

Crown ownership of commercial entities

EXECUTIVE SUMMARY

We find the main arguments for Crown ownership fairly unconvincing...

The main arguments we see in favour of Crown ownership are to capture any monopoly rents, to fulfil 'strategic' objectives of some sort, or to prevent 'hollowing out'. We don't find any of these arguments particularly strong:

Argument	Our general view is that...	The argument is stronger...
Monopoly characteristics	the focus should be on regulation rather than ownership.	the less robust and stable the regulatory framework.
'Strategic' objectives	it can be hard to unbundle, but hard to see circumstances where ownership is necessary to achieve the objectives.	when it is difficult/impossible or prohibitively expensive to achieve the same outcome via regulatory, subsidy, or other policy levers.
Prevent 'hollowing out'	concern about profits going offshore is too simplistic: the overall savings/investment balance is the more important factor. concern about activity has some basis, but ownership is not necessarily the best policy lever.	the more mobile and economically important the activity is. the harder it is to target relevant activities in another way.

...while the main arguments against point to moderate gains from privatisation.

The main arguments we see against continued Crown ownership are to improve economic efficiency, improve the fiscal position, and develop capital markets. We think all of these arguments have merit and point to moderate gains from privatisation.

Argument	Our general view is that...	The argument is stronger...
Economic efficiency	static efficiency gains are likely to be moderate at most, given no clear evidence of systemic underperformance. dynamic gains from 'big' ownership decisions, impact on policy decisions, etc. could be as or more important.	for companies that exhibit worse performance and/or in sectors where even small improvements are important. when the buyer has strong commercial discipline.
Fiscal position	the main impact is that debt would be lower than it would otherwise be. In the current environment, this is material.	the greater the likely sale proceeds (which depends mainly on the amount sold and the sale process).
Capital market development	domestic saving, and tax/regulation are more important levers. But listing SOEs would be complementary and would increase market depth and liquidity.	the larger the amount listed. the less likely de-listing is (mainly linked to foreign ownership).

Note that a recurring theme in the above tables is the importance of good regulation, both as an alternative to Crown ownership to address some concerns, and as a pre-requisite to capturing the potential benefits from private ownership.

Greater private ownership seems generally likely to result in better outcomes...

We compared likely outcomes for different groups of companies along a spectrum of Crown ownership from full public to private. Our assessment is that further along that spectrum should generally result in greater impact on efficiency, fiscal objectives, and capital market development. Similarly, the risks, such as activity moving offshore, tend to increase further along the spectrum. But the mix of benefits and risks would differ across the portfolio.

Companies	Likely gains from privatisation are...	The risks are...
Electricity generator/ retailers <i>Meridian, MRP, Genesis</i>	driven by fiscal and capital market objectives, with efficiency gains secondary. The dampening impact on electricity policy-making could be beneficial.	relatively low, given operations and functions are relatively immobile. less freedom to regulate (which we would see as a benefit).
Natural monopolies <i>Transpower, Airways</i>	relatively small, given that the regulatory environment is already driving efficiency, and the size is relatively small.	some possibility of monopoly profits being privatised and residual risk of failure.
Other big companies <i>Air NZ, Solid, Landcorp, NZ Post/ Kiwibank, KiwiRail</i>	potentially more significant than for the electricity sector, given significant business challenges and capital expansion needs for some companies.	mainly about activity moving offshore, given more mobile activities for some companies.
Other small companies <i>Kordia, QV, MetService, ACP, LML, AQ, airports</i>	relatively small, given their materiality.	relatively low.

...but a pragmatic approach could be a mix of ownership models.

We acknowledge that in the face of strong concerns by some New Zealanders, the case should be particularly strong to recommend ongoing reform. But we are also mindful that high-level economic goals require improvements across a range of policy areas. Further, introducing private ownership would support and reinforce a number of policy goals, namely better balance sheet management, fiscal consolidation, and capital market development and saving.

So we see a case for a medium-term strategy that involves a mixture of:

- full privatisation for companies in competitive markets, where potential gains are high and/or New Zealanders' concerns are low or could be mitigated;
- partial privatisation where residual concerns remain; and
- full Crown ownership for a subset with high residual risks.

As an illustration only, a sequenced approach across a combination of companies utilising different approaches depending on the primary objective could look like [primary objective(s) in brackets]:

- a (say) 25% partial listing of one or more of the gentailers [fiscal, capital market]
- a (say) 25% partial listing of Solid Energy's core business [efficiency, fiscal]
- issuing equity bonds for Kiwibank to fund its growth [fiscal]
- full sale of Kordia and minority shares in regional airports [efficiency].

CONTENTS

Executive Summary	1
Contents	3
I. Introduction.....	4
Purpose and scope	4
Approach and structure	4
II. Arguments for and against Crown ownership.....	5
For: Monopoly characteristics.....	5
For: 'Strategic' objectives	7
For: Prevent 'hollowing out'	9
Against: Economic efficiency	12
Against: Fiscal position.....	17
Against: Capital market development	19
III. Institutional options.....	22
Current model	22
Holding Company.....	23
Financing instruments	25
Partial or full privatisation	26
IV. Comparative Institutional analysis	29
Electricity generator/retailers: Meridian, Mighty River Power, Genesis	30
Natural monopolies: Transpower, Airways.....	31
Other big companies: Air NZ, Solid Energy, Landcorp, NZ Post/Kiwibank, KiwiRail	32
Other small companies: Kordia, QV, MetService, ACP, Learning Media, AsureQuality, regional airports	33
V. Conclusions	34
VI. References	37
Annex I: Snapshot of the balance sheet and commercial portfolio	39
Annex II: Extended discussion of economic efficiency impact.....	40
Annex III: List of major asset sales in New Zealand, 1988-1999	54

I. INTRODUCTION

Purpose and scope

1. This paper sets out Treasury's current thinking on the arguments and issues related to Crown ownership of commercial entities.¹
2. The Government's first Investment Statement, to be released in December 2010, provides an overview of the significant assets and liabilities on the Crown's balance sheet and how they are forecast to grow over time. Its release provides an opportunity to reconsider the ownership and institutional form of a number of Crown assets. The broader context is the Government's fiscal and economic objectives, particularly the pressing need to rebuild the Crown's balance sheet buffer and to actively reprioritise Crown capital to its highest value use in support of raising New Zealand's potential growth rate. Crown ownership and institutional form is one possible lever for these objectives.
3. The scope of this paper is limited to the commercial portfolio of companies (i.e. SOEs, Air New Zealand, and airports), but the issues are likely to be relevant to the broader context of better management of the Crown's balance sheet.

Approach and structure

4. This paper uses a comparative institutional approach by comparing likely future outcomes for different institutional arrangements. The burden of proof is to show whether alternative institutional arrangements would be likely to result in sufficiently better outcomes in practice to warrant the transition costs of change. This approach contrasts from a market failure approach where the burden of proof would be to show that the rationale for government intervention (i.e. ownership) is clear and compelling.
5. Section II sets out the main arguments for and against Crown ownership generally, drawing on the relevant literature. The 'arguments for' effectively give the most common rationales for government intervention, and the 'arguments against' effectively give the most common objectives from privatisation. An initial assessment is made of the relative strength of the arguments and in what circumstances they are more or less relevant. This assessment is only partial, pending the comparative analysis in Section IV.
6. Section III describes the main institutional options: current SOE model, a holding company, financing instruments, and partial or full privatisation.
7. Section IV brings the analysis together. Outcomes for different future states of Crown ownership (i.e. the options in Section III) for sub-portfolios of companies are compared with each other (i.e. using the arguments in Section II).
8. Section V sets out the Treasury view, based on the preceding analysis. As will become clear, this issue has a number of complex aspects where the evidence is not always clear cut. Our view is based on decision-making under uncertainty and relies on a number of judgements.

¹ For the avoidance of doubt, this paper was commissioned by Treasury's Executive Leadership Team. The paper was not requested by Ministers.

II. ARGUMENTS FOR AND AGAINST CROWN OWNERSHIP

9. This section summarises the main arguments for and against Crown ownership of commercial entities:

For	Against
Monopoly characteristics	Economic efficiency
'Strategic' objectives	Fiscal objectives
Preventing 'hollowing out'	Capital market development

For: Monopoly characteristics

Argument: In markets that are natural monopolies or competition is low, Crown ownership is likely to be more economically efficient.

The empirical evidence is clear on the importance of competition regulation...

10. The empirical literature on privatisation consistently finds that having a robust regulatory framework in place *before* privatisation is essential.² New Zealand's experience with Telecom arguably represents a case study where the appropriate regulatory environment was not in place before privatisation. Further, the strength of the empirical evidence on efficiency gains from privatisation is not as strong for natural monopolies.³

...and the implication is to focus on regulation, not ownership.

11. We think the first policy response to concerns about low competition or natural monopoly characteristics should be a robust regulatory framework.
12. Examples exist in New Zealand of companies with monopoly characteristics without government ownership, such as electricity lines companies (e.g. Vector, Orion) and telecommunications (e.g. Telecom, Vodafone). These entities are regulated under the Commerce Act. In recent years, the Commerce Commission has pursued action against some of these companies on competition grounds. Many examples exist internationally of natural monopolies in private ownership but subject to regulation, such as the UK's national grid.
13. One argument that is made in favour of Crown ownership of monopolies is that any economic rents are captured by the Crown rather than a private owner. It can also be argued, however, that the extent to which the sale price reflects

² Guriev & Megginson (2005) find that "The evidence suggests that privatization succeeds, but only if the relevant institutional environment is in place: private property rights protection, rule-of-law, hard budget constraints, competition and regulation". Similarly, Kikeri & Nellis (2004) find that "What is clear from the studies is that the aggregate gains are greatest when privatization is combined with proper competition policies and regulatory frameworks."

³ Shirley & Walsh (2000) conclude that "Theory's ambiguity about ownership in monopoly markets seems better justified, since the empirical literature is also less conclusive about the effects of ownership in such markets."

expectations of future monopoly profits then a sale will also capture these rents for the Crown.⁴

14. We are doubtful that 'regulation by ownership' (i.e. using ownership levers to ensure efficient pricing) is likely to be feasible for reasons of information asymmetry and principal-agent problems.⁵ So even if natural monopolies are in Crown ownership, we would recommend regulation (as is the case currently).
15. In short we would see only a limited rationale for Crown ownership of natural monopolies: where there is a lack of confidence in the regulatory framework to deliver an efficient outcome; or where the Crown will have limited ability to avoid effectively underwriting these entities.

Transpower and Airways are the natural monopolies in the portfolio.

16. In the current commercial portfolio, the natural monopolies are Transpower and Airways. Regional airports arguably have some local monopoly power (though the airline serving the airport may have greater monopoly power). Some may argue that the electricity sector exhibits monopolistic characteristics given the small number of generator/retailers, but as discussed in Annex II, the evidence suggests the electricity sector is relatively competitive (although perhaps less so in national and regional lines distribution).
17. The regulatory regime for most companies in the current portfolio is settled (by number of companies). However, most of the portfolio by value is in the electricity sector, which has been subject to numerous regulatory changes over the past decade and is currently undergoing a further set of reforms. Regulatory objectives in the electricity sector are more complex than simply efficiency considerations (e.g. encompassing security of supply and climate change).⁶

We see a weak argument for Crown ownership due to monopoly characteristics.

18. In summary, provided a robust regulatory framework exists, Crown ownership should not be required to achieve an efficient outcome. The case would be relatively stronger where there was a less robust and less stable regulatory framework, and/or where the Crown in practice may not be able to avoid effectively underwriting the entity.

⁴ Generally sales of monopolies are accompanied by regulation of prices and profits and/or deregulation to improve competition. If this is the case then any future monopoly profit stream will likely be more heavily discounted by the potential buyer.

⁵ Crown ownership may be a way to introduce or induce competition, as has been suggested in the case of Kiwibank. Another interpretation may be that the major banks all face similar competitive pressures. They have more or less the same business model, face more or less the same market for customers and raise finance in more or less the same financial markets. On that basis the overall impact of Kiwibank may be quite limited.

⁶ We acknowledge that regulatory objectives in the electricity sector are more complex than simply efficiency considerations. Objectives also include security of supply, climate change mitigation, and natural resource management (eg of land and water).

For: 'Strategic' objectives

Argument: Some goods or services would not be delivered by the market at all (i.e. missing market) or in a way that is detrimental to New Zealand (e.g. not taking into account externalities), now or in the future.

Arguments for 'strategic' objectives are varied, but mainly about 'security'.

19. This argument is sometimes described as about 'strategic assets' or 'the national interest'. We have tried to separate out the issues related to foreign ownership (namely profits or activity going offshore) and issues that are relevant regardless of nationality – the former are considered in the next section and the latter considered here.
20. Overall, we think the various perspectives of assets sales are clustered around one main theme: security: This could be about security of "affordable" access to services, security of access to ancillary benefits (such as dividend flows), or security of control over nationally important resources or activities.
21. Economically, we can see these concerns as being about some form of market failure: either externalities or a particular market not forming at all.

Spillovers are generally better achieved by means other than ownership.

22. Most arguments about spillovers tend to relate to activity occurring in New Zealand (which is dealt with under 'hollowing out', below). But another common argument is that in air transport, for example, there may be are spillover benefits from having a national flag carrier for national brand, tourism, and so on. We would be sceptical of the size of such spillovers, and there are alternative ways of achieving national branding through contracting (e.g. tourism promotion).

Service delivery is a weak rationale for ownership.

23. An argument may be made that security of service delivery, such as security of electricity supply, requires Crown ownership. We would argue that a number of crucial elements of infrastructure are currently in private ownership, without any apparent concern to security of service delivery, such as Marsden oil refinery and the Southern Cross cable. To ensure security of supply, regulation is likely to be more effective and lower cost than ownership. Contracting is also a feasible alternative to ownership.
24. Another concern may be the price of services, such as electricity prices. There is some overlap here with concern over monopoly characteristics, and we would argue that regulation is the best policy lever.
25. Some countries have been acquiring land in other parts of the world for agricultural purposes, perhaps due to concerns of food security. New Zealand does not have a similar concern, and in any case, we would argue that open trade is a much more effective means of achieving food security.

Control in a crisis does not require Crown ownership.

26. There may be a view that having control over key national infrastructure provides options for the Government in times of crisis. However, the Government retains the ability to intervene in private enterprise in times of crisis, most directly by the sovereignty of parliament to legislate. The OECD Codes of Liberalisation, intended to promote open capital markets, recognise exceptions for governments to intervene for reasons of public order and security. Existing mechanisms also provide scope, such as the Public Works Act providing the ability for the Government to acquire land.

Past experience with privatisation may be an underlying concern.

27. Some of the different twists on 'strategic' objectives may stem from a feeling that New Zealand's experience with privatisation has been poor.⁷ While there are (albeit comparatively few) examples where past privatisations went badly – and these tend to be uppermost in the public mind – the broader benefits in terms of competition, service and prices can be easily forgotten.⁸

We see few, if any, circumstances where ownership would be necessary...

28. We see few, if any, circumstances where 'strategic' objectives would suggest Crown ownership as the best policy response for companies pursuing commercial objectives.
29. The argument would be stronger if there were circumstances where it would be difficult/impossible or prohibitively expensive to achieve the same outcome via regulatory, subsidy, or other policy levers.

...though revealed preference may suggest a cautious approach.

30. New Zealand's experience includes two significant privatisations and re-nationalisations, namely Air New Zealand and KiwiRail. For KiwiRail, it could be argued that the profits were privatised and the losses were socialised.
31. If there are specific companies where it seems likely that the Government would not allow them to fail, full privatisation should probably be approached cautiously. On the other hand, it could be argued that several large New Zealand companies might fall into a similar category (e.g. the banking sector and Fonterra), but this is not enough of an argument for Crown ownership.

⁷ Such a feeling appears to be the case for postcommunist countries: Denisova et al (2010) analysed attitudes to privatisation using a 2006 survey of 28 postcommunist countries. They found "overwhelming support for revising privatization, but also that most respondents prefer to leave firms in private hands" and conclude that "dissatisfaction with privatization should not be equated with a preference for state property ... Such views are due to a massive discontent with the process and outcome of privatization in transition countries."

⁸ For example, Telecom and New Zealand Rail were both arguably sold too cheaply and before a sufficiently strong and stable regulatory environment was in place. Yet consumers have benefited, at least in telecommunications, where privatisation accompanied by deregulation introduced competition and substantially brought down prices and did away with inefficient and unresponsive service.

For: Prevent ‘hollowing out’

Argument: Crown ownership is a means of preventing foreign ownership, which would be detrimental to New Zealand because of profits going offshore and/or the economic activity itself moving offshore.

Focussing on ‘profits going offshore’ is only part of the picture.⁹

32. From a national accounting point of view, the relevant indicators are the balance of payments and international investment position. These indicators can be characterised as follows:
- New Zealand’s current account flow is dominated by net investment transfers (i.e. net ‘profits going offshore’, where profits also includes debt servicing costs), reflecting past net investment by foreigners.
 - New Zealand’s stock of net international investment is highly negative, but is dominated by debt. That is, in net terms New Zealand mainly *owes* a lot to the rest of the world rather than being *owned*.
33. For the sale of any particular asset to a foreign investor, the key points are:
- *The price a purchaser pays should represent the expected future stream of profits.* In general, we would expect the sale price to be efficient and reflect the underlying commercial value of the asset.
 - *The main driver of ‘profits going offshore’ is the national saving and investment balance.* Selling an asset to foreigners will only have a significant effect on the current account deficit if it affects these fundamental drivers.
 - *The macroeconomic effects depend on the use of the proceeds from the sale.* The impact on the current account is unlikely to be significant, and long-term real incomes would be expected to increase if the foreign investment brings economic benefits (as the evidence suggests it does, on average).
34. In short, we do not think it makes sense to be concerned about ‘profits going offshore’ per se. The more important places to focus from a macroeconomic perspective are the overall saving and investment balance and New Zealand’s overall external vulnerability. We do see reasons to be concerned by New Zealand’s external vulnerability, but any policy response needs to be linked to the fundamental drivers.
35. The case for concern would be relatively stronger the lower the likely increase in company performance, and/or if the sale proceeds were used for consumption rather than investment (including debt reduction).

⁹ For a more comprehensive analysis, see [T2010/1266 - Should we be concerned about profits going offshore?](#)

Concern about activity moving offshore is less relevant for the current portfolio.

36. Some evidence suggests foreign ownership will, over time, make a company more likely to relocate offshore.¹⁰ However, this effect will depend on the nature of the business: Most of the companies in the Crown's commercial portfolio would be hard or impossible to shift offshore: for example, mining New Zealand minerals and generating electricity are intrinsically immobile activities. The head offices of such businesses are more mobile but could be 'sticky' to the operations themselves – e.g. Contact's head office is still in New Zealand even though it is majority Australian-owned. But if, for example, Solid Energy were majority owned by a mining multinational, it is quite possible that some head office functions would be centralised offshore.
37. A case can be made that high-value activity such as head office functions brings spillover benefits to New Zealand. Agglomeration economies also suggest there are benefits to such activities occurring in geographical proximity. So as some activity moves to (say) Sydney, it may make it marginally more attractive for other companies to consider moving their own functions – i.e. there could be a longer term risk of hollowing out of corporate capability.
38. In any case, the first set of policy responses would focus on the general business environment and removing any biases that may incentivise relocation offshore (such as double taxation of dividends for offshore shareholders). Beyond that, policy responses should target activities or skills, rather than particular firms.
39. In addition, ownership restrictions could be used to encourage the retention of certain functions or skills, or to protect the "public interest" in particular firms (discussed further in Section III below). For example, the UK has used a "golden share" – a share which is able to outvote all other shares in certain specified circumstances to protect public interest or to allow privatised companies time to adjust to operating in the private sector. "Golden shares" can be used to:
- prevent takeovers which a government judges against the public interest;
 - restrict the issue of new voting shares;
 - place constraints on the disposal of assets;
 - impose limits on winding up or dissolution;
 - ensure that the company is run by a non-foreign management;
 - guarantee the place of government appointed directors on the board.¹¹
40. In short, we see 'hollowing out' as a weak argument for Crown ownership. The argument would be stronger the more mobile the activity is and the harder it is to target the relevant activities in another way.

¹⁰ Sweet & Nash (2007) investigated location decisions, and found a number of factors that can influence such decisions, including centre of business gravity, global supply chains, and distance-sensitive market data. Foreign ownership was also found as one potential factor.

¹¹ See Adam Smith Institute, <http://www.adamsmith.org/80ideas/index.htm>. The existence of a golden share or similar restrictive mechanism will likely prevent the full benefits of privatisation from being realised in terms of price and/or performance.

And foreign ownership has the potential to bring significant economic benefits.

41. The other side of discussion about foreign ownership is the potential economic benefit to New Zealand. The empirical literature generally finds that foreign direct investment (FDI) is accompanied by financial and business expertise and skills, or access to international distribution networks. FDI can also stimulate domestic competition and assist upstream and downstream firms.¹²
42. Our generally strong view on the benefits of openness to foreign investment is based on the relative strength of the evidence of potential benefits on one hand, and, on the other hand, a judgement that the risks (such as those discussed above) are either not significant or not best addressed by restricting foreign investment.

¹² Treasury (2009)

Against: Economic efficiency¹³

Argument: Privately-owned companies tend to be more productive than Crown-owned companies.

Theory predicts that private ownership should be better than public ownership...

43. From an economic perspective, private ownership should strengthen commercial incentives and therefore increase allocative efficiency. From a corporate governance perspective, key levers are either weakened or absent under Crown ownership, as shown below:

Corporate governance influences	
External	Internal
Law/regulation	Board of Directors – role, structure, incentives
Markets (1) – Capital markets, market for corporate control, labour/product markets	Managerial Incentives – ownership, compensation, employment agreement
Markets (2) – Capital market information/analysis	Capital Structure – debt/equity
Markets (3) – accounting, financial and legal services	Bylaw & Charter Provisions
Private sources of external oversight – e.g. media	Internal Control Systems

Source: Gillan (2006); shading added to indicate areas weakened by Crown ownership

...and the empirical literature finds strong support for theory...

44. The privatisation literature includes a weight of evidence supporting the argument that privatisations undertaken around the world have generally led to improved firm performance. The literature argues that privatisation generally leads to better quality goods and services, improved competition, more rational pricing, efficient staffing levels, and fiscal gains for governments through lower subsidies to state enterprises. These gains tend to be larger when firms when appropriate institutions are in place to ensure competition. Not all studies find positive benefits, to be sure, but the general result across a range of studies is strongly positive.
45. The empirical literature also generally finds gains from partial privatisations, but at a lower magnitude compared with full privatisation. The benefits are likely to be muted by, for example, if partial privatisation allows management to be completely protected from takeover or full scrutiny or if other shareholders believe government may use its ownership stake to pursue non-commercial goals.

¹³ An extended discussion is contained in Annex II.

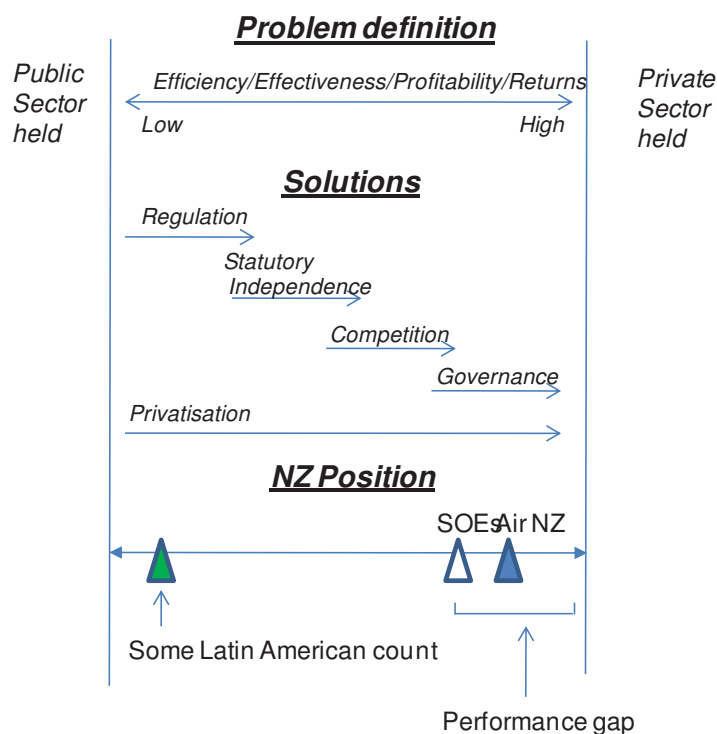
...though the literature may be less relevant to New Zealand.

46. The cases in the literature tend to be very poor performers. As discussed below, it would be hard to say this is currently the case for New Zealand.
47. The literature also highlights the importance of general policy liberalisation, but is sceptical that this is always possible without privatisation. In contrast to the themes from the literature, New Zealand has been able to undertake significant policy reforms to promote competition and to provide commercial incentives while maintaining Crown ownership.

Current SOE performance appears to be adequate...

48. An important caveat is that measuring and benchmarking SOE performance is more difficult because of their privately held status. We have, nevertheless, tried to assess performance using a number of different methods (see Annex II). Overall:
 - there is *little* evidence of *systemic* under- or over-performance in the SOE portfolio;
 - there *is* evidence to suggest that *some* individual SOE companies under or over perform; and
 - there is *little* evidence to suggest that privatisation would *significantly* improve the financial performance of many of the SOE companies.
49. Another approach is to consider whether the electricity sector, dominated by Crown ownership, is exhibiting the sorts of characteristics found in the literature, such as insufficient investment, inefficient prices, and poor quality investment. Data on energy supply margins, projected new generation and transmission investment, and pricing compared with long-run marginal cost all support the view that SOE performance is adequate.
50. The diagram below is a stylised representation of the spectrum of commercial performance under public and private ownership, and an indication of where current SOE performance might sit.

Commercial asset performance spectrum



...but other effects are probably hindering economic performance.

51. The performance analysis above does not capture some crucial aspects that are likely to be influencing policy and commercial behaviour in the market. These factors are hard to measure, but are likely to be having negative flow-on effects to the broader economy and could be more important over time (i.e. the potential for dynamic efficiency gains through different investment decisions, for example, as opposed to static efficiency gains from closing the performance gap at a point in time). The types of effects are:

- *Changing commercial discipline over time.* The SOE framework depends on Ministers to apply commercial discipline. This discipline will tend to go through periods of strength and weakness. The market, on the other hand, provides continuously strong commercial discipline.
- *Reluctance to take 'big' ownership decisions.* Ministers are probably less inclined than private shareholders would be to take on higher risk projects, partly due to the political risks involved. For example, total offshore investment by the SOE portfolio is currently about 1% of assets, probably much lower than it would be in private ownership. It is arguably sensible for the Crown to be somewhat risk averse, but having a significant part of the economy with a lower risk appetite is unlikely to be conducive to economic growth. One consequence of this risk appetite could be that SOEs tend to have 'lazy balance sheets', retaining more cash in case they need it.

- *Tendency for worse policy decisions.* Having SOEs in Crown ownership can result in policy making that probably wouldn't occur otherwise. For example, the extensive regulatory changes in the electricity sector over the past decade would probably not have happened to the same extent if the sector had been in private ownership. The asset swaps in the current electricity reforms (viewed by officials as the least likely to be beneficial out of all the reforms) would have been extremely difficult if the generators had been in partial or full private ownership. We think even a small private stake would be likely to make governments pause before regulating. We would see lower regulatory intervention as positive for the market.
- *Taking up Ministerial time.* At a very basic level, SOEs can take up significant Ministerial time (a scarce resource), which crowds out consideration of other issues.
- *Potential for negative interaction with the market.*
[withheld s9(2)(b)(ii) & (g)(i)]

On balance, we consider it likely that private ownership would improve economic efficiency, but the impact could be modest...

52. New Zealand has probably been able to generate the substantial majority of potential efficiency gains through a mixture of regulatory and competition reforms and the maintenance of a relatively strong SOE framework. There is certainly still scope for improvement, but we should be cautious about the likely quantum.
53. Consequently, we put potentially more weight on the more-difficult-to-quantify effects that could be more important over time, such as the reluctance to take 'big' ownership decisions, and the potential for worse policy decisions.
54. These arguments will differ significantly by company. The case would be stronger for those companies that exhibit worse performance and/or in sectors where even small performance improvements may be more important for New Zealand's economic performance.

...and the buyer is likely to matter.

55. The likely economic benefits are based on a private owner exerting stronger commercial discipline than a public owner. Not all private owners would be equivalent in this regard and we consider some of the possibilities here:
 - *Cornerstone shareholder with expertise.* A shareholder with a significant stake and expertise in the sector would be likely to transfer and utilise some of that knowledge and network of contacts in improving performance. One of the reasons the empirical literature tends to find strong benefits from FDI is because of knowledge transfer from an overseas investor.

- *Concentrated versus dispersed ownership.* On average over time, dispersed ownership tends to outperform other forms of ownership, though highly concentrated ownership may be effective in periods of distress (e.g. a private equity approach to restructure a company).
- *NZ Superannuation Fund.* Given the Government's 40% target for New Zealand investment, the Fund is a potential buyer. It is not immediately obvious to us that the Fund would apply significantly greater commercial discipline than the current SOE model.
- *Local government.* Local councils are potential buyers for the Crown's remaining shareholding in regional airports, but may pursue non-commercial objectives. For sea ports, for example, extensive local government ownership is likely to be hindering port rationalisation.
- *Iwi.* Iwi would be likely to look to purchase significant stakes. Iwi are arguably political bodies, similar to government, which could suggest some non-commercial objectives. But provided appropriate governance structures are in place, there is no reason to think that would be the case. In fact, iwi are likely to have longer time horizons than many investors.¹⁴

¹⁴ For example, Ngāi Tahu has a separate holding company, Ngāi Tahu Holdings Group, whose role is "prudently to administer [the assets of the Trust] and its liabilities by operating as a profitable and efficient business". Its objectives include "increasing shareholders equity", "providing annual returns", and "growing the businesses for future generations".

Against: Fiscal position

Argument: Reallocating capital from the Crown's commercial portfolio to other uses, such as debt reduction, would be better fiscally.

The main fiscal arguments are deleveraging, recycling capital, funding capital growth, or diversification.

56. The main fiscal arguments are:

- *Deleveraging.* The commercial value of an asset represents the future income stream from that asset. Therefore, selling part or all of that asset would be swapping cash now for the equivalent discounted stream of cash into the future (assuming the price is fair¹⁵). In situations where the fiscal position is particularly poor (such as New Zealand in the 1980s and 1990s), reducing debt via asset sales can be highly effective.
- *Capital recycling.* The Crown has alternative uses for the capital it currently invests in SOEs, with these alternatives far exceeding the Crown's ability to fund them, as demonstrated every year through the budget process. The alternatives which are currently not funded may generate greater returns (financial, economic or social) than the returns from SOEs, although this is difficult to assess.
- *Funding capital growth.* In the current fiscal environment, there may be a reluctance for significant capital injections for SOEs, which could potentially constrain growth. Private sector capital could fund this growth.
- *Diversification.* Changing the balance of the commercial portfolio could help diversify the Crown's commercial ownership risk, particularly away from the electricity sector.

Apart from diversification, the argument is essentially about lower debt...

57. The first three arguments are not as different as they appear: cash is fungible and debt is the marginal source of funding. So a decision to recycle capital from one part of the balance sheet to another is equivalent to using any sale proceeds to offset the amount of debt that would have been required to fund the other investment. Similarly, funding capital growth from another source would reduce the amount of debt required to fund the company. (Note that debt wouldn't necessarily be reduced, but would be lower than it would otherwise have been.)

58. We are sceptical that the additional marginal capital project is likely to have a high benefit:cost ratio.
[withheld s9(2)(f)(iv) & (g)(i)]

¹⁵ There are reasons to think that the sale price might be more or less than the discounted value to the Crown. On one hand, an alternative owner of an SOE might put a higher value on it than the Crown does, because they think they can improve its performance. On the other hand, discounts may apply: prospective minority owners may demand a discount for the lack of control (this would be the case in listing some or all shares on the NZX) and/or prospective owners of a significant but non-controlling stake may demand a discount for a lack of future marketability.

So we would be cautious about recommending that any sale proceeds be used to expand the currently forecast capital allocations.

...while the diversification argument is not particularly strong.

59. Even selling 25% of the electricity companies would leave the portfolio dominated by the electricity sector, and in the context of the Crown's overall balance sheet, SOEs only represent about a quarter of the total assets. Further, it may be difficult to completely remove the perception of an implicit guarantee short of a full privatisation.
60. It is also worth noting that the Crown has exposure to a diversified asset portfolio through the New Zealand Superannuation Fund, and is exposed to all New Zealand companies through the tax base.

Given the current fiscal outlook, we see a moderate fiscal argument.

61. We have advised elsewhere of the merits of consolidating the fiscal position, for reasons of the rebalancing the economy and reducing vulnerabilities. In this context, limiting the amount of debt that needs to be raised for future capital expenditure would be beneficial.
62. To give an idea of materiality, the capital budget allocations for the medium term are around \$1.5 billion per annum. Selling 15% to 20% of the 3 electricity SOEs would effectively allow for one capital budget to be funded from a source other than new debt.
63. A more significant divestment would be much more material: Selling 100% of the 3 electricity generators and Solid Energy would be worth about \$13 billion¹⁶. That is, debt could be lower than it otherwise would have been by approximately 6% of GDP.
64. The case would be stronger the greater the likely sale proceeds (which depends mainly on the amount sold and the sale process).

¹⁶ Based on the commercial valuations prepared by each of the SOEs.

Against: Capital market development

Argument: Significant Crown ownership means lower depth and liquidity of capital markets, hindering economic growth.

Capital market development is linked to economic growth...

65. The level of capital market development influences economic growth. There is considerable evidence that the level of development of a country's financial system has a positive influence on economic growth and productivity. The relationship is bidirectional with economic growth also contributing to financial sector development. For example, a 2001 OECD study
- ... finds significant relationships between investment and financial development, as measured by indicators of the scale of financial activity. Evidence is also found of significant relationships between financial development and growth – over and above the links via investment – indicating impacts via overall economic efficiency.¹⁷
66. Some more recent international studies¹⁸ indicate that the relationship between financial development and economic growth may vary according to the level of financial development. The impact of financial development on growth is positive and significant when a certain threshold is met and declines once it reaches very high levels. A 2008 survey by the World Bank¹⁹ of recent empirical studies found:
- The size of the banking system and the liquidity of stock markets are each positively linked with economic growth. ... Better-functioning financial systems ease the external financing constraints that impede firm and industrial expansion.

...and New Zealand's capital markets are under-developed.

67. Given lack of development in parts of the New Zealand financial system,²⁰ the findings of the literature are relevant and we would expect the relationship between financial system development and growth to be positive.
68. New Zealand's share market capitalisation (as % of GDP) is currently smaller than for comparator countries and is not growing. Two significant areas of the economy that are not currently open to outside ownership and share market listing are cooperatives, especially in the agricultural sector (the value of agricultural cooperatives is equivalent to about 25% of GDP), and companies owned by central and local government.
69. In the past, we have had mixed views on whether New Zealand *needs* its own share market – companies listing on an Australian exchange are unlikely to face a materially higher cost of capital, for example.²¹ However, the localisation of information appears to be an important factor, influencing the ongoing demand

¹⁷ Leahy et al (2001)

¹⁸ e.g. Rioja & Valev (2004), based on a sample of 74 countries from 1960-1995.

¹⁹ Demircug-Kunt & Levine (2008)

²⁰ Cameron et al (2007)

²¹ du Plessis (2005)

for listings on the New Zealand stock exchange, especially for small and medium sized New Zealand firms.²²

70. More recently, our view has evolved to recognise that foreign savings are not a perfect substitute for domestic savings,²³ indicating that retaining a local stock market could be important for firms seeking access to finance, especially new and emerging firms. The Capital Market Development Task Force has made a number of recommendations that would help develop the New Zealand stock market,²⁴ which are currently being implemented through the Government's Action Plan in response to the Task Force.

Listing SOEs would increase market depth and liquidity...

71. Listing some/all of some/all Crown-owned companies should increase market size, depth and liquidity. In turn, deeper and more liquid capital markets should lower the cost of capital for New Zealand companies. The international evidence²⁵ and available New Zealand evidence²⁶ suggests privatisation achieves these objectives, by significantly increasing market capitalisation and liquidity. That said, the liquidity of New Zealand's share market appears to be concentrated in the stocks of large New Zealand firms, while the stocks of small firms have low liquidity.²⁷ So if larger SOEs were listed, it would be less likely to increase liquidity (and therefore lower the cost of capital) for smaller companies.
72. As well as the direct impact on capital markets, increasing opportunities to invest in large New Zealand companies would reinforce the message about shifting the balance of the New Zealand economy toward saving and investment. The ability to invest in relatively low-risk large companies may be appealing to many New Zealanders.
73. That said, we need to be careful how much weight to put on this argument: While investment opportunities are important (and certainly complementary to greater saving), domestic saving preferences are probably the more important driver of economic rebalancing (for similar arguments as discussed in 'profits going offshore' above). It is also perhaps an open question the extent to which individual retail investors would buy shares directly, rather than indirectly via a managed fund, such as a KiwiSaver account.

...but there are reasons to think that the potential impact would be modest.

74. On the other hand, there are reasons to think that the potential beneficial impact on capital market development would be modest:

²² Cameron (2007)

²³ Cameron et al (2007)

²⁴ Capital Market Development Task Force (2009a)

²⁵ For example, Boutchkova & Megginson (2000) found that each privatization raises the stock market liquidity (proxied by the turnover ratio) by 2.3 percent in the next year and by further 1.7 percent the year after that.

²⁶ Kerr et al (2008) analysed New Zealand's privatisation programme from 1986-1999 and found that "privatisations have significantly increased share market capitalisation, liquidity and share ownership."

²⁷ The lack of equity research on smaller New Zealand firms reduces the information available to potential investors resulting in lower liquidity for those firms.

- *Materiality.* The commercial portfolio is equivalent to 30% of the NZX's market capitalisation. However, listing a small subset of the portfolio would have much smaller impact. For example, 25% of all three electricity SOEs would increase NZX's capitalisation by around 5%.
- *Diversity.* The SOE portfolio is dominated by the electricity sector, but 'electric' is the single largest sector currently listed on the NZX (including Contact, Infratil, Trustpower, and Vector). Diversification benefits would be much more apparent if some agricultural companies were listed, for example.
- *Complementary measures.* Listing some of the commercial portfolio would provide some benefit on its own, but the benefits would be much greater as part of an overall package. The Capital Markets Development Taskforce made a number of recommendations, such as reviewing the Securities Act, as well as listing SOEs. Each recommendation is relatively small on its own, but as a package it is more significant.
- *Risk of de-listing.* If the majority of a privatised SOE were bought by foreigners, then it would be less likely to list or remain listed on New Zealand share market, especially if foreign ownership is concentrated.²⁸ Other New Zealand evidence also suggests foreign takeovers are significant, if not the dominant driver of delistings.²⁹ (These arguments are also covered under 'hollowing out' above.)

On balance, we think there would be modest economic gains.

75. We think there would be modest economic gains through capital market development from listing some of the Crown's current commercial portfolio, mainly through increased size, depth and liquidity of the New Zealand stock market (diversity benefits would be low). We think the gains would only be modest because the more important drivers of capital market development are domestic savings and the broader tax and regulatory environment, as identified in the Capital Market Development Taskforce report. Listing some SOEs without other complementary measures would limit the benefits.³⁰
76. The quantum of any gains would depend in large part on which SOEs were listed (e.g. size and attractiveness to the market), the proportion listed, and how the listing was implemented (e.g. involvement of retail investors). The certainty about any gains would be greater the greater the likelihood that the company would remain listed – targeted ownership restrictions could make this outcome more likely.

²⁸ Capital Market Development Taskforce (2009b)

²⁹ Lawrence et al (2009) find that "less than half of the delistings [in the dataset] are as a result of a takeover by an offshore company" and that "foreign companies tend to take over larger companies on average than do local New Zealand companies".

³⁰ One complementary measure, KiwiSaver, is in train and is generating increasing demand for New Zealand equities over time as KiwiSaver funds build up.

III. INSTITUTIONAL OPTIONS

77. This section summarises the main institutional options and design choices.

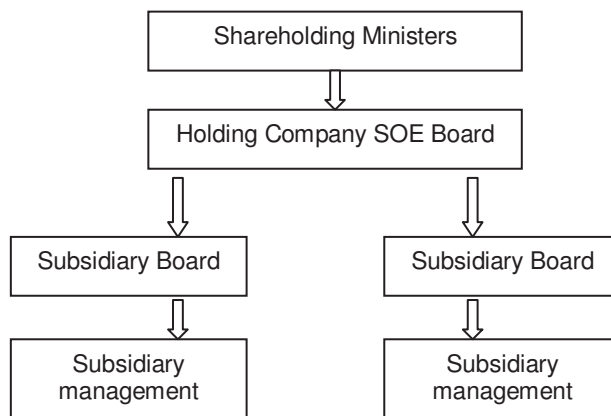
Current model

78. The current commercial portfolio is a mixture of three main ownership models, as summarised below:

	SOEs	Air NZ	Airports
Legislative basis	State-Owned Enterprises Act 1986	Companies Act 1993	Council-controlled trading organisations under the Local Government Act 2002
Principal objective	To be a successful business, i.e. be as profitable and efficient comparable businesses not owned by the Crown; be a good employer; exhibit social responsibility.	<i>[company dependent]</i> Duty of directors to act in good faith and in the best interests of the company.	To achieve the objectives of its shareholders, both commercial and non-commercial; be a good employer; exhibit social responsibility; conduct affairs in accordance with sound business practice.
Crown ownership stake	100%	75%	25-50%
Ownership approach	Scope for shareholding Ministers to be relatively involved in strategic company decisions, if they so choose. In practice, rare for Ministers to choose to be involved, rather than just being informed.	Shareholding Minister acts in a way akin to a minority shareholder, with minimal control exerted.	Local government, as majority shareholder, tends to take a more involved role than the Crown.
Board appointments	Shareholding Ministers appoint board.	Board recommends directors and shareholding Minister approves appointments.	Board appointments shared by owners in accordance with percentages in constitution. These may differ from ownership percentages.

Holding Company³¹

79. A holding company, whether in the public or private sectors, has common characteristics. It is a company that owns shares in other companies, and is non-operating but rather manages the holdings or the portfolio from a financial or strategic perspective. The structure is shown below:



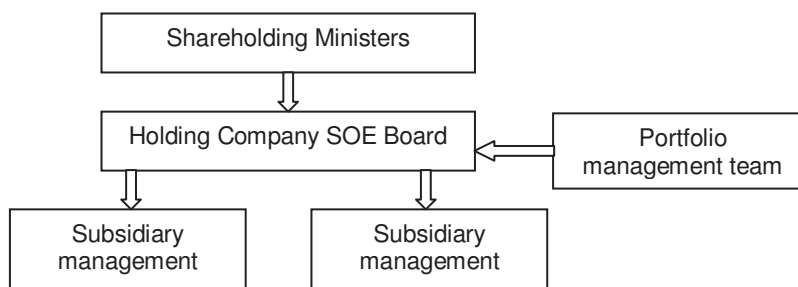
80. The main benefits and costs of a holding company are summarised below, for a holding company over (i) all/most SOEs, and (ii) small SOEs only:

Holding company	Small SOE holding company
Benefits	
<ul style="list-style-type: none"> providing a parent Board that is: highly skilled at commercial decision-making, has the ability to intervene directly in the subsidiary SOE, and has a stronger incentive to maximise value joining together a number of possibly disparate organisations, to achieve economies of scale or risk diversification introducing an additional layer of 'filtering', preventing undue interference in operational matters and enforcing the profit focus providing a structure that allows effective reallocation of resources across the portfolio 	<ul style="list-style-type: none"> some gains <ul style="list-style-type: none"> ability to get strong profit focus across small SOEs (tempered because profits from small SOEs make up only small portion of total SOE profit) structure very good for allowing reorganisation/restructuring as required some gains – good gains in terms of risk diversification as allows diversification across portfolio, rather than by individual SOE; limited economies of scale because of disparate nature of companies some gains – allows Minister to focus on bigger SOEs and avoid involvement in small SOEs mixed – may allow better resource allocation and more discerning investment, but may also encourage greater investment through retention of dividends within parent to reallocate across portfolio (need strong dividend policy)

³¹ This section draws heavily from an internal Treasury paper: ([SSP 2001 Holding co:36291](#)).

Costs	
<ul style="list-style-type: none"> the additional layer can also obscure performance of individual SOEs (through aggregation of results), and frustrate attempts to (appropriately) intervene diversification can reduce/remove the option value provided by limited liability (ie the option to isolate risk and place an SOE in receivership) there is a risk of performance being obscured and poor decision-making due to cross-subsidisation the problems of incentivising the parent Board remain the subsidiary Boards become 'second-tier', increasing the difficulty of recruitment 	<ul style="list-style-type: none"> not major cost, enforce segment reporting – costs should be outweighed by parent Board's stronger commercial focus which it passes onto subsidiary SOEs risk needs to be managed by avoiding cross-financing; may even improve receivership option value as subsidiary further away from Crown not major cost due to diverse nature of subsidiary SOEs, suggesting few joint functions small risk of putting all eggs in one basket small risk – problem is likely to arise, but on other hand the subsidiary Boards could be leaner/more focussed, and even include some of management team

81. An alternative structure, based more on a private equity model, would be not to have subsidiary Boards and instead used an outsourced management team to provide support to the main Board.

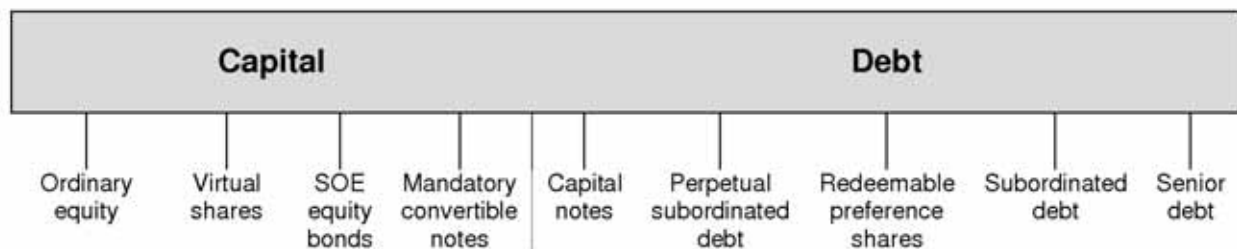


82. Overall, our current view is that we consider the benefits of a holding company model do not clearly outweigh the costs. In particular, it is not clear to us that the strongest potential benefits (namely greater political distance and greater ability to shift capital between subsidiaries) would actually eventuate in practice.³²

³² We think it is more likely that the public will still see the Government as ultimate owner and therefore Ministers as accountable. Aspects of holding companies in current arrangements include Kiwibank, a subsidiary of NZ Post, and the retailing arms as subsidiaries of the electricity generators. Various events in recent years suggest to us that Ministers still retain accountability despite the additional distance (perhaps most notably the disconnection by Mercury Energy and subsequent death of Folole Muliaga in 2007).

Financing instruments³³

83. A wide range of financing instruments exists. Generally, instruments have a range of features relating to voting rights, return rates and risk, seniority and principal repayment. For a limited liability company such as an SOE, instruments range from ordinary equity (which confers variable dividend payments, a right to the firm's residual assets on wind-up, and usually voting rights) to senior debt (which confers set interest payments and first right to principal repayment on wind-up)
84. Other instruments have features that make them more equity-like or more debt-like. Redeemable preference shares, for example, have features of equity but are usually ultimately more debt-like as they earn specific rates of interest and principal is repaid through redemption. However, they can be structured to be more equity like – for example, by linking redemption to the wind up of the company, and linking dividends to the dividends paid on ordinary shares. An important feature of quasi-equity for SOEs is its tradability – quasi-equity can trade on the stock exchange and is therefore likely to provide important information about the market's perception of the SOE's value.
85. The range of instruments is summarised below. Some SOEs already have some debt-like instruments, such as Kiwibank's tradable perpetual preference shares and some listed bonds.



Note that where each instrument sits on the debt-equity continuum depends on structure eg redeemable preference shares can be more like debt or more like equity.

86. The potential benefits of any of the instruments are essentially better company performance (e.g. through improved monitoring) and risk transfer. To achieve such benefits, financial instruments need to be as equity-like as possible – ideally ordinary equity. If ordinary equity were not possible for whatever reason, then equity-like instruments would be a second-best option. A secondary benefit is the fiscal impact of company financing from a party other than the Crown.

³³ This section draws heavily on an internal Treasury paper: [\(SOEs and financial instruments:799553\)](#).

Partial or full privatisation

Main advantages and disadvantages

87. Either partial or full privatisation would bring the pros and cons identified in Section II to a greater or lesser extent. In particular:
- *Economic efficiency.* Company performance would be likely to improve relatively less for partial compared with full privatisation, but with improvement over full Crown ownership.
 - *Fiscal position.* In general, a trade sale would be likely to provide a higher sale price.
 - *Capital market development.* Such benefits would only occur through a listing and would depend on quantum.
 - *'Strategic' objectives & preventing 'hollowing out'.* These concerns would be significantly reduced under partial privatisation, since, by definition, the Crown continues to hold a significant (perhaps controlling) stake.
88. In addition, partial privatisation would bring some particular downsides compared with either 100% Crown ownership or full privatisation:
- *Residual liability.* Despite the reduced ownership stake, the Crown would probably continue to bear residual liability through the perception of an implicit Crown guarantee, i.e. there would not be true risk transfer to the private owners. At the same time, the Crown would have reduced levers to act.
 - *Shareholder dynamics.* Potentially difficult interactions that could arise include: private shareholders appointing Board members that have different views than those appointed by Ministers (which may be positive for company performance if the privately-elected Board member is more commercially driven), or a dominant minority shareholder putting pressure on Ministers for regulatory change, or directors' fees not being comparable with other private sector companies.
89. Despite these downsides, we still think partial privatisation would be likely to offer benefits over 100% Crown ownership. But the reduced benefits and additional risks (compared with full privatisation) suggest partial privatisation should generally be restricted to circumstances where full privatisation is off the table.

Key design choices (partial or full privatisation)

Method of sale

90. The main methods of sale are:

- *Trade sale* – sale by competitive tender or negotiated with a preferred buyer. The main advantage is maximising competitive tension and the potential value of the asset. A buyer would also pay a premium if the interest acquired offered some degree of control.
- *Initial Public Offering (IPO)* – sale through an offer of shares to the public, usually split between retail and institutional investors. The main advantages are wide public participation and capital market development. The main disadvantage is significant compliance and regulatory aspects, and the loss in value compared with a trade sale. An important consideration would be the capacity of New Zealand capital markets to absorb new listings: for the larger SOEs, any IPO would need to be done in tranches.
- *Combined trade sale/IPO* – sale with a trade sale followed by IPO, or vice versa. This approach tries to balance the advantages achievable under each method separately.
- *Management buyout (MBO)* – the staff or management acquires all or part of the shares. This approach is most suited to smaller, specialised, or developing companies where information about prospects is uncertain or very technical.

91. Another consideration as part of the sale process could be whether to provide a discount (or even give away shares) to current customers or to domestic investors generally. The main advantage would probably be greater public support for the sales process, while the main disadvantages would be the loss in sale price to the Crown and the loss of potential spillover benefits that can accompany FDI.

[withheld s9(2)(d), (f)(iv) & (g)(i)]

[withheld s9(2)(d), (f)(iv) & (g)(i)]

Ownership restrictions

92. As part of the sale, ownership restrictions that could be imposed are:³⁵

- *Total foreign ownership cap* – a limit of (say) 49.9% foreign ownership. This restriction prevents overall majority foreign ownership of the company, but can be difficult to enforce (e.g. are New Zealand funds managed by a foreign fund manager counted?).
- *Individual [foreign] shareholder cap* – a limit of (say) 10% or 19.9% for any single shareholder. This restriction limits the control an individual shareholder can influence.
- *Specific restrictions* – restrictions on, for example, the nationality of the board/CE, or the location of certain activities, company registration, or primary share market listing. These restrictions target specific activities or functions that are considered.

93. Restrictions on total foreign ownership and individual shareholder ownership are currently in place for both Air New Zealand and Telecom.
[withheld s9(2)(d), (f)(iv) & (g)(i)]

94. Any restrictions will raise the cost of capital to the company. For example, Air New Zealand 'A' shares, which were restricted to New Zealanders only, traded at an average 25% discount to Air New Zealand 'B' shares over the period 1994-2001. Restrictions that reduce the threat of takeover are also likely to reduce pressure on the Board and management.

95. We are sceptical of the benefits from such restrictions and would therefore advise against imposing any restrictions on sale. If the Government wished to impose restrictions, we would recommend targeting something specific (such as primary share market listing to target capital market development) and/or a restriction that imposes least cost on the company (which may be an individual shareholder cap at a high level, such as 20%).

Ownership level and governance [partial privatisation only]

96. For a partial privatisation, key design choices include:

- *Ownership level* – e.g. a simple majority (51%), super-majority to pass special resolutions (75%), minority.
- *Governance arrangements* – e.g. who appoints Board members, monitoring approach taken by COMU

³⁵ For two recent pieces on ownership restrictions, see [T2009/1382 - Overseas Investment Act review: Strategic Assets](#), and an internal Treasury paper in relation to Fonterra, ([Ownership and Control:1751185](#)).

[withheld s9(2)(d), (f)(iv) & (g)(i)]

IV. COMPARATIVE INSTITUTIONAL ANALYSIS

97. This section makes assesses the likely effects of different institutional arrangements for companies in the Crown's commercial portfolio. The analysis is based around four groups of companies with similar characteristics:³⁷
- electricity generators (Meridian, Mighty River Power, Genesis);
 - natural monopolies (Transpower, Airways);
 - other big companies (Air NZ, Solid Energy, Landcorp, NZ Post/Kiwibank, KiwiRail);
 - other small companies (Kordia, QV, MetService, ACP, Learning Media, AsureQuality, regional airports).
98. For each group, a number of institutional options are considered (drawing on Section III), essentially making a spectrum from full public to private ownership:
- the status quo SOE model;
 - an enhanced status quo SOE model, including
 - different governance options (e.g. a holding company); and/or
 - increased external financing involvement (e.g. equity bonds);
 - partial privatisations (noting that this is the status quo for Air NZ and regional airports);
 - full privatisations but with ownership restrictions; to
 - full unrestricted privatisations.
99. For each combination of group and institutional option, we assess the likely impact (drawing on Section II) on:
- economic efficiency;
 - fiscal position;
 - capital market development; and
 - risks, capturing concerns about monopoly characteristics, hollowing out, or 'strategic' objectives, and also opportunity costs.

³⁷ This analysis could easily be extended by, say, undertaking a more thorough assessment company-by-company. This assessment should therefore be considered 'initial'.

Electricity generator/retailers: Meridian, Mighty River Power, Genesis

Nature of the market: Small number of players, but reasonably competitive. Non-tradeable.

Best form of sale: IPO, probably in tranches.

Issues regarding sale: Current electricity reforms (including asset swaps) – probably 2012 at earliest.

	Status quo SOE model	Enhanced status quo (e.g. HoldCo, equity bonds)	Partial privatisation	Full privatisation (restrictions)	Full privatisation (no restrictions)
Possible state of the world in 10 years' time	Continued good growth in total shareholder return, driven by value growth. Modest expansion (e.g. some increase in offshore activity).	Some capital moved between companies to capitalise on opportunities.	Possible cornerstone stakes by energy multinationals. Greater dividend payments. Greater expansion.	Small cornerstone stakes by energy multinationals. Greater expansion.	Large cornerstone stakes by energy multinational. Greater expansion. Possibly delisted.
Economic efficiency	No material change	Small improvements	Small to moderate improvements	Small to moderate improvements	Moderate improvements (given very large size)
Fiscal objectives	None	Some (for equity bonds)	Small to moderate	Small to moderate	Moderate
Capital market development	Minimal, with some possibility of subsidiary listings	Minimal, with some possibility of subsidiary listings	Moderate impact (Listing 25% or 50% would increase market cap by 5% or 10%, respectively)	Moderate to high impact (Listing all 3 would increase market cap by 20%)	Moderate to high impact (Listing all 3 would increase market cap by 20%)
Risks	Main risk is opportunity cost of Crown ownership.	Main risk is opportunity cost of Crown ownership. Risk of less than anticipated performance improvements.	Main risks include the perception of an implicit guarantee and limited ability to intervene in difficulty.	No risk of foreign majority ownership (by definition). Low risk of monopoly profits privatised.	Majority foreign ownership likely, with possible implications for listing. Low risk of monopoly profits privatised.

Natural monopolies: Transpower, Airways

Nature of the market: Regulated monopolies.

Best form of sale: IPO for Transpower, probably in tranches. Trade sale or IPO for Airways.

Issues regarding sale: Transpower: current electricity reforms – probably 2012 at earliest.

	Status quo SOE model	Enhanced status quo (e.g. HoldCo, equity bonds)	Partial privatisation	Full privatisation (restrictions)	Full privatisation (no restrictions)
Possible state of the world in 10 years' time	Companies largely as they are now.	Companies largely as they are now.	Possible cornerstone stakes by energy/air multinationals.	Small cornerstone stakes by energy/air multinationals.	Large cornerstone stakes by energy/air multinational. Greater expansion. Possibly delisted.
Economic efficiency	No material change	Small improvements possible	Small improvements (Given regulation, performance unlikely to change materially)	Small improvements (Given regulation, performance unlikely to change materially)	Small improvements (Given regulation, performance unlikely to change materially)
Fiscal objectives	None	Some (for equity bonds)	Small (given small size)	Small (given small size)	Small (given small size)
Capital market development	Minimal	Minimal	Small impact (given small size)	Small impact (given small size)	Small impact (given small size)
Risks	Main risk is opportunity cost of Crown ownership.	Main risk is opportunity cost of Crown ownership. Risk of less than anticipated performance improvements.	Main risks include the perception of an implicit guarantee and limited ability to intervene in difficulty.	No risk of foreign majority ownership (by definition). Some risk of monopoly profits privatised.	Majority foreign ownership likely, with possible implications for listing. Some risk of monopoly profits privatised.

Other big companies: Air NZ, Solid Energy, Landcorp, NZ Post/Kiwibank, KiwiRail

Nature of the market: Competitive markets. Tradeable: Air NZ, Solid Energy, Landcorp. Non-tradeable: NZ Post/Kiwibank, KiwiRail.

Best form of sale: IPO, probably in tranches. Except Landcorp: sell down likely to be better.

Issues regarding sale: Landcorp: Treaty processes. NZ Post: structure/Kiwibank growth. KiwiRail: not profitable in medium term. Air NZ: international agreements.

	Status quo SOE model	Enhanced status quo (e.g. HoldCo, equity bonds)	Partial privatisation (NB: Air NZ = status quo)	Full privatisation (restrictions)	Full privatisation (no restrictions)
Possible state of the world in 10 years' time	Performance likely to be mixed. All face significant challenges, e.g. carbon (Air NZ, Solid, Landcorp), declining market (Post), viability (KiwiRail), capital growth (Solid, Kiwibank).	Potentially greater ability to shift capital to faster expanding companies, i.e. Solid/Kiwibank.	Possible cornerstone stakes by energy/air/other multinationals. Greater expansion likely for Solid/Kiwibank.	Small cornerstone stakes by energy/air/other multinationals. Greater expansion likely for Solid/Kiwibank. Some head office functions moved offshore.	Large cornerstone stakes by energy/air/other multinationals. Greater expansion likely for Solid/Kiwibank. Some head office functions moved offshore for Solid. Possibly delisted.
Economic efficiency	No material change	Small improvements	Small to moderate improvements	Small to moderate improvements	Moderate improvements (given large size)
Fiscal objectives	None	Some (for equity bonds)	Small to moderate	Small to moderate	Moderate
Capital market development	Minimal	Minimal	Small to moderate impact	Small to moderate impact	Small impact
Risks	Loss of value to the Crown for some companies if don't overcome challenges. Opportunity cost of Crown ownership.	Main risk is opportunity cost of Crown ownership.	Main risks include implicit guarantee and limited ability to intervene in difficulty.	No risk of foreign majority ownership (by definition).	Majority foreign ownership likely, with possible implications for listing.

Other small companies: Kordia, QV, MetService, ACP, Learning Media, AsureQuality, regional airports

Nature of the market: Airports: some local monopoly power; scope for regulation under Part 4 of the Commerce Act. Others: competitive markets.

Best form of sale: Airports: sale to local government/iwi, plus IPO. Others: trade sale or IPO, depending on objectives.

Issues regarding sale: Airports: Rights of first refusal for local government/iwi. AsureQuality: international commitments.

	Status quo SOE model	Enhanced status quo (e.g. HoldCo, equity bonds)	Partial privatisation (NB: airports = status quo)	Full privatisation (restrictions)	Full privatisation (no restrictions)
Possible state of the world in 10 years' time	Companies largely as they are now [withheld s9(2)(g)(i), (b)(ii) & s9(2)(g)(ii) of change.	Potentially greater ability to shift capital to companies in (b)(ii) of change.	Probably greater change/expansion for many companies.	Probably greater change/expansion for many companies.	Potential for significant innovation/change by new owners [withheld] Possible stagnation in local govt ownership (airports).
Economic efficiency	No material change	Small improvements (given small size)	Small improvements (given small size)	Small improvements (given small size)	Small improvements (given small size)
Fiscal objectives	None	Some (for equity bonds)	Small (given small size)	Small (given small size)	Small (given small size)
Capital market development	Minimal	Minimal	Small (given small size) None if trade sale	Small (given small size) None if trade sale	Small (given small size) None if trade sale
Risks	Potential for loss of value to the Crown for Kordia, if doesn't overcome challenges. Opportunity cost of Crown ownership.	Opportunity cost of Crown ownership.	Main risks include the perception of an implicit guarantee and limited ability to intervene in difficulty.	No risk of foreign majority ownership (by definition).	Majority foreign ownership likely.

V. CONCLUSIONS

Full private ownership would probably deliver moderate economic benefits...

100. We think full private ownership for all companies over the medium term would be likely to result in moderate economic benefits compared with alternative institutional arrangements. By 'moderate', we mean that the likely impact would be much less substantial than (say) tax reform or policy measures to encourage saving, but would be much more substantial than many other economic policies (e.g. economic development assistance to firms).
101. We do not find any of the arguments for continued Crown ownership particularly convincing, and for some companies there are particular commercial challenges and risks that are likely over the medium term. If the starting position were no Crown ownership, we would strongly advise against nationalisation. But, on the other hand, the arguments against continued Crown ownership are different from and not as compelling as they were, say, in the 1980s and 1990s.

...but the benefits would differ across the portfolio.

102. The likely benefits from private ownership would differ across the portfolio:
- *Electricity generator/retailers.* Given their large size, scope for supporting capital market development and fiscal objectives are the highest in the portfolio. Size also makes any economic efficiency improvements material, though the relatively competitive nature of the market suggests these could be limited. The risk of functions being moved offshore seems low for generation itself (given the nature of the activity), but possible for head office functions depending on degree of foreign ownership.
 - *Natural monopolies.* Given the regulatory environment both companies already operate in, any economic efficiencies are likely to be small. The size of Transpower in particular would support fiscal and capital market development objectives. We don't see a major concern from private ownership simply because of natural monopoly characteristics, though there is a small risk of privatising monopoly profits.
 - *Other big companies.* All of these companies face specific challenges that could pose risks to continued Crown ownership. The possibility for expansion and the benefit from outside expertise are both arguably higher than for the electricity generators.
 - *Other small companies.* None of these companies is particularly material and does not feature strongly on any of the criteria discussed. Perhaps the strongest argument for private ownership is to reduce the time spent by Ministers and officials on these companies.
103. It is worth emphasising that a strong and stable regulatory environment is an important pre-requisite to considering privatisation.

Stopping short of full privatisation would still offer benefits.

104. The benefits would be reduced for partial privatisation and/or some ownership restrictions, but, on balance, we think such institutional arrangements would still offer benefits compared with full public ownership. The lower level of foreign ownership in such alternatives would also significantly mitigate any concerns over delisting or functions moving offshore.

The strength of the case needs to be weighed against strong public views...

105. We acknowledge that in the face of strong concerns by some New Zealanders, the case should be particularly strong to recommend ongoing reform. We think the case is particularly strong for ongoing tax reform, for example, but the case is comparatively much weaker for private ownership of the Crown's commercial portfolio. A risk of moving too far is loss of public support for ongoing reform or even policy reversal later through renationalisation.

...but private ownership would reinforce the Government's policy direction.

106. Significantly improving New Zealand's economic performance is an ambitious goal and requires even modest improvements across a range of policy areas. Signalling also matters: ongoing structural reform sends a signal to the international community that New Zealand is serious about its economic agenda.
107. Introducing private ownership to SOEs would also support and reinforce a number of policy goals:
- better balance sheet management, by applying additional commercial discipline for performance of a significant part of the balance sheet;
 - fiscal consolidation, by releasing capital that could be recycled elsewhere, supporting the general need for fiscal consolidation;
 - capital market development and saving, by providing investment opportunities for savers (other than housing), and deepening domestic capital markets.

A medium-term strategy could reflect the differing objectives...

108. A possible mix of ownership models in 5-10 years' time, and the underlying rationale and strategy, is described on the table below:

Ownership form	Rationale	Companies
Fully privatised and publicly listed	Operate in competitive markets. New Zealanders' concerns low to moderate, and could be mitigated via ownership restrictions. Significant potential economic, fiscal, and capital market gains. Specific commercial risks from ongoing Crown ownership.	Air NZ Solid Energy Landcorp Kiwibank
Fully privatised, probably by trade sale	Operate in competitive markets. New Zealanders' concerns low. Low residual risk to the Crown from private ownership. Economic/fiscal gains relatively small, but worth having.	Kordia MetService QV Regional airports
Partially privatised and publicly listed (majority or minority)	Generator/retail electricity market is competitive, but some regulatory concerns remain. New Zealanders' concerns moderate, but mitigated by Crown stake. Significant potential fiscal and capital market gains, and some economic gains.	Meridian Mighty River Power Genesis
SOEs	Specific characteristics make private ownership more difficult. Potential economic/fiscal gains very low.	Animal Control Products Learning Media AsureQuality
SOEs	Competition limited and/or residual risks to the Crown would remain (e.g. in event of failure).	Transpower Airways NZ Post (ex Kiwibank) KiwiRail

...and a pragmatic first step could be a package that highlights different benefits.

109. As an illustration only, a sequenced approach across a combination of companies utilising different approaches depending on the primary objective could look like:

- a partial listing of (say) 25% of one or more of the gentailers, with the emphasis on fiscal objectives and capital market development;
- a partial listing of (say) 25% of Solid Energy, perhaps just focusing on its core business, with the emphasis on economic efficiency and company growth while moderating the fiscal impact;
- issuing equity bonds for Kiwibank to fund its growth, with the emphasis on company growth while moderating the fiscal impact, and in a way that retains full Crown voting rights; and
- full sale of Kordia by trade sale and minority shares in regional airports to local government, with the emphasis on reducing the Crown's commercial risk exposure and allowing for greater company innovation and growth.

110. It should be emphasised that any significant sales process requires significant effort and has a number of practical considerations that are beyond the scope of this paper.

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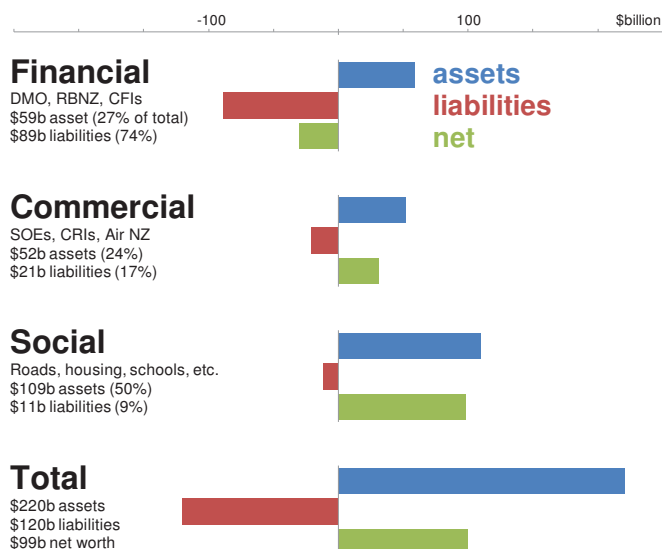
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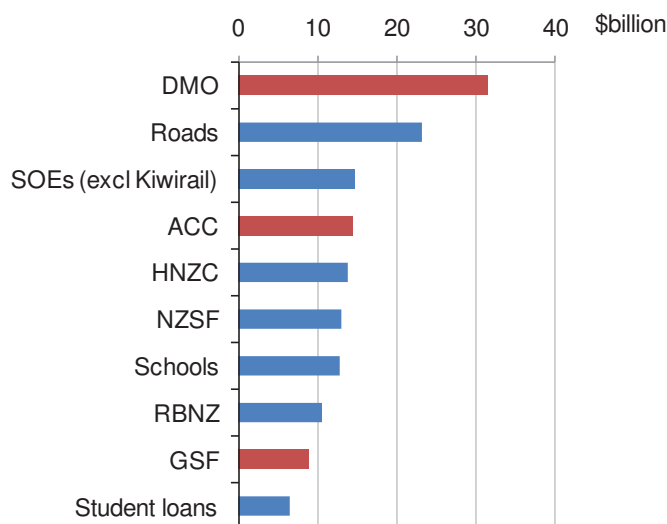
ANNEX I: SNAPSHOT OF THE BALANCE SHEET AND COMMERCIAL PORTFOLIO

Overall Crown balance sheet

Breakdown by type of asset/liability



Top 10 components

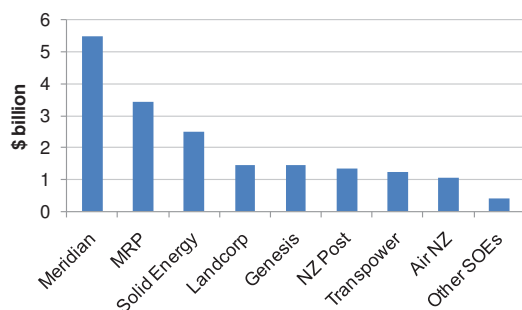


Source: Crown Financial Statements, as at 30 June 2009

Bar represents net value: blue = net asset;
These components represent 68% of total assets and 50% of total liabilities.

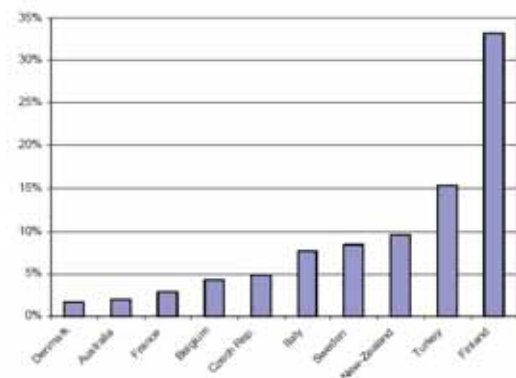
Commercial portfolio

Commercial value

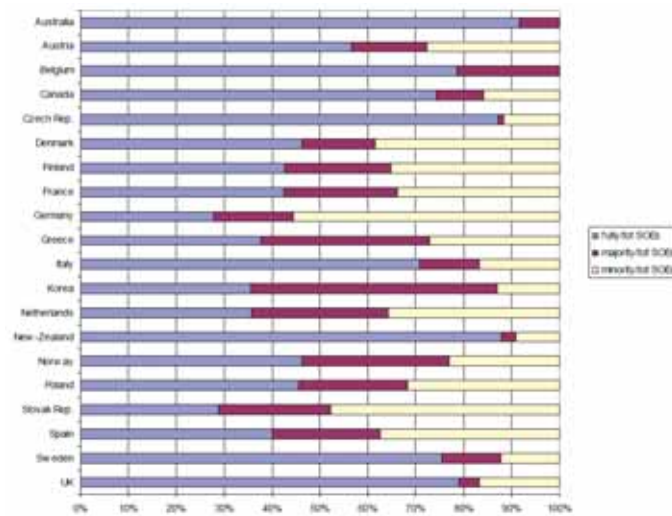


Source: Company SCIs, 2009/10

Economic weight (Equity/GDP)



Ownership structure



Source: OECD Comparative Report on Corporate Governance of State-owned Enterprises (2003)

ANNEX II: EXTENDED DISCUSSION OF ECONOMIC EFFICIENCY IMPACT

The empirical literature finds strong efficiency gains from privatisation...

111. The OECD³⁸ summarised the impact of privatisation on corporate efficiency and performance:

Despite the data and methodological difficulties noted above there is overwhelming support for the notion that privatisation brings about a significant increase in the profitability, real output and efficiency of privatised companies. The results on improved efficiency are particularly robust when the firm operates in a competitive market, and that deregulation speeds up convergence to private sector levels. The studies also report that:

- Profitability increases more and productivity increases less in regulated or less competitive sectors.
- Fully privatised firms perform better than partially privatised ones. Cross-country studies report smaller profitability gains and productivity changes as compared to fully privatised ones.

112. Similarly, a 2005 World Bank conference paper³⁹ summarised a large number of empirical studies across developed and developing countries:

The results of these studies show that privatization usually results in increased productivity but also leads to a reduction or no change in employment. There is also a strong evidence that privatization to foreign investors results in higher productivity gains. Privatization brings higher benefits to the firms wherever the appropriate institutions are in place. One should emphasize that tens of studies on developed, developing and transition countries using very diverse methodologies seem to yield very similar results.

...and partial privatisation can achieve lower magnitude gains...

113. The OECD and World Bank papers quoted above found that partial privatisation also generally leads to efficiency gains compared with public ownership, but at lower magnitude than for full privatisation.
114. One study that looked specifically at partial privatisation is Gupta (2005), which found that partial privatisation of Indian state-owned enterprises had a positive impact on profitability, productivity, and investment. But not all studies find positive impacts: for example, a study by Li and Xu (2004) across a number of countries found substantial benefits from full privatisation in the telecommunications sector, but no significant impact from partial privatisation.

...though the cases in the literature tend to be very poor performers.

115. The theme in the literature is one of state enterprises that are highly indebted, inefficient, over-staffed, and loss-making enterprises, protected from competition, deliberately under-pricing their products for political reasons, and imposing significant pressure on government finances. Fiscally strained governments are unable to provide capital to the state enterprises for maintenance or for expansion, leading to a lack of access to services for poor and rural consumers. Privatisation is argued to reverse many, if not all, of these negative outcomes.

³⁸ OECD (2003)

³⁹ Guriev & Megginson (2005)

116. For example, consider the following quotes⁴⁰:

[Inefficient state enterprises led to] ... financial losses that in acute cases amounted to as much as 5 to 6 percent of gross domestic product annually.

La Porta and Lopex-de-Silanes ... conclude that state enterprises went from being highly unprofitable before privatisation to being profitable thereafter

In Brazil ... before privatisation, the ratio of profits to net assets was negative, averaging -2.5% and falling to -5.4% toward the end. The large steel mill, which had been incurring heavy losses, became profitable and investment increased dramatically.

Losses in the Chilean electricity sector ... more than halved after privatisation . . .

In Sri Lanka ... estimated redundancy in eight of the largest firms (in electricity, railways, shipping, sugar, cement, and petroleum) averaged 53 percent

Prior to privatisation, Argentine railways, with more than 90,000 employees, had a wage bill equivalent to 160% of the firm's total revenues

117. Various cross-cutting studies involving the privatisation experiences from different countries at different levels of development, and different industries and market structures, produce clear statistical evidence of improved performance. Boubakri and Cosset (1998) found profitability increased by 124% on average, real sales per employee increased by 25% on average, net income per employee increased by 63%, capital investment spending increased by 126%, employment increased by 1.3%, and there was a decline in leverage.

Changing ownership may not necessarily be the critical factor...

118. Some studies have assessed the possibility that the performance of state enterprises could have been achieved without a change of ownership if reform measures could be implemented while retaining government ownership. For example, Omran (2001) assessed a mix of privatised firms and firms that remained state owned and found that all of these firms had improved performance irrespective of ownership. In his view, general policy liberalisation was a more important driver of performance than ownership changes.

119. Dewenter and Malatesta (1997) and Hodge (2000) argue that many performance improvements occur well before privatisation. Looking at a range of countries they were able to observe that governments had undertaken a range of reforms in the run-up to privatisation such as management changes, layoffs, and enhanced competition, as a way of preparing the assets for sale. The question becomes whether these could have been done without the planned privatisations.

120. Galal (1994) estimated the welfare consequences of privatisation of 12 mostly infrastructure enterprises. His analysis included a more sophisticated comparison than most studies by comparing the pre- and post-privatisation performance of the enterprises against a hypothetical scenario of performance under an improved form of state ownership. His conclusion, however, was still that divestiture substantially improved economic welfare in 11 of the 12 cases

⁴⁰ All quotes are from Kikeri & Nellis (2004).

with a dramatic increase in investment, improved productivity, more rational pricing policies, increased competition, and effective regulation. Of course, his hypothetical scenario may not be a good reflection of how New Zealand's SOE framework has operated.

...but the literature is sceptical at the ability to reform without privatisation.

121. While the reforms that are necessary to improve performance are generally clear, the literature is sceptical at governments' ability to make these changes to assets they own. Governments find it difficult to apply the full package of reforms needed (exposing state enterprises to competition, requiring them to access private capital markets for investment funds, creating a market for managers, isolating the process from political interference) and to leave the reform package in place for long enough to have an effect. Generally there would be renewed political interference. Governments are reluctant to allow insolvent state enterprises to fail and go out of business. In the absence of this there is often little pressure on government officials, managers and workers to reform.
122. Facing state enterprises with competition may generate a significant portion of the potential efficiency gains but the literature argues that governments' may be unwilling to do this without a link to privatisation. Privatisation and pro-competition policies appear to be mutually reinforcing. Ownership change is not enough but when ownership is combined with institutional reforms – removing barriers to entry and exit, improving prudential regulation and corporate governance, hardening budget constraints, and developing capital markets – progress is much greater.

The literature may be less relevant to New Zealand's situation.

123. While the literature appears unequivocal, there are a number of questions that should be considered, such as:
 - How applicable are these results to New Zealand? Is the starting condition of the state enterprises in these studies reflective of New Zealand's state owned enterprises?
 - Is the scepticism in the literature regarding the ability to improve enterprise performance while retaining government ownership reflective of New Zealand's experience?
 - What is the influence of other policy interventions such as regulatory and competition policy? Is ownership actually the main influence of the poor performance of these entities?
124. Below, we discuss New Zealand's experience with its SOE framework, including the impact of regulatory and competition policy reforms. It indicates that there is reason to believe that the efficiency gains from privatisation promised by the literature may be overstated in New Zealand's case.

Past New Zealand privatisations appear to have out-performed the market...

125. One measure of the success of past privatisations is how the companies have performed. International evidence consistently finds that privatisation IPOs significantly outperform their domestic markets in the long run, apparently revealing efficiency gains. More recent evidence suggests that when comparing with a size-adjusted benchmark, the outperformance is significantly reduced.⁴¹
126. For New Zealand, Jarrod Kerr et al (2008) found that “the privatised portfolio had earned significantly higher returns compared with the general market” (adjusting for risk). They also found some evidence of initial underpricing of the IPO, but this did not affect the analysis of long run returns.

...but current SOE performance is not demonstrably poor.

127. Measuring and benchmarking the financial performance of any privately held company is difficult for a number of reasons including the lack of an objective measure of value growth, inadequate or incomplete financial information and limited comparability. While some of these limitations are able to be worked through, many cannot be and the resulting performance analysis and conclusions will always be qualified and subject to wide interpretation.
128. Measuring and benchmarking SOE financial performance is further complicated by the origins of these companies, some having relatively limited life spans and the influences associated with the Crown as owner.
129. Importantly, these caveats are not reasons for ignoring performance analysis - they simply place necessary bounds around the resulting conclusions.
130. Over the last two years CCMAU, Treasury and COMU have relooked at the measurement and analysis of SOE performance. The following summarises these various pieces of work, including one external study⁴².

Total shareholder return

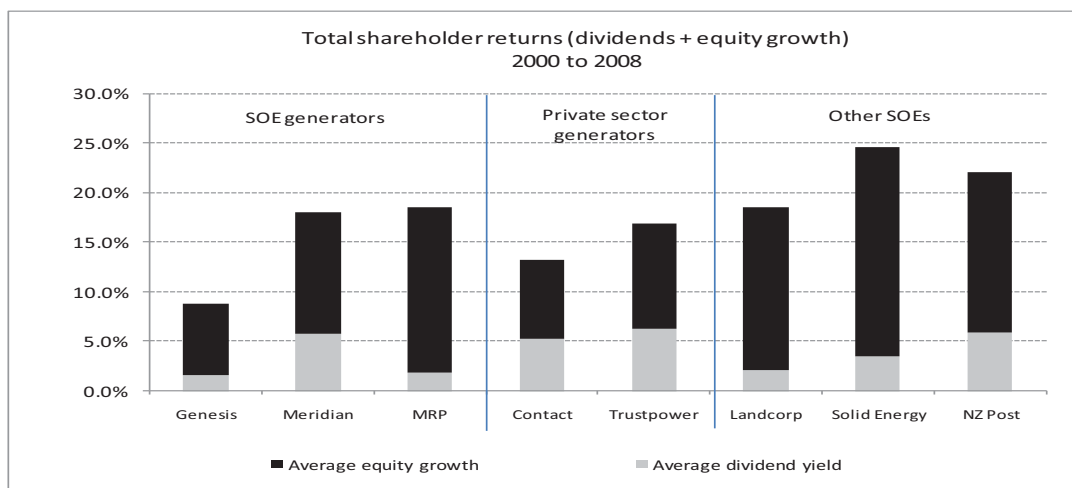
131. This work used accounting data to highlight the deficiency in using Return on Equity (ROE) a single measure of SOE financial performance - the main issue being the failure to recognise capital growth. The main conclusions were:
- although the total energy SOE shareholder returns are comparable to their private sector counterparts, much of the SOE's profits were reinvested rather than distributed. A significant share of the Crown's return from 2000 to 2008 was therefore through unrealisable growth in the equity of the company;

⁴¹ Choi (2010) find that “Consistent with previous studies, we find that privatization IPOs significantly outperform their domestic stock markets in the long run. However, they show less consistent abnormal long-term stock performance relative to their size or size- and [book-to-market equity ratio]-matched benchmark firms.”

⁴² While there have been many statements made about SOE performance from private sector individuals and organisations, we are unaware of any detailed empirical studies over the past two years.

- there is no clear evidence to suggest that financial performance of the SOE companies is better or worse than private sector comparables; and
- using return on equity as a single measure of financial performance can be misleading.

132. The following chart is taken from the analysis:



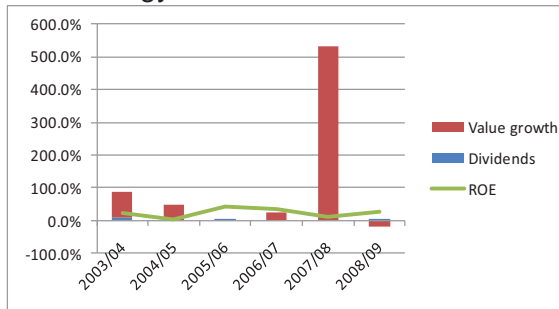
SOE Performance – a value growth perspective⁴³

133. This report highlighted the difficulties in using historic accounting data and the significant variance that exists in using certain returns because of changes to accounting standards, how those standards are interpreted by the companies and the use by the SOEs of different valuation methodologies in their assessment of commercial value.
134. The analysis showed that five of the largest SOEs have generated a total shareholder return (TSR) of 12.9% on average for the past three years. The TSR comprises 2.9% in dividends and a 10% increase in the commercial value of the SOEs. The TSR is significantly greater than the ROE, as the ROE averages 3.7% for the same period. The calculation of TSR also exceeds an estimated target return of 11.5%⁴⁴.
135. The following charts taken from the report illustrate the issue with using the SOE's commercial valuation as changes to the valuation methodology used has significantly impacted the calculated value growth.

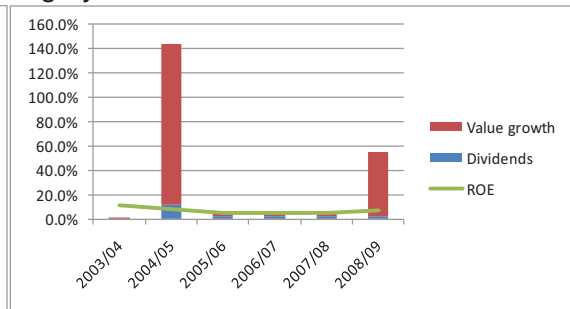
⁴³ [Measuring SOE Performance \(Treasury:1784618\)](#) [Add to worklist](#)

⁴⁴ The estimate was prepared by an independent investment advisor and is for comparison purposes only.

Solid Energy



Mighty River Power



Modified Return on Assets

136. This analysis uses one ratio and excludes the irregular accounting based revaluations while adjusting share capital for inflation. The modified RoA was then compared to the NZX15 –the key conclusions being:

- with the exception of 2009, the NZX15 has always generated a higher average ROA⁴⁵ than the SOE portfolio. The average difference in performance is 4.6%; and
- the SOE portfolio appears to be more resilient to the economic climate, since ROA only dropped 2.8% from 2007. This compares to a 11.2% drop for the NZX15.

137. However, the following limitations were also noted:

- NZ Post is excluded because its subsidiary Kiwibank has \$14.5 billion in debt and is only earning a 0.4% ROA. Therefore, including Kiwibank will drag portfolio return downwards.
- Although some adjustments for abnormal events have been made (e.g. excluding the effect of Meridian's \$653 million gain on the sale of a subsidiary in 2006), they are mostly not adjusted for.
- Failed SOEs such as Timberlands and KiwiRail are excluded, leading to an overstatement in returns.
- The SOE portfolio and the NZX15 are composed of firms from different industries. The SOE portfolio will be more weighted towards electricity generation and the NZX15 towards property and telecommunications.
- SOEs share capital represents a notional transfer value, and often is completely different to true equity value (e.g. Animal Control Products has share capital of \$100).

The Top 200 Study

138. This is an external analysis prepared by the New Zealand Management Magazine of New Zealand's Top 200 Companies. The most recent was prepared by Deloitte for the December 2009 issue of the magazine. Below is a summary that is relevant to the performance of the SOE portfolio:

⁴⁵ ROA = EBIT/average capital invested. Average capital invested excludes the effects of revaluations and adjusts share capital for inflation.

	SOE	Co-operative	Foreign Unlisted	All NZX Listed	Top 200
Revenue Growth <i>2007 to 2009</i>	24.5%	13.1%	3.2%	13.7%	11.5%
Asset Growth <i>2007 to 2009</i>	33.8%	14.3%	0.2%	6.4%	27.6%
EBIT/Revenue <i>2009</i>	12.0%	3.1%	9.3%	12.4%	8.5%
Return on Assets <i>2009</i>	1.9%	2.8%	4.4%	4.4%	7.1%

139. The table shows that SOEs have expanded more rapidly than other organisations and have greater operational efficiencies, but are earning a lower return on assets. Possibly capital intensity lowers their ROA, and SOE expansion projects have not matured to a point where they are profitable. The greater operational efficiency may have something to do with the SOE generators' lower operating cost structure.

DuPont and Altman Z analysis of the generating companies

140. This work used accounting data while noting the lack of a robust and credible valuation metric. It aggregated the largest four energy SOEs (Meridian, MRP, Genesis and Transpower) and compared them to an aggregate of the two main private sector energies companies (Contact and Trustpower). A graphical summary is shown below. The main conclusions were:

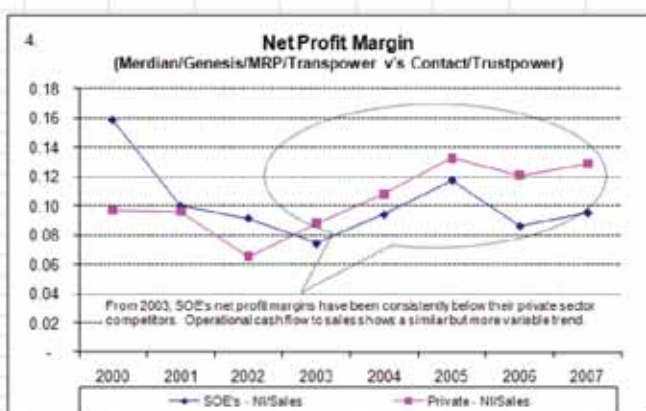
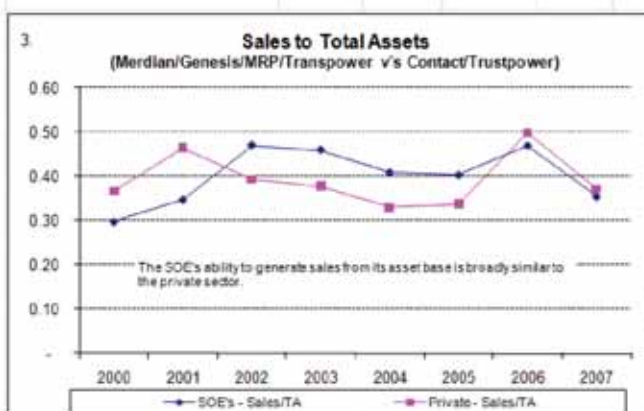
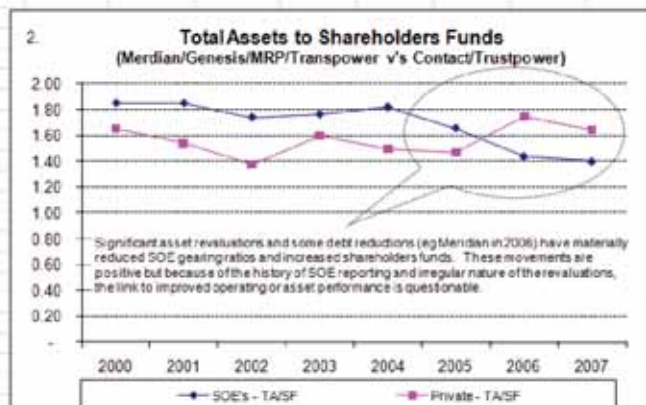
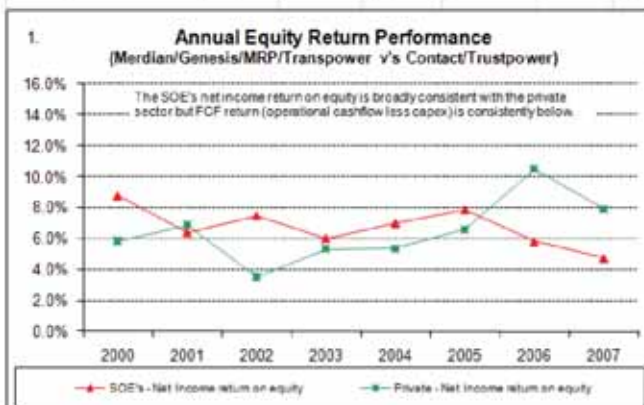
- based on the Altman Z measure, in aggregate, the overall financial performance of the largest SOEs has significantly improved since 2004 and was above the private sector companies over the last two years. This was mainly to a strengthening of their balance sheets through asset revaluations. This is positive but does obscure (and may actually be contributing to) poor operational profit performance;
- the SOE's net income return on equity is broadly consistent with their private sector counterparts and reflects, comparatively; lower gearing and lower profit margins; and
- overall, there was no conclusive evidence to suggest systemic under or over performance of these SOE companies.

141. Again, there were a number of important limitations to this work:

- the small number of NZ based private sector companies;
- the different nature of the generation mix between the companies. For instance, much of the SOE's poor operational performance was due to one company (Genesis) having high cost and low output generation assets (eg Huntly).

Dupont Return on Equity Analysis

$$ROE = [Sales / Total Assets] \times [Net Income / Sales] \times [Total Assets / Shareholders Funds]$$

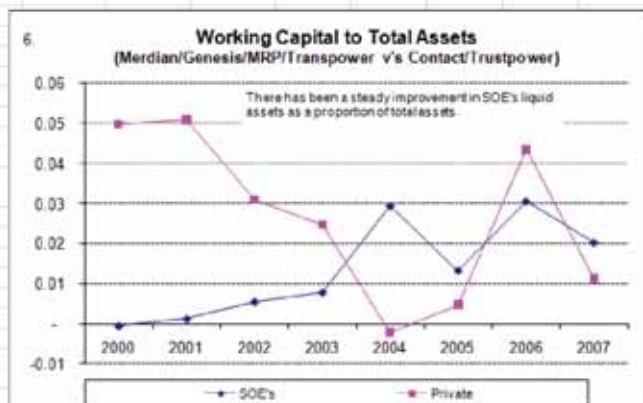
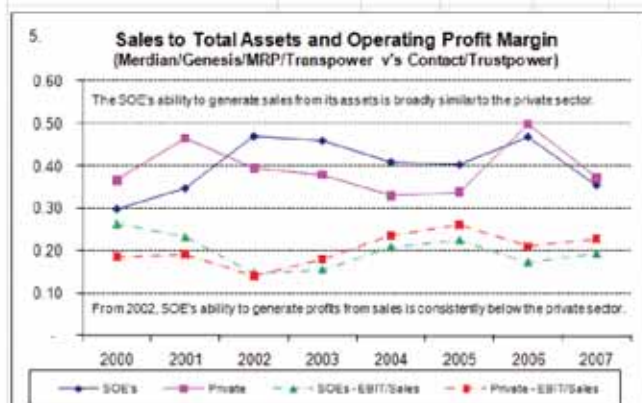
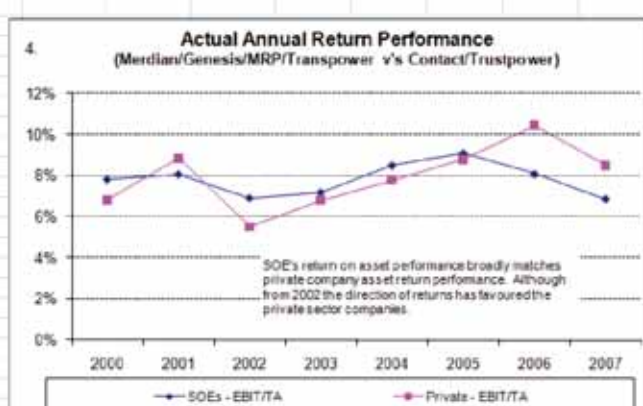
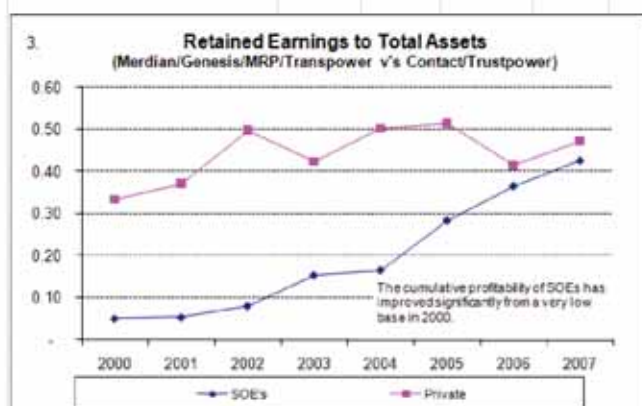
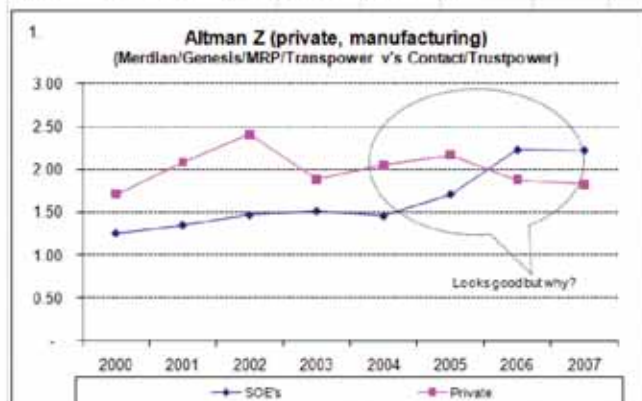


Summary

1. The SOE's net income return on equity is broadly consistent with their private sector counterparts
2. The relative comparability of the SOE's net income return on equity is a function of a similar ability to generate sales from assets but offsetting differences in net profit margins and gearing.
3. The reduced gearing of the SOE's is positive but the link to improved performance is inconclusive
4. The ability of the SOE's to generate sales from their assets is broadly equivalent to their private sector counterparts. However, the SOE's ability to generate net profits from these sales is consistently below their private sector competitors.

Altman Z Analysis

Altman Z (private, manufacturing) = $[0.717 \times \text{Working Capital} / \text{Total Assets}] + [0.047 \times \text{Retained Earnings} / \text{Total Assets}] + [3.107 \times \text{EBIT} / \text{Total Assets}] + [0.42 \times \text{Shareholders Funds} / \text{Debt}] + [0.998 \times \text{Sales} / \text{Total Assets}]$. Basically - the higher the better.



Summary

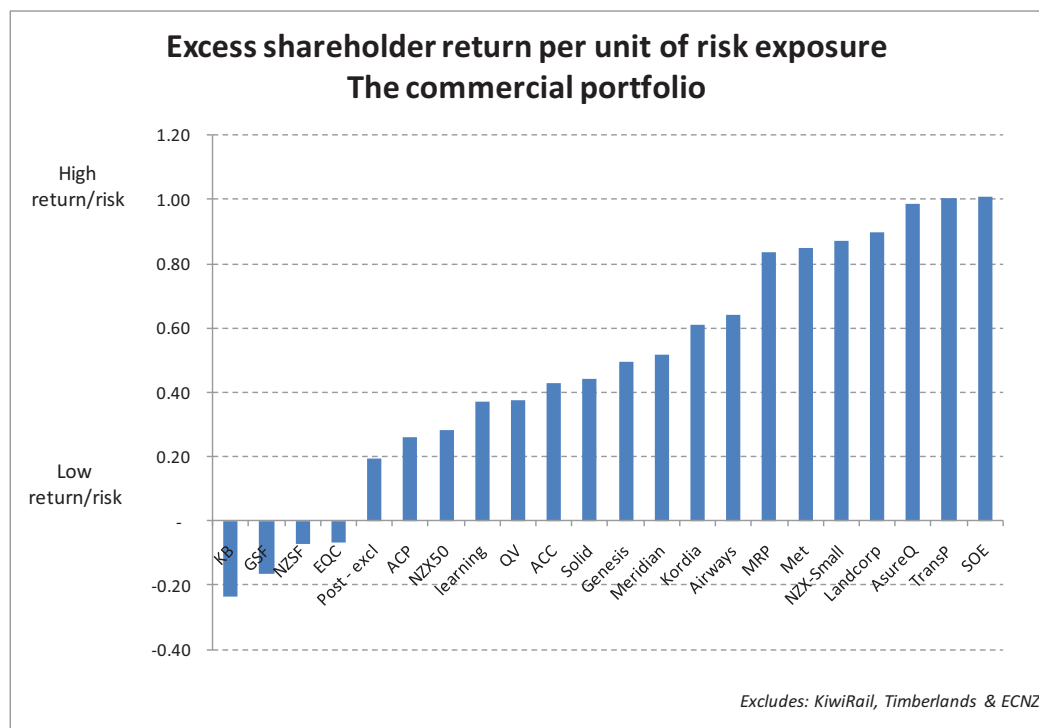
- Using the Altman Z formula as an indication of long term company performance shows a consistent improvement in the SOE companies since 2004.
- Much of the relative improvement in SOE performance is from irregular but material asset revaluations which have lowered SOE gearing ratios and increased shareholders funds. Retained earnings and working capital, both starting from very low bases, have also increased at a faster pace than the increase in total assets.
- Annual SOE asset return performance is broadly consistent with private sector companies but the data is compromised by the irregular asset revaluation process.
- The ability of the SOEs to generate sales from their assets is broadly equivalent to their private sector counterparts. However, the SOE's ability to generate profits from these sales is consistently below their private sector competitors. Note, operational cash flow (excl capex) as a proportion of sales shows a similar (but more variable) trend.

A shareholder based risk and return analysis

142. This work was valuation⁴⁶ (not accounting) based and focussed on shareholder expected returns through dividends and capital growth. To enable comparison with NZX indices and CFI investments, the uncertainty (standard deviation) surrounding these returns were used a corresponding measure of their riskiness. The main conclusions of this analysis were:

- the SOE portfolio is arguably too concentrated in energy sector companies; and
- when comparing the returns from SOEs to the risk of earning those returns, there was no evidence of systemic under or over performance within the SOE portfolio – compared to the NZX50 and NZX Small Company indices.

143. The following chart is taken from this work:



144. This work also noted that there were reasons to think that the Crown's controlling interest could be complicating the efficiency and effectiveness of the internal commercial decision making process. The analysis suffered from the following limitations including:

- it ignores the potential for low probability but high impact events. For instance, although Meridian exhibits relatively low return variability, if a 'tail event' hit the company the impact would be material;

⁴⁶ The study used a discounted cash flow based portfolio performance model that analysed three year historic and five year forecast total shareholder returns for each SOE, based on the company's own 2009 forward looking business plans. [Commercial portfolio risk report \(Treasury:1827942v1\)](#) [Add to worklist](#)

- using a time series of DCF company valuations will normally exhibit lower variability than a time series of share market prices. However, offsetting this, we would also expect a diversified market index to exhibit lower variability than the individual company returns;
- the data on the organisation's returns is limited. Therefore a mix of historic and forward looking information over varying medium to long-term horizons is used; and
- it assumes shareholder risk is simply a function of the volatility in return over time and does not drill down into the specifics underlying that variability.

Summary

145. To summarise the above analysis: All financial performance analysis of privately held companies will to a greater or lesser degree be affected by limitations relating to data availability, methodology and comparability. Despite these limitations some broad conclusions can be drawn from the work outlined above:

- measuring and benchmarking SOE performance is more difficult because of their privately held status;
- there is little evidence of systemic under or over performance in the SOE portfolio;
- there is evidence to suggest that some individual SOE companies under or over perform; and
- there is little evidence to suggest that privatisation would significantly improve the financial performance of many of the SOE companies.

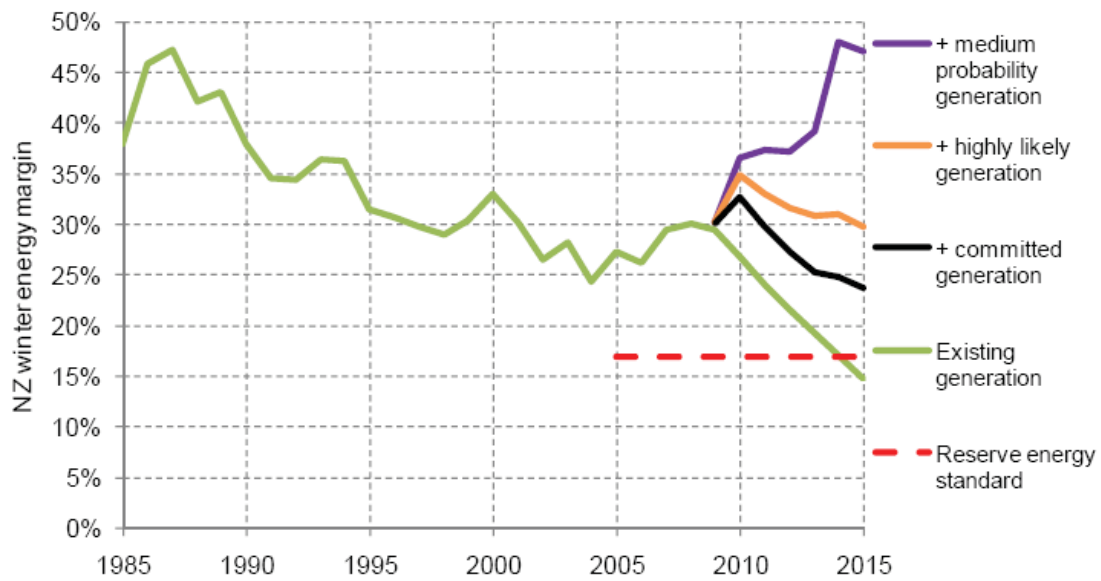
And this view is supported by the electricity sector as a case study.

146. Apart from the general performance data above, if we focus on the electricity sector SOEs (over 70% of the SOE portfolio) there is industry performance data supporting the argument that SOE performance is adequate. The literature summary above indicates that state enterprises are characterised by insufficient investment, inefficient prices, and poor quality investment. We consider evidence on these matters below.

147. The graph below depicts winter energy supply margins – effectively the excess of electricity supply compared to expected demand. The graph demonstrates that the market has been relatively comfortably exceeding the reserve energy standard and that anticipated new generation investment is sufficient to maintain this performance. This is also backed up by the fact that the last time New Zealand experienced black outs due to supply shortages was 1992, several years before the reform of the sector.

148. The graph indicates that there is no evidence of these state enterprises under investing. We also know that this investment is funded entirely from the SOEs' own balance sheets, whilst maintaining dividends, indicating that Crown ownership is not starving these enterprises of capital.

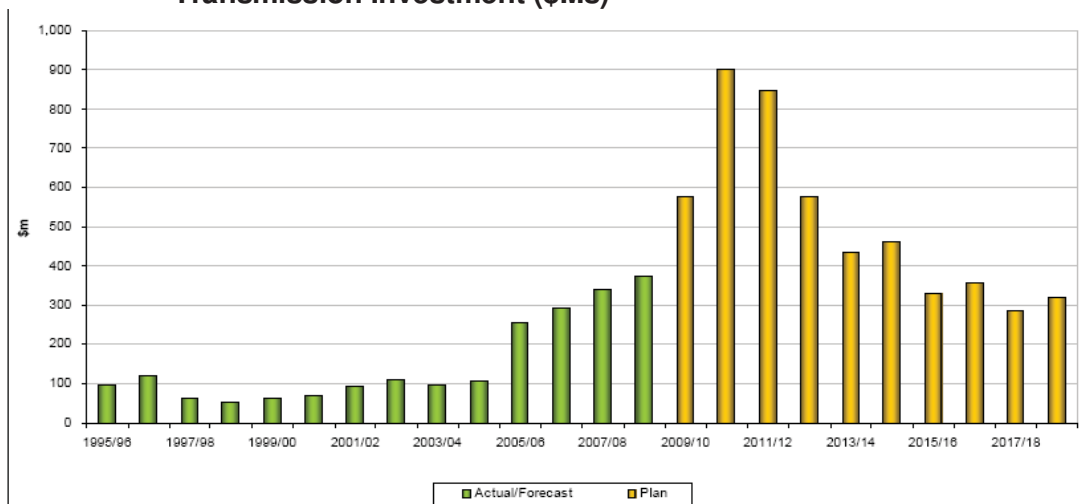
Winter Energy Margin 1985 - 2015



Source: MED

149. Below is past and forecast transmission investment expenditure. It shows the approximate \$5 billion in new investment Transpower is currently undertaking to strengthen the capacity of the national grid, all to be funded from Transpower's balance sheet. Again, there is no evidence of under-investment due to Crown ownership⁴⁷.

Transmission Investment (\$Ms)



Source: Transpower business plan 2009/2010

⁴⁷ The clear under-investment in transmission through the 1990s and early 2000s was driven by regulatory failure that was remedied by the introduction of the Electricity Governance Rules in 2003.

[withheld s9(2)(b)(ii) & (f)(iv)]

[withheld s9(2)(b)(ii) & (f)(iv)]

ANNEX III: LIST OF MAJOR ASSET SALES IN NEW ZEALAND, 1988-1999

Date	Asset	Price (\$m)	Buyer
1988	NZ Steel	\$327	Equiticorp
1988	Petrocorp	\$801	Rosspart Investments Ltd
1989	Post Office Bank	\$665	ANZ
1989	Air New Zealand	\$660	BIL/ Qantas/ JAL/ AAL
1989	Rural Bank	\$550	Magnetron Holdings
1990	State Insurance Office	\$735	Norwich Union
1990	Mauia Gas	\$240	Generate Development Ltd
1990	Telecom	\$4,250	Ameritech and Bell Atlantic
1990	Various Forestry Rights	\$1,026	Fletchers/ Carter Holt
1991 - 1999	Housing Corp Mortgages	\$2,410	Various banks
1992	Timberlands	\$366	ITT Rayonier
1992	Taranaki Mining Licences	\$119	Petrocorp
1992	BNZ	\$850	NAB
1993	New Zealand Rail	\$328	Various
1993	Fletcher Challenge shares	\$418	Investment institutions
1996	Forestry Corporation	\$1,200	Fletchers/ BIL/ Citifor
1996	Works and Development	\$108	Downer/ Kinta Kellas
1998	AIAL	\$460	Public share issue
1998	WIAL	\$96	Infratil
1999	Contact Energy	\$2,331	Edison/ Public share issue
		\$17,940	

Source: Treasury website, <http://www.treasury.govt.nz/government/assets/saleshistory>

Note: Excludes transactions under \$90 million