assets. The Auckland distribution system that was floated as Power New Zealand by distributing shares to consumers and which Utilicorp of the United States purchased a controlling stake in through on-market activity, and the Wellington distribution system assembled by TransAlta of Canada.

In 1994 TransAlta bought 20% of EnergyDirect, the former Hutt Valley Electric Power Board that had been floated by distributing some of its shares to consumers. The remaining minority stake was retained for the Hutt Mana Energy Trust. Also in 1994, TransAlta bought 49% of Capital Power, the Wellington City Council owned power company. During 1995 TransAlta raised its stake in EnergyDirect to 41% by on-market purchases, and in 1996 it bought the remaining 51% of Capital Power from the City Council. In October 1996, it merged EnergyDirect and Capital Power into TransAlta NZ Ltd, in which TransAlta Canada held a controlling 63% interest.

Both the Wellington and Auckland groups of assets eventually passed to Vector Ltd.