

# Focusing on Growth

The Second Report of the 2025 Taskforce  
**3 November 2010**

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# Foreword

Hon Bill English  
Hon Rodney Hide

As you know, the Confidence and Supply Agreement between the National and ACT parties following the 2008 election committed the Government to the concrete goal of having New Zealand reach Australian income levels by 2025 and to appointing an advisory group both to provide advice on how best to accomplish that objective and to report annually on progress towards it.

As a consequence, the 2025 Taskforce was set up in 2009. This is our second annual report.

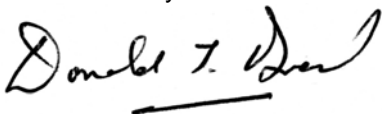
Achieving the goal poses a formidable challenge, perhaps illustrated by the fact that the OECD has recently published projections that show the income gap continuing to widen over the next fifteen years. If the gap does continue to widen as projected, the already large net outflow of New Zealanders to other countries is very likely to increase further, potentially to more than 400,000 people over the next 15 years.

Our first report outlined the kind of measures that we believe are required to give New Zealand a credible chance of closing the income gap to Australia and other advanced economies. The primary focus of this second report is on more fully articulating our thinking in some of the more important areas where our arguments and analysis were criticised last year, to help readers better understand the approach we have taken and the analytical underpinnings for our recommendations.

We stand by the recommendations in our first report and believe that our approach provides a realistic means of achieving the Government's 2025 goal. We also believe, however, that for there to be any chance at all of achieving that goal, an early and substantial start is critical. We hope that this report assists the broad public debate that is imperative if policy change of the kind required is to have any chance of being politically durable.

Over the last two years, the Government has taken a number of steps that are likely to have improved our economic growth outlook, but has introduced some other measures which can be expected to detract from our prospects. Various growth-enhancing policy initiatives appear to be under consideration in a range of other areas. Overall, our assessment is that New Zealand is still a long way from having the kind of policies in place that would be needed to give us a good chance of wholly or substantially closing the gap with Australia by 2025.

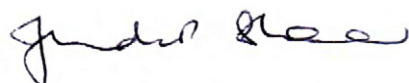
Yours sincerely



Donald T Brash  
Chair



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3 November 2010

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# Executive Summary

## Background

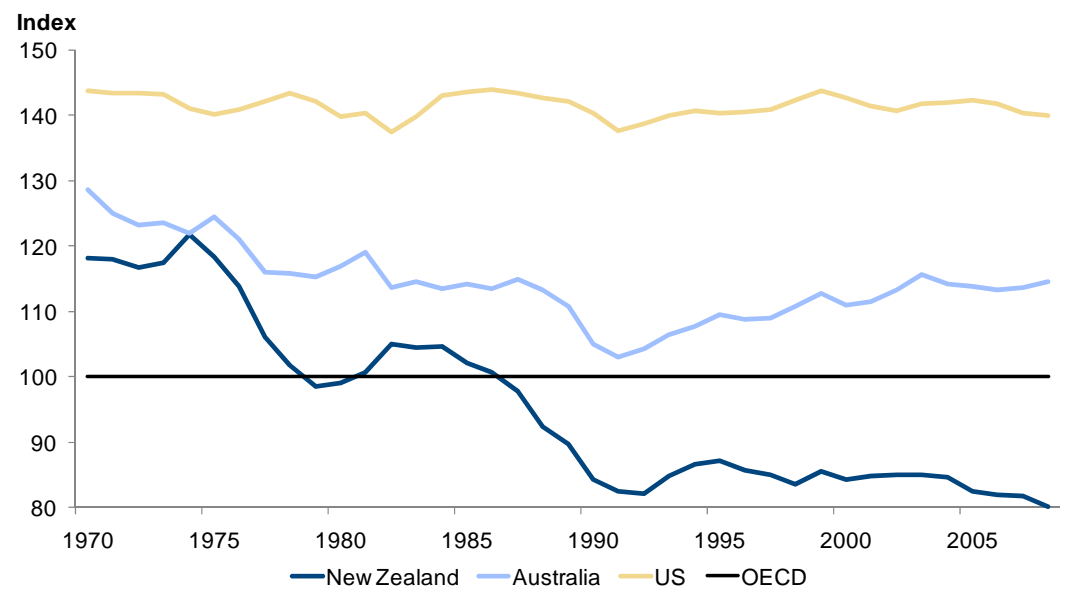
The 2025 Taskforce was set up in 2009 to provide recommendations to the Government on how to close the income gap with Australia by 2025.

The Taskforce's first report in 2009 concluded that far-reaching policy changes would be required to close the gap. The Taskforce stands by the specific recommendations made in that report. We have used this second report to more fully articulate the context and framework for those recommendations. It stresses the urgent need for public policy to become focused on creating an environment conducive to strong sustained economic growth that will benefit all New Zealanders.

## The income gap between Australia and New Zealand

Since the mid 1970s, per capita incomes in New Zealand have fallen substantially relative to those in Australia and the OECD average, although the rate of decline was slowed notably by the extensive reforms of the late 1980s and early 1990s. In our first report, we estimated that Australian incomes were 35 percent higher than in New Zealand. Australia proved more resilient than New Zealand in the recent global recession, and we now estimate that to close the gap by 2025, New Zealand will need to grow slightly more than two percent per annum faster on average than Australia.

**Figure 1: GDP per capita relative to the OECD, 1970 - 2008**



Source: OECD, OECD = 100, current prices and PPPs

There are two reasons why closing the income gap with Australia matters. First, our real incomes affect our material standard of living. People in Australia and most other advanced countries can afford better houses, better healthcare, higher levels of funding for education and more expensive investments in environmental protection.

Second, we need to ensure that there are opportunities for our people to realise their potential in New Zealand. The income gap will encourage more New Zealanders to join the hundreds of thousands who have already emigrated, mostly to Australia. Based on current projections of the income gap and its impact on emigration, a net 412,000 New Zealanders could leave New Zealand over the next 15 years. That is almost one in every ten people living in New Zealand today, and equivalent to the entire population of the Wellington region. The skills and enterprise of these emigrants would be a huge loss to the New Zealand economy, especially given that taxpayers would have spent perhaps \$30 billion educating and providing medical care for them. Immigrants may reduce the impact, but they are not a perfect substitute for the rapid loss of so many people born and raised in New Zealand.

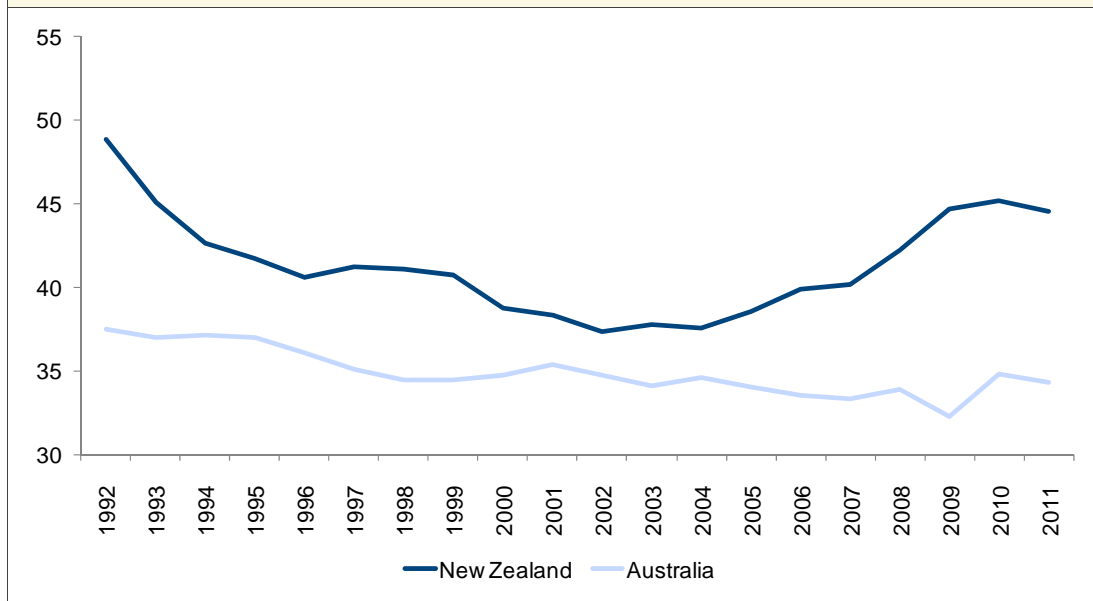
To catch Australia over the next 15 years, New Zealand's income is likely to need to grow at slightly more than two percent per capita faster than Australia on average. That is a formidable challenge, which requires policies that are superior to those in Australia in their focus on growth. This challenge can only be met by ambitious and far-reaching reforms along the lines recommended in our first report. Over the last two years, the Government has taken some steps that are likely to have improved our growth prospects and some that are likely to detract from prospects. It is also investigating growth-enhancing policy change in other areas. But on balance, New Zealand is still a long way from having the kind of policies needed to have any chance of closing the gap with Australia by 2025, or even of making serious progress towards that goal.

To close the gap with Australia, governments need to consistently make choices that will increase economic growth. This focus on growth will mean government building a structured analysis of the implications for economic growth into every major policy decision that it makes, and benchmarking all proposals on the best and most growth-enhancing practices of the most successful countries. The Treasury and the new Productivity Commission should be required to advise Government on this and to facilitate better-informed public debate.

### Changing the balance between the public sector and the private sector

Since 2004, New Zealand general government outlays as a proportion of GDP have grown very rapidly. New Zealand governments have spent a larger share of GDP than their Australian counterparts for decades, but that gap has widened markedly in the last seven years. This spending increase has contributed little to core government functions. Much of the increased spending is "tax churn" collected from and returned to middle-income earners in the form of universal provisions such as interest-free student loans, early childhood subsidies, KiwiSaver subsidies, and subsidised visits to the doctor.

**Figure 2: General government outlays (percent of GDP)**



Source: OECD

Government taxation and spending is not just a costless transfer from one part of society to others. Firms and individuals respond to taxes by working, saving and investing less than they would have otherwise. Those “deadweight” costs can be very substantial. The recent Henry review in Australia noted that the deadweight costs are highest for corporate income tax, at perhaps 40c in every dollar. Even GST, a relatively efficient tax with lower deadweight costs than some other taxes, has materially adverse effects on economic activity.

To avoid the deadweight costs of high taxation, government needs to be much more focused on efficient provision of public goods and support for those genuinely in need, rather than creating spending programmes that only benefit the same middle-income families who pay taxes. In markets where a high proportion of the services are provided by, or assets are owned by, the public sector, the competitive pressure that drives productivity growth and innovation will be reduced or entirely absent. By reducing the scope for private sector investment and provision of services, and reducing the share of the private sector in the economy as a whole, these public sector activities are a barrier to higher growth rates.

Our statement in last year’s report that smaller government was critical to closing the gap was considered contentious. We stand by that statement as an important component of the broader range of policy changes set out in our recommendations needed to generate higher growth. Some rich countries do have larger public sectors than New Zealand, but their rates of growth are typically modest. Our reading of the economic literature and the historical evidence suggests that closing an income gap of the size New Zealand faces, and reversing our decades of relative decline, cannot be done with government spending at more than 40 percent of GDP as it is in New Zealand at present. A focus on removing unproductive government spending which does not improve economic and social outcomes, and on cutting the most inefficient taxes as a result, will have a substantial positive impact on growth.



The Government's Budget strategy envisages gradually reducing the size of government over the coming decade to 2004/05 levels. However, no specific decisions that would deliver such an outcome have been announced. A much greater sense of urgency and ambition will be needed to remove the policy initiatives and regulations that inhibit economic growth. In the medium term, New Zealand will need to consider ways of imposing greater fiscal discipline to ensure we can surpass Australia's relatively small share of government spending in GDP and the relative stability of that share of spending over time. Options include a taxpayers' bill of rights and an independent fiscal council.

The sharp increase in New Zealand government spending since 2004 has created our largest structural primary budget deficit in decades.<sup>1</sup> Because this deficit is structural, it can only be eliminated by serious policy choices.

It seems likely that over the past two years large government deficits have kept interest rates and the real exchange rate higher than they otherwise would have been. This is preventing much-needed rebalancing of our economy that would result in much greater production in internationally competitive sectors. New Zealand's net foreign liabilities are now so high that it would be imprudent to assume they can sustainably be increased further. A credible, well-signalled, early return to fiscal surpluses through reduced spending will be vital to putting the economy on a more competitive global footing.

There have been no major state asset sales in New Zealand since 1999, which has put New Zealand out of line with practice in other advanced and emerging countries. Not only has the government retained ownership of many trading enterprises, but both past and present governments have increased state holdings of business assets (airlines, rail, broadband, banking).

The case for state asset sales is different from the 1980s and 90s, when reducing public debt and eliminating gross inefficiency drove decisions. Today the debate needs to address the potential lost contribution to economic performance resulting from these firms operating under public sector constraints, without market incentives and disciplines. State-owned enterprises and other major Crown trading enterprises could potentially contribute much more to the economy if they were wholly or partially privatised, including through initial offerings to the New Zealand public.

Public-private partnerships (PPPs) are widely and successfully used overseas, including in Australia, to engage private capital and expertise in infrastructure development or other public purposes. There have been few PPPs in New Zealand, but there are areas where much wider use of them would be appropriate. We have the advantage of being able to learn from the experiences – successes and failures – of other countries to more fully capture the benefits PPPs can offer.

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<sup>1</sup> The structural deficit is the deficit that will remain when the impact of the current recession has ended.

## Welfare, health, schools and superannuation

There is much scope to reform welfare, health, schools and superannuation to achieve better outcomes while, in many cases, also reducing government spending and taxes. This can be done by focusing government funding on the necessary parts of the social welfare net, reducing the churn of taxation and benefits for middle-income families, and changing the balance between private and public sector provision and the funding of those services.

In welfare, there needs to be a strong focus on eligibility criteria and return to work, where possible, for every form of benefit while ensuring that ongoing support is available for those genuinely in need. This may be helped by lowering effective marginal tax rates to make it more attractive to choose work rather than welfare, as well as by introducing time limits on benefits when work capacity is established, and well-targeted support for education and training.

In health, New Zealand should look to more private provision of facilities and delivery of services, following the trend established in the United Kingdom and other European countries. The Government should establish a Health Taskforce to examine world-leading health models and the lessons they offer New Zealand.

The Government should provide much stronger encouragement to independent schools and remove restrictions such as the lack of performance pay and school zoning that inhibit performance improvements in the state school system.

New Zealand should lift the age of eligibility for New Zealand Superannuation beyond 65, as Australia, the United Kingdom, the United States and other countries are doing, and also draw a clear link between life expectancy improvements and future increases in the eligibility age. Lengthening the typical working life by two years would itself represent a material contribution to closing the per capita income gap with Australia.

## Investment in infrastructure, research, and tertiary education

High-quality infrastructure investment will be needed to meet the 2025 target, and government has an important role in getting the climate right for that to occur. The government can have a direct role in infrastructure projects that cannot efficiently be provided by the private sector, but it is imperative that rigorous, transparent cost-benefit analysis be done on all projects, using modern techniques of analysing the optimal timing of investment. And while transparency is vital, decisions on whether or not to proceed with such projects need to be made in the light of the results of the cost-benefit analysis. Projects that do not meet such a test waste scarce public resources.

An unusually large share of total New Zealand research and development (R and D) spending is funded by government, including public funding of research in Crown Research Institutes and tertiary education institutions. Much international evidence from empirical studies indicates that only private R and D spending has a direct impact on growth, because it is initiated by firms in response to their own perceptions of profit opportunities. This means that government funding of R and D should not be increased.

In a high performing New Zealand economy, more private research and development spending would take place without specific government support. That means we need an overall policy framework where more firms want to spend their own money on R and D, not more public subsidies to firms to somehow compensate for other weaknesses in the New Zealand business environment. The research and tertiary education sector is too heavily micro-managed towards “official visions” of New Zealand’s economic development path. Public research funding should once again be fully contestable, and roadblocks to improved governance and consolidation of entities in the research and tertiary education sector should be removed.

## Reducing regulation

Improving economic growth means removing or reshaping regulation that is limiting the scope for technological change and entrepreneurship. Despite the far-reaching reforms in the 1980s and 1990s, New Zealand once again has too much low-quality regulation, creating barriers to economic growth in a number of key markets and sectors. This creates the potential for material income gains from regulatory reform. The New Zealand Productivity Commission, if properly resourced, should have a useful role in evaluating reform options and obstacles in the regulatory area, and highlighting examples of best practice from around the world. In our first report we commended the concept of a Regulatory Responsibility Bill. We remain of that view.

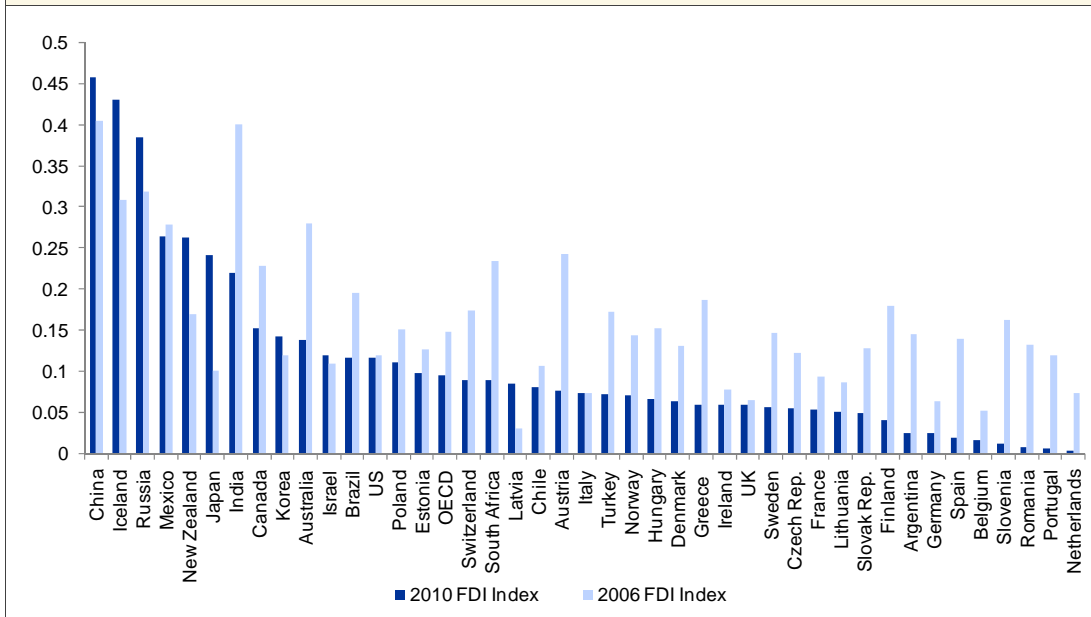
Specific regulatory issues that need to be addressed include the following:

- The *Resource Management Act* should urgently be subject to further and more fundamental review to bring it back to its original intent as an effects-based, broadly permissive law. Change to the Act to date has been insufficient. The reform process must result in a much more responsive supply of new land for housing when demand increases to end the current situation in New Zealand where houses, relative to incomes, are among the most expensive in the world.
- New Zealand’s *labour market* flexibility reduced substantially over the last decade, particularly with the minimum wage being raised to the second highest level in the OECD relative to median incomes. Abolition of the *youth minimum wage* has had a seriously adverse impact on youth unemployment, and it should be reinstated urgently.
- A regulatory regime is needed around *hazardous substances*, and *new and genetically modified organisms*, but New Zealand’s is overly restrictive, requiring specific approval for even low-risk work. It is out of step with regimes in Australia, Europe and the USA, and is diverting valuable research to Australia and elsewhere.

## Foreign direct investment

New Zealand has depended heavily on foreign direct investment since the beginning of European settlement. According to the OECD, New Zealand now has one of the most restrictive FDI regimes. Recent announcements will have accentuated this trend, but have been formulated without informed public debate about the costs and benefits of foreign ownership, or a clear public understanding about the negative impact that restrictions on foreign investment have on New Zealand’s economic performance.

**Figure 3: Changes to openness to FDI by country, 2006 and 2010**



Source: OECD

Note: On the y-axis, numbers are between 0 (open) and 1 (closed)

The Taskforce can see no national economic benefit in the current level of restrictions on foreign investment in New Zealand. To close the income gap with Australia, New Zealand must create a stronger presumption for acceptance of foreign investment, subject to the same regulatory provisions as domestic investors.

### Industry policy

Active industry policy may have helped some developing Asian economies that had a clear comparative advantage but faced institutional or infrastructural barriers to development. There is no evidence that this approach works in a developed economy like New Zealand. The record of governments “picking winners” or “tilting the playing field” towards sectors or individual firms is extremely poor, in New Zealand and everywhere else.

Far too much emphasis has been placed on searching for clever new government initiatives that will directly drive higher growth rates. At their core, those policies reflect the idea that choosing some potentially high growth sectors for special government support will allow us to overcome the costs created by poor policy choices. A much more effective strategy is to directly address the barriers to expanded activity across the whole economy: high taxation and government spending, government ownership, regulation, and investment and service provision that inhibits private sector activity. The contemporary global economy is complex, but the fundamental sources of economic growth have not changed. Government policy should focus on minimising the barriers to the productivity improvements, innovation and private investment that are the sources of economic growth rather than on searching for new ways to identify the appropriate recipients of subsidies.

## Conclusion

The public policy changes we recommend will require strong political leadership and an ability to convey a vision of what New Zealand can once again achieve. It will also require an unwavering focus on the private sector as the driver of productivity, sustainable job creation and growth. By minimising the barriers to growth-enhancing private sector activity, government will make us all better off, even if we do not achieve the growth rates required to close the gap with Australia by 2025.

We do not have to settle for the crumbs from Australia's table. But changing course requires an active and sustained focus on the policy options outlined in this and our earlier report. New Zealand must create a policy environment that is more conducive to private sector investment, and where every part of the private sector finds it attractive to play its part in generating growth and higher per capita incomes. And since our growth rates must be materially higher than those in Australia to close the gap, New Zealand will need to emulate and surpass the best of Australian policies that minimise the barriers to economic growth.

# 1 Introduction

## 1.1 Background

Following the 2008 General Election, the National and ACT parties signed a Confidence and Supply agreement which noted that “They have agreed on the concrete goal of closing the income gap with Australia by 2025”. The 2025 Taskforce is the advisory group established pursuant to that agreement, and its terms of reference are to provide the Government with recommendations to close the income gap with Australia by 2025. The Taskforce is required to:

- i review New Zealand’s poor productivity performance, and monitor the productivity gap versus Australia
- ii identify the causes of New Zealand’s poor productivity performance and any barriers to improved productivity
- iii provide recommendations to create new or improve existing New Zealand institutions that could have an impact on productivity
- iv provide advice on policies and other measures to close the income gap with Australia by 2025, and
- v provide an annual report on progress made by the Government in closing the gaps.

The Taskforce provided its first report in November 2009. That report put the per capita income gap with Australia at 35 percent, and noted the strong relationship between the size of the gap and the net migration outflow to Australia. It argued that the gap could well widen if nothing was done, and that to make progress on closing the gap our political leaders would need to accept, and explain to the public at large, the seriousness of the situation and the magnitude of the problem.

The first report of the Taskforce concluded that closing the per capita income gap with Australia would require far-reaching changes to public policy and public management in New Zealand. The Taskforce provided detailed recommendations (Appendix 1). Those recommendations were shaped within a framework that focused on changing the balance between public sector and private sector activity in New Zealand, improving the efficiency of both government service provision and the management of state assets, and minimising the regulatory obstacles that the government puts in the way of the private sector investment, innovation and productivity growth that will be required to close the income gap with Australia. The recommendations focused in particular on:

- Significantly cutting government spending and tax rates.
- Finding better, more effective, ways of ensuring the delivery of services the government does fund.

- Substantially improving the rigour with which government spending proposals are evaluated.
- Substantially improving, across the board, the quality of economic regulation.
- Getting government out of the ownership of business assets.

The Taskforce has benefited from a wide range of submissions on its first report (Appendix 2), including many that supported the overall direction and individual recommendations we provided. In addition, a number of our recommendations have been endorsed by the Government and some have already been implemented. Some submissions on the first report of the Taskforce noted, however, that the recommendations appeared to be similar to the reforms undertaken by New Zealand in the late 1980s and early 1990s, causing some readers to question the benefits that could be obtained from a further round of reforms of this type or to question the effectiveness of this approach to closing the gap in the context of the global economy of the 21<sup>st</sup> century. The Taskforce stands by the recommendations made in its first report, and is pleased to have the opportunity to use this second report to both explain the context for and underpinnings of those recommendations, and provide a more detailed outline of the case for reform.

Following this introduction and our analysis of the record of productivity and growth in New Zealand (Chapter 2), this report provides an outline of our interpretation of the lessons that can be derived from the recent literature on economic growth and innovation, including the impact of economic geography and globalisation (Chapters 3 and 4). We consider the impact of government spending, taxation and investment and the implications of our current fiscal policy settings (Chapters 5 and 6). The report then pursues the three themes from our first report identified above in the following way:

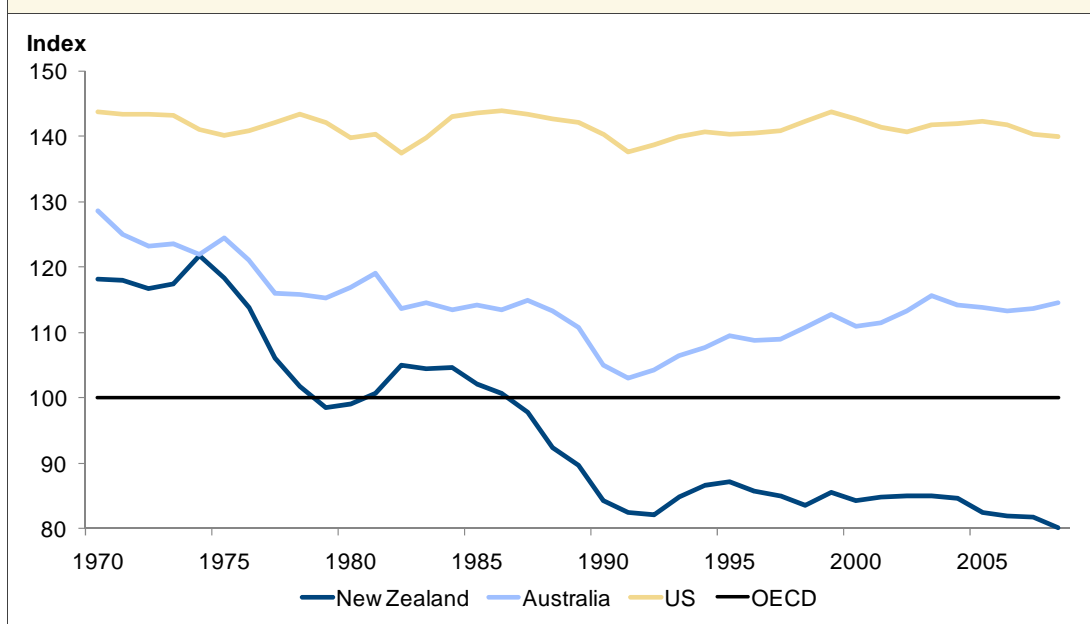
- In Chapters 7, 8 and 9, we consider approaches to changing the balance between public sector and private sector activity in New Zealand.
- In Chapters 10 and 11, we consider the evaluation of proposals for major government investment projects and opportunities to improve the return on our investment in research and tertiary education.
- In Chapters 12 and 13, we consider a number of important examples of government regulation that reduces economic growth, including the RMA and restrictions on foreign direct investment.

Finally, in Chapter 14, we discuss the pros and cons of active industry policy.

## 1.2 The per capita income gap with Australia and growth projections to 2025

In its first report, the Taskforce analysed the gap between New Zealand and Australian real GDP per capita, as reported by the OECD in purchasing power parity (PPP) terms. Real GDP per capita last year was 35 percent higher in Australia than in New Zealand. On that measure, an average New Zealand family of four was worse off than their Australian counterparts by around \$64,000 per annum<sup>2</sup>. Since that time the New Zealand economy has experienced a recession, and grown only slowly coming out of it, whereas the Australian economy has continued to grow. As a result, we do not see any realistic possibility that the gap in real per capita income has narrowed in the past year, though the official data needed to confirm this are not yet available. Year to year fluctuations in the income gap will occur, but may or may not reflect the relative merits of the policy frameworks in the two countries. For this reason, changes in the income gap are most accurately assessed over the medium term.

**Figure 1.1:** GDP per capita relative to the OECD average, 1970 – 2008



Source: OECD, OECD = 100, current prices and PPPs

The Taskforce has also considered the current projections for economic growth for the two economies from this year until 2025. In April 2010, the OECD released projections to 2025 of real GDP growth and population for its member countries. The following table combines these projections to infer GDP per capita growth rates for Australia and New Zealand through to 2025. These projections can be thought of as 'base case' projections by the OECD that take into account how well it perceived Australia and New Zealand were positioned at the time for coping with the aftermath of the global financial crisis of 2008 and 2009.

<sup>2</sup> Of course, not all of this difference is in the direct consumption and savings of households. Around a third of all income is currently taken in taxes, to finance various public services.



**Table 1: Projected annual rates of growth for Australia and New Zealand to 2025**

	OECD projections to 2025				Implied Real GDP per capita growth rates		Implied Gap Australia/New Zealand	
	Real GDP		Population		New Zealand	Australia	Proportionate Gap	Dollar Gap in NZ 2008 Prices*
	New Zealand	Australia	New Zealand	Australia				
2008							1.35	\$15,175
2009	-0.5%	1.4%	0.9%	1.1%	-1.3%	0.3%	1.37	\$15,900
2010	2.5%	3.2%	0.8%	1.1%	1.7%	2.1%	1.38	\$16,400
2011	3.9%	3.6%	0.8%	1.1%	3.1%	2.5%	1.37	\$16,600
2012-2015	2.6%	3.4%	0.7%	1.0%	1.9%	2.4%	1.40	\$19,200
2016-2025	2.5%	2.9%	0.6%	0.9%	1.9%	2.0%	1.42	\$24,100
<b>Implied average annual growth rates 2010-2025</b>								
	2.6%	3.1%	0.7%	0.9%	1.9%	2.1%		2.6%

\* The gap for 2008 is the difference between GDP per capita for Australia in the year ended June 2009, expressed in NZ dollars using PPP exchange rates, and New Zealand's GDP per capita of \$34,413 in the year ended March 2009.

Source: OECD, with calculation by 2025 Taskforce

New Zealand's average rate of GDP per capita growth in the 15 years to the year ended March 2010 was only 1.3 percent per annum, reflecting in part the effects of the current recession.

The OECD's projections above imply that Australia will enjoy a slightly higher rate of per capita growth than New Zealand over the next 15 years, implying that the gap will widen further unless policies supporting higher rates of growth in New Zealand can be introduced. On these OECD projections, the gap would reach 42 percent in 2025. In dollar terms it would have risen by almost 60 percent from \$15,200 per capita in round figures in 2008 to \$24,100 per capita by 2025.

These projections illustrate the potential seriousness of the problem but are not determinative. But coming from an organisation with the standing and independence of the OECD, they demonstrate that it is highly unrealistic to think that the income gap with Australia can be closed without a substantial increase in New Zealand's rate of economic growth. To close the gap by 2025 New Zealand's GDP will need to grow two percent faster on average than Australian GDP every year, that is, at around four percent per annum. The longer the delay in making changes, the more implausible it is that the gap will be eliminated even with very significant policy changes.

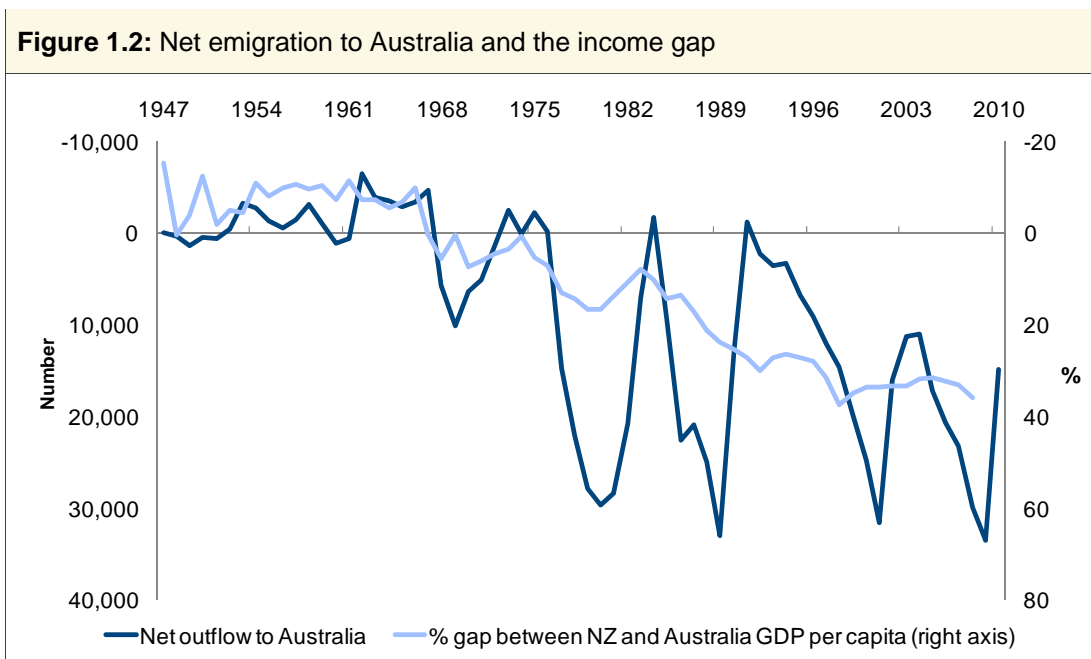
The Taskforce remains firmly of the view that New Zealand can set itself on a path to close the per capita income gap within a reasonable timeframe, and that moving down that path will be to the benefit of all New Zealanders whether the gap is closed by 2025 or a few years later. However, achieving that goal will require a greater sense of urgency than is apparent at present. In what follows, we suggest that a greater sense of urgency would imply an immediate and intensive focus on growth as a key objective of Government policy.

## 1.3 Implications of the income gap: standards of living and emigration

In the last decade, New Zealanders have enjoyed rising material standards of living. Real wages have increased substantially and overall living standards of the average New Zealander (at least as proxied by real GDP per capita) have increased by around 14 percent. In addition, there are many aspects to quality of life: for many New Zealanders, the country's temperate climate, low population density, ready access to mountains and beaches, and orderly society provide important reasons to live here. Why then would we put a lot of effort into attempting to reduce our income gap with Australia?

There are two reasons. Economic growth and national income per capita matter because they affect our material standard of living. The higher is our national income, the better the quality of the houses, education and medical care that we can afford. National income affects the hours we have to work to earn a comfortable living, the length and the location of our holidays, and how early we can retire. National income also affects our ability to invest in enhancing our natural and social environments, because it is expensive to preserve and enjoy those valuable aspects of New Zealand. In other words, having a higher income provides wider choices and greater scope to invest in those aspects of our natural or social environment that we value.

The second reason is that New Zealand has no controls on emigration. New Zealand has a free labour market with Australia, and as more and more New Zealanders move to live in Australia the financial and social barriers to crossing the Tasman are reduced. As we pointed out in our first report, this means that the size of the flow of emigrants to Australia is strongly influenced by the size of the per capita income gap (Figure 1.2). Large scale emigration by New Zealanders is the most tangible sign that a high proportion of our population recognises, at least implicitly, the significance of the income gap between Australia and New Zealand.



Source: Statistics NZ, GDP per capita from Maddison, constant prices, 1990 international Geary-Khamis dollars

To illustrate the likely impact of the income gap between Australia and New Zealand on emigration, NZIER developed a simple model of net migration to Australia from 2010 to 2025 assuming economic growth in New Zealand and Australia at the rates currently projected by the OECD for that period. Net migration was estimated on the basis of the ratio of GDP per capita in Australia to GDP per capita in New Zealand in the two years before the emigration decision and other variables. The estimate was contemporaneous and did not take into account the dynamic nature of the migration. This estimate suggests that, based on current projections of the income gap between Australia and New Zealand, we should expect 412,000 people to emigrate between now and 2025. This is the equivalent of the whole of the population of Wellington, the Hutt Valley and the Kapiti Coast moving to Australia.

The cost of this emigration would be very high. The skills, enterprise and productive capacity of these emigrants would be a huge loss to the New Zealand economy. Immigrants may reduce the impact, but they are not a perfect substitute for the rapid loss of so many people born and raised in New Zealand. The social costs resulting from geographical separation of families when such high proportions of our population are overseas are also substantial.

We have estimated that a 23 year old New Zealander with four years of university study will have cost the taxpayer \$32,000 in healthcare costs, \$95,000 for primary and secondary education costs, and \$51,000 for tertiary education costs; or around \$200,000 per person. Since 35 – 40 percent of emigrants from New Zealand are in the 20 – 29 year age group, and assuming 50 percent have completed four years of tertiary study, and attributing costs proportionately to emigrants aged 0-19 years, the national investment in human capital that will be lost as a result of this emigration will be in the order of \$30 billion. New Zealand cannot afford to continue its existing state funding of health and education while anticipating this magnitude of emigration in the next 15 years, so must ensure that there are opportunities for our people to realise their potential by living and working in New Zealand.

## 1.4 Policy changes that may have assisted in closing the gap

In the past year, the Government has introduced a range of policies that have implications for economic growth, some of which are consistent with the recommendations contained in the first report of the Taskforce. Among the more important policies, the Taskforce notes the following:

- The marked reduction in the allowance for new operational expenditure to \$1.1 billion per annum so as to reduce the fiscal deficit and slow the rate of growth of public debt.
- Reduced personal tax rates.
- An expansion of bilateral agreements to reduce trade and investment barriers for New Zealand exporters and investors.
- Changes to the Resource Management Act (RMA), which attempt to reduce the delays and costs imposed on those applying for resource consents for new development.

- Removal of the moratorium on the expansion of aquaculture.
- Changes in employment law, relating particularly to probation periods.
- The re-introduction of part-time work tests for recipients of the Domestic Purposes Benefit under certain circumstances.
- The announcement of the creation of a productivity commission.

In addition, the Government has sought advice on a wide range of issues, including ACC, regulatory responsibility, urban planning and savings, though no significant new initiatives have resulted from these processes as yet.

The Taskforce has not undertaken a detailed analysis of the likely impact of each of these initiatives, but offers the following general observations on them. The tax package may represent a move towards a more efficient tax system (GST being a more efficient tax than personal income tax), but insofar as it did not provide any reduction in effective corporate tax rates (the impact of the lower rate being offset by the removal of depreciation allowances) it has not strengthened incentives for investment in New Zealand. Only modest support for economic growth is likely to come from the limited changes to the RMA and employment law. Support for research and innovation may be of assistance, but does not address the fundamental question of why private sector spending on R and D in New Zealand is so low by international standards. And finally, initiatives such as the productivity commission, aquaculture moratorium and road investment will take some time to impact on economic growth.

The Taskforce is concerned that some policy changes have reduced our prospects for higher economic growth. The sharp increase in New Zealand government spending over the past five years has created our largest structural primary budget deficit in decades. It seems likely that over the past two years, large government deficits have kept interest rates and the real exchange rate higher than they otherwise would have been, preventing much-needed rebalancing of our economy that would result in much greater production in internationally competitive sectors. New Zealand's net foreign liabilities are now so high it would be imprudent to assume they can sustainably be increased further, creating severe limits on policy flexibility. Other examples of recent policy changes that have not assisted with increasing economic growth include increasing restrictions on foreign direct investment and increases in the minimum wage.

In the remainder of this report, we set out an approach that will create a policy environment consistent with much faster economic growth in New Zealand. In our opinion, the approach that we set out is most likely to create the substantial increase in economic growth that is required to close the gap with Australia.

## 2 Productivity and economic growth

- Higher incomes require increased production per capita. Productivity growth is the fundamental source of increases in production per capita.
- There is very strong evidence that government policy settings can have a major impact on productivity and economic growth.
- New Zealand achieved strong productivity gains relative to Australia following the economic reforms of the 1980s, especially in those sectors most open to competition. But since 1995 New Zealand has fallen behind as Australia has continued to reform its economic policies and institutions.

### 2.1 Understanding productivity

Productivity is a measure of the rate at which inputs, such as labour, capital and raw materials, are transformed into outputs. The level of productivity can be measured for firms, industries and economies. Productivity growth implies that fewer inputs are used to produce a given amount of output or, for a given set of inputs, that more output is produced. Other things being equal, both implications of productivity growth increase economic growth since fewer inputs used to produce the same amount of output implies resources are freed up to increase production in other sectors of the economy.

There are two main measures of productivity:

- i Labour productivity is normally calculated as real GDP per hour worked. Labour productivity is affected by the efficiency with which labour and capital are combined in the production process, as well as by the amount of capital per worker per hour worked (increases in capital per worker are known as capital deepening).
- ii Multifactor productivity (MFP)<sup>3</sup> is measured in terms of real GDP per unit of labour and capital. MFP is a better reflection of overall efficiency than labour productivity, as it controls for changes in both labour and capital inputs. In practice, MFP reflects technological changes, as well as a range of non-technological factors such as industry and firm level adjustment, economies of scale and cyclical effects.<sup>4</sup>

There are many technical problems with the measurement of productivity, beginning with the shortcomings in the measure of income – GDP – that is used in productivity measures. In addition, productivity is only measured accurately for the market sector of the economy where prices provide an indicator of value that can be used to compare the value of new goods and services to those that they replace. In the non-market sector, where public sector provision of

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<sup>3</sup> Sometimes referred to as Total Factor Productivity or TFP.

<sup>4</sup> MFP can also be affected by differences in the treatment of labour and capital input. Labour input is only included where labour is employed, that is, where hours are actually worked. Capital input, however, reflects the capital stock available to be used whether or not it is employed.

goods and services predominates, prices are either absent or so heavily influenced by government policy as to make interpretation of price signals impossible. Productivity is also measured meaningfully only over a number of years, as a combination of measurement error, real economic shocks and the cyclical nature of productivity that arises from employment growth lagging output growth can make it impossible to interpret the implications of year to year changes in productivity estimates. Finally, the impact of changes in the quality of inputs on productivity may be difficult to measure. An important example is provided by the difficulty of measuring the productivity of labour given that data on levels of education are only a proxy for this. As a result, the best measure of productivity is the (multi-factor) residual, that is, the proportion of output growth that cannot be explained by growth in inputs of capital, labour and resources.

Variation in living standards across countries and time primarily reflects differences in the rate of capital accumulation and the rate of (multi-factor) productivity growth. Empirical studies carried out from the perspective of development accounting show that among these two broad factors, productivity differences among countries are the dominant explanation for income differences. Similarly, differences in productivity growth are the most important explanations for differences in income growth rates among countries (Howitt and Weil 2010 43-44).

In subsequent sections of this chapter, we consider the literature on productivity differences and the available evidence on the impact of changes in productivity on the per capita income gap between Australia and New Zealand. We then consider the evidence on capital formation.

## 2.2 Explaining productivity differences

Over the last two decades, improvements in the quality of the data available across OECD countries have resulted in a huge increase in the volume and sophistication of analysis of productivity differences. Two empirical facts have emerged from this literature. First, large and persistent differences in measured productivity exist across individual producers, both within countries and between countries. Second, higher productivity producers are more likely to survive than their less efficient competitors. Productivity is quite literally a matter of survival for businesses.

In a major new survey of the literature on productivity, Syverson (2010) outlines our current understanding of the causes of these productivity differences. The explanations are normally divided between factors that operate within businesses and are therefore under the control of management and labour, and factors that are external to the firm, including the policy and macroeconomic environment.

Determinants within the external environment include the following:

- The intensity of the competitive pressure in the relevant markets, including the ease with which imports can substitute for local production.
- The quality of the regulatory environment, and in particular, policy changes that substantially reduce regulation.

- Product and input flexibility, which includes the ease with which consumers can reallocate purchasing between different types of producers, and the flexibility of labour markets.
- Positive externalities (“spillovers”) arising from agglomeration effects (which tend to be specific to particular geographic markets) and knowledge transfers (which are not specific to particular geographical markets).

The factors associated with the external environment are closely tied to government policy and are important both because they directly affect productivity and because they may influence business decisions made within firms.

Firms will attempt to maximise value for shareholders whatever the policy environment, but policy may have a substantial influence on the strength of the incentives faced by firms and the resulting productivity gains. Competition moves market share toward more efficient (ie lower-cost and therefore generally lower-price) producers, shrinking relatively high-cost producers, sometimes forcing their exit, and opening up room for more efficient producers. It also raises the productivity bar that any potential entrant must meet to successfully enter. In addition, heightened competition can induce firms to take costly productivity-raising actions that they may otherwise not (Syverson 2010).

There is a vast theoretical and empirical literature demonstrating that poorly regulated markets can create perverse incentives that reduce productivity and that deregulation can reverse this<sup>5</sup>. A wide range of empirical work has also provided evidence that trade liberalisation has positive effects on growth<sup>6</sup>. And product and labour market flexibility are also important, since the more easily inputs can move toward higher-productivity businesses which are gaining market share, the stronger will be productivity growth (Syverson 2010).

## 2.3 Productivity and public policy: New Zealand and Australia

As we noted in Chapter 1, there has been a large increase in the gap between per capita incomes in Australia and New Zealand since the 1970s. However, as Figure 2.1 makes clear, there have been substantial fluctuations around the trend.

Studies in both New Zealand and Australia have credited changes in public policy with contributing to increases in the rate of economic growth. In New Zealand, the evidence available in the 1990s was interpreted as being consistent with economic reform having generated substantial increases in productivity (Evans et al 1996; Hall 1996). In Australia, the widely respected and non-partisan Productivity Commission (2009: 36) concluded that:

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<sup>5</sup> For example, at a cross-country level, Nicoletti and Scarpetta (2005) and Arnold, Nicoletti, and Scarpetta (2008) discuss the productivity effects of product-market regulations in OECD economies.

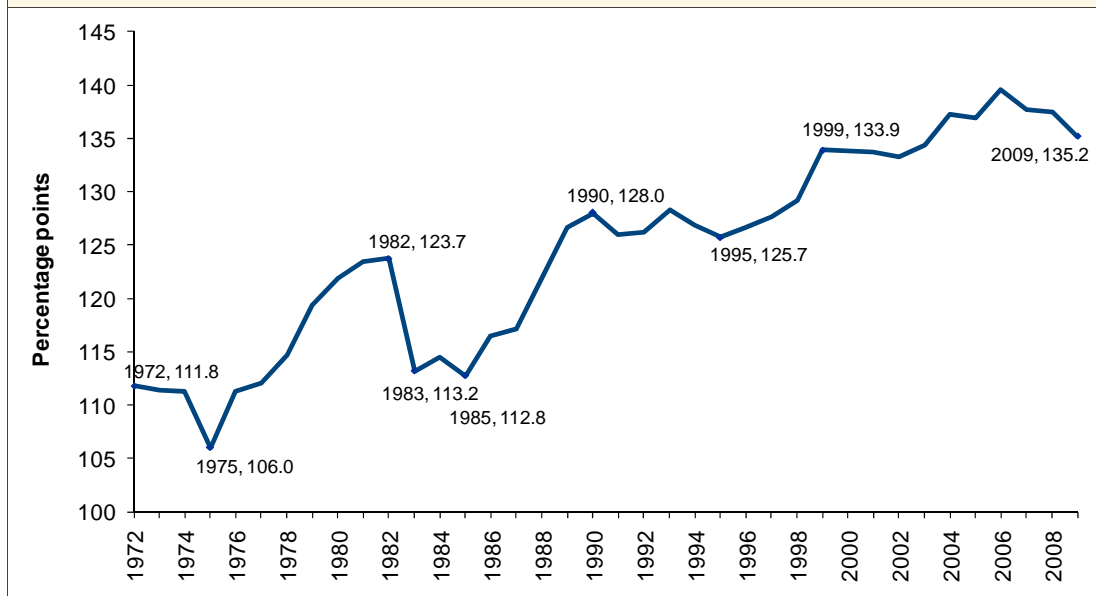
<sup>6</sup> For example, Aghion et al (2008) on trade liberalisation in India and Pavcnik (2002) on trade liberalisation in Chile.

*The key lessons from the unprecedented productivity growth of the 1993-94 to 1998-99 productivity cycle were that broad, enabling economic reforms, together with the pervasive, competitively driven deployment of breakthroughs in information and communication technologies, provided unprecedented opportunities to change production processes and redesign workplaces to raise productivity, with heightened competitive pressures to do so.*

Increasing productivity depends on the performance of individual firms, and that in turn depends on the incentives that they face to invest in improvements in productivity.

The Taskforce is aware that some New Zealand commentators doubt the productivity-enhancing effects of deregulation and economic reform from the mid 1980s, and some even attribute a further widening in the income gap to those reforms. Below we use the available data to consider the evidence on the impact of economic reform in New Zealand.

**Figure 2.1: GDP per capita, PPP basis Australia/New Zealand**



Source: Statistics New Zealand report for the 2025 Taskforce. Years ended March for New Zealand. Years ended June for Australia

Figure 2.1 plots Australian GDP relative to that in New Zealand. In the late 1980s, the combination of recession and restructuring costs in New Zealand and faster growth in Australia caused the income gap to widen substantially, despite significant productivity gains in New Zealand (see Table 2.1). However, from 1990 to 1995 the gap did not widen. The key economic policy developments were cuts to welfare spending and the Employment Contracts Act announced in December 1990. During the five years to 1996, New Zealand's trend rate of growth in real GDP per capita was 3.4 percent per annum, the fastest of any five-year period since the first half of the 1960s, while in this same period New Zealand's rate of employment growth was among the fastest of the OECD member countries. As can be seen from the chart above, the gap with Australia actually narrowed slightly during this period.



However, Australia embarked on a series of reforms of its own in the mid-1990s and this was reflected in higher growth rates in Australia for the remainder of that decade (Hilmer 2010) and a further increase in the income gap with New Zealand.

Since our first report, Statistics New Zealand has published new statistics on productivity movements covering 23 industries in the economy for the 30-year period 1978-2008.<sup>7</sup> The combined activity in these industries accounted for about 74 percent of GDP in 2007 and this aggregate is officially called 'the measured sector'. The following two tables from the SNZ report summarise the results for some of those industries in respect of productivity growth.

**Table 2.1: Labour productivity by industry**

Average annual percentage change by growth cycle

Year ended March

Industry	Growth cycle					Average for 1978-2008 %
	1982-1985	1985-1990	1990-1997	1997-2000	2000-2006	
Average annual % change						
Agriculture, forestry, and fishing	1.9	7.9	6.3	-0.2	4.1	4.0
Agriculture	1.8	6.6	7.4	-0.8	4.3	4.0
Forestry, and fishing	2.9	18.2	-0.9	0.2	3.2	3.9
Mining	12.1	4.9	8.1	2.1	-5.6	1.9
Manufacturing	2.7	1.7	1.3	3.3	1.8	1.7
Electricity, gas, and water supply	3.1	4.3	7.0	21.0	-3.0	4.4
Construction	1.7	1.4	0.3	-1.7	0.0	0.5
Wholesale trade	-1.1	0.8	-1.0	6.2	0.7	0.7
Retail trade	-2.4	0.7	1.5	3.1	2.1	1.0
Accommodation, cafes, and restaurants	-2.3	-1.4	-0.7	-0.8	0.4	-1.3
Transport and storage	4.6	6.1	5.9	2.9	0.6	3.6
Communication services	6.3	12.3	13.6	13.2	6.8	9.3
Finance and insurance	1.9	0.1	3.2	12.3	3.3	3.4
Business services <sup>1</sup>	..	..	..	-1.9	0.8	..
Cultural and other community services <sup>1</sup>	..	..	..	-0.6	-2.5	..
Personal and other community services <sup>1</sup>	..	..	..	9.2	1.2	..
Measured sector	1.5	2.9	2.6	3.1	1.3	2.1

1 Data available only from 1996

.. Figure not available

Source: Statistics New Zealand

<sup>7</sup> Statistics New Zealand, Industry Productivity Statistics, 1978-2008. Statistics for three of these industries were added in 1996.

**Table 2.2: Multifactor productivity by industry**

Average annual percentage change by growth cycle

Year ended March

Industry	Growth cycle					Average for 1978-2008 %
	1982-1985	1985-1990	1990-1997	1997-2000	2000-2006	
Average annual % change						
Agriculture, forestry, and fishing	0.5	6.2	5.0	-0.2	2.6	3.1
Agriculture	0.2	6.0	6.7	-0.4	3.1	3.4
Forestry, and fishing	2.9	6.7	-1.3	0.6	0.1	1.5
Mining	10.2	-3.7	5.7	0.0	-3.8	-0.3
Manufacturing	0.3	-0.9	0.9	2.1	1.3	0.6
Electricity, gas, and water supply	2.9	0.8	0.9	0.7	-1.7	0.7
Construction	2.3	1.0	-0.9	-1.4	-0.4	0.0
Wholesale trade	-2.6	-0.8	-0.6	5.6	0.5	0.2
Retail trade	-3.0	-0.6	1.1	2.5	1.4	0.3
Accommodation, cafes, and restaurants	-2.5	-2.2	-0.4	-0.6	-0.7	-1.5
Transport and storage	5.7	4.8	6.9	2.5	-0.2	3.4
Communication services	2.0	3.6	7.1	7.8	5.5	5.2
Finance and insurance	-2.3	-3.2	2.8	6.5	1.4	1.3
Business services <sup>1</sup>	..	..	..	-2.1	-0.2	..
Cultural and other community services <sup>1</sup>	..	..	..	-2.2	-2.7	..
Personal and other community services <sup>1</sup>	..	..	..	7.8	0.0	..
Measured sector	0.2	0.4	2.1	2.1	0.7	1.1

1 Data available only from 1996

.. Figure not available

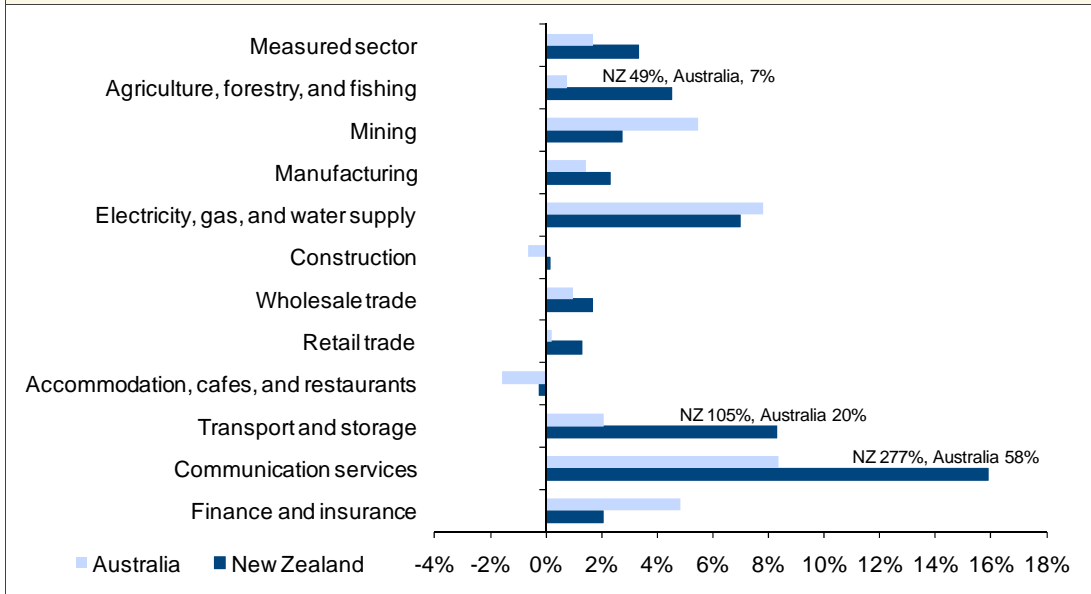
Source: Statistics New Zealand

These tables demonstrate that in a 'before-and-after' comparison for the measured sector as a whole, the 1990s were characterised by strong growth in productivity. The 1985-1990 period was characterised by strong labour productivity but weaker multi-factor productivity, a short-term result of the restructuring that occurred during this period.

Figure 2.2 compares productivity growth in Australia and New Zealand from the same Statistics New Zealand publication across 11 sectors. Data comparability problems restricted this analysis to 1986-2008 and the coverage to about 63 percent of both economies. Three sectors in which New Zealand introduced far-reaching economic reforms stand out, despite the fact that Australia introduced reforms in the same period. In Agriculture, forestry and fishing, labour productivity rose an impressive 49 percent in New Zealand and just 7 percent in Australia. In Transport and Storage, labour productivity rose 105 percent in New Zealand and 20 percent in Australia. But the biggest difference was in Communication services, where the figures were 277 percent and 58 percent respectively. This evidence is consistent with major policy reforms

being directly targeted at these sectors during this period. Subsidies for agriculture were almost all withdrawn, transferable quotas were put in place in fisheries and the Forest Service was restructured. In transport and storage, New Zealand Rail was opened up to competition and eventually privatised, and ports were reformed. In communications, Telecom was split out from the New Zealand Post Office, exposed to competition and then privatised. Manufacturing was a more complex matter as import protection was reduced, but gradually.

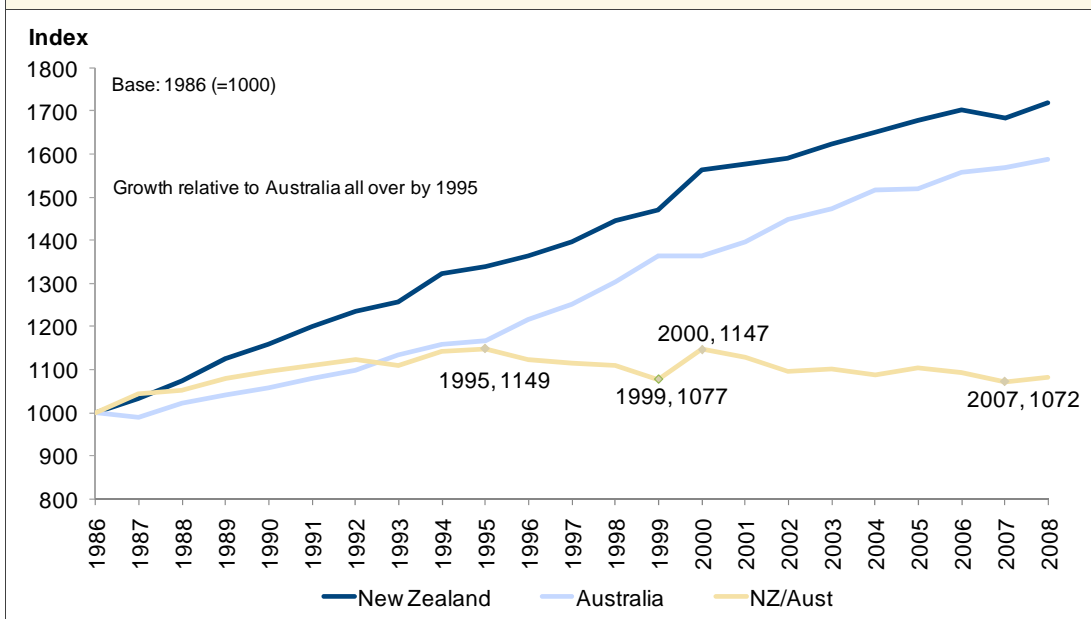
**Figure 2.2:** Annual average labour productivity growth in New Zealand and Australia 1986-1995



Source: Statistics New Zealand

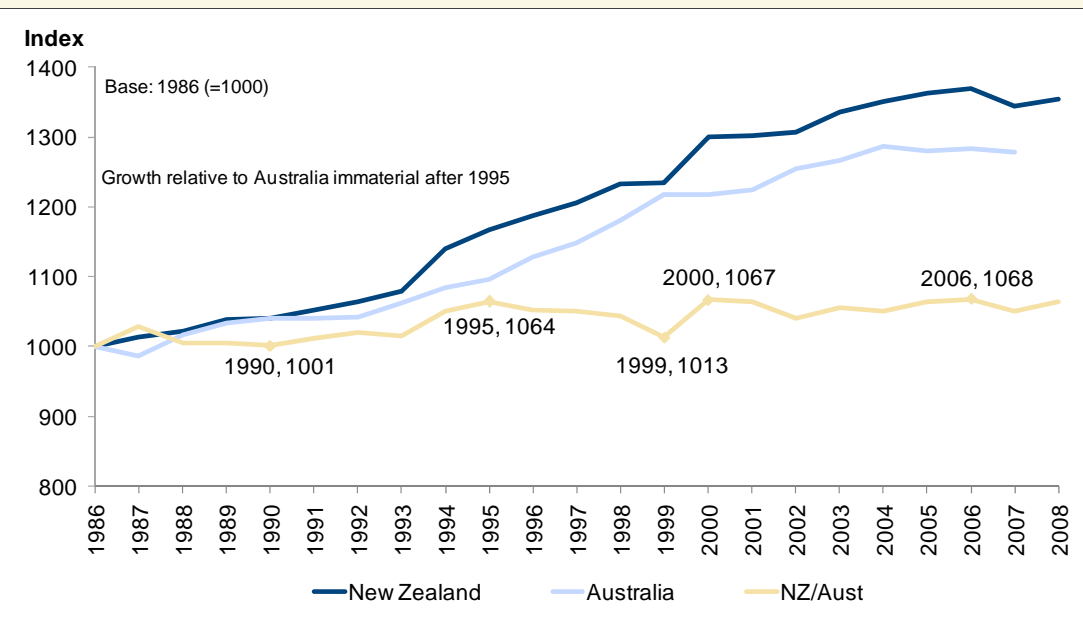
Note: Comments written on the graph refer to cumulative growth over the entire period.

**Figure 2.3:** New Zealand and Australia measured sector labour productivity 1986-2008



Source: Statistics New Zealand

**Figure 2.4: New Zealand and Australia measured sector multifactor productivity 1986-2008**



Source: Statistics New Zealand

Figures 2.3 and 2.4 indicate that labour and multifactor productivity in the measured sector increased more in New Zealand than in Australia during the 1986 - 2008 period as a whole. However, it is also clear that New Zealand's out-performance was essentially all over by 1995. New Zealand has lost ground against Australia in respect of labour productivity growth since 1995, but notice that this was, initially at least, because growth in Australia accelerated. Since 1995, New Zealand has more or less held its own against Australia in respect of multifactor-productivity growth, although the growth rate in both countries has been minimal in recent years. But "holding our own" will not close the income gap with Australia. To do that, New Zealand will need to generate a renewed focus on productivity, efficiency and growth.

## 2.4 Fixed capital formation and growth

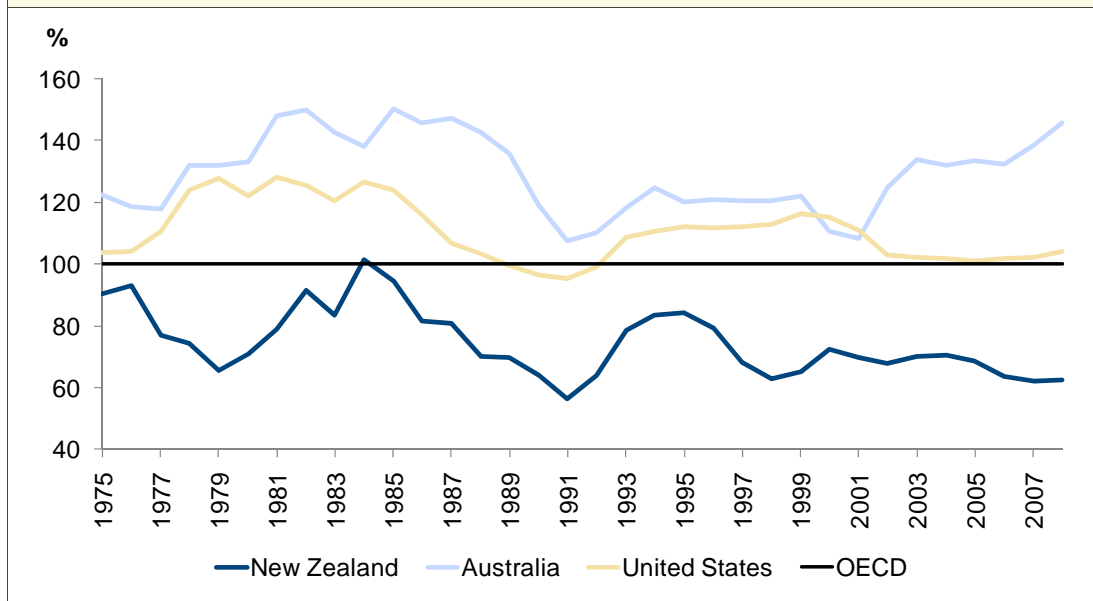
Most economic output requires both human and physical capital. All else being equal, a higher rate of investment, driven by firms' assessment of market and profit opportunities, will tend to be part of the process that lifts GDP and average output per worker. Additional investment is positive for growth when it represents an efficient diversion of some of today's output into the production process to boost future output. Investment in new and better equipment is a key channel through which many new innovations and efficiency gains enter the production process. The rate at which new investment occurs, and at which the effective per capita capital stock increases, is thus one of the key channels through which many of the gains from innovations that lift the overall level of (multi-factor) productivity are realised. However, this process requires the efficiency in the allocation of resources that arises from the price signals present in a market-based economy. Even in New Zealand, the lift in new investment per worker in the early 1980s shown in Figure 2.5 largely reflected the construction of the Think Big projects, all too many of which proved to be unprofitable.

Few countries have high quality data on their capital stock, and estimates are only as good as the models and assumptions used to build them. The difficulties are compounded when attempting cross-country comparisons. New Zealand appears to face more serious problems than most in this area, with various different capital stock measures producing quite different results depending, for example, on whether one focuses on the measured sector of the economy (where market prices exist, and where investment choices reflect market incentives) or the whole economy. On some time series measures, the growth in New Zealand's capital stock appears to have been quite rapid by OECD standards, but on others it has not. On some measures we appear to have seen more growth in capital stock per worker than in Australia, but again, on other measures we have not. Schreyer (2005) produced estimates suggesting that New Zealand's absolute multi-factor productivity lagged Australia's by only around 10 percent but our capital stock per unit of labour or of output lagged much further behind, but offers no assistance in understanding how New Zealand's performance has changed through time. Differences in capital intensity between New Zealand and Australia in sectors where many major firms operate in both countries are also difficult to understand.

Given these inconsistencies, we have fallen back on the best available internationally comparable measure of new investment: real Gross Fixed Capital Formation (GFCF), as recorded in individual countries' national accounts and reported by the OECD. Over recent decades, New Zealand's investment (GFCF) as a share of GDP has been around that of the average longstanding OECD country (since 1970, 24 percent of GDP, as compared with the OECD average of 23.7 percent). In Australia, 27 percent of a much larger GDP was invested during that period. For the period since 1990, the picture has been much the same: investment was 21.1 percent of GDP in New Zealand, 24.2 percent in Australia, and 21 percent in the average longstanding OECD country. If Australia has a higher capital stock in relation to GDP than New Zealand, as is plausible, the difference on a net investment basis will be smaller, but it is still likely to be positive in favour of Australia.

However, because New Zealand's GDP per capita is so much less than that in other countries, to get the same real dollar value of investment spending per worker in New Zealand the total share of GDP accounted for by investment would have to be materially higher than in higher income countries. In their last report the OECD used Figure 2.5, and calculated that over the last 15 years for every \$100 of non-residential investment spending per worker in the OECD as a whole, New Zealand firms spent only \$70. Firms operating in Australia, by contrast, have been spending around \$120.

**Figure 2.5: New investment per worker (relative to the OECD average)**



Source: OECD

Note: Non-residential gross fixed capital formation per worker at current prices and current PPPs (OECD = 100).

Of course, the industrial structure of a country affects capital requirements. The United Kingdom, for example, devotes a relatively small share of its GDP to investment, probably in part reflecting its specialisation in financial and business services which tend to require much more human capital than physical capital. However, it is not obvious that the differences between the industrial structures in New Zealand and Australia are so large as to account for the differences in capital investment.

The rate at which the population and workforce are growing also influences the required rate of investment. A faster growing population will tend to require, over time, a larger increase in the capital stock, both in the workplace and for infrastructure and housing. Both New Zealand and Australia have among the faster rates of population growth in the developed world, but since New Zealand's population has grown at around the same rate as that in Australia since 1990, population growth differences cannot explain the differences in the rates of gross fixed capital formation between the two countries.

Another complication is that the OECD projections to 2025 that were discussed in Chapter 1 imply that per capita GDP growth in New Zealand will be fractionally higher than the OECD average through to 2025. One interpretation of this is that the OECD expects capital per worker to grow quite strongly in New Zealand despite the relatively low level of net capital formation per worker in New Zealand. A further difficulty is that, as shown in Figure 2.3 above, labour productivity actually grew faster in New Zealand than in Australia between 1986 and 2008, implying either greater capital deepening in New Zealand or relatively faster multifactor productivity growth, or both.

Despite all these complicating considerations, it is reasonable to conclude that for New Zealand to have materially closed the income gap with Australia during the last 20 or 30 years a higher level of investment in physical (and of course human) capital would have been necessary. The important question then is why did firms operating in New Zealand, or which might have considered operating or expanding here, either not find more profitable investment opportunities, or fail to take up profitable opportunities that were available?

## 2.5 Conclusion

A vast body of theoretical and empirical evidence supports the proposition that productivity is a fundamental source of economic growth, and that economic policy has a very important impact on it. In particular, reforms which improve the quality of regulation, reduce government ownership and protection from imports, and increase competition, have consistently resulted in increases in the wealth of the societies implementing them. The evidence available to the Taskforce provides strong support for the proposition that productivity and economic growth in New Zealand were increased as a result of the economic reforms instituted by New Zealand from the mid-1980s, both absolutely and by comparison with Australia. However, public policy in New Zealand in the past 15 years has often been inconsistent with achieving increased levels of productivity, whereas Australia continued to introduce a range of productivity-enhancing reforms over that same period.

The available evidence also suggests that it is likely that non-residential fixed capital formation in New Zealand is substantially less than in Australia. Since investment also has a strong impact on productivity and growth, it seems likely that a lower level of investment is directly related to the increase in the income gap between Australia and New Zealand. Attention therefore needs to be focused on the creation of an environment in New Zealand that is more conducive to wealth creation.

## 3 What do we know about the forces that drive economic growth?

- The modern literature on economic growth provides three important lessons for New Zealand. First, globalisation has provided entrepreneurs in all countries with greatly increased access to new ideas. Second, economic growth depends more on the ability to absorb new ideas into the economy rather than the ability to develop new ideas themselves. Third, absorption of new ideas depends on the institutions of the economy, including the extent to which the policy environment and the intensity of the competition that it facilitates provides incentives for firms to invest in innovations, as well as workforce skills.
- Attention should focus on whether New Zealand's institutions provide adequate incentives and are sufficiently flexible to maximise the benefits from our integration into international markets.

### 3.1 Introduction

In this chapter we provide a brief survey of theories of economic growth and the understanding of the forces that drive economic growth. In particular, we explain the lessons that have emerged from the modern literature on endogenous growth, the support that this literature provides for the view that the microeconomic framework of policies and institutions in individual countries has a major impact on economic growth, and the insight that this literature provides regarding the relationship between globalisation and economic growth.

### 3.2 From neoclassical to endogenous growth

The literature on economic growth which developed up to the 1980s was based on a series of stylised facts or relationships which were demonstrated empirically and captured in what is known as the neo-classical growth model (Solow 1956). However, a key limitation of that literature lay in its inability to assist in understanding the drivers of those stylised facts – in other words, that literature captured at the most basic level the relationships between labour, capital and productivity in economic growth but on its own it told us little about the causes of growth. To address more directly the causes of growth, models of endogenous growth were developed where technological advance is determined by forces within the economic system itself (Romer 1994).

A key advance associated with endogenous growth models is that they capture the idea that investment and technological advance are mutually reinforcing, because investment occurs in ideas and people (human capital) as well as in capital equipment, creating a platform for further technical advance. A second key advance associated with the endogenous growth models is that institutions (very broadly defined to include law, policy and all types of physical and social infrastructure) are explicitly modelled as part of the growth process to capture the way in which they influence the propensity to invest in the development and implementation of new ideas and the level of human capital in society. Thirdly, endogenous growth theory provides an explicit



role for dynamic competition in markets. This means that markets reflect competition driven by economic incentives to develop and introduce new products and methods of production rather than by price competition between suppliers of homogeneous products.

### 3.3 The stylised facts of the modern growth literature

The literature on endogenous growth has generated a substantial degree of consensus around a number of stylised facts about the process of economic growth. Drawing on Jones and Romer (2010), Acemoglu (2009), Aghion and Howitt (2009) and other sources, we provide a summary of these stylised facts below.

- Increased flows of goods, ideas, finance and people – via globalisation as well as urbanisation – have increased the extent of the market for all workers and consumers. This is important given the scale effects of ideas, since scale effects mean we are made better off by interacting with other countries even if they have the same comparative advantage as we do. The focus that New Zealand has placed on increasing interaction with the rest of the world is therefore growth-enhancing provided we have the institutions and educated population required to take advantage of it.
- Ideas are non-rival, which means that they introduce strong scale effects and they change the feasible and optimal sets of economic institutions. Even if they are protected by a patent, the value of ideas to firms and consumers in New Zealand is not reduced by the fact that they are valuable to firms and consumers in the US and other countries (Romer 2010).
- There is greater variation in growth rates the further a country is from the technology frontier. Countries a long way from the frontier can either grow very quickly or very slowly. The propensity to grow quickly depends on institutions and human capital – limited human capital and low quality institutions are a barrier to growth, even in a world of globalisation. For developed countries such as New Zealand, the opportunities to generate growth that is much faster than other developed countries are limited unless catch-up is possible through adoption of the best growth-enhancing policies in place elsewhere in the world.
- Modern growth theory emphasises human rather than physical capital as the driver of economic growth, and highlights the interaction between ideas, population and human capital. The increasing extent of the market that has resulted from globalisation has provided all countries with exposure to a much larger and wider range of ideas. The ability of a country to take advantage of these ideas depends on human capital and institutions.
- The rising quantity of skilled labour relative to unskilled labour has not produced a decline in its relative price. In particular, the income premium associated with a university education has not declined over time, even though we have trained large numbers of university graduates – and the reason is that this higher level of education has at least an offsetting impact on economic growth by providing society with a greater ability to adopt and implement new ideas.

In New Zealand, there is evidence that the income premium associated with a university education is smaller than in countries such as the US, which we take as evidence that a symptom of New Zealand's relatively poor growth performance may be its limited capacity to utilise skilled labour of the type generated by a university education.

- A more educated labour force means a larger effective labour supply (more value can be produced for any given number of hours worked). In addition, as society's workforce becomes more educated, the greater is the likelihood that some of its members will contribute to technological advance in some way, by inventing or commercialising inventions or assisting others who do. Note however that causation is complex, and may run both ways (growth causes larger investments in education, and more education causes higher growth).

### 3.4 The importance of rules and institutions for economic growth

The current models do not explicitly capture the way in which institutions evolve as part of the growth process, but they have a central role for institutions (broadly defined to include the policy environment, law, regulation and the intensity of competition). The importance of the development of an endogenous representation of institutional dynamics in these models is widely recognised (Jones and Romer 2010). However, the impact of institutions is difficult to measure, in part because they are endogenous to the growth process (they develop over long periods of time and are context dependent), and because there is no single recipe for institutional structure that works in every context. But difficulty of measurement should not be interpreted as unimportance (Baumol et al 2007: 41).

Rules (institutions) matter because they change both the incentives for flows of technologies and the productivity of technologies that are locally available. A key, perhaps the key, problem for New Zealand is that our institutions and policies do not provide the incentives and the flexibility for New Zealand to maximise the income benefits from its integration into the international economy, especially those parts of it that are growing very quickly.

Two aspects of the efficiency of institutions matter for economic growth. First, the rate of growth depends on whether they are dynamically efficient – that is, whether they are consistent with efficient responses to the ideas (opportunities and technologies) received through interaction with the rest of the world. A dynamically efficient economy is one where the incentives for investment (in new assets and new knowledge) maximise long run national income by providing for the introduction of new services and new technologies. Second, institutional change is regarded as a continual process driven by the need to ensure dynamic efficiency in a world where new ideas and new opportunities are constantly becoming apparent.

In dynamically competitive markets, the threat of being bypassed by a superior technology drives incumbents to invest in new technology and provide new services to customers, since failure to do so will increase the speed with which alternative technologies become economically feasible. This type of dynamic competition (sometimes referred to as the process of creative destruction after the pioneering work of Joseph Schumpeter) is the driver of economic growth, because it maximises the benefits to society from investments in new technology and the associated infrastructure and capital equipment (Aghion and Howitt 1992; Barro and Sala-i-Martin 1995). Prices above the perfectly competitive price provide an incentive for innovation, and technical change forms the basis on which firms compete for the market. Telecommunications, information technology and consumer electronics markets are among the best examples (Evans et al 2003; Baumol et al 2007: 51).

The negative impact of dynamic inefficiency on national income and economic growth can be large. Two examples illustrate the point. First, if dynamic inefficiency results in poor investment decisions relating to infrastructure or long-lived assets, then those inefficient assets may go on impairing economic output for a long time. Poor investment decisions may sometimes be made in a dynamically efficient environment, but those who make such poor decisions will normally be forced to exit the market. Second, if dynamic inefficiency results in the delayed introduction of new services or technologies (for example, congestion pricing for roads), then both the consumer benefits and the producer benefits from the introduction and operation of the technology are lost to the economy.

### 3.5 The impact of innovations on growth

Commercially successful innovations usually have a much greater impact on the economies of the countries where they are most comprehensively implemented than on the economy where they were invented. This is because commercially successful innovations enrich more than just the innovator. In other words, innovation will have a much greater impact on national income if it benefits many users in the country rather than benefiting only those who developed the intellectual property (Bhidé 2008). Even where monopoly rights exist, such as through patents, the vast majority of the economic benefit from innovations is captured by consumers. This is because an innovation can generate substantial profits for an inventor and the firm that puts it into production only if the innovation increases the prosperity of many users.

In a prosperous New Zealand economy, there will be substantial private investment in R and D. Some of that investment may be in the development of genuinely new ideas of commercial importance to local industry, but much of that investment may be in the development of local adaptations of ideas that originated in other countries. So New Zealand stands to gain from an increase in high-level research abroad: the output of such research is very mobile and, compared to its value to New Zealand, cheap. An increase in the supply of research in other countries increases the opportunities for firms and individuals to put those innovations to work improving productivity in New Zealand.

It follows that the benefits that the New Zealand economy derives from an innovation do not depend on whether the technology was actually invented in New Zealand. As Baumol et al (2007: 27) put it "...innovation is an inherently "leaky" process. Even with well-enforced property rights, the vast majority of the profits from innovations accrue to society as a whole rather than the inventor or the initial entrepreneur. That is because innovations lead to new and cheaper products and services, which benefit all who purchase them, improving their standard of living. Thus, even if the "next big thing" should be invented in China and India, Americans end up benefiting." This is a key reason why economists doubt the economic benefits of public subsidies to invention: if the invention has wide application, only a small portion of the benefits will be contained within the boundaries of the economy in which it was invented (Leamer 2007: 98).

### 3.6 Innovation, absorptive capacity and publicly funded research

The term "absorptive capacity" refers to the capability to identify and acquire new production and distribution technologies, to adapt that technology to the needs of local firms, and to put it into production in a way that increases productivity. One justification for public and private investment in research institutions such as universities is their impact on the quality of the human capital in the economy, and the impact of that in turn on the absorptive capacity of firms in the economy. However, public investment of this type is insufficient because it neither has a direct impact on growth nor provides an institutional framework within which innovation can be implemented in local production. Similarly, entrepreneurs who develop new technologies may produce innovations that have a transformative effect on the relevant markets, but no advanced economy can achieve prosperity with only entrepreneurs. This is because established firms are normally required to refine and mass-produce the innovations that are developed by entrepreneurs and those undertaking basic research (Baumol et al 2007: 92). Thus the most important role for government relates to its ability to create a policy environment within which every sector of the economy will find it attractive to invest in productivity-enhancing innovation. Critical for this is the extent to which government policy ensures the existence of intense competitive pressure on the widest possible range of firms and markets within the economy. For example, recent theoretical and empirical research has shown that the removal of barriers to entry and the removal of labour market regulations can permanently increase the incentive to innovate (Aghion and Howitt 2009).

### 3.7 Conclusion

At any point in time, a country has available to it the stock of ideas (technologies) in the rest of the world, filtered by the local rules (institutions) that determine which of those technologies will be available for local production. The technologies that are actually available for use in each country will depend on the incentives created by local institutions and rules in that country. In this sense, the modern literature on economic growth very strongly supports the focus on policy, institutions and regulation outlined in the first report of the Taskforce. This literature also suggests that given New Zealand's level of integration into the global economy, most of the ideas that improve productivity in New Zealand will be developed overseas. The economic

impact of local R and D will be determined by its relevance to business activity in New Zealand, and by the breadth of its application in products consumed in New Zealand, rather than by the location of the inventor.

The literature on economic growth still has considerable limitations. It is moving only slowly to capture the forces that create growth. It relies on analysis of multi-country statistical data, and there is undoubtedly much about the differences between countries that is not captured by the variables included, opening up the potential for significant bias in the estimates obtained.<sup>8</sup> Equally importantly, while the data analysis can identify different contributors to growth it cannot provide a clear policy prescription for individual countries or circumstances. As a result, there is no single policy blueprint: economies are complex; history, geography, terms of trade, the policies of other countries and the international economy all matter but are outside the control of contemporary policymakers in any country. But policymakers can control the size and quality of government spending, and the extent to which institutions and regulations created by government promote or inhibit economic growth. In other words, policymakers can control whether the institutional environment that they create is consistent with the dynamically efficient environment required to produce the highest possible standards of living.

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<sup>8</sup> As Robert Solow (2006:3) recently remarked, "I am not deeply devoted to cross-country regressions as a way of improving our understanding of economic growth. But I suppose they could suggest interesting topics for serious research."

## 4 Economic geography and globalisation: Distance, market size, commodities

- In a global context Australia is disadvantaged by its small size and distance from major markets. New Zealand is smaller still, but no more disadvantaged overall, because it benefits from proximity to the Australian market. Size and distance from markets therefore cannot explain Australia's superior economic performance, and need not be obstacles to the eradication of the income gap between New Zealand and Australia.
- The gradual shift of economic power from Europe and North America to Asia is an opportunity for both Australia and New Zealand, but we will need a more growth-focused policy environment to capitalise on this opportunity.
- To attract increasingly footloose talent, skills, capital, technology and entrepreneurship from around the world, New Zealand must offer a policy environment that is attractive enough to overcome the obstacles posed by economic geography. The community needs governments to ensure an adequate supply of public goods and a welfare safety net. Yet this activity accounts for only a small proportion of current government spending.

### 4.1 Introduction

Both the New Zealand and Australian economies have been shaped by their natural resource endowments and their comparative advantage in primary products. But even by comparison with Australia, New Zealand is sometimes seen as disadvantaged by its distance from markets, small population and domestic market, and relative lack of mineral wealth. Contemporary interest in these issues has been stimulated by globalisation – the increased international mobility of goods, people, contracts and ideas, and the rapid growth of international trade and investment with Asia and the states of the former Soviet Union – and its implications for New Zealand. In addition, the economic analysis of international trade has been advanced through the development of models which explicitly captured the impact of geographical distance, market size and increasing returns to scale, and national borders (Krugman 2007). In this Chapter, we consider these issues, their significance in the context of the modern global economy, and their implications for economic policy in New Zealand.

### 4.2 Distance

By raising transport costs, distance reduces trade. New Zealand is 10,000 km from the United States and China and 2,250 km from Australia. Despite reductions in transport costs in the last three decades, it is not clear that transportation costs have fallen relative to the cost of the goods being transported, or that transportation costs have fallen to a proportionately greater extent on longer routes (Boulhol and de Serres 2008: 21-22). As a result, the impact of transport costs on New Zealand's trade appears to be just as strong as it was 30 years ago.

On one measure, high transport costs mean that New Zealand's external market potential<sup>9</sup> is only about a fifth of the OECD average.

Reduced trade opportunities affect domestic productivity in many ways. Low market access limits opportunities for concentrating production in activities where there is a comparative advantage: domestic businesses produce goods that could be supplied more efficiently from abroad were it not for transportation costs. By segmenting markets, distance also limits the extent to which domestic firms can operate on an efficient scale, an effect magnified by the country's small size. Moreover, by providing a natural shelter from foreign competition, distance weakens the pressure on domestic companies to be efficient and innovate (Boulhol and de Serres 2008: 5). Foreign direct investment is also sensitive to distance if the costs of operating overseas affiliates rise the further they are from the multinational's headquarters.

The impact of distance to markets on developed countries was recently estimated in a sample of 21 OECD countries. The OECD methodology is unable to quantify the relative contribution of different transmission channels, but it generates estimates that New Zealand and Australia suffer the strongest negative effect from distance, while Belgium and the Netherlands obtain the greatest benefits from their location. New Zealand's distance to markets reduces its GDP per capita by about 10 percent (Boulhol and de Serres, 2008). By comparison, remoteness also reduces Australia's GDP per capita by about 10 percent, while the effect for the United States is very close to zero.

**Table 4.1:** Impact of geography on GDP per capita for some OECD Countries  
(Average 2000 – 2004; Difference compared to the average OECD country)

Country	Distance to Markets (percent)
Australia	-10.6
Belgium	6.7
Canada	2.1
Denmark	2.2
Finland	-2.4
Ireland	0.6
Netherlands	5.6
New Zealand	-10.1
Sweden	-1.4
USA	-0.3

Source: OECD 2008

<sup>9</sup> Defined as the sum of all countries' GDP weighted by the inverse of the bilateral distance from the country under consideration.

These OECD estimates indicate that distance to markets has slightly less impact on New Zealand than on Australia because of the benefit that New Zealand derives from proximity to the Australian market, whereas Australia derives less benefit from proximity to the smaller New Zealand market. Thus, geographical location may explain up to three quarters of the gap in New Zealand's living standards relative to the OECD average, but it cannot explain any of the gap relative to Australia.

Though the evidence is, therefore, that New Zealand is not disadvantaged by distance from markets by comparison with Australia, it is still a small country with small cities by world standards.

### 4.3 Population and domestic market size

With a population of a little over four million, New Zealand is not a large country, and is significantly smaller than Australia. But New Zealand is not among the smallest nations in the world, and even among the group of developed countries there is nothing unique about our size: countries such as Norway, Denmark, Finland, Singapore, Slovakia, Slovenia, and Ireland have similar populations, and Cyprus, Iceland, Luxembourg, and Malta are materially smaller. Most of these countries have incomes at least as high as New Zealand's. And there is no evidence that small countries are getting poorer relative to large ones over time.

There are two ways in which size may matter. First, countries that are sparsely settled (including both New Zealand and Australia) may have to spend more, per capita, on physical infrastructure than more closely-settled countries. Second, it may be more difficult for firms to achieve efficient scale in their operations if they supply only the home market of a small country, but firms in most small countries address that issue by moving into export markets. While exporting requires investments beyond those made in the home market, New Zealand firms do benefit from the advantages that economic integration with Australia, including a common language, provide.

One stream of the economic geography literature focuses particularly on the importance of agglomeration in cities in driving growth in high value-added activities. It argues that the increased importance of "spatial transaction costs" means that economic growth and globalisation over the past 20 years have favoured large urban centres in almost every country (large and small). Hence, a key problem for New Zealand is that its small population limits the potential to obtain agglomeration effects (McCann 2009: 290). But the evidence in support of this approach appears to us to be weak. Auckland is a large city by comparison with the total population of New Zealand, and despite New Zealand's high level of integration into the global economy, the position of Auckland within the regional hierarchy of Australasian cities is not declining; indeed, from 1991 to 2006 the population of Auckland grew faster than the populations of Sydney or Melbourne. More broadly, we understand too little about the causal relationships between productivity in the economy and agglomeration to ascribe to agglomeration a pivotal role in driving New Zealand's economic performance.

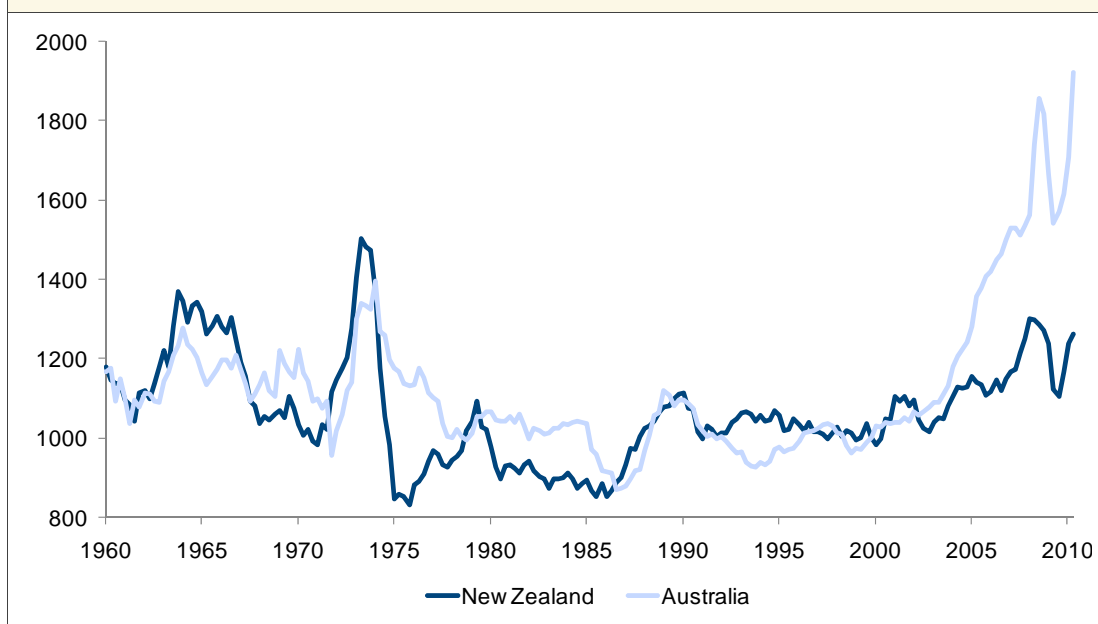


## 4.4 Minerals, commodities and the terms of trade

From a global perspective a striking feature of both New Zealand and Australia is the unusually high proportion of commodity products within the total exports of both countries. New Zealand's relatively poor economic performance in the last three decades is sometimes attributed to this feature, but the evidence does not support this: New Zealand's terms of trade have improved quite steadily since the mid 1980s. In addition, as is clear from Figure 4.1, New Zealand's terms of trade have followed a very similar pattern to those in Australia until the last 5 years, so differences in the terms of trade cannot explain most of New Zealand's decline relative to Australia.

A second and related hypothesis is that the real difference between New Zealand and Australia is the richness of Australia's resources of minerals such as coal, gold and iron ore and the demand for those minerals in Asia. The recent dramatic increase in Australia's terms of trade suggests that this hypothesis has some merit in explaining at least the short-term changes in the income gap between the two countries. However, the marked divergence between New Zealand's and Australia's terms of trade is recent, so it is more relevant as an explanation for the recent increase in the per capita income disparity between the two countries, and the level of challenge associated with the 2025 goal.

**Figure 4.1:** Terms of trade (Dec 99=1000)



Source: Bank for International Settlements

In 2009 the direct effect of activity in the minerals sector accounted for 6.8 percent of Australia's GDP, about the same as the share of agricultural production in New Zealand's GDP. This is large enough to have some impact on growth in the whole Australian economy. It is, however, easy to overstate the importance of the minerals boom in Australia. Australia's mineral and related exports were growing very rapidly (as a share of total exports and of GDP) from the 1960s, at least 20 years before Australia reversed its own fall in OECD rankings of income per capita.

Minerals were already around 35 percent of total Australian exports by the mid 1970s (equal in nominal terms to around 5 percent of Australia's GDP in 1970).

In contrast to many popular views about Australia's advantages, New Zealand is relatively well endowed with natural resources, and on a per capita basis perhaps better endowed than Australia<sup>10</sup>. We have a climate almost ideally suited to grassland farming and, for example, productivity growth in the dairy sector has been faster than in most other sectors of the economy over the last 20 years. There is probably more scope for innovation, new technologies, and smart products in these commodity-based industries than there is in most of Australia's commodity industries. New Zealand also has a huge exclusive economic zone that is rich in fish (a well-managed sustainable resource). Even on or under the land, indications are that New Zealand's mineral and hydrocarbon resources could be, for the physical size of the country, at least as large as Australia's – rich in iron sands, lignite and other minerals, in geothermal energy potential and potentially in oil and gas. New Zealand may well have made it more difficult to explore and develop its resources than Australia has done, but if so those are regulatory and political issues, not issues of underlying economic potential.

Finally we note that many high-income countries have much smaller mineral resources than New Zealand: these include Singapore, Taiwan, Japan, Denmark, Ireland, and Austria. In many countries abundant mineral or hydrocarbon natural resources have come to be seen as something of a "curse", undermining good policies and institutions, driving up the exchange rate and deferring necessary structural adjustment.

## 4.5 Implications of contemporary globalisation

Debate about the impact of globalisation has been polarised. At one extreme, Thomas Friedman (2007) has claimed that modern information technology, reductions in trade barriers and the globalisation of economic interaction have "made the world flat" – that is, the ability to participate in globalisation is not impaired by location in geographical space or by national boundaries, so there are no barriers to a large scale transfer of employment from the developed to the developing countries. Alternatively, McCann (2009) suggests that contemporary globalisation has increased the impact of geographical distance, because it is focused on knowledge-intensive forms of production in which the increasing importance of timeliness, speed, variety, customisation and service quality has increased the premium associated with face-to-face contact between those involved in the production process. Globalisation has also increased the benefits of knowledge spillovers, "thick" labour and input markets and intense competition associated with large cities, and has therefore favoured countries close to large markets and with significant agglomeration economies generated by large cities.

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<sup>10</sup> World Bank estimates of natural resources (including pasture land) per capita are at the following link: <http://go.worldbank.org/RRCQLBZMX0>.

Considering the specific impact of globalisation on New Zealand, McCann (2009: 289 – 290) suggests five “fundamental” changes to the global economy occurring between the late 1980s and early 1990s that dramatically changed New Zealand’s position in the global economy.

These changes were:

- deregulation of transportation and the emergence of lower cost transport systems,
- use of computing in business, and the use of mobile phones and the internet for communication,
- entry of China and the former Soviet republics into the world economy, and the proliferation of trade agreements that increased regional economic integration,
- organisation changes that result in firms relocating production to different parts of the world (“offshoring”), and
- the increasingly important role played by cities in generating agglomeration economies.

McCann explains New Zealand’s relatively poor economic performance by noting that the fall in spatial transaction costs arising from the five changes set out above has focused trade on much finer levels of specialisation of production, resulting in greater integration of countries and fast growth of trade between similar countries but disadvantaging small distant countries such as New Zealand. He suggests that the integration of the economies and labour markets in New Zealand and Australia means that the larger and more diverse Australian cities are better able to profit from modern economic geography, and thus are more attractive to capital and labour than are New Zealand cities. This in turn means that labour productivity grows faster in Australia than in New Zealand, creating the observed gap.

A key problem with this approach is that there is no evidence in the record of productivity and growth that New Zealand suffered an adverse shock from globalisation in the 1980s and neither is there evidence that agglomeration effects are drawing a disproportionate number of highly skilled workers from New Zealand to Australia. The recent minerals boom in Australia has probably created jobs that have attracted more unskilled and semi-skilled New Zealand workers. Finally, there is no evidence that the relative performance of small countries has declined in the last 20 years: even New Zealand has grown slightly faster than the OECD average over that period.

The Taskforce has concluded that modern growth theory provides stronger support for the importance of institutions and policy than it does for geography, especially in the deterministic interpretations of economic geography (see Jones and Romer 2010; Rodrik et al 2004; Romer 2010). This is particularly so given the evidence that, despite low spatial transaction costs, substantial differences in labour productivity and standards of living exist within countries and regions (Acemoglu and Dell 2009).

We accept that where the geographical distance between countries is small their trade will be larger than that between more distant countries because small differences in comparative advantage or efficiency will make trade feasible where geographic distance is relatively unimportant. But since many transactions occur in markets in which relationships between buyer and seller matter, the “distance” that is relevant to trade and capital flows can be defined in linguistic, cultural and legal terms as much as it can in physical transport costs. Countries cannot change their geographical location, but they can change other aspects of distance.

Of all the changes resulting from globalisation it is probably the mobility of ideas that is most important (Leamer 2007: 104; Bhidé 2008) and this is where transport costs have the least impact on New Zealand. A key outcome of the mobility of ideas and capital is that economic activity has become more dispersed. Since New Zealand generates a tiny fraction of those ideas but is highly integrated into the world economy, the strength of the incentives for New Zealand firms to adopt the available ideas is likely to be much more important than distance from their origination in shaping our economic prospects. It is far from clear why these changes should be interpreted as increasing the geographic disadvantages of New Zealand. As one of the pioneers of the new economic geography, Krugman (2007), concludes:

*There are some reasons to believe that the centripetal forces emphasized by the new economic geography – forward and backward linkages driven by the interaction of increasing returns and transport costs – actually had their peak influence some time ago, and are weakening in the 21<sup>st</sup> century economy....Distance matters a lot, though possibly less than it did before modern telecommunications. Borders also matter a lot, though possibly less than they did before free trade agreements.*

## 4.6 Policy responses

The key policy issue arising from consideration of New Zealand's economic geography and the implications of globalisation is whether government policy can still influence our future growth path (that is, whether the forces of geography and globalisation are deterministic). McCann (2009: 286 – 300) suggests that the interplay of economic geography and globalisation mean that “... the ability of individual national governments to effect major changes in their domestic economies is very limited,” particularly where policy interventions are focused on the quality of institutions and policy, and issues such as tax rates and labour market regulation. He offers instead some “modern” policy prescriptions that include (i) increasing New Zealand's domestic agglomeration effects by increasing the scale of the economic activity located in Auckland, Hamilton and Tauranga, and (ii) reducing spatial transaction costs with other countries. The Taskforce does not accept that New Zealand policy settings in areas such as tax and regulation are so good that further changes can be dismissed as contributors to future growth. In addition, there is a danger that by attempting to introduce centrally-planned solutions, and subsidising particular aspects of economic activity, government may actually inhibit the private sector adjustment to the international economic environment and increases in the efficiency of the economy more generally which will ultimately be necessary for New Zealand's income to grow.

The Taskforce therefore favours a focus on removing identifiable roadblocks to the development of efficient urban centres and agglomerations in New Zealand.

Wilkie and McDonald (2009:13) offer a contrary view to McCann. They conclude that geography reinforces rather than reduces the importance of good policy and “helps a country exploit and maximise the benefits from its geographic advantages ... and adapt to and minimise the costs associated with geographic disadvantages.” This approach is similar to that recommended by the OECD (Guillemette 2009) in recommending that New Zealand respond to the challenges of geography by creating a “policy advantage”, that is, a set of structural policies attractive and welcoming enough to attract investment, skills and ideas to New Zealand.

The Taskforce believes that economic geography does have implications for our policy choices. New Zealand’s location means higher transport costs which shelter suppliers in the domestic market from competition limit the extent to which New Zealand firms can gain from specialisation, and make it more difficult to attract foreign direct investment (especially that aimed at serving markets outside New Zealand). Thus, there are real dangers in naive attempts to provide policy prescriptions for New Zealand based on the economies of (for example) Finland and Denmark, where the opportunities for trade are shaped by the much higher potential for specialisation arising from their low costs of transport to major markets. Much of the potential for trade that these countries exploit cannot be exploited by New Zealand. Instead, adaptation to the hand that geography has dealt us involves policies that invest in changing those aspects of distance that are susceptible to policy intervention. Examples include the study of other languages and cultures as part of our education system and bilateral agreements to reduce trade barriers, as well as policies that make New Zealand sufficiently attractive as a location for investment and innovation as to overcome the disadvantages of isolation.

## 4.7 Conclusion

New Zealand is disadvantaged by its distance from markets, but so is Australia. Australia is currently benefiting from a boom in demand for the products of its mining sector, but the output of the mining sector is too small to explain all of Australia’s superior economic performance, and the current terms of trade advantage to Australia cannot explain the long-term decline in New Zealand’s relative economic performance. New Zealand is smaller than Australia, but even Australia is not large compared to many OECD economies, and like New Zealand it is a very small proportion of the world economy. The impact of size on New Zealand’s ability to generate agglomeration economies might explain part of the decline in New Zealand’s economic performance if there was evidence that Auckland is declining relative to Sydney and Melbourne, but there is not.

The Taskforce therefore concludes that New Zealanders can aspire to close the prosperity gap with Australia despite the disadvantages of its small size and geographic location and the benefits that Australia is currently obtaining from its mining boom. New Zealand cannot rely on closeness to other large markets to compensate for low quality policies, so it must adopt policies which across the board offset the disadvantages of geography. The impact of geography and the terms of trade increase the importance of institutions and economic policy, rather than diminishing them.

The dispersion of global economic activity and, in particular, the shift in the centre of global economic gravity from Europe and North America towards Asia will, with appropriate policies and institutions, provide advantages to New Zealand. However, that dispersion of economic activity is a two-edged sword: it creates opportunities for New Zealand in Asia, but it also means that without a competitive business environment, New Zealand will not be able to retain and attract investment. To attract increasingly footloose talent, skills, capital, technology and entrepreneurship from around the world, New Zealand must offer a better policy environment than can be found anywhere else – one attractive enough to overcome the obstacles posed by economic geography and create (as the OECD (2009) termed it) a “distinct New Zealand advantage”.

## 5 The role, size and impact of government

- The community needs government to ensure an adequate supply of public goods and a welfare safety net. Yet this activity accounts for only a small proportion of current government spending.
- Since 2005, New Zealand government expenditures have grown faster than at any time since the late 1970s and early 1980s, and are now substantially larger than those in Australia relative to GDP.
- Very little of this additional government spending has contributed to economic growth or core welfare goals. A substantial amount of it is “tax churn” collected from middle-income earners and returned to those same families as subsidies.
- High rates of government taxation and spending reduce economic growth because large governments reduce the scope for private sector activity and because the high taxes required to fund large governments reduce the incentives for people and firms to work and invest.
- New Zealand should quickly reduce core Crown operating expenses to 29 percent of GDP – the level achieved in 2004 – 2005.
- New Zealand should give serious consideration to establishing a stronger mechanism for scrutiny of fiscal policy and the enforcement of fiscal discipline. Options include a taxpayer bill of rights and/or an independent fiscal council.

### 5.1 Introduction

In this chapter we consider how the size and composition of government activity impacts on the rate of growth. Depending on its quality, government spending and taxation may raise or lower income per capita, and may have transitional or permanent effects on the rate of economic growth. Good quality spending provides goods and services that could not efficiently be provided by the private sector (public goods) and should have a positive impact on standards of living. But government taxation and spending of low quality may reduce living standards and economic growth by reducing incentives for effort and investment. In addition, the larger the share of government in the economy, the more likely it will be that government activity displaces or discourages private initiatives and enterprise, and the less likely it will be that the remaining scope for competitive discovery and innovation by the private sector will be large enough to generate acceptable incomes for the community as a whole.

Following a review of the current role and scope of government in New Zealand, we adopt the taxonomy of government activity set out in our first report, looking at government as spender and tax collector, as owner of assets and as provider of services. We then consider in more detail the ways in which the size and quality of government affects economic growth. Finally, we look at recent changes in the size of government in New Zealand and provide an assessment of the impact of those changes on our rate of economic growth.

## 5.2 The role and scope of government

The core role of government is to provide public goods. A public good is usually defined as a good or service that cannot be charged for directly because there is no practical or cost-effective mechanism for excluding from consuming those who do not pay and which provides a benefit that is not reduced by the level of anyone else's consumption. National defence and law enforcement are usually cited as the clearest examples of public goods, but border protection and public health protection against contagious diseases are also good examples.<sup>11</sup> Public goods do not necessarily have to be provided by central or local government. An unscrambled radio signal or internet posting has the public good characteristics of absence of rivalry and inability to exclude from consumption, but private radio stations and free web pages abound. Historically, the provision of light houses was considered to be a textbook example of a public good that needed government provision until Coase (1974) demonstrated that even privately-owned port authorities had an incentive to provide safe harbours, and could potentially raise berthing charges if they did so.<sup>12</sup>

Governments also have an important role to play in ensuring the welfare of those who are not capable of looking after themselves and lack adequate family or other community support. More broadly, most people acknowledge that central government's fundamental role includes providing a basic welfare safety net, although there is less agreement about its scope and the means by which those in need of support are identified and provided with it. Wherever a society determines that the boundaries should be drawn, the critical point is that it is costly to fund goods and services through the tax system if there are efficient alternative means of funding them.

## 5.3 Government as spender and tax collector

In the long run, the level of government spending determines both the actual tax rate and the rate that firms and households expect to pay in the future.<sup>13</sup> Looking ahead from New Zealand's current position, where the level of public debt is prudently low, it is choices about the level of spending that will determine long-run average tax rates, and thus shape incentives for investment and our international competitiveness as a place to live, work and build businesses.

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<sup>11</sup> The benefit any one citizen derives from national security and law and order does not detract from the benefit enjoyed by any other citizen and it would be very difficult to charge directly for these services.

<sup>12</sup> Extension of the argument is often rationalised by treating pure public goods such as defence as a special case of market failure, in which general category could be included a wide range of other market imperfections such as asymmetric information and uncertainty. Not all markets that are incomplete or have imperfect information require government intervention, since markets normally find ways of addressing these issues that are less costly than government provision funded by taxation.

<sup>13</sup> In the short term, the relationship is not direct, since government can increase spending without increasing taxes, or reduce spending without lowering taxes.



Table 5.1 demonstrates that collective consumption, the value of goods and services that Statistics New Zealand has characterised as benefiting society as a whole, is estimated at only 8.1 percent of GDP in the year to March 2009 – less than one-quarter of total current spending by government.<sup>14</sup>

Three points stand out from the table:

- 1 taxes are much higher than would be necessary to fund the core activities of government. For example, while collective general government spending was 8.1 percent of GDP, taxes raised were 33.8 percent of GDP,
- 2 central government spending is dominated by spending on social assistance, and
- 3 local government spending appears to be more focused on providing collective (core public) goods than is central government.

**Table 5.1:** Analysis of current government spending

Derived from Statistics New Zealand's Government Income & Outlay Accounts

Year Ended March 2009 Percentage of GDP	Central Govt	Local Govt	General Govt
<b>Current outgoings</b>			
Collective consumption*	6.3%	1.9%	8.1%
Social assistance	22.2%	0.4%	22.6%
Other current spending	5.6%	1.1%	6.7%
<b>Total current spending</b>	<b>34.1%</b>	<b>3.4%</b>	<b>37.5%</b>
<b>Memorandum item:</b>			
Other current spending comprises:			
Other payments**	2.9%	0.1%	3.0%
Depreciation	1.1%	0.6%	1.7%
Finance	1.3%	0.1%	1.5%
Subsidies	0.3%	0.2%	0.5%
	<b>5.6%</b>	<b>1.1%</b>	<b>6.7%</b>

Explanatory Notes:

\* "Actual collective consumption is measured within final consumption expenditure as the total value of goods and services that benefit society as a whole." [Statistics New Zealand definition.]

\*\* Other payments include current grants paid by government to other organisations.

Source: Statistics New Zealand, with calculations by 2025 Taskforce

<sup>14</sup> Statistics New Zealand defines 'collective consumption' as spending on "final goods and services that benefit society as a whole". This category includes defence, the police, the courts and the administration of justice, border protection (customs, ministry of agriculture, health, fisheries, immigration services, security and police surveillance), inland revenue, and public administration.

Particularly notable in Table 5.1 is the high level of spending on social assistance and security. This item represents the return of tax revenues to individuals as cash or as health or consumption goods. While some of this spending is a transfer of income in favour of low income households, a very substantial proportion is associated with middle class tax churn – collecting taxes from middle income earners to return it to them in the form of subsidies to particular types of consumption. Spending on social assistance as cash rather than in kind was 11.6 percent of GDP in 1986 and 5.7 percent in 1972, demonstrating how substantially this type of government activity has increased during the period of New Zealand’s relative economic decline.

In considering the taxes that must be collected to fund this spending, it is appropriate to focus on economic losses associated with the effects of higher taxes on incentives to work, save and invest and their distortion of consumption patterns. The deadweight costs of government spending consist of the excess burden of the taxation needed to finance it and additional deadweight costs that arise because many forms of government spending can distort the incentives of individuals to work and save.

The marginal excess burden of taxation is the economic loss, or deadweight cost, associated with a small tax increase as a percentage of the additional revenue collected. Thus, for example, a 40 percent excess burden implies that for each dollar of additional revenue raised, the associated economic loss is 40 cents. With an excess burden of that magnitude, each additional dollar of revenue raised would need to yield a return to citizens of at least \$1.40 in order to be worthwhile.

A major study of the deadweight costs associated with different forms of taxation has recently been undertaken in Australia in connection with the Henry Tax Review (Henry et al, 2010). This produced estimates of deadweight costs for different taxes ranging from zero to over 90 percent.<sup>15</sup> The results most relevant to New Zealand are presented below:

**Table 5.2:** Deadweight costs of different taxation

Taxation type	Deadweight Cost
Corporate income tax:	40 percent
Labour income tax:	24 percent
GST:	8 percent
Municipal rates:	2 percent.

Source: Henry et al, 2010

Similarly, Johansson et al (2008: 7) conclude that the “evidence and the empirical work suggests a “tax and growth ranking” with recurrent taxes on immovable property being the least distortionary tax instrument in terms of reducing long run GDP per capita, followed by consumption taxes (and other property taxes), personal income taxes and corporate income

<sup>15</sup> The results are summarised in Box 1.1 of the Overview of the report. These estimates were produced by KPMG (Econtech) using an advanced model that enables analysis of different behavioural responses to different taxes by allowing for substitution between a large number of different products and a range of primary factors of production. The model estimates the marginal excess burden of different taxes using a utility function in which households derive utility from leisure and saving as well as from consumption of products (KMPG, 2010).

taxes". These estimates reflect two economic principles that are generally accepted by economists. First, the *mobility principle* recognizes that the excess burden of a tax is higher, the higher is the responsiveness of the tax base to the tax rates that it faces. When a tax is applied to a highly mobile tax base (such as corporate income), that tax base is likely to shrink, distorting economic activity.<sup>16</sup> Second, the narrowness principle recognizes that, for a given revenue requirement, the excess burden of a tax is likely to be higher, the narrower the tax base.

The greatest efficiency gains from reducing the size of government would come from reducing the dead-weight costs caused by the least efficient taxes and spending. However, an optimal reform programme would eliminate inefficient spending that could not be justified otherwise (eg on equity grounds) and could see some increases in high quality public spending.

The potential gains from revenue-neutral changes in the composition of taxes depend on the existing tax structure. Past reforms have left New Zealand with the bulk of tax revenue being raised by taxes that have a relatively broad base, with fewer exemptions and concessions than most other countries. However, New Zealand and Australia stand out among OECD countries in having a relatively high proportion of revenue raised from taxes on capital, while other OECD countries typically raise much higher proportions of revenue from taxes on labour and taxes on consumption.<sup>17</sup> This suggests that the tax changes introduced in the last Budget have improved the economic efficiency of taxation in New Zealand through raising more revenue from GST, though the failure of the Budget to provide any effective reduction in the tax rate on returns to capital is not optimal from an economic growth perspective, given the high deadweight costs of corporate taxes.

## 5.4 Government as owner of assets and provider of services

The efficiency costs of government raising tax revenue and spending are increased where the government plays a role in the economy as an owner of assets and a provider of services that it is not necessary for government to own or provide. In particular, we have identified five problems with government ownership of assets and provision of services:

- i Public funding of economic activities transfers them from the private sector to the public sector where they are shielded from normal market incentives. Adverse effects on efficiency have the potential to be greatest in those activities where public spending represents a high proportion of total spending and there is little competition between public and private service providers.

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<sup>16</sup> The KPMG model assumes that the international supply of capital is perfectly mobile. This is particularly relevant in relation to the estimate of marginal excess burden for corporate income tax. The authors found, however, that relaxation of this assumption (by requiring a 50 basis points increase in interest rates to double foreign assets' share of total assets) resulted in only a moderate reduction in their estimate of excess burden (Henry et al: 55).

<sup>17</sup> This can be clearly seen in Chart 6.4 of the Henry review paper, 'Architecture of Australia's Tax and Transfer System' (Henry et al, 2010: 220).

- ii Government has much less capacity than the private sector for creating the innovation and productivity improvements required if its assets and services are to contribute to economic growth over time.
- iii For assets and services in the public sector, there is no direct market mechanism to translate productivity improvement into benefits to consumers or lower government spending. Much depends on the effectiveness of administrative arrangements to encourage productivity, including through competitive contracting processes.
- iv When services are provided by governments, there are political pressures for standards of service provision to keep pace with those in 'comparable' countries irrespective of affordability, and limited pressure to fund those improved standards of service through efficiency gains. This applies particularly when technological advances make possible substantial benefits to the community with commitment of additional resources (eg new diagnostic equipment in the health sector). Countries where average incomes are rising relatively slowly are faced with difficult choices because the resource commitments needed to keep pace with rising standards of public service provision in high-income countries are at the expense of private sector investments that generate the returns required to achieve higher average income levels.

## 5.5 The size and quality of government and economic growth

It will be clear from the discussion above that if a government fails to fund activities that it can undertake more efficiently than private firms or other voluntary activity, this has adverse impacts on the economy which can reduce standards of living and/or economic growth. Similarly, if a government extends its activities into areas that can be undertaken more efficiently by the private sector, this has deadweight costs which may also reduce standards of living and/or economic growth. While some types of government expenditure enhance economic growth, at some point the economic costs of raising taxes to fund that expenditure will outweigh its benefits. There is an optimal level of government expenditure, ownership and control which balances the economic benefits of (high quality) expenditure against the cost to the community of raising taxes and of undertaking activities that could be more efficiently provided by the private sector. Thus the fundamental issues relating to size of government concern the relative magnitudes of benefits and costs when national income is churned unnecessarily through the tax and transfer system and when services and functions are provided and undertaken collectively when private markets and other voluntary processes provide an efficient alternative.

A wide range of econometric studies have found a negative correlation between government size and economic growth, including Gwartney, Holcombe and Lawson (1998), Folster and Henrekson (2001), and Romero-Avila and Strauch (2008). A more recent paper by Bergh and Karlsson (2010) concludes on the basis of a review of many studies that "In rich countries there is, indeed, a robust negative relationship between total government size and growth" (2010: 30). However, many aspects of the technical specification of the models used in these studies are

controversial, prohibiting any consensus in the literature about the precise degree to which ill-justified government spending in New Zealand might be depressing living standards.<sup>18</sup> Cross-country regressions are broad brush techniques that should be read as illustrative rather than determinative.

A review of the literature undertaken for the Taskforce (Bates 2010) concluded that a reduction in government spending of 10 percentage points of GDP might increase GDP per capita by 5 percent over a decade. This was appreciably lower than some estimates in the literature and higher than others. For example, Bassini, Scarpetta and Hemmings (2001) found that a rise in the ratio of taxes to GDP of 1 percentage point was associated with a 0.6-0.7 percent fall in per capita income. Using a different estimation technique, Schule (2010) found that in the case of New Zealand a permanent reduction in government consumption spending of 1 percentage point of GDP would likely increase real GDP by 2 percent in total during the next 25 years.

Other work by researchers such as Gemmell and Kneller (2003) has stressed the importance of estimation techniques that explicitly recognise the interrelationships arising from the government budget constraint. This induces a more explicit focus on compositional effects than might otherwise occur. An illustrative finding (in the 2001 paper) is that increasing so-called distortionary tax revenues by 1 percent of GDP reduces the average rate of economic growth by 0.41 percentage points, whereas increasing productive spending by the same amount increases it by 0.39 percentage points.

The Taskforce has no view about the true order of magnitude of the negative relationship between size of government and growth, but it does consider that the quantum and quality of much government spending is likely to be significantly impeding the creation of wealth in this country. This is particularly important given the magnitude of the challenge that New Zealand faces in increasing its rate of growth to the level of around 4 percent required to close the income gap with Australia. As Bates (2010) points out, over the last 50 years no OECD countries with government spending levels as high as those currently in New Zealand have been able to sustain per capita GDP growth of more than 4 percent per annum for 15 years or more. The Government's willingness to pursue excellence and rigour in evaluating the quality of its spending, and in actually reducing spending in the light of that scrutiny, will therefore be an important indicator to the community of its commitment to achieving the 2025 goal.

### Quality of government spending

Both the size of government and the associated distortions created by taxation and public spending may be reduced through a focus on the quality of government spending. In particular, this means focusing on ways in which the desired social outcomes can be achieved with lower levels of government spending and taxation. This is consistent with the evidence that social

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<sup>18</sup> Cross-country comparisons are made still harder by differences in tax and expenditure regimes, particularly the composition of spending, and by provisions for compulsory purchase of services (eg compulsory superannuation) which in other countries might appear as part of government activity.

outcomes of countries with big governments are often not very different from those of countries with small governments. On the basis of their research in the 1990s, Tanzi and Schuknecht (2000: 108) concluded:

*Social indicators have been and are still very similar between country groups, showing that higher public spending did not have a significant effect on these indicators. Judging from the UN human development index, which is a composite of life expectancy, education and per capita income, countries with small governments are even somewhat better off.*

In a more recent study, with Antonio Afonso, these authors obtained similar results for OECD countries. Average indicators for education and health performance were similar for small, medium and big governments (Afonso et al 2003: 12).<sup>19</sup>

The costs of large government are well illustrated by the fact that in countries like New Zealand a large part of government spending involves middle class tax churn. The problem with this churning is the deadweight costs generated by effective marginal tax rates and government spending programmes, which means that the value returned to taxpayers is much lower than the value collected from them in taxation.

In Chapter 8, we consider explicitly the ways in which public goods and public services may be provided, and desirable social outcomes achieved, utilising the skills and capital of the private sector in place of public sector provision.

## Evidence on effects of social transfers on economic growth

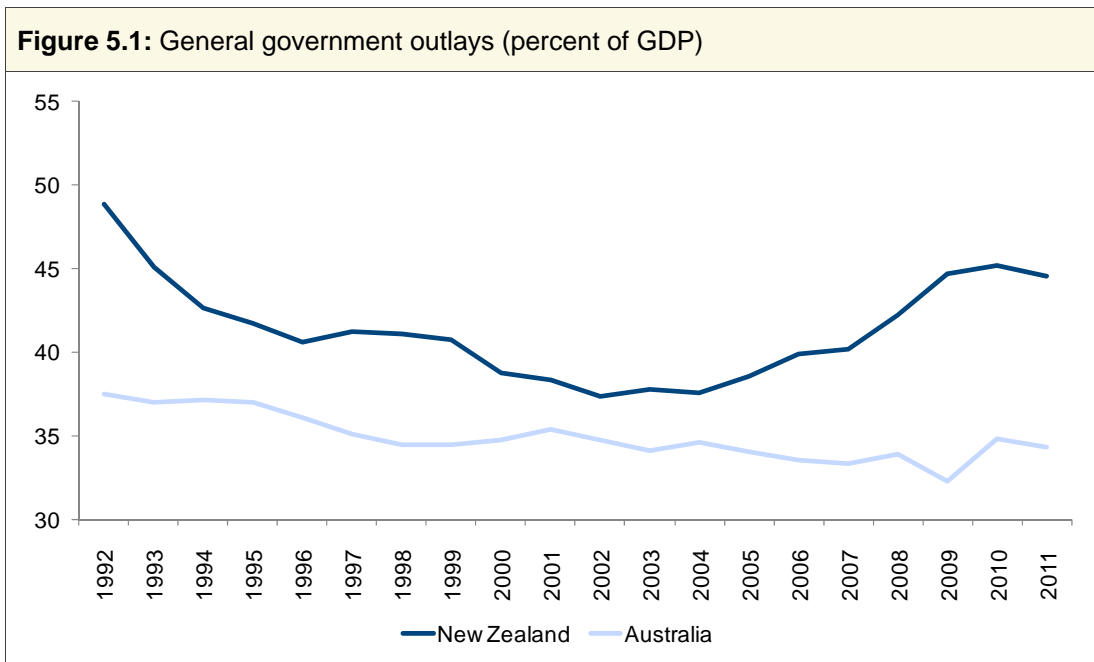
Some authors have argued that the Western European economies, which have large government shares of national income and high levels of social transfer payments, provide evidence that large government is not inconsistent with economic growth. This approach is rationalised by the argument that these countries have managed to find means of raising taxation revenue that do not place undue tax burdens on capital investment and wealthy individuals. In other words, it is argued that the adverse effects of high social spending on economic growth can be offset to some extent by adopting a more efficient tax-transfer system (Lindert 2004). High income countries such as Sweden have certainly been able to maintain modest growth in per capita GDP despite very high levels of government spending because policy settings aside from the size of government encourage growth to a greater extent than in other countries. However, there is no evidence that it is possible to achieve the economic growth rates required to meet the 2025 goal with government shares of GDP at the levels characteristic of European economies such as Sweden.

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<sup>19</sup> New Zealand is classed as having a 'medium' government in this analysis.

## 5.6 Recent changes in New Zealand government expenditure

The proportion of the New Zealand economy taken up by government activity has increased substantially since 2004 and currently makes up a higher proportion of the economy in New Zealand than in Australia. According to latest available International Monetary Fund data, total government outlays were 36.7 percent of GDP in New Zealand in 2007. The corresponding number for Australia (for 2008) was 32.4 percent (IMF, 2009, Table W3). The margin of difference is greater on the basis of the more widely used OECD data on general government total outlays (Figure 5.1).<sup>20</sup> The estimate of the OECD for the 2010 calendar year is for general government outlays of 45 percent in New Zealand as against 35 percent for Australia.



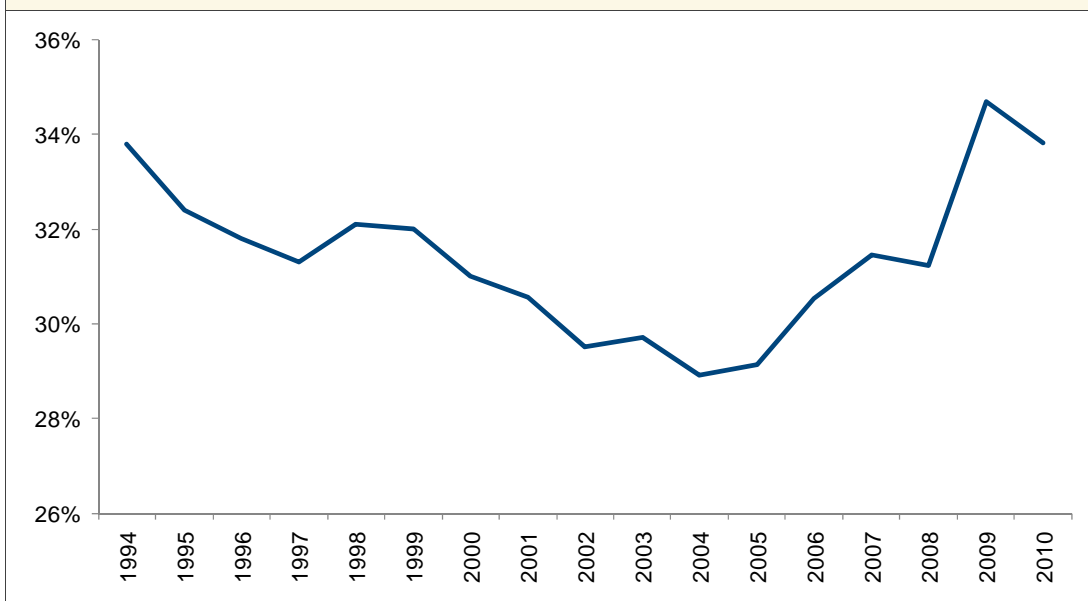
Source: OECD

It is also apparent from Figure 5.1 that government spending as a proportion of GDP in Australia has been more stable over time than that in New Zealand. The higher level of stability in Australia has a number of advantages which include reducing the risk of excessive swings in the real exchange rate, reducing uncertainty about future tax rates, and reducing the potential for low quality programmes being introduced during periods in which government spending is increasing rapidly.

<sup>20</sup> The International Monetary Fund data probably provides a better basis for comparison, but it is not possible to be sure of this.

For New Zealand purposes, we focus on the Treasury’s measure of core Crown operating expenses (Figure 5.2). This measure captures the operating expenses (including funding for depreciation) under the direct control of central government<sup>21</sup>. Spending has increased extremely rapidly in recent years. Between 2004 and 2009, nominal GDP increased by \$42 billion (30 percent), while core Crown expenses increased by \$30 billion (56 percent). As we have already noted, core Crown (operating) expenses rose from around 29 percent of GDP in 2004 and 2005 to a projected 34 percent this financial year.<sup>22</sup> These rates of increase in public spending are the fastest experienced in New Zealand since the late 1970s and early 1980s.

**Figure 5.2:** Core Crown operating expenses (percent of GDP)



Sources: Treasury, Statistics NZ.

Almost none of the large increase in government spending since 2005 can be explained by the recent economic recession. A few components of government spending – notably unemployment benefits – rise directly when the economy slows, but the number of people on the unemployment benefit today is not substantially larger than the number in June 2005. In contrast to some other countries, little direct “stimulus” expenditure was undertaken in response to the economic downturn. In a mechanical sense, as GDP fell over 2008 and early 2009, the ratio of government spending to GDP has increased a little. Most estimates, however, suggest that real GDP is probably no more than 2-3 percent below its trend level at present. If so, less than 1 percentage point of the increase in the ratio of government spending to GDP can be explained simply by cyclical factors. The substantial real increase in government spending is a structural issue and needs to be tackled as such. The increase will not reverse itself.

<sup>21</sup> Thus, for example, it excludes the spending of Crown entities, but captures Crown funding of those entities.

<sup>22</sup> Based on 2010 Budget forecasts.



The sharp increase in the share of government spending in recent years – much of it undertaken with very little robust policy justification – is inconsistent with the successful pursuit of the 2025 target. We regard reversing that increase and reducing the amount of churning through the social welfare system as a matter of high priority. If the New Zealand government could function in 2005 spending 29 percent of all this economy produces, it is difficult to see why it could not also do so again three years from now. We recommend that core Crown operating expenses be cut to around 29 percent of GDP by 2014/15 or in other words, to reverse the increase in government spending as a proportion of GDP at around the same rate as the increase from 2005 to 2010. Our understanding is that the pace of adjustment implied by this target would be similar to what was achieved in the early 1990s.

Getting spending as a share of GDP back to 2005 levels would be a good start, but no more than a good start, given the need to address the problems that have been created by this spending and the structural fiscal deficit that we face at present (see Chapter 6 below). Once core Crown operating expenses have been reduced to 29 percent of GDP, we recommend that the Government should actively limit future growth in public spending so that real per capita core Crown operating expenditure does not grow any further. To be clear, that means total real spending would continue to increase, but real per capita spending would be held constant. It does not mean cuts in the total dollars spent.

New Zealand has been relatively successful in constraining levels of public debt, but much less successful in constraining levels of public expenditure. Our relatively low level of public debt reflects in part the role that debt targets established under the Public Finance Act (and originally established in the Fiscal Responsibility Act 1994) have played. These targets stress the importance of transparency about fiscal prospects and goals without putting binding external rules in place to constrain policymakers.

The current system of budget operating allowances does not encourage a systematic and rigorous focus on value-for-money in government spending and makes it too easy for governments to increase spending when tax revenues increase. The fiscal and economic forecasts (although not the medium-term projections) included in the Budget and in the half-yearly and pre-election updates are the professional responsibility of the Secretary to the Treasury, and not of the Minister of Finance, but the importance that the Treasury must place on maintaining an effective relationship with successive Ministers of Finance limits its ability to provide independent scrutiny of fiscal risks. The Taskforce therefore believes that New Zealand would benefit from adopting a mechanism that would provide some greater discipline on the tendency for public spending to increase more rapidly in good times than proves to be sustainable in the medium-term.

As we indicated in our first report, an amendment to the Public Finance Act could provide, at a minimal level, a step towards improving transparency and accountability. But this, in itself, would not be a credible measure. Other options worthy of consideration include a “taxpayer bill of rights” and an independent fiscal council.

An increasing number of OECD countries have fiscal monitoring or reporting agencies of the type that we envisage. These agencies do not make fiscal policy, and do not remove any powers from elected members of Parliament; they focus on in-depth analysis and monitoring, to ensure that the public and political leaders have the broadest possible set of information about the choices that they are making. Even in 2007, the OECD reported that 16 of its member countries had some sort of independent fiscal agency. The US Congressional Budget Office is part of a different political system to that in New Zealand, but is perhaps the best known of these agencies, and plays a vital and highly credible role in analyzing and reporting on fiscal developments and the implications of proposals coming before Congress. Since 2007, several countries with similar political and economic systems to our own have moved in the same direction. In 2008, Canada established a Parliamentary Budget Office, a small agency with a mandate to provide independent analysis of fiscal issues for Parliament. This year, the newly-elected British government has established an Office of Budget Responsibility, to provide an independent assessment of the state of the public finances and of the economy in advance of each Budget and other fiscal statements. Most recently, it has been agreed to establish a Parliamentary Budget Office in Australia, which appears likely to be along the lines of the Canadian model.

## 5.7 Conclusion

There is both theoretical and empirical evidence that high levels of government spending and taxation reduce standards of living and economic growth. Government spending needs to be paid for by taxes. Almost all taxes reduce the rewards to effort, undermining incentives to work, save and invest. New Zealand's economic growth would be increased by reducing taxes and eliminating the most inefficient forms of government spending. The combination of the reduction in spending and taxation would promote growth by increasing efficiency, and by creating greater scope and stronger incentives for private sector investment.

New Zealand has seen significant growth in government expenditure since 2005, much of it in areas that neither contribute to economic growth nor address core social welfare goals. It is implausible that government activity has not encroached on areas in which private sector provision and funding are feasible (see Chapters 9-11 below). The churn associated with taxation of middle income families to provide those families with benefits is a significant driver of increased government spending and reduced efficiency (because of the deadweight losses associated with taxation). Government spending must be substantially reduced as a share of GDP if New Zealand is to have any realistic hope of matching Australian living standards by 2025. It has been done before. The fact that the latest substantial step-up in spending has been so recent should make it a little easier to address.

The sharp increase in government's share of the economy in New Zealand over the last 5 years is inconsistent with successful pursuit of the target of matching Australian per capita incomes by 2025. We regard reversing that increase in government activity as a high priority if the 2025 goal is to be achieved. Some (efficient) government activity may actually increase growth, but the current balance is so heavily tilted in favour of low quality spending that does not promote

growth or social goals that the types of expenditure reductions flagged in this report can be achieved without any risk of cutting essential government spending. It is a reduction in spending that is achievable given that the New Zealand government could function while spending 29 percent of all our economy produces as recently as 2004 and 2005.

We recognise that achieving that goal will take creativity and new approaches to the reduction of government expenditure from those that got us there in 2005. The realism of the target is perhaps illustrated by the fact that on current projections an average rate of growth of real GDP of around four percent per annum will be required to catch Australia by 2025. To achieve those rates of economic growth, it would be important that, over a substantial period of time, the benefits be used to reduce effective marginal tax rates rather than allow increases in government spending. The benefits of a higher proportion of private sector activity and a lower level of taxes would in themselves assist in making those growth rates sustainable over the longer term.

The Taskforce believes that serious consideration should be given to establishing a stronger mechanism for scrutiny of fiscal policy and the enforcement of fiscal discipline. Both a “taxpayer bill of rights” and an independent fiscal council are potential models for achieving this.

## 6 The implications of current fiscal and taxation policies

- Significant reductions in government spending as a share of GDP are required to eliminate New Zealand's large structural fiscal deficit. It is likely that this deficit is exacerbating the imbalances in our economy by keeping interest rates and the real exchange rate high, shifting production away from the tradable sector of the economy and encouraging a reliance on borrowing offshore.
- New Zealand's net foreign liabilities are now at a level where it would be imprudent to assume that they can be increased further. A well-signalled reduction in the fiscal deficit will begin the process of adjustment needed to address these problems.

### 6.1 Introduction

Government expenditure, and in particular government deficits, can have a substantial negative impact on the performance of the economy. In this chapter we consider the implications of New Zealand's current fiscal policies for our macroeconomic performance. We explain the implications of the current structural fiscal deficit, and how this has contributed to the current imbalances and fragility in our economy. Our focus is on the relationship between structural deficits, high interest rates and real exchange rates, shifts in production from the tradable to the nontradable sector of the economy, and high levels of foreign borrowing.

### 6.2 Economic performance and the real exchange rate

Very successful economies, with a strong sustained record of comparatively rapid productivity growth, tend to have that success reflected in rising real exchange rates. Alternatively, when countries are in relative decline, this tends to be reflected in falling real exchange rates.<sup>23</sup>

For a high-performing economy, with strong sustained productivity growth, a rising real exchange rate serves to share the gains of economic success across the economy as a whole. It does this by reducing the price of imported consumption goods and reducing the scarce resources that need to be devoted to the production of tradables to achieve any given standard of living. In balance of payments terms, a particularly highly performing economy in which, for some reason, the real exchange rate did not rise would tend to see an inexorable accumulation of net foreign assets.

Taken from the perspective of the last 40 years, New Zealand has been characterized by economic underperformance relative to Australia. Our productivity growth has not kept up with that of many other wealthy countries, and our per capita income has fallen to the point where we cannot enjoy standards of living on a par with those in countries such as Australia. This

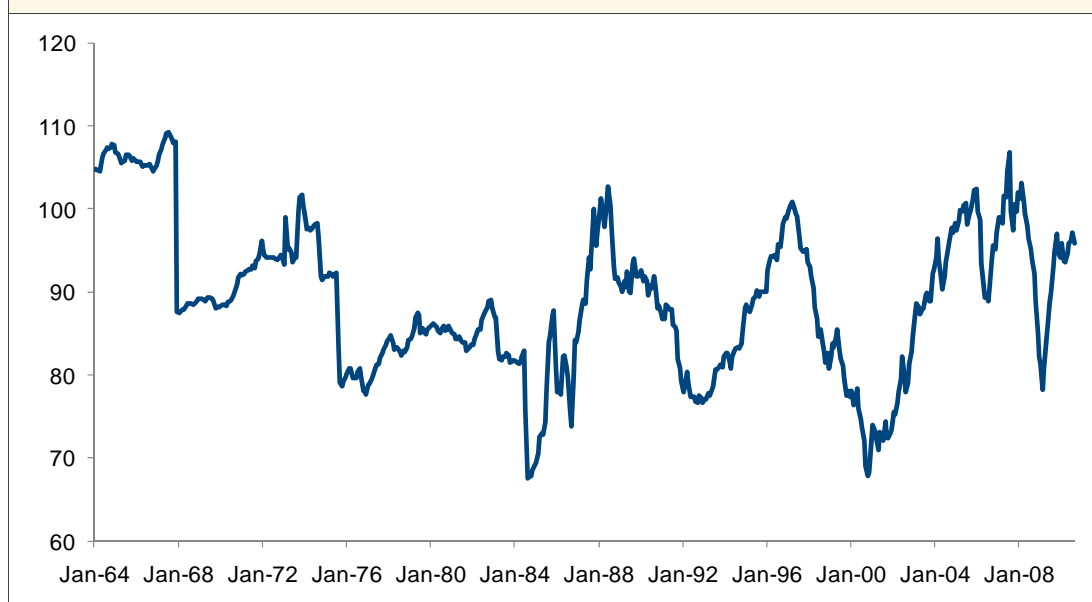
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<sup>23</sup> This is known in the economics literature as the Balassa-Samuelson effect.

would normally lead us to expect that New Zealand’s real exchange rate had fallen – probably quite materially – over the same period. If that had happened, consumption would have been discouraged and resources would have shifted more towards the tradables sector of the economy, enabling us to, inter alia, more fully capture the fruits of the reform programmes put in place in the 1980s and early 1990s.

However, despite short-term fluctuations over time, New Zealand’s effective exchange rate has not declined consistent with our poor performance (Figure 6.1). Our productive potential has not improved as rapidly as it needed to, but the appropriate price signals have not been transmitted to either firms or households. Resources have not been encouraged to move into the tradables sector, and households have not been discouraged from maintaining high rates of consumption.

**Figure 6.1:** New Zealand’s effective exchange rate (relative CPIs)



Source: Bank for International Settlements

From the perspective of the balance of payments, a fall in the real exchange rate would provide incentives to limit New Zealanders’ borrowing from abroad. But in the absence of a fall in the real exchange rate, the balance of payments has been in consistent deficit for more than thirty years, and our net dependence on debt and equity capital from the rest of the world has climbed steadily. At negative \$167 billion, or 90% of GDP, New Zealand’s net international investment position (NIIP) as a percentage of GDP is now at levels from which it would be imprudent to assume that it can increase much further.<sup>24</sup>

<sup>24</sup> Increasing dependence on debt and equity from the rest of the world may be appropriate for a country on a fast growth trajectory, investing and consuming partly in anticipation of the expected continuing relative income gains, but that has not been the case in New Zealand.

## 6.3 The impact of fiscal deficits

The reasons why our real exchange rate has stayed relatively high, and why we have continued to borrow abroad to fund consumption unrelated to our investment needs or income growth, are not fully understood. However, there can be little doubt that fiscal policy choices have had an important impact. These effects are not permanent but they can be sufficiently large and long-lasting to materially assist or impede the desired direction of economic change. Large fiscal surpluses tend to relieve pressure on domestic demand, resulting – all else equal – in lower than otherwise interest rates and a lower than otherwise real exchange rate. By contrast, large fiscal deficits will tend to hold interest and exchange rates higher than otherwise. Firms and households do adjust over time to whatever fiscal balance the government is running, but that adjustment takes time. That means that big swings in aggregate fiscal policy can have particularly important macroeconomic effects. At present, we believe that fiscal policy choices are materially impeding the rebalancing of the economy and, thus, impeding New Zealand's progress towards the 2025 goal.

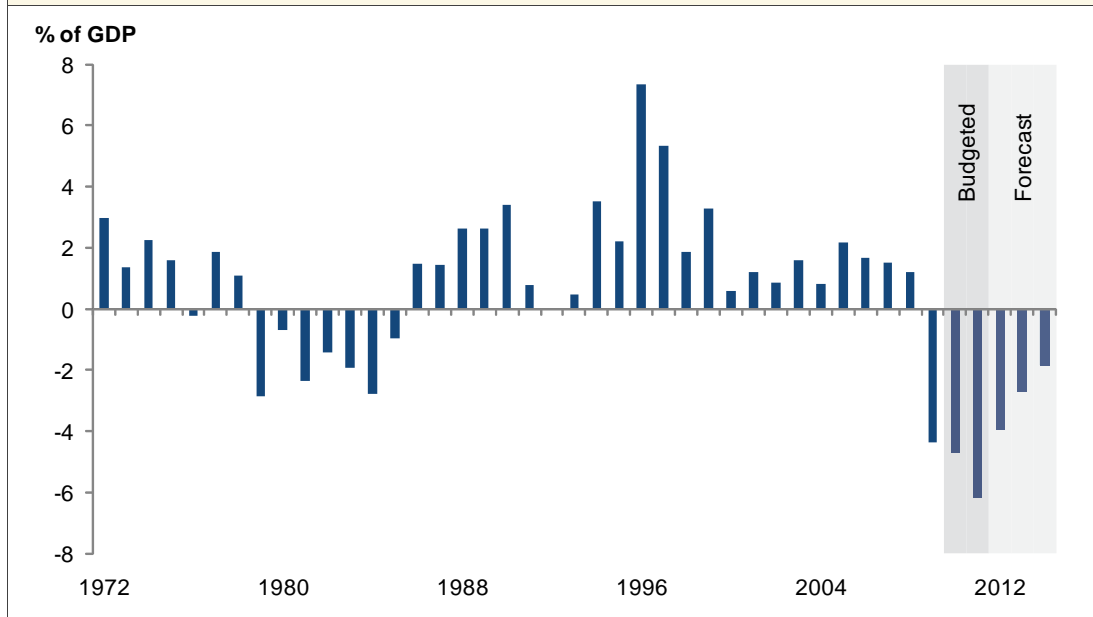
For much of the period from the mid 1980s to the middle of the last decade, aggregate fiscal policy was relatively supportive of economic rebalancing. The shift back to sustained structural fiscal surpluses, mostly achieved by keeping the share of government expenditure to GDP in check and prudent choices about fiscal balance, was broadly supportive of the overall rebalancing of the economy. The picture began to change from around the middle of the last decade. As we highlighted in Chapter 5, government spending began to increase rapidly from around 2005, but despite this tax rates also began to be cut. Shifting from a large surplus back to sustained balance would itself tend to put transitional upwards pressure on real interest and exchange rates.<sup>25</sup>

Through a combination of circumstances, the New Zealand fiscal position has deteriorated much more seriously than was expected. We suspect that the seriousness of the position, and the way in which it is influencing economic conditions at present, are still not widely appreciated.

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<sup>25</sup> The Reserve Bank was explicit in its view that the changing fiscal position was one factor behind the need for increases in the Official Cash Rate during 2007.

**Figure 6.2:** Primary Crown cash balance



Source: The Treasury

Figure 6.2 shows the primary fiscal balance for recent decades and 2010 Budget projections for the next few years. It starkly illustrates that New Zealand now faces larger primary deficits than at any time in the last 40 years.

The portion of the deficit that can be attributed to the relatively weak cyclical state of the economy is quite small. The Treasury's Budget projections suggest that spending and revenue are not too far from what one would expect them to be, on current policies, if the economy was running at its normal cyclical performance. The fiscal projections are also somewhat flattered by the current strong terms of trade (see Chapter 4). The deficit has actually arisen because of a combination of events: continued spending growth by successive governments, cuts in tax rates by successive governments, and a realisation that the tax base – the size of the economy – is smaller than it had been thought to be during the boom years.

In facing a sharp deterioration in its fiscal position, New Zealand is, of course, hardly unique. However, when the New Zealand fiscal numbers are put onto an internationally consistent basis and compared with those in other countries, it becomes clear that the deterioration in New Zealand's aggregate fiscal deficit has been among the largest of any OECD country. Moreover, some (admittedly imprecise) estimates suggest that New Zealand's structural fiscal deficit<sup>26</sup> is now exceeded by those in only around half a dozen OECD countries.

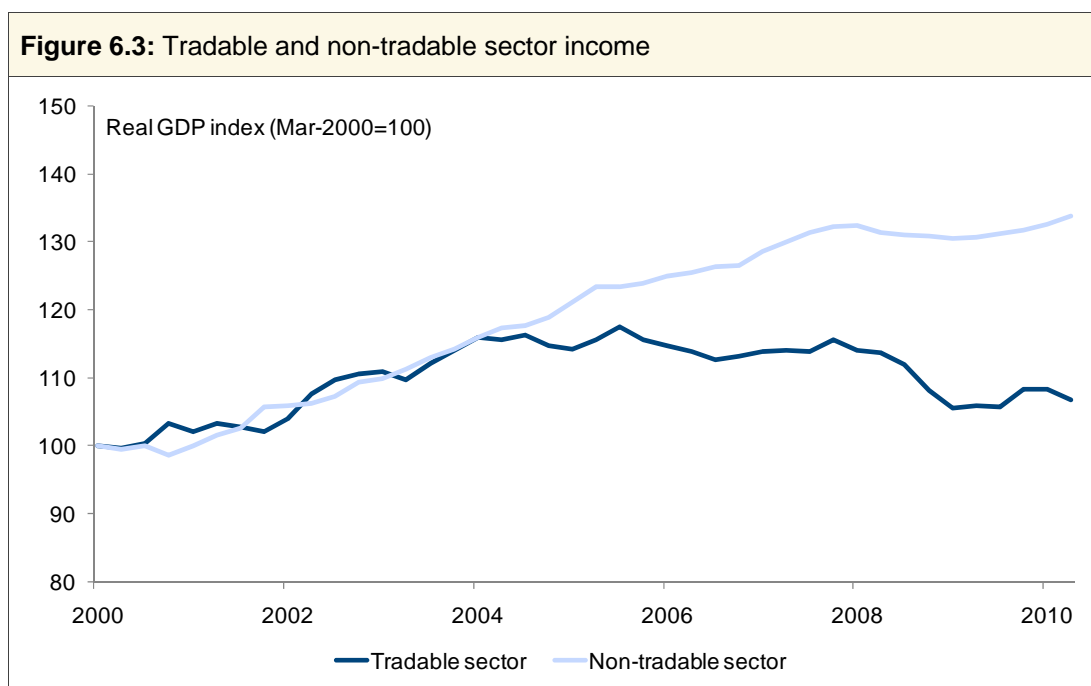
The suggestion that the shift to large fiscal deficits is part of the explanation for New Zealand's real exchange rate remaining high is supported by international studies. Ricci et al (2008: 10) examined the influence of a range of different factors on real exchange rates, and found that an increase in the ratio of government consumption spending to GDP of 1 percentage point is

<sup>26</sup> The structural deficit is the portion of the deficit that is not expected to disappear as the recession ends.

associated with an appreciation of the equilibrium exchange rate of close to 3 percent. The main reason for such a result is that government consumption tends to fall more on nontradables than on tradables, hence raising the relative price of the former and disadvantaging the latter.<sup>27</sup> Galstyan and Lane (2008) confirmed the result that an increase in government consumption spending (of which the rapid increase in government’s spending in New Zealand since 2005 is a good example) is associated with exchange rate appreciation. Thus, the shift to larger fiscal deficits in New Zealand, despite our economy being less badly hit by the global recession and financial crisis than many others, has meant that our interest rates will have stayed higher than otherwise.<sup>28</sup> In other words, the Government’s willingness to preside over large and still-increasing structural fiscal deficits is impeding the rebalancing of the economy many had expected, and which will be required as part of moving towards the 2025 goal.<sup>29</sup>

## 6.4 Implications for tradable and non-tradable output

Figure 6.3 (below) illustrates the extent of the imbalances in the New Zealand economy that have resulted from increases in government spending, structural fiscal deficits and the failure of the real exchange rate to fall.



Source: The Treasury

<sup>27</sup> The real exchange rate can be thought of as the ratio of the price of non-tradable goods to tradable goods.

<sup>28</sup> Our Official Cash Rate is currently low by historical standards, but exchange rates are relative prices, and our interest rates remain relatively high by international standards.

<sup>29</sup> Fiscal policy is by no means the whole story. Private choices around the credit and asset boom play a significant part in the story, but with private credit growth now very subdued, it is the Government’s fiscal choices that now largely explain New Zealand’s current account deficit, and the lack of any material rebalancing.



In this simple, slightly stylised, presentation, the economy is divided into tradable and non-tradable components. The bulk of non-tradables is domestic service sectors (shops, cafes, real estate, public consumption, etc), while the tradables sectors are those portions of the economy which sell abroad, or compete with products from abroad. The real output of the tradables sector of the economy is now back at 2002 levels, and the gap that has opened between the performance of the tradables and non-tradables sectors is likely to be unsustainable.

The primary balance graph, and the Government's 2010 Budget, do show Budget deficits closing over the next few years, getting back to balance in 2015/16. But those projections are not bottom-up calculations of the cost of existing tax and spending programmes, but are simply statements of top-down intention. While the Taskforce welcomes the statement of the Government's intention to close the deficit, it notes that to date the deficits (total and structural) have increased, not decreased, that this year's tax package was not revenue neutral, and that as the economy recovers spending pressures are only likely to increase again. We urge the Government to use this year's Budget Policy Statement to announce policy decisions that will begin the process of accelerating the reduction in the fiscal deficit.

In the international debate at present, there is considerable unease about the effects of significant fiscal consolidation on short-run economic performance. Those questions are very understandable in countries such as the US, UK, Japan, or Europe, where there is little or no scope for further easing in monetary policy to offset short-run adverse demand effects from accelerated fiscal consolidation. That is not New Zealand's situation. A well-signaled fiscal consolidation would be expected to result in the Reserve Bank setting interest rates lower than otherwise, reducing the real exchange rate, and promoting a rebalancing of the economy. Not to accelerate the pace of fiscal consolidation will undermine the ability of private firms and households to realise the opportunities created by other aspects of the Government's economic reforms, including the recent tax package.

## 6.5 Conclusion

This chapter has explained how increasing government spending and fiscal deficits can affect the macroeconomic performance of the economy. New Zealand's aggregate fiscal position has deteriorated sharply in recent years, so that New Zealand now faces primary fiscal deficits larger than it has faced at any time in the last 40 years. It seems likely that over the past two years large government deficits have materially increased interest rates and the real exchange rate, promoting a reallocation of economic activity from the tradable to the non-tradable sector and encouraging borrowing offshore to finance consumption. New Zealand's net foreign liabilities are now at a level where it would be imprudent to assume that they can be increased further. A well-signalled reduction in the fiscal deficit will begin the process of adjustment needed to address these problems.

# 7 Changing the boundaries between the state and the private sector I: Ownership

- There have been no major state asset sales in New Zealand since 1999, but government retains or has acquired ownership of a substantial number of trading enterprises. In this respect New Zealand is out of line with policy in other OECD countries.
- It is important that there is now an opportunity to engage in a constructive debate about the costs and benefits of state ownership of trading assets, and that the Government leads and encourages that debate.
- The rationale for sales of state trading assets is different now to the 1980s and 1990s, when debt reduction and improving the efficiency of resource allocations were key drivers. Today, the rationale focuses on the contribution that State-Owned Enterprises (and other major Crown trading enterprises) could make to economic growth if freed from the constraints of operating within the public sector.
- This suggests that 21<sup>st</sup> century policy on the sale of state trading assets may be different in a number of ways, including in focusing on ownership of shares by the public in New Zealand rather than “trade sales” to large (sometimes foreign) corporations.

## 7.1 Introduction

Over the last 30 years, governments in OECD countries, and in many developing countries, have progressively re-evaluated the case for state ownership of enterprise, and progressively transferred ownership to the private sector in a wide range of areas. Internationally, New Zealand was a leader in thinking about the boundary between public and private ownership in the late 1980s and early 1990s, but in the last decade it has become a laggard in this respect. There have been no major state asset sales in New Zealand since 1999, while the purchase of a majority stake in Air New Zealand, the creation of and subsequent capital injections into KiwiBank, and the decision to bring the railway track and then the operations of KiwiRail back into full state ownership, have substantially increased the level of state ownership of trading assets.

The Government has announced its intention not to sell any state assets in its first term. This approach reflects contemporary uncertainty about the rationale for, and benefits, of state asset sales, given the fact that the circumstances which drove the asset sales of the period up to 1999 were quite different. In that period asset sales were motivated by a combination of a desire to reduce government debt, and to address the dramatic misallocation of resources and inefficiency in the state trading activities of the mid-1980s. The sales of state assets that have occurred, the substantial reductions in government debt since the mid-1980s, and the much improved framework provided by the State-Owned Enterprises Act mean that the case for further sales of state assets cannot easily be made in the same terms that drove policy

20 years ago. The Taskforce accepts that new ways of thinking about the costs and benefits of state ownership are required for 21<sup>st</sup> century New Zealand. In particular, the task of reassessing the ownership boundaries between the private sector and the state must be developed utilising the modern approaches to thinking about efficiency and economic growth that we outlined earlier in this report.

In this chapter we explain why closing the income gap with Australia by 2025 will require that New Zealand again aspires to provide international leadership in thinking about the boundary between public and private ownership. In our view, the requirement comes not from unsustainable levels of government debt or dramatic levels of inefficiency in the current operations of state owned enterprises, but from the potential loss of contribution to economic growth that comes from having some of our largest enterprises constrained to operate within a public sector framework, and thus denied the advantages and disciplines that access to private equity markets provides. In other words, the sale of state trading assets to the private sector should be motivated primarily by the opportunities that companies can create and the contribution to a major increase in per capita income that they can make when they operate in the dynamically efficient environment provided by the private sector.

## 7.2 Public ownership in New Zealand

As at 30 June 2010, total assets on the New Zealand government balance sheet were \$223 billion (around 118 percent of GDP), having almost doubled over the past decade (total assets were 66 percent of GDP in 2001).<sup>30</sup> These assets include:

- Financial assets held by various funds.
- Commercial operations. These include a wide range of SOEs involved in power generation, banking, coal extraction and a plethora of other activities; Crown-owned companies such as Television New Zealand; and a controlling shareholding in a major listed company (Air New Zealand).
- Assets held pursuant to the delivery of services funded entirely or largely by the state, including schools, hospitals, roads, police stations, defence force bases, etc.

The Crown also has substantial ownership interests in land and in mineral rights, and rights protecting specific obligations such as the “kiwi share” in Telecom. In addition, local governments held a further \$99 billion of assets (as at 30 June 2009) including land, trading companies and assets held pursuant to the delivery of various services funded by local government.<sup>31</sup> Both central and local government assets far exceed the market capitalisation of companies listed on the New Zealand stock exchange or the total assets of those companies.

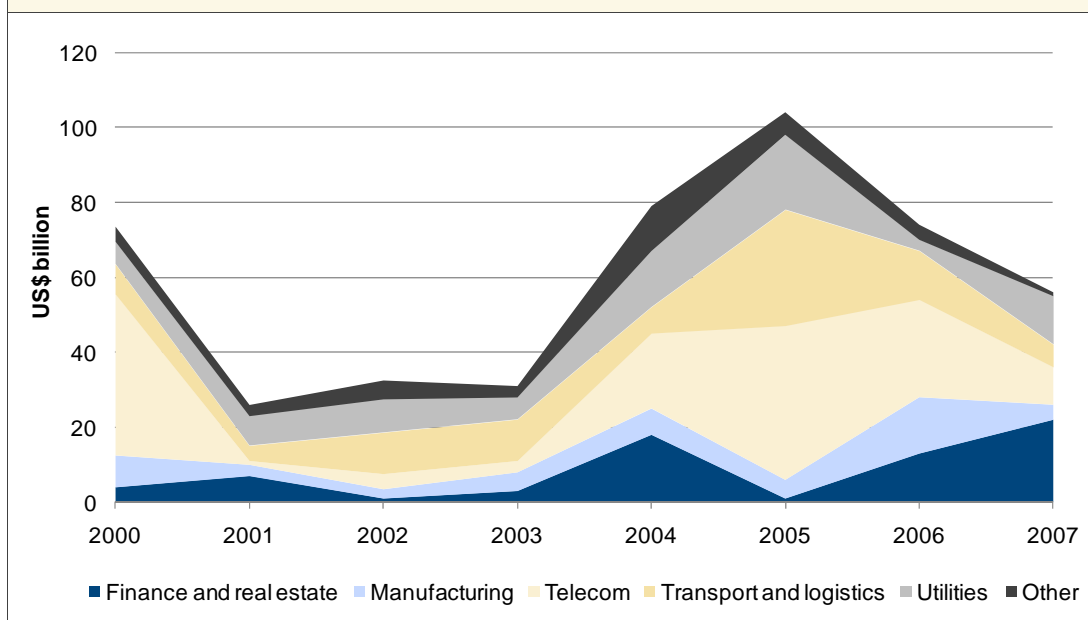
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<sup>30</sup> New Zealand Government (2010), “Financial Statements of the Government of New Zealand for the year ended 30 June 2010”, pps 20-21.

<sup>31</sup> [http://www.localcouncils.govt.nz/lgip.nsf/wpg\\_url/About-Local-Government-Local-Government-Statistical-Overview-Index](http://www.localcouncils.govt.nz/lgip.nsf/wpg_url/About-Local-Government-Local-Government-Statistical-Overview-Index).

A survey of member countries conducted by the OECD (2009) indicates that policy in New Zealand in respect of government ownership has been out of line with the majority of OECD governments in the period since 1999. The OECD estimates that privatisation proceeds for member countries amounted to at least US\$ 487 billion over the eight year period from 2000 to 2007. As shown by Figure 7.1, sales of state assets reached their maximum in 2005 with total proceeds of US\$ 103 billion – a figure that has historically been exceeded only in a couple of the “boom years” in the late 1990s.<sup>32</sup> Most active in privatising SOEs since 2000 have been the large economies of continental Europe. With a combined US\$ 233 billion of privatisation revenue, France, Italy and Germany accounted for almost half of the total proceeds in the OECD area. This, of course, to a large extent reflects the size of the underlying economies – plus the fact that unlike some other big OECD countries the governments in question still held a large portfolio of SOEs. A continuation of the privatisation programmes of Japan, Turkey and Australia also makes up a material portion of the privatisations captured in Figure 7.1.

**Figure 7.1:** The value of privatised state assets in OECD countries, 2000-2007



Source: OECD

### 7.3 The limitations of public ownership

The framework established under New Zealand’s State-Owned Enterprises Act has been effective in reducing the risks, costs, and static inefficiency of operating businesses owned by the state, but it falls short of providing incentives to make the contribution to economic growth that the private sector can provide. So while we welcome the indication from the current Government that it wishes to place greater emphasis on balance sheet management issues, the

<sup>32</sup> This is a low-end estimate in the sense that it excludes data for two OECD countries (New Zealand and Norway) as well as 2007 data for Mexico. On the other hand, it includes a wide range of “indirect privatisation” that not all member countries would consider as privatisation transactions.

management of trading enterprise assets will necessarily require comparison with, and consideration of transfer of, those assets to the private sector.

Boards of directors of SOEs are appointed by Ministers. No matter how talented and experienced those Board members are, they will never face the same incentives to maximise long-term returns on the operations of the firm that directors of private sector companies face.

Government ownership of an enterprise that has a substantial share of any market inhibits private investment in that market. The reason is that private investors risk their investments being stranded by changes in government policy that protect or advantage the state-owned enterprise at the expense of its competitors. In addition, state ownership makes a change in ownership of an enterprise more difficult: any poorly performing private enterprise may be the subject of a takeover offer, and purchasing an existing enterprise is a route to entry that is blocked (or at least much more complex) if the enterprise is state-owned.

There is always a risk that state-owned businesses will face implicit pressure to run, or feel rewarded for running, their businesses in ways that support the political priorities of the government of the day rather than focusing strictly on responding to economic incentives and opportunities.

It is sometimes argued that it is profitable for government to hold trading assets because government can raise funds at much lower rates than the private sector, and returns on those trading assets will normally be higher than the government's cost of funds. However, the reason that government can raise funds at low rates is that it has the power to tax, which means that the risk associated with the operation of state trading companies is imposed on taxpayers. The evidence here and abroad is that private owners are able to obtain better returns on trading assets than are government owners: rates of return from New Zealand SOEs have generally been no better than adequate, and often not adequate. For these reasons, the transfer of state trading assets into the private sector will generally improve the government's financial position.

## 7.4 Changing the ownership boundary

Changing the boundary means divestment of assets and removal of any exclusive franchises or barriers to competition that might have been associated with them while state-owned. It includes dilution of state ownership positions in SOEs by secondary share offerings to non-state shareholders and the divestment of subsidiaries by SOEs.

The sale of state assets may be contentious if it creates an expectation that employment at the enterprise may be reduced, or if it is associated with the removal of subsidies to certain groups of customers. However, we believe that the current framework for SOEs in New Zealand is strong enough to ensure that the static efficiency losses from state ownership of trading assets are not large. The potential for a "step change" as a result of sales of state assets is there, but that potential flows from what we referred to in Chapter 3 as the dynamic efficiency effects of the sale of state assets rather than the static efficiency gains.

Dynamic efficiency benefits arise not from more efficient resource allocation, production and pricing today, but from the investment decisions that the enterprise will make when it is freed from the constraints of state ownership and confronted with the opportunities that will be provided by a commercially focused board, and the disciplines and potential for expansion provided by private equity markets. In other words, dynamic efficiency is the driver of the enterprise that the state entities could become, and the contribution that they could make to prosperity in New Zealand in the future, much of which will not be apparent or even imagined today.

If New Zealand is to dramatically increase its rate of growth and close the income gap with Australia by 2025, it needs more of its large companies to be investing in innovation, sucking ideas out of universities and research labs around the world, and putting those to work in the New Zealand economy. The transfer of state assets into the private sector could form an important plank in getting a much higher level of private sector involvement in research and development, and a much larger number of companies with the capacity to identify innovations that will dramatically increase growth and (via retained earnings and the ability to tap private equity markets) the capacity to invest in them. Note that Nokia was a diversified industrial conglomerate that sold off the majority of its business divisions to focus on cellular phone technology: if it had been state-owned, it would probably still be managing forests, and producing pulp and paper, lumber and electricity.

The sale of state trading assets into the private sector could have the incidental benefit of increasing somewhat the size of New Zealand's private capital markets (as noted by the Capital Markets Taskforce), but we do not see this as a primary driver of the asset sales<sup>33</sup>. Moreover the floating of state trading assets on the private equity markets need not guarantee a sustained increase in the depth and liquidity of New Zealand's capital markets, especially if the relatively small stock of domestic savings has actually been the primary reason why many New Zealand companies have been taken over by foreigners.

The achievement of gains does not necessarily require sale of 100 percent of state trading assets to the private sector. The sale of a minority stake which still left the government with control of the company would allow exposure of the company to the disciplines and the opportunities created by access to public equity markets, allow board and senior management remuneration packages to move closer to those offered in the private sector, and thus create the opportunity for executives and directors from the private sector to be appointed<sup>34</sup>. The example of Air New Zealand is instructive, in that a relatively small equity stake held by members of the public and the appointment of private sector directors helps ensure that the company is managed in the interests of all shareholders and is at less risk of being required to respond to the political imperatives and constraints of the government of the day.

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<sup>33</sup> This would require that sales of state trading assets occur through initial public offerings rather trade sales.

<sup>34</sup> We recognise that where the government retains a majority stake, private investors may assume that there is an implicit government guarantee of the firm. However, the exercise of any such guarantee may not insulate private shareholders from loss.

## 7.5 Modern approaches to policy on state ownership of assets

As already noted, the Government has made a commitment not to sell state assets in its first term and some New Zealanders are implacably opposed to sale of any state assets. We believe that it is now important to engage in a constructive debate about the costs and benefits of state ownership of trading assets, and that the Government provides leadership in encouraging that debate. The points of debate would include:

- The opportunities for SOEs to make a much larger contribution to future prosperity in New Zealand through the investment and fundraising opportunities provided by private sector ownership.
- Why New Zealand ownership does not have to mean government ownership as opposed to ownership by members of the public of New Zealand. We believe that the public in New Zealand has an appetite for greater opportunities to invest directly in high quality New Zealand companies such as our SOEs, and as our national savings rate increases so will the demand for such securities.
- Having a public debate about minority private ownership of SOEs, which would require those who oppose minority private ownership to explain exactly what is lost by allowing access to private capital markets, allowing the benefits of investment by individual members of the public, while retaining effective government control.
- Consideration of the benefits that might arise from a presumption that government ownership will be retained only where there is a clearly identified rationale why state ownership is required, and the interests of the state cannot be achieved through mechanisms other than state ownership (regulation under the Commerce Act, for example).

One very clear example of a rational approach to government ownership is provided by the Federal Republic of Germany, whose choices about ongoing state ownership are anchored in the annual fiscal budgeting procedure to provide consideration of both the public interest in state ownership and also the explicit and contingent liabilities with which control over the SOEs could burden the public finances. In case of public enterprises, the German Budget Law (Section 65 BHO on *Participation in private law enterprises*) provides that:

“[T]he federal government should participate in the founding of a private law enterprise or in an existing enterprise with a legal form of this kind only if:

- There is an important interest on the part of the federal government and the purpose intended by the federal government cannot be achieved better or more economically in any other way.
- The federal government’s contingent liability for calls is limited to a fixed amount.
- The federal government is granted suitable influence, particularly on the supervisory board or in an equivalent supervisory body.

- It is ensured that the annual statement of accounts and the annual report will be prepared and audited in accordance with the provisions of Part Three of the Commercial Code relating to large commercial law entities...”

Every two years the government of the Federal Republic of Germany examines whether the companies need to be retained by the state. If not, the government is committed to creating a plan for privatisation.

## 7.6 Conclusions

The Taskforce welcomes the commitment of the current Government to better management of the state balance sheet, but in practice this must mean a readiness to sell assets where a robust professional analysis determines that this would result in the best long-term economic outcomes. Best practice in state ownership of assets is for a regular assessment of the assets owned by the state against a presumption that if there is no explicit efficiency rationale for state ownership, or if there is an alternative means of addressing any efficiency issues or national interests other than through state ownership, then ownership of the assets should be transferred to the private sector. Against these criteria, we believe that the case for retaining many trading assets in state ownership is weak.

The public debt levels and the framework for management of state trading assets in New Zealand today are different from those that motivated the sale of state assets in the late 1980s and 1990s. This suggests that 21<sup>st</sup> century policy on the sale of state trading assets may be different in a number of ways, including in focusing on ownership of shares by the public in New Zealand rather than “trade sales” to large (sometimes foreign) corporations. Further, consideration of the benefits that will be derived from the transfer of state trading assets to the private sector should today focus on the dynamic efficiency benefits that will arise from the investment decisions that boards and CEOs will make when enterprises are freed from the constraints of state ownership and politically-defined mandates, and confronted with the opportunities that will be provided by a commercially focused board, and the disciplines and potential for expansion provided by private equity markets. In other words, the debate about ownership should focus on the contribution that state enterprises could make to future prosperity in New Zealand, many potential aspects of which will not be apparent or even imagined today.

Where assets are retained in state ownership, it is vital that the best possible management and governance structures are put in place to maximise the benefits that the public obtain from that investment of public funds. However, that is often difficult to achieve with state assets where there is no competing firm, or where they are associated with a service provided only by the state. For this reason, we turn in Chapters 8 and 9 to consider ways in which the private sector may make a contribution to the efficient management and governance of assets that remain in state ownership, and of services involving people and assets that will continue to be funded and directed by the state.



## 8 Changing the boundaries between the state and the private sector II: Public-private partnerships in infrastructure

- Public Private Partnerships (PPPs) enable governments to engage the capital and expertise of the private sector in support of their attempts to address infrastructure deficits and achieve more efficient service delivery.
- PPPs are an underutilised option for achieving greater efficiency and innovation in public infrastructure projects in New Zealand. There is now a wealth of overseas experience in running successful PPPs, including in Australia. New Zealand therefore has the advantage of being able to learn from the experience of other countries.

### 8.1 Introduction

The size of government in the New Zealand economy makes it unlikely that the per capita income of New Zealanders can be raised to parity with that of Australians by 2025 without a substantial improvement in public sector productivity. This applies both to the government as owner of assets and to the government as deliverer of public services. In contrast to the assets of state trading entities reviewed in Chapter 7, full private ownership and operation of the assets associated with the delivery of public infrastructure may not be feasible. But this does not mean that it is impossible to obtain the benefits of private sector expertise in improving the efficiency with which services utilising public infrastructure are delivered. As the Minister of Finance recently announced:

*The current Government wants to see as much private sector expertise and discipline used as possible... welcomes engagement because [we] believe there are big gains to be made by exposing the public sector to private sector skills and techniques - particularly in the area of risk management and better assessment of whole-of-life costs (English 2010).*

In this chapter we look at a range of opportunities to re-examine the boundaries between the state and the private sector through arrangements that may be broadly termed public-private partnerships (PPPs).

### 8.2 Public-private partnerships in infrastructure

Public policy relating to infrastructure for energy, transport, water and communications is important because these sectors rely on investment in capital-intensive fixed asset networks. Because these investments are irreversible, private investment may be below the optimal level if there is a risk of those assets being stranded by a change in policy. In addition, empirical and theoretical studies have found that infrastructure investments have positive effects on economic growth because they facilitate higher productivity in other activities in the economy. Given the evidence that inadequate infrastructure (particularly in roads) may be a serious barrier to

expansion of business activity in some parts of New Zealand (Guillemette 2009: 22), PPPs provide a mechanism by which the government can engage the capital and expertise of the private sector to support its attempts to address these infrastructure deficits.

Public-private partnerships are established by long term, risk-sharing contracts between public and private parties based on a project agreement or concession contract. This term covers a wide range of arrangements which include concessions, delegated management contracts, leasing or other forms of private participation in the operation, maintenance and development of public assets. In some cases, PPPs involve the financing, design, construction, renovation, management or maintenance of an infrastructure asset; in others, they incorporate the provision of a service traditionally delivered by public institutions. Payments are made over the life of the PPP contract through usage charges and/or by the public sector to the private partner, and are linked to the level and quality of services actually delivered.<sup>35</sup> The core rationale for the use of PPPs is the promotion of state sector efficiency through risk sharing and harnessing private sector expertise for the public purpose. PPPs are distinguished from private sector procurement because they involve financing and/or operation by a private entity.<sup>36</sup>

While public-private partnerships may in some cases involve a transfer of assets to the private sector, they normally involve retention of residual government ownership rights while operating rights are transferred to the private sector. The distinction is important, in part because public-private partnerships may be close substitutes for wholesale transfers of state asset ownership, meaning that both options need to be considered in evaluating opportunities to improve the productivity of the public sector and increase the scope of the private sector. Thus, where appropriate frameworks are utilised, public-private partnerships have the potential to provide the static and dynamic efficiency benefits associated with the private sector in the use of assets for public purposes.

## 8.3 Use of PPPs: New Zealand in international perspective

The Government has announced its intention to use PPPs for a prison, for new school property, and for an ultra-fast broadband initiative, and to investigate their use for the construction of a wider range of public infrastructure by requiring that PPPs be considered for all public projects with value in excess of \$25 million (English 2010). While this new policy is encouraging in that it establishes the expectation that public-private partnerships will become an important vehicle for improving efficiency in the future, New Zealand is starting from a position that is well behind that of Australia and many other OECD countries.

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<sup>35</sup> This definition excludes for example investments made by regulated utilities, project refinancing and privatisations involving asset sale or service outsourcing.

<sup>36</sup> In New Zealand at present, private firms would normally be involved in the design and construction of facilities because there are no government entities with those capabilities (this model is termed private sector procurement (Katz 2006)).

Since 2000 around 50 PPP projects worth about A\$30 billion, or around 20 percent of total new infrastructure investment, have been completed in Australia (English 2010). The Canadian Council for Public Private Partnerships currently records 140 PPPs in Canada, about 50 percent of these in Ontario. Canada's PPPs are concentrated in hospitals and healthcare (54), transport (31), justice and corrections (16), environmental (16), recreation (9) and education (6).<sup>37</sup> It is part of the Canadian government's stated intention to become a world leader in the development of innovative uses of public private partnerships. PPP Canada is a Crown Corporation recently established to support the development of public-private partnerships and facilitate the development of the Canadian PPP market. The Government of Canada established a C\$1.25 billion fund that is managed by PPP Canada to support PPP infrastructure projects.

Between 1990 and 2009, more than 1300 PPP contracts were signed in the EU, representing a capital value of more than EUR 250 billion. This includes around 350 new projects with a value of almost EUR 70 billion which have reached financial close since the beginning of 2007 (Kappler and Nemoz 2010: 28). Since 2006, the PPP market in Europe has continued to diversify both across countries and sectors. The UK remains the largest PPP market in Europe, though its share in the total of EU PPPs continues to shrink. At the same time, PPPs have become more important in other European countries. PPPs in the UK have continued to diversify across sector, with health and education PPPs gaining ground. Outside the UK, similar tendencies can be observed, though transport remains the dominant sector.

The fact that New Zealand is a long way from the frontier in terms of the use of PPPs in a wide range of areas means that we have substantial opportunities to increase our productivity by quickly adopting the practices that have been pioneered and proved successful in other countries.

## 8.4 Will PPPs improve the efficiency of public infrastructure?

The most recent literature on PPPs provides strong support for the potential efficiency enhancement that they provide.

Packaging investments in infrastructure and services into public private partnerships results in greater transparency and better investment decision-making, because the private sector will require realistic estimates of costs and reasonable return on the capital invested. As a result, the public will know what projects are really costing. In that process, PPPs can be subject to a value-for-money test, as the Government has proposed. This means that there is a requirement to demonstrate the superior efficiency of private sector involvement as a precondition for the use of a PPP.

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<sup>37</sup> <http://projects.pppcouncil.ca/ccppp/src/public/>.

Listing PPPs on the stock exchange would provide New Zealanders with opportunities to invest in securities that are long-term, relatively low risk, and have the added attraction of being an investment in the growth and development of our country. As Kelsey (2010) notes, the investors are often pension funds and insurance companies – which in fact means it is the pension and insurance assets of the New Zealand public being invested. In addition, the development of PPP expertise here will open up opportunities for New Zealand companies to expand offshore, not just to Australia but also into Asia where large numbers of PPP projects are being developed to provide infrastructure that governments in those countries have neither the expertise nor the funding to build alone.

Up-front involvement of the private sector brings a diversity of decision-making to bear on the best way to make investments and provide services. While government can employ consultants, their role is quite different because they are not residual claimants in the success of a project in the way that the private entity in a PPP will be. Under conventional procurement, individual private sector companies do not evaluate the whole-of-life viability of a project because they are invited to tender only for portions of the project. Under a PPP, if the designers and builders have a financial stake in the project over its whole life, they will have an incentive to design features and construction standards so they are optimised against the long-term cost of maintenance and operational requirements. The incentives to do so are likely to be stronger than under conventional procurement.

Public sector assessments often suffer from an optimism bias or a political bias (the project is more likely to be deemed financially viable if the responsible Minister wishes the project to be undertaken). With a PPP, the private sector has a stronger incentive than a government agency to be realistic about the prospects of a project and its views will be relatively transparent in the terms of the tender.

The whole-of-life approach and the contractual obligations around maintenance ensure that it is fully maintained throughout its life. This is not always the case under the direct management of a public agency, where maintenance needs are sometimes subordinated to other priorities. This means that PPPs may be used to create a commitment device for the government. For example, having committed to meet certain obligations, or to raise revenue in certain ways, the government must capture these elements in the agreement with the private provider. In the case where a public agency is the user (such as a schools PPP), a contractual obligation to fund maintenance will be required, and will need to be built explicitly into future government budgets.

The above should not be taken to mean that the extraction of benefits from PPPs is a trivial task. Considerable expertise must be brought to bear on the contracting process if risk is transferred to the private sector and any residual risk remaining with the state is explicitly recognised. Without the relevant expertise, the government may impose large costs on the public by writing poorly conceived contracts that inflate profits for the private entity, alienate Crown assets at unreasonably low values, or grant monopoly privileges to a private entity to the detriment of users of the facility. These constitute valid concerns about PPPs. In contrast, a range of other criticisms of PPPs do not, in our view, have merit.

Some early commentators on PPPs claimed that they were only effective because they reduced the quality of the facilities or services that were otherwise required by the public (Quiggan 1996). This confused the effectiveness of PPPs in assisting the government to find better ways to consider the level of service that could cost-effectively meet demand. It is in fact precisely the emphasis on value for money through the process of negotiating and establishing PPPs that helps to define the benefits that they provide to society by comparison with earlier approaches to public sector provision that focused too much on the satisfaction of perceived needs at any cost.

More recent commentators (Katz 2006; Kelsey 2010) have raised concerns about the use of PPPs, which we set out and address below:

- “...they are creative accounting exercises to disguise a massive transfer of wealth to private consortia that receive guaranteed returns with minimal accountability” (Kelsey 2010). While there is some evidence that the accounting treatment of the project was a driver of some PPPs in the UK, internationally this is rarely the driver for governments to enter PPP arrangements. Public sector accounting standards in New Zealand certainly preclude such an approach. If the government has residual ownership rights, the asset may still appear on the government’s books, and at the same time any commitments to funding will be incorporated in current and projected government budgets.
- “The private finance model reduces the public services to a purely commercial venture that is detached from their social purpose” (Kelsey 2010). This is not true because the point of the PPP is its social purpose, and the challenge for contemporary public management is to find ways to achieve those social purposes in more effective ways. If the social purpose can be met more effectively by a public private partnership, then the New Zealand public would be disadvantaged by pure public sector provision.
- It is sometimes also argued that the power to levy taxes to service its debt means that the New Zealand government can raise funds to finance projects at lower interest rates than the private sector. However, this just reflects the fact that taxpayers are bearing the risk that is priced into interest rates in private contracts. The difference in interest rates, in other words, reflects differences in the allocation of risk, not greater efficiency in undertaking capital-intensive projects. Further, the higher funding costs of private entities must be balanced against the deadweight losses of the taxes required to repay public debt raised for infrastructure projects, as we pointed out in Chapter 5 above.
- PPP contracts are more complicated (must address more contingencies) than conventional procurement contracts, and measurement of performance by the private partner may also be complex, so the resources invested in contract negotiation are typically large. However, complexity and incompleteness in contracting and the up-front costs of negotiation can be mitigated in a variety of ways, including by the provision of options and the assignment of residual rights of control to the state (Schmidt 1998).

- Given the difficulty in estimating financial outcomes over such long periods, there is a risk that the private sector party will either go bankrupt, or make very large profits. Both outcomes can create political problems for the government, and the former will likely cause government to intervene to maintain provision. But even if an extreme negative outcome results in government intervention, this still leaves a very large range of outcomes where the risk is carried by the private entity. Moreover, knowledge of the potential for government intervention can be explicitly built into the terms of the contract *ex ante*, reducing efficiency concerns arising from government bailouts of private entities based purely on “too big to fail” criteria.

## 8.5 Evidence on the efficiency of PPPs

In those countries where substantial numbers of PPPs have been created, the emerging evidence supports the proposition that they increase efficiency, particularly in relation to time and cost over-runs for projects. The Allen Consulting Group and the University of Melbourne (2007) undertook an analysis of the relative performance of PPPs and traditional procurement in relation to cost and time over-runs for over 50 infrastructure projects in Australia. They found that:

- “On a contracted \$4.9 billion of PPP projects the net cost over-run was only \$58 million – not statistically different from zero” while for “\$4.5 billion of traditional procurement projects, the net cost over-run amounted to \$673 million”. On this basis, \$17.5 million is saved for every \$100 million invested in infrastructure via PPPs rather than via publicly managed and operated facilities.
- PPPs were much more likely to be completed on time. Further, project size had a marked (statistically significant) negative impact on time over-runs for publicly managed and operated projects, while the timeliness of completion was not negatively affected by the size of the PPP projects.

Even this analysis understates the potential economic benefits of PPPs. The timeliness of the completion of PPP projects increases consumer benefits by making facilities available earlier, which in turn means that the economic impact of activities associated with the facilities affects growth sooner as consumers get the benefits of the use of those facilities sooner. In addition, there will be positive spillovers from the negotiation of PPP contracts to other areas of government activity. In particular, some of the lessons learnt by public officials in dealing with PPP projects will be transferable to those projects that are publicly managed and operated, improving public sector efficiency overall.

## 8.6 Conclusion

Changes in technology and new ways of thinking about the role of the state have provided opportunities for private sector participation in the development of infrastructure. Since New Zealand has a variety of major infrastructure bottlenecks that are impeding growth, PPPs offer the potential to speed up infrastructure development, reduce the need for government borrowing and improve the transparency and quality of decision-making.

There are risks associated with the use of PPPs, and the contracting requirements may be complex. There is therefore the potential that government will not always strike an advantageous deal when entering into PPPs. But Europe, Canada and Australia are so far ahead of New Zealand in the use of PPPs for infrastructure projects that there is no need for New Zealand to re-learn all the lessons about potential pitfalls that have emerged from their experience. In the right circumstances, the directly measurable savings from the use of PPPs may be substantial, and when combined with the benefits of superior *ex ante* evaluation of the lifetime costs of projects, timely delivery of projects, and greater management efficiency in the operation of the facility, PPPs are likely to have made a material contribution to increases in GDP in Australia.

The intention of the Government to look at PPPs is a potentially positive contribution to closing the income gap. But to catch up with Australia it will need to do a lot quickly. The opportunity for New Zealand is to get ahead of the game through more innovative approaches to the use of private sector partnerships.

## 9 Changing the boundaries between the state and the private sector III: Welfare, health, education, and superannuation

- Social welfare, healthcare, compulsory education and superannuation have an important impact on the lives of all New Zealanders and consume a large portion of the New Zealand government's Budget. There is significant scope for reform in these areas, both to generate better long-term outcomes and to reduce government spending.
- Improvements in efficiency will involve changing the balance between both private and public provision of services and between private and public funding of those services.
- In welfare, the most important issue is establishing a focus on return to work, where possible, for every form of benefit. This will require attention to the high marginal tax rates created by benefit abatement to incentivise the choice of work over welfare, as well as time limitations on benefits where work capacity is established, and support for education and training.
- In health, New Zealand should look to more private provision of facilities and delivery of services, following the trend established in the United Kingdom and other European countries. The Government should establish a Health Taskforce to examine world-leading health models and the lessons they offer for New Zealand.
- The Government should provide much stronger encouragement to independent schools and remove restrictions such as the lack of performance pay and school zoning that inhibit performance improvements in the state school system.
- Changes to superannuation are necessary and long overdue. New Zealand should lift the age of eligibility beyond 65, as Australia and other countries are doing.

### 9.1 Introduction

Social welfare, healthcare, compulsory education and superannuation have an important impact on the lives of all New Zealanders and consume a large portion of the budget of the New Zealand government. All developed countries face pressure driven by increasing demands for government-provision of services, and the constraints imposed by the costs for the economy of the increases in taxes that are required to pay for them. In New Zealand, the pressure is increased by the fact that our income per capita has fallen relative to other developed countries in the last 30 years, but our expectations of the quality and scope of services that we will receive from government have not. Increases in our rate of economic growth will assist in improving the affordability of some of these services, but are unlikely to be sufficient on their own. New Zealand will also need to consider alternative models for the delivery and funding of services, particularly where they are successfully used in Australia or in other developed countries.



## 9.2 Social welfare

Few, if any, New Zealanders would deny the need for government to ensure that there is an adequate safety net to care for those who genuinely need it. But New Zealand provides welfare benefits to a high proportion of its population. Around 2.1 million people are employed in New Zealand. As at 30 June 2009, another 310,000 people (equivalent to 15 percent of the number of those employed) aged 18-64 were on welfare benefits.<sup>38</sup> The annual value of the benefits being paid in each category is shown in Table 9.1 below.

**Table 9.1:** Annual cost of each benefit type (2009/10)

Benefit type	Estimated Gross Benefits (\$000)
Domestic Purposes Benefit	1,694,360
Invalids Benefit	1,302,459
Accommodation Support	1,157,683
Unemployment Benefit	938,662
Sickness Benefit	713,516
Income Related Rents	527,851
Disability Allowance	411,711
Hardship Assistance (Special Benefit, TAS and SNG)	272,963

Source: Treasury Report to the Welfare Working Group

The Report of the Welfare Working Group suggests that New Zealand is a long way from achieving the correct balance between caring for those in genuine need and providing incentives for members of society to make choices (including sole parenthood) that make workforce participation more difficult. For example, it reported that in 1960, only 2 percent of the working age population was receiving a benefit. Today, the figure is around 13 percent and “roughly one in five Kiwi children live in benefit-dependent households”.<sup>39</sup> Around 100,000 New Zealanders have spent 9 of the last 10 years on a benefit.

Some of the people on the Invalids Benefit are society’s most vulnerable and needy people, who due to physical or mental incapacity will never earn an income for themselves. Providing adequate support for them is a necessary feature of a compassionate society. But the number of people who can never earn an income is likely to be small, and it seems likely that a reasonably large proportion of those on benefits could undertake at least some work with appropriate support. It is noteworthy that numbers in receipt of sickness and invalids benefits have increased by almost 70 percent in the last decade. In a period when the total population has grown by 12 percent and spending on health has more than doubled, it is very difficult to argue that the figures reflect declining levels of health in the population.

<sup>38</sup> Not including tax credits such as Working for Families. This number also does not include those not working but in receipt of ACC weekly compensation.

<sup>39</sup> See the Treasury Report to the Welfare Working Group, page 8.

Numbers on the Domestic Purposes Benefit (DPB) have fluctuated in the range from 95,000 to 110,000 over the last decade; they were reduced by the introduction of Working for Families, but have increased again in the last few years. More fit and active people are on the DPB than on either sickness or invalids benefits, but many DPB recipients have low skill and education levels, which make it difficult for them to enter the workforce. As a result, dependence on the DPB often continues for years.

From the perspective of economic growth, the welfare problem is that New Zealand has too many people who lack the human capital or the incentives to be productive participants in the economy at New Zealand's minimum wage. A large welfare overhang has three impacts on economic growth. First, it reduces the proportion of the population who contribute to government funding by paying taxes. Second, the level of benefit payments increases required tax rates, reducing incentives for investment and saving in the portion of the population that is working. Third, it means that a substantial portion of our working age population are not able to contribute to the increase in national income required to match the per capita income of Australia by 2025.

In any reform of the welfare system, it will be very important to consider pathways by which qualification for benefits is established. It seems likely that at present assessments are made in the absence of incentives to consider the fiscal implications of the decision.

The Taskforce believes that the single most important issue in welfare reform is to establish a focus on return to work for every form of benefit. This focus would include robust work tests and consideration of the introduction of an absolute cut-off where ability to work is established. There appears to be no reason why most of those on the DPB for more than five years (ie until a youngest child, born at the time a parent went onto the DPB, starts school) should not at least be in part-time work.<sup>40</sup>

How will this be achieved? The starting point is likely to be consideration of the high effective marginal tax rates faced by many beneficiaries contemplating work. In some cases, accommodation supplements and other allowances mean that beneficiaries may face effective marginal tax rates as high as 100 percent as a result of benefit abatement. For many beneficiaries a key barrier to entering the workforce may simply be the complexity created by different forms of financial assistance and the difficulty this creates in calculating the net benefit from work. No beneficiary can be expected to voluntarily enter the workforce if their income does not increase significantly as a result, so high marginal tax rates and the complexity of assistance packages are a barrier to beneficiary participation in the workforce. In addition it seems likely that we will need to consider a range of policy changes including time limits on benefits where the work capacity of the individual is established, and a range of programmes providing support for beneficiaries to invest in education and training and make the transition to work.

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<sup>40</sup> We recognise that some of those on the DPB are full-time carers for severely disabled children or relatives who will not be away from the home attending school.

The potential benefits for our society of changing the balance between work and welfare are substantial. They go well beyond the reduction in the cost of the benefits being paid because each transfer from benefit to work reduces government expenditure and increases national income. Further, the gains are not just economic – although those are likely to be large. It is well recognised that welfare dependency is debilitating for the individuals concerned, and in particular for their children. The best way to position the next generation for the challenges and opportunities of a strong and high-performing economy is through the example of parents actively engaged in the workforce.

Welfare reform, especially the transition to a world of greater self-reliance and greater use of family, community and market mechanisms for support, is not easy. It is also not necessarily a path to large short-term fiscal savings. The entrenched problems are sufficiently severe that significant expenditure could be required to help facilitate the transition. The required expenditure will include investment in stronger case management, but not necessarily higher overall spending. In this respect, management of beneficiaries should parallel the processes now used for managing the tail of long-term claimants on ACC. The required expenditure will also include investment in raising the minimum skills and qualifications of the labour force, since people with low or no formal educational qualifications make up the majority of long-term beneficiaries. The OECD has recently estimated that removing the current problems with educational under-achievement could add 0.42 percent per annum to New Zealand's economic growth, but will take 20 years to achieve (OECD 2010c: 26).

Internationally, recent interest has centred on Public–Private Community Partnerships, wherein the government partners with private and community organisations to address welfare issues. Given the scale of the welfare problems in some communities in New Zealand, and the limited success of other initiatives aimed at breaking inter-generational cycles of welfare dependency, this model appears to be worthy of consideration. The Whanau-Ora programme represents a promising example both of community partnership and community self-determination. It could be extended by government seeking to actively partner with iwi and other communities in the development of public-private initiatives aimed at addressing social issues and delivering social services.

## 9.3 Health

Over the last decade, the New Zealand government has funded a very large increase in health spending amounting to \$6.5 billion (OECD 2009). Without substantial changes to policy settings, the health spend is expected to increase well above the current level of 7 percent of GDP over the next 20 years. There are two reasons for this fiscal pressure. The first is that approximately 80 percent of health spending is from the public purse, mainly out of general taxation. The second is that New Zealanders expect a public health and disability system of the same standard as other OECD countries despite our lower levels of income per capita. Clearly there must be questions about the affordability of this projected increase in health spending. Given the essentially private nature of most of the benefit(s) from healthcare, and the fact that there is a large element of personal choice in how much to spend on medical care, the

Taskforce believes that the potential to change the boundaries between private and public provision, and private and public payment for healthcare, must be considered as part of any assessment of affordability.

By some measures, the New Zealand healthcare system performs well.<sup>41</sup> Despite expending somewhat fewer resources on healthcare per capita than the OECD average, New Zealand now has the 11<sup>th</sup> highest life expectancy out of the 30 OECD member countries (in other words, we live significantly longer than would be predicted by our material standard of living alone). However, the best available evidence suggests that despite substantial increases in the salaries for medical and nursing professionals, productivity in the health sector has not increased. Indeed, productivity in the state health sector has actually fallen and we now appear to be getting fewer health outputs for every dollar of input to the system<sup>42</sup>. As the range of treatments and drugs improves and the average age of the population increases, it will not be sustainable to go on increasing spending in return for few perceptible health gains.

### Institutional arrangements

In the 1990s, the Health Funding Authority developed a sophisticated body of expertise in the difficult area of contracting, specifying outputs etc, based around a model which distinguished carefully between the role of the state as funder of health services, and the role of government-owned hospitals as (predominant) providers. In the hospital sector, the reduction in the average length of stay was the main success of the 1980s and 1990s reforms, and as a result New Zealand's spending on in-patient care appears to have fallen faster than in most OECD countries.

The single most important strategy used in New Zealand for containing overall health expenditure is the setting of an overall national budget for health by the central government. However, this approach has not been effective in containing costs or in increasing productivity in health, and this appears to be in part because the potential agency role of the District Health Board (DHB) is undermined by its concurrent ownership of public hospitals. The amalgamation of the purchaser and provider roles is a classic recipe for conflicts of interest and anti-competitive behaviour. It has also not provided obvious financial benefits, with DHBs continuing to run deficits and having large unfunded capital requests. Getting better efficiency in the public hospital system is therefore likely to require operational separation between ownership and purchase functions of the DHBs. This model is also already well-established in another government agency, ACC – all of the surgery ACC pays for is contracted from providers, 80 percent from private providers<sup>43</sup>. If this model was adopted, it is not clear that there would be a place for DHBs, much less 21 of them.

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<sup>41</sup> Our analysis of the healthcare system draws on the report of the New Zealand Government Ministerial Review (2009).

<sup>42</sup> Mani Maniparathy, Productivity Performance of New Zealand Public Hospitals 1998/99 to 2005/06, New Zealand Business Roundtable, 2008.

<sup>43</sup> Beyond the health sector, the retirement home sector is also another functioning and successful example of the funder/provider split.

The Government has implemented a number of initiatives in the health system, and usefully addressed some of the issues raised by layering of bureaucracy. But these initiatives do not appear to us to go to the real issues and primary cost drivers of the health system. Indeed, some initiatives, such as the move to a single agency managing human resource issues, may reinforce other weaknesses in the system, such as the extent of centralised wage bargaining. There is no obvious logic to a common pay scale for doctors or nurses in Auckland, Invercargill and Whakatane.

### Shifting the point of care

Research has shown that in countries where primary healthcare is strong, health spending is lower, all else equal. Recent efforts in New Zealand (and elsewhere) have focused on trying to shift the point of delivery of many services from secondary to primary (or community) providers. Co-incidentally, in New Zealand that would also amount to a shift from largely public to largely private providers. Shifting some forms of care from secondary to primary and community settings provides more convenient care closer to home and at reduced cost. For example, working closely with hospital-based clinicians, a wider range of care could all sit with primary providers.

However, this shift has largely failed to materialise despite additional government spending on healthcare. Part of the reason for this failure is that the Government's health budget is still being prioritised (rationed) largely at a national level. Ministerial priorities are conveyed by the Ministry to DHBs and thence (under the Primary Health Care Strategy) to Primary Health Organisations. Unless primary providers or PHOs can be incentivised to reduce demands for health services, costs will continue to escalate.

### Increases in private provision and co-funding

The traditional model for the delivery of healthcare in New Zealand and many other developed countries was built around public finance and public delivery. However, contemporary practice already provides a large role for the private sector though government health strategy and policy have often been slow to reflect this. In New Zealand, we have operated a healthcare system that mixes private and public provision, with substantial parts of the system delivered by the private sector (general practice, community pathology and private specialist, elective care and aged care facilities) funded by differing combinations of user payments, private health insurance and government.<sup>44</sup> In addition, the boundary between specialists working in the private and public sector is highly porous, with some DHBs contracting substantial amounts of work from the private sector.

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<sup>44</sup> We note that the current fragmentation of policy and funding for community pathology that results from funding through DHBs, and the prohibition of co-payment charges for community pathology, are quickly promoting a crisis of quality and availability in what is otherwise a very efficient example of a public private partnership in the New Zealand health system.

Given the existing evidence of the benefits that are provided by private sector ownership of facilities and delivery of services in New Zealand, and the challenges that the government faces in delivering healthcare that meets the public's expectations of quality and availability, New Zealand should be looking to greater private sector involvement in construction of facilities and delivery of services. In this, New Zealand would not be a pioneer. In the last five years, such public-private partnerships have made up 40 percent of the new investment in the health sector in the UK and are increasingly used for health sector investment in other European countries (Kappler and Nemoz 2010). In addition, in rapidly developing countries such as India, China and Vietnam, the inability of public provision to keep up with the demand for quality healthcare has resulted in private participation in the health sector playing an increasingly important role, which in turn creates international opportunities for any world class private sector health providers in New Zealand.

From the perspective of funding of care, the current New Zealand health system is a confusing mixture of pure public provision (with no co-payments), joint public and patient funding, and pure private funding (mostly for elective surgery). There appears to have been little thought given to the overall planning of the balance between private and public provision, which as a minimum suggests the potential for better outcomes from a system that provided clearer strategic planning of the funding of provision. This is especially important given, as we noted earlier, the substantial private benefits from healthcare, and the willingness of many New Zealanders to pay for higher levels of care.

There appear to be feasible options to increase the level of patient co-funding. For example, the Taskforce cannot understand the rationale for the current level of subsidies on prescription pharmaceuticals in New Zealand. For other than the very poor and the chronically ill, we believe that pharmaceutical pricing more akin to that in Australia (where there is a fee of up to \$30 per prescription) should be considered. We also see little justification for the significant increase in recent years in the extent of universal subsidies paid for visits to the doctor. The amounts involved run to hundreds of millions of dollars per annum. For working age middle income people, the additional taxes that they pay to fund higher subsidies for doctor visits represent a classic example of churn through the tax system (they pay in taxes, what they later get back in benefits). The insurance benefits to the individuals appear to be minor by comparison with the deadweight costs of taxation, especially given that insurance is available from private providers of health insurance.

Longer-term, another possibility is to move the system towards a more explicit "public health insurance model" in which stronger incentives were provided for middle income families to invest in private health insurance. We urge the Government to establish a separate health taskforce, with a more ambitious mandate than the recent Horn review, to look at the best health models in the world, and ways to capture the benefits of such approaches and insights for New Zealand.

## An example: Pathology services

Pathology services in New Zealand have traditionally been divided between Community Pathology Services<sup>45</sup> (private sector) and hospital pathology services integrated into public hospitals. Community pathology involves the collection of samples from patients, the transport of these samples to pathology laboratories where the analysis is carried out, and the reporting of the test results back to the referrer who ordered the tests. Hospital pathology services primarily carry out analysis of samples referred by hospital doctors. Tertiary hospital laboratories at Auckland, Hamilton, Wellington and Christchurch meet the 24 hour specialist needs of their hospital as well as undertaking specialised tests for community laboratories and other hospitals. DHBs fund both the community pathology services and the hospital pathology services within their own hospitals.

There are three problems with these arrangements. The first is that pathology services are funded entirely by the public health system, and there is no separation of the payment for collection, analysis and reporting<sup>46</sup>. The absence of any requirement for co-payment by the patient or the primary healthcare provider ordering the tests promotes the ordering of more than the efficient level of tests, and this is evident in the unsustainable growth in the number and cost of tests being ordered.

The second problem is that the separation between hospital and community pathology services is artificial: hospital laboratories could be run by the private sector providers of community pathology. In some regional centres, where the total demand for pathology services is too small to sustain separate community and hospital pathology laboratories of efficient scale, joint community and public hospital pathology services are provided through joint-venture arrangements of different types.<sup>47</sup> But in areas where separation of community and hospital laboratories is maintained, there is duplication of technology and competition for the expertise of specialist pathologists which appears to be inefficient given that integration of community and hospital providers has been shown to be feasible in other locations. The absence of a split between funder and provider in respect of hospital laboratories means that there is little transparency in the cost of hospital services, and insufficient incentive for DHBs to look for opportunities to introduce rationalisation.

The third problem with the current institutional structure is that funding of community pathology is on a regional (DHB) level, when there is increasing evidence that it would be more appropriate to view the market as national. The costs of DHB funding have been increased by the recent move of some DHBs to a monopoly franchise contract approach to the purchase of community pathology services, despite the fact that the franchise model seems inappropriate in this case and the potential for competition in the larger DHB areas. Technological change is providing the potential for a wide range of new competition, including allowing many basic tests to be undertaken remotely, with samples requiring more specialised tests shipped to a small

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<sup>45</sup> Also known as “Primary Referred Pathology Services”, or “Community Labs”.

<sup>46</sup> Pathology tests ordered as part of *privately funded* medical treatment outside the state health system do incur a charge.

<sup>47</sup> Bay of Plenty, Whanganui, MidCentral, Wairarapa, Nelson, Marlborough, South Canterbury and Otago Southland.

number of specialist centres. In addition, changes in the technology used for sample collection are increasing the scope for competition, including sample collection by staff at doctors' surgeries and community collection points that serve multiple providers of laboratory and pathology advice. In Christchurch at present, more than 50 percent of samples are collected at doctors' surgeries, and in most cases patients pay the doctor a collection fee.

The Taskforce believes there are opportunities for increases in efficiency that would produce superior outcomes for patients and lower costs for the government. Those opportunities revolve around reorganisation of the market and the introduction of co-funding within parameters negotiated with the government. First, funding should be removed from the DHBs, and both public and private pathology providers funded on the same basis. Transparent funding for hospital and tertiary pathology testing, with payments for identical services set at the same level across the tertiary and community sectors, would increase competition in the market, and ensure that funding regimes do not create an artificial barrier to the efficient organization of the pathology market. With funding on a national level, a national market would emerge through changes in ownership structures and specialisation in service delivery much more quickly than it is now. Second, the Government should consider introducing a tender process to integrate hospital pathology laboratory services with the private community pathology system to remove duplication of services. Third, the market should be deregulated to allow private pathology providers to set fees for the collection of samples and the analysis of those samples, as is currently the case in Australia.

## 9.4 Compulsory education

Education is also a source of fiscal pressure on government, and this pressure is exacerbated by the current rate of emigration of young adults who have been educated almost entirely at taxpayer expense. Total operating expenditure in compulsory education is budgeted to be \$12 billion in 2010/2011, and the value of state assets in the compulsory education sector is estimated to be \$11.4 billion for that financial year. The compulsory education sector is also heavily regulated, by a combination of state funding, zoning, centralised salary determination and other regulation of education providers. As is commonly the case with such intense regulation, perverse incentives and inefficient outcomes abound.

The very large financial commitment of the New Zealand government to education covers all ages and stages of life: universal subsidies for early childhood care,<sup>48</sup> compulsory primary and secondary education for children, and heavily subsidised tertiary education. This section of our report focuses on the compulsory education sector, while tertiary education is covered in Chapter 11.

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<sup>48</sup> In relation to early childhood education, the Taskforce noted in its first Report that it sees little merit in the churn of taxes paid by middle class parents to support universal early childcare subsidies (which have trebled in cost over the last five years, to around \$1.2 billion per annum). We are not aware of any evidence that any valuable public policy objective has been met by the initiative, which appears to have served only to impose an increasingly expensive overlay of regulation and cost on the sector.



Education in New Zealand is compulsory for all children aged 6 to 15 and (at least in theory) free from ages 5 to 18. The compulsory school sector is comprised of state schools, integrated schools, private schools and home schooling. State and integrated schools receive state funding based on student numbers and their decile ranking.<sup>49</sup> The decile ranking is a proxy for the socioeconomic status of the families within the residential zone from which the school draws students; the lower the decile ranking the higher the level of state funding per student.

Education is enormously important for our society and economy. It is part of passing on the heritage and culture of our society, as well as of developing the skills required to make a positive contribution to our national income and our society. In many respects, the New Zealand education system appears to produce reasonably good results. Our top performers are among the best in the world, although compared to other countries with high-performing education systems we have a relatively long tail of underachievement, especially for Māori and Pasifika students.<sup>50</sup>

There has been considerable focus this year on new national standards for childhood numeracy and literacy, and on the industrial dispute over teacher salaries that continued while this report was being written. There are few things schools can provide that are more important to getting a successful start in life than numeracy and literacy, and the new standards reflect community expectations and requirements for accountability. But the Taskforce believes that there are much more fundamental policy issues that must be addressed to improve the performance and the value for money that New Zealanders obtain from the compulsory schooling sector.

### The private sector in compulsory education

In New Zealand, there have been three major policy initiatives that have crowded the private sector out of funding education. The first was the decision to allow private schools to integrate into the state system in return for those schools teaching the standard state curriculum (with some modest concessions such as for religious education reflecting special features of those schools) accepting some limitations on the right to require parents to pay fees in addition to the state funding received. This had the effect of placing “integrated” schools on the same funding base as state schools for operational expenditure, though capital investment in integrated schools is not funded by the state. The second was the decision made by the New Zealand Government in 2000 to freeze the state contribution to private schools. This had the effect of reducing the per student state operating subsidy received by private schools to about 20 percent of the per student grant received by state schools by 2009. The third policy was the retention of the prohibition on state schools requiring parents to pay fees to supplement state funding, despite the necessity for high decile schools to raise funds from the community to meet parental expectations of educational quality and have the same level of funding per student as low decile schools.

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<sup>49</sup> The provision of financial support based on decile rankings is called “Targeted Funding for Educational Achievement”.

<sup>50</sup> New Zealand’s tail of underachievement is similar to that of Australia, UK and USA.

The combination of these policies creates a strong disincentive for parents to contribute directly to the cost of compulsory education. These policies preclude choice between schools that are (at least in theory) entirely state funded and schools that receive what is by international standards a very low level of state funding, given that they contribute to education across the age groups where government has made education compulsory. A small number of examples help make the point that, despite the increase in funding for private schools provided in the 2009 Budget (to bring state funding in private schools up to the level of 30 percent of the per-pupil operational funding provided to state and integrated schools), New Zealand is out of line with international practice, including in Australia.

### International experience

In Australia, non-government schools account for around 35 percent of total enrolments. Government expenditure per student in those non-government schools is, on average, 48 percent of the amount spent per student in government schools. The savings to governments in Australia from the education of students in non-government schools is in the order of A\$7 billion per annum.<sup>51</sup>

Three small European countries with which New Zealand is often compared have even more generous funding for private or non-government schools (Nesdale 2003). In the Netherlands, there has been equal government funding of state and private schools since 1917, and 65 percent of students attend privately run schools. In Belgium, most private schools are “grant aided” and so get recurrent funding on the same basis as state schools. In Denmark, private schools get government funding to around 80 percent of the level of state schools. In each case this level of government funding comes with the condition that the fees levied by private schools are set by the government, but none-the-less these systems still provide an effective mechanism for increasing choice and promoting private contributions to the cost of compulsory education.

In Sweden, recent reforms in the compulsory education sector (which we understand are now supported by teacher unions in Sweden) allow any new provider, for profit or otherwise, to set up a school (or chain of schools) and be funded for each pupil who attends<sup>52</sup>. Allowing private for-profit providers has been an important component of the success of the scheme, as private providers have a strong and direct profit motive to expand capacity when an existing successful school reaches a capacity limit. Queues and administered rationing of access such as zoning limits are much less common when the private sector provides goods and services than when the government does so.

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<sup>51</sup> See <http://www.isca.edu.au/html/funding>.

<sup>52</sup> We note the Swedish model not because Sweden necessarily has better education outcomes than New Zealand but because it provides an established model for introducing greater choice and for facilitating the entry of new providers in which school education remains overwhelmingly state-funded.

## Opportunities for reform in New Zealand

In Chapter 5 we explained why the deadweight costs of taxation make services provided by the state more expensive than if they were paid for directly by consumers. This is true for education: the greater the degree to which the state allows parents to spend their own money on education rather than paying for it through taxation, the more affordable education will be. New Zealand is more restrictive than other countries, with only four percent of students in the compulsory schooling sector attending independent (private) schools. Despite this, attendance at independent schools in New Zealand still saves the government \$300 million a year by comparison with the costs that they would be required to pay if all independent schools were integrated into the state funding system.<sup>53</sup>

The Taskforce suggests that the \$300 million that private schools in New Zealand save the taxpayer illustrates the point that better funding of private schools effectively creates budgetary flexibility for government as well as providing greater choice for parents. If New Zealand increased the funding of independent schools to 50 percent of the operational and capital funding provided to state schools, reducing the portion of compulsory education funded entirely by the state from the current level of 96 percent of enrolments to the Australian level of 65 percent of enrolments, then the savings for the government would rise from \$300 million to \$1.2 billion each year.<sup>54</sup> A saving of this magnitude would provide government with the flexibility to consider additional funding for those (often low decile) schools where educational attainment does not meet the minimum levels that New Zealand needs to aspire, putting more funding into retaining the best quality teachers, or lower tax rates.

Opponents of increases for funding of private schools in New Zealand sometimes attempt to cast the debate as being about equity in educational opportunity. But changing the boundary between the private and public sector in compulsory education does not need to mean degrading the state school system. In fact, allowing parents greater choice, and encouraging private schools to take a higher proportion of the load, have the potential to provide both more funding per pupil in those sections of the state sector where it is needed and to reduce the overall fiscal burden on government. The Taskforce cannot see any inequity in allowing parents who send their children to private schools to save the government money that can be used for genuinely important and effective social programmes in education or elsewhere.

Similar arguments can be made about the insistence of successive New Zealand governments that state schools can only request that parents pay donations, and that integrated schools have limits placed on their ability to set compulsory fees (called “attendance dues”). The decile funding system is officially characterised as a mechanism by which additional funding is

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<sup>53</sup> This calculation assumes that the state would be required to fund facilities as well as provide the operational grant in respect of these pupils.

<sup>54</sup> This calculation is based on average funding per state school student of \$8,866 per annum in 2008/09. It takes into account all state support for state schools rather than just the basic grants for operating and the cost of salaries. See [http://www.educationcounts.govt.nz/publications/tertiary\\_education/81180/3](http://www.educationcounts.govt.nz/publications/tertiary_education/81180/3).

allocated to schools as a means of addressing barriers to learning created by socioeconomic disadvantage. However, given the importance of money raised from the community for the operations of high decile schools, it could equally be characterised as compensation for the presumed inability of low decile schools to raise external funding via donations or other sources.

Given the practical necessity of donation income if high decile schools are to operate at a level that meets parental expectations and to demonstrate that academic excellence can be achieved within the state system, the insistence that contributions be restricted to donations is a constraint on the ability of state schools to achieve the highest levels of performance. To open up greater potential for the pursuit of excellence in the state and integrated school system, the Government should consider options to remove zoning restrictions and create greater flexibility in the funding of high decile schools. Consideration of the options should include the Swedish model of full recognition and equivalent funding of private for-profit schools.

Reforms to the level of funding provided to private schools, and to the policy on donations, might be coupled with reforms that would allow an enhanced ability to reward excellence. State and integrated schools are at present extremely limited in their ability to reward outstanding teachers with additional remuneration. Over time, this has the perverse effect of allowing schools to retain average teachers, but providing incentives for the best teachers to move into administration jobs, into other occupations, or to private schools. An inability to reward excellence reinforces the power of teacher unions to resist reforms that would produce better schools and better educational outcomes. A high priority should be given to the establishment of a mechanism by which funding available to increase total remuneration for teachers was made available to Boards of Trustees and headmasters to allocate according to the quality of individual teacher performance.

## 9.5 Superannuation

New Zealand currently provides a non-contributory state pension to everyone turning 65. Life expectancy at 65 is now around 18 years – a little higher for women, a little lower for men – and is increasing every decade. Our pension arrangements therefore allow us to spend a large and increasing share of our lives outside the workforce, which does not seem to fit very well with a serious focus on lifting material living standards for ourselves, our children, and our grandchildren.

Other Western countries also have state pensions of one form or another. Those schemes are typically quite a bit less generous – both in terms of eligibility criteria and in income replacement rates – than New Zealand's<sup>55</sup>. Comparing systems is not straightforward. For example, Australia has a lower means-tested age pension, but also has a compulsory private savings

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<sup>55</sup> It should be acknowledged that New Zealand's total pension spending does not appear to have been particularly large by international standards in recent years. That partly reflects the success in raising the age of eligibility to 65, the absence of any early retirement provisions in the New Zealand scheme, and our relatively young population.

scheme. In many other countries, very favourable tax treatment is given to private retirement savings schemes – transferring public money to the elderly through a different channel than a direct pension payment. And many European countries have generous state pensions, but they are not universal.

However, the relatively favoured position of the elderly in New Zealand is fairly firmly established<sup>56</sup>. The poverty rate among those aged over 65 in New Zealand is among the very lowest found anywhere in the OECD countries. And poverty rates among the working age population, who are paying for New Zealand Superannuation, are generally higher. A recent Statistics New Zealand survey of well-being of different classes of people in New Zealand reported that on almost every dimension other than health, those aged over 65 were better off than other age groups<sup>57</sup>.

As a state pension scheme, New Zealand Superannuation has some positive features. It is administratively simple, as universal schemes tend to be. There is no penalty to anyone staying in the workforce beyond 65, so there is no direct deterrent to remaining in the workforce. But the level of the pension is sufficiently high that most people feel no need to go on working, even if they have made no significant financial provision for retirement themselves. New Zealand Superannuation appears to provide the most generous universal state pension relative to average earnings anywhere in the developed world<sup>58</sup>.

Changes to New Zealand Superannuation are vital and are already well overdue. Changes would not be expected to generate material short-term fiscal savings. But over the medium-term, the amounts involved are very substantial. These savings would take various forms:

- Lower spending on superannuation itself.
- Higher GDP per capita and tax revenue from increased participation of older people in the labour force, and lower tax rates when this effect is combined with lower spending on superannuation.
- Modestly reduced health spending (it is well-established that if people remain active longer they also tend to keep in better health).

Other countries are already acting to reduce future pension costs, by lifting the age of eligibility beyond 65. Among them, the Australian government in its 2009 Budget announced that the age of eligibility for the age pension will be progressively raised to 67. Germany is also raising the eligibility age to 67, and the United Kingdom is gradually raising its eligibility age to 68. Denmark has gone further, both raising the eligibility age to 67 and then indexing the age of eligibility to future improvements in life expectancy. Each of these changes to the average working life will have a material positive impact on GDP in those countries.

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<sup>56</sup> Further reinforced recently by the SuperGold card scheme.

<sup>57</sup> Reported in the *New Zealand Herald*, 29 October 2009.

<sup>58</sup> OECD, *Pensions at a Glance*, 2007.

We believe that a serious review of the issues would result in an increase in the pension eligibility age, and – *inter alia*, to help neutralise future political controversy – seek to draw a link between improvements in health and life expectancy and future increases in the eligibility age. Even an increase in the average working life by two years resulting from an increase in the age of eligibility for New Zealand Superannuation to 67 would make a material contribution to closing the income gap with Australia. Consideration also needs to be given to the rate of payment: we believe that it would be appropriate for a period of some years to shift from wage-indexation to CPI indexation.

Finally, the Taskforce noted in its first report<sup>59</sup> that given New Zealand's relatively generous superannuation scheme, further consideration should be given to the current levels of subsidy for KiwiSaver. Around \$1 billion per annum is being spent on KiwiSaver subsidies to support what appears to be a second-best response to current policy settings that reduce incentives to save.

## 9.6 Conclusion

In this chapter we have considered four of the largest sources of fiscal pressure on government: social welfare, health, education and superannuation. In each case there appear to be substantial opportunities to improve efficiency in the delivery of these services, including many which are suggested by current policy settings in Australia.

If we can adopt more efficient approaches to the delivery of welfare, superannuation, healthcare and education we will both be able to afford higher quality services and make a contribution to increasing our rate of growth. In each case, improvements in efficiency will involve changing the balance both between private and public provision of services and between public and private funding of those services. In general, the Taskforce sees substantial scope for reducing the fiscal burden and improving outcomes in welfare, health, education and superannuation by encouraging private provision of services where that is feasible and providing stronger incentives for New Zealanders who can afford to fund a higher share of the services they consume to do so.

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<sup>59</sup> On the issue of KiwiSaver subsidies and compulsory saving more generally see the first Report of the 2025 Taskforce at pages 64; 73 – 4; and 91 – 2.

# 10 Infrastructure and public analysis of investment

- High quality investment in infrastructure will be required to create and support higher rates of economic growth. Government will have an important role in developing those components of our infrastructure that cannot efficiently be provided by the private sector alone.
- Public infrastructure investments are frequently very expensive, increasing the risk that large amounts of taxpayers' money will be wasted unless all projects are subject to rigorous and publicly transparent cost-benefit analysis, including the use of modern techniques for analysing the optimal timing of investment.

## 10.1 Introduction

Timely investment in infrastructure is critical for productivity and economic growth. Positive externalities arise because efficient infrastructure investment increases the productivity of other sectors of the economy. Recent publicity about road congestion and electricity network infrastructure problems in Auckland have resulted in some observers suggesting that inadequate infrastructure is a significant barrier to faster economic growth in New Zealand (Guillemette 2009: 22). Even if this overstates the problem to some extent it is certainly true that major new infrastructure investment will be required if New Zealand is to raise its rate of economic growth to the extent required to meet the 2025 target.

The private sector will be an efficient provider of infrastructure where there are efficient mechanisms for pricing for use of the infrastructure, and where there is competition from alternative infrastructure providers to constrain pricing. Where these conditions do not hold, government has a key role in the provision of infrastructure because it has the ability to recover the capital and maintenance costs of the investment through general or specific taxes.<sup>60</sup>

All public expenditure raises problems of accountability but with infrastructure these problems are exacerbated by the complexity of the analysis of costs and benefits from investment, the opaque nature of analysis and decision processes within the public sector, the long time required to observe outcomes compared with short political cycles, and the incentives that politicians have to ignore the opportunity cost of public funds, and treat infrastructure only as a benefit to economic development rather than as a cost. Given the scale and complexity of public infrastructure projects, and the potential for decisions that are politically attractive but reduce wealth, the problem of efficient decision-making about the allocation of public capital might well be more important than any question of increases in its supply.

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<sup>60</sup> Government may also enter into public private partnerships which combine the skills of the private sector in construction and management of infrastructure with the government's power to fund infrastructure from taxation revenue. We consider this particular form of infrastructure investment in Chapter 8 above.

In this chapter we consider the decision to invest in public infrastructure. First we outline the importance of rigorous and transparent assessments of costs and benefits. We then consider approaches to the analysis of costs and benefits, and use concepts from modern investment theory to explain why governments may frequently overstate both the case for investment and the case for public investment when private sector business cases would not support investment. Finally, we address some specific examples where we believe that government should be evaluating the case for public investment more carefully.

## 10.2 Analysis of costs and benefits

When prudent investors consider investment in a fixed capital asset, they consider the net present value of the investment. Cost-benefit analysis is a technique used by governments to evaluate public investments, policy changes, and other situations where government action affects individuals. In principle, it is similar to the investment analysis undertaken by the private sector: a selection of different policies are considered; the estimated flow of net benefits from each policy is identified; and the flow for each possible policy is converted into a single number that reflects the overall contribution of that action to the decision-maker's objectives. The main difference is that private sector investments are evaluated in terms of the private benefits and costs that they generate (via the net cash flows paid to the owners), whereas cost-benefit analysis attempts to measure the benefits and costs to all affected parties.

The concept of a cost-benefit analysis is relatively simple. Projects should not be undertaken when the costs exceed the benefits. This analysis involves estimating the direct and indirect costs of undertaking any project (using direct price evidence wherever possible), and then seeking to rigorously evaluate the benefits to (in the case of government projects) citizens. In a society such as ours, "benefits" need to be those that citizens themselves place a value on, and there needs to be evidence to illuminate that discussion. Benefits arising from the desirability of implementing particular visions of what growth or development "should" look like that have been developed by officials or politicians should not be relevant to the calculus.

A cost-benefit approach recognises that capital devoted to one project can't be used for other projects: that cost of capital is factored into the calculation. And the cost of capital highlights starkly that a benefit 10 years ahead is much less valuable than the same sized benefit that can be achieved a year from now. Even in straightforward commercial operations – where the costs might be clear, and the interests of the owner are also clear – cost-benefit analysis isn't always easy. In public sector projects where direct price signals are often unavailable, the challenges are even greater. But accepting that such analysis is difficult does not change the importance of doing it well, including testing and evaluating credible alternative scenarios, and exposing the analysis and assumptions as far as possible to public scrutiny.

An important limitation of cost-benefit analysis is that it is static. To the extent that it incorporates uncertainty about the future, it will do this by valuing different scenarios, but it contains no formal mechanism for incorporating the implications of the uncertainty that is reflected in those scenarios into the analysis. In contrast to cost-benefit analysis, a prudent



investor will incorporate into their investment analysis the fact that uncertainty about the future is pervasive, and that at any point in time the investor has the option to invest today, or delay investment until a future time.

The value of the option to wait and invest in the future arises from the fact that investment requires a certain commitment of capital but the future, and thus the return that can be obtained on that asset, is uncertain, exposing the government to several distinct risks. Three specific sources of risk associated with most infrastructure investment are:

- First, the cost of completing the project is uncertain because of a wide range of unpredictable factors (including the weather, as well as future wages and capital prices).
- Secondly, shocks to the strength of the local economy will affect use of the new infrastructure and thus the benefits that society obtains from it. For example, if the local economy falters, the infrastructure may end up being a white elephant.
- Thirdly, infrastructure users' demand for new infrastructure is uncertain. That is, the size of any increase in activity resulting from the new infrastructure is uncertain. While surveys may be able to elicit some information about the demand response, the uncertainty surrounding the increased demand that will actually be generated by a project can only be resolved by building it.

The detailed investigation of the project that must be undertaken before construction begins will reduce some of the cost uncertainty but variations between anticipated and actual costs in infrastructure projects are frequently large. In addition, there is no effective way to remove the two types of uncertainty about demand, each of which has a different implication for the decision to invest. Investment is only needed when demand is high, so delay avoids building expensive excess capacity in the short run. When demand is low, the flow of benefits generated by a large project is only very slightly larger than that generated by a small project. However, when demand is high the existing infrastructure becomes congested. In this case the new infrastructure will reduce congestion and in addition stimulate additional demand for its use, both of which provide benefits for the economy.

As well as avoiding building excess capacity, delay in investment or investment in stages can provide valuable information about the demand for improved infrastructure. However, investing in stages has a cost that may outweigh these benefits. Specifically, building a large road initially allows full exploitation of economies of scale in road construction. The optimal infrastructure construction policy will trade these risks off against the benefits of exploiting the economies of scale in construction.

Much of the value of flexibility stems from the ability to avoid making large irreversible investments in projects that turn out to be not worthwhile. If the government delays investment, and then receives new information that indicates it would have regretted earlier investment either because demand is insufficient or new technology supporting a different approach to investment has emerged, then the decision to delay has allowed the government to avoid

incurring wasteful expenditure. In contrast, if it delays investment and then receives new information that indicates it would not have regretted earlier investment, then it still has the option to invest. That is, delaying investment does not prevent the government from undertaking good investments, but it helps it to avoid making bad ones. This is an established result in investment theory—the so-called “bad news principle”.<sup>61</sup>

There is now an extensive academic and practitioner literature on the value of such flexible investment policies, under the broad heading of “real options analysis”.<sup>62</sup> Flexibility will either have no value to the government, or it will have some positive value, but it cannot make things worse (ie have negative value). By ignoring it, government capital investment proposals consistently underestimate the costs of investment. Moreover, since the private sector will incorporate in its analysis of investment the cost of real options destroyed (either through a formal analysis of the real options or “rules of thumb” such as the use of a higher cost of capital in the analysis), ignoring the value of flexibility will also lead officials to consistently recommend public sector investment when private sector investors would wait.

### 10.3 Transparency in the analysis of public infrastructure investment

Where public funds are invested in projects whose costs exceed their benefits, then the wealth of society is reduced rather than increased. For this reason, no infrastructure project should be of such fundamental importance to the New Zealand economy that it is exempt from a requirement that the government be able to show, in an independently-evaluated economic analysis, that the project will increase national wealth.

Transparency is very important, and that transparency must exist across the board. To subject only projects of high quality to rigorous cost-benefit assessment and to exempt those that clearly are not under the guise of political importance, national interest or economic development will produce an even worse mix of projects than an absence of cost-benefit assessment, because some of the good projects may not pass but all of the bad ones will be implemented.

Rigorous analysis of the costs and benefits of infrastructure investment helps reduce the potential for capture of policy by special interests, and of policy bias created by commitments to policy or strategy that override consideration of costs. It also helps improve the ability to undertake auditing and impose accountability. Rigorous analysis of the costs and benefits can help reduce undesirable policy flip-flops; if a project has a cost-benefit rationale that has survived independent assessment, then it is less likely to be abandoned by a subsequent government. Those projects that have the lowest benefit-cost ratio normally do not survive changes of government.

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<sup>61</sup> See, for example, Bernanke (1983).

<sup>62</sup> See, for example, Dixit and Pindyck (1994), Copeland and Antikarov (2003), and Guthrie (2009).

We believe that a full economic cost-benefit analysis should be conducted, and should play a central part in decision-making, when any significant capital, infrastructure, or asset purchase decision is being made. Such cost-benefit analyses should be routinely published, whenever possible before final decisions are made, to enable more informed scrutiny of decision-making by citizens. A formal review by Treasury should be a requirement for all projects over a certain size (perhaps \$50 million), and Treasury should provide robust, published guidelines to all agencies on methodologies to be used in preparing cost-benefit analysis.

It is, of course, true that the quality of capital spending analysis undertaken in many countries appears to leave much to be desired. The proposed National Broadband Network in Australia, the largest single public investment in Australian history, projected to cost A\$43 billion, is being undertaken despite the absence of a credible business case demonstrating that it has benefits in excess of its costs (Ergas and Robson 2009). Australia's investment in the NBN creates an opportunity for New Zealand to close the income gap by using high-quality investment analysis to identify broadband investment policy options that are superior to those in Australia.

## 10.4 Roads

In contrast to the very low benefit-cost ratios applicable to many rail projects, in recent decades national road projects have often only been funded when they have had a benefit/cost ratio of around 4 (ie economic benefits exceed costs by 4 times). When investment allocation decisions are made by government agencies, because the government has decided to own the assets itself and not charge at point of use, it is important that a realistic assessment of the economic benefits to all users and of the construction and ongoing maintenance costs to the Crown guides decision-making. There is good reason to suppose that there has been significant underinvestment in roading infrastructure, a conclusion that was endorsed by the OECD in their recent survey of New Zealand. Urban congestion has real and material economic costs, and better quality inter-city roads would better enable the productivity gains from larger trucks to be achieved.

Both the current and previous governments have recently put priority on increasing spending on road infrastructure. We think that this approach is probably consistent with the direction required to meet the 2025 goal. However, we believe it is important to consider again possible reforms that might lead to a consistently better allocation of capital to roading through time. This is not a matter of raising total revenue from road users: we have been advised that total excise revenue on petrol, and road user charges, approximately cover the total cost of the roading network. Instead, the critical issue is about sharpening pricing incentives and information, both for road users and for those responsible for decisions on road building.

Road pricing allows more efficient use of existing infrastructure, which will in turn make delay in investment more valuable. In the short term, further work on the option of congestion charging for central Auckland and Wellington should be pursued as a means of ensuring that we do not invest in more roads when more efficient use of existing roads can reduce the problems that we face. Congestion charging is now an established technology in a number of large cities internationally

and we understand that a cost-benefit analysis would now support its use in Auckland. A useful example in overcoming popular resistance to road congestion pricing is provided by Sweden. The citizens of Stockholm adopted a road congestion plan by agreeing in advance to try the proposed system for seven months, going back to the status quo ante, and then having a referendum on whether to bring the system back (Romer 2010: 11).

In the longer term, we suspect that full road-use pricing, differentiated by location and time of day, is likely to have a valuable role to play, both in relieving congestion and in ensuring that appropriate pricing signals face the New Zealand Transport Agency (NZTA) and other road-builders. The technology exists to make a full electronic pricing model feasible though it is probably not yet economically viable. However, we understand that it is approaching the point where it could be economic for heavy vehicles.

## 10.5 Broadband

In 2009, the Government announced its intention to launch an ultra-high speed broadband initiative, in conjunction with private providers. This initiative will involve the commitment of \$1.5 billion of public money to the rollout of a fibre-to-the-home network that will reach 75 percent of the population in 10 years.

Broadband technology has made a great deal of difference to many people's lives, and to many businesses. It seems likely that the technology will continue to develop rapidly, and that many opportunities – business and leisure – will unfold in future years. It is difficult for researchers to meaningfully assess in advance how large those benefits are likely to be, but we can easily look backwards at other technologies, now commonplace and integral to our lives and commerce, which struggled to get a foothold, or whose potential may have been underestimated at the time. We think, for example, of cell-phone networks.

The case for government involvement in the further development of broadband technology in New Zealand is much less apparent. As the Government noted in announcing this initiative: "private sector companies have decided, on behalf of their shareholders and as a commercial decision, not to invest in a nationwide network of fibre-to-the-home at this point in time". We have not seen any sort of robust analysis of what market failure might justify government involvement in the provision of this sort of infrastructure when private investors, with all the incentives to properly internalise the costs, risks, and potential benefits, have chosen not to. There has been no clear or convincing articulation of the market failure in any of the material released with the announcement of this initiative.

The questions about this project are substantial, and include the following:

- Investing now in an industry with rapidly changing technology in anticipation of demand in 10 years time involves considerable risk that changes in the path of technical change or the nature of demand will vary from that currently anticipated, making the investment redundant. In this case, the value of the real option to delay investment will be high, and the expected return required to justify investing now will also be high.

- It is not clear what problem this investment is solving. There are very few applications relevant to leisure or home business activities that currently require fibre to the home, and even if such applications are developed in the near future, consumer demand for them is uncertain.
- The demand and willingness to pay for fibre to the door is uncertain even in the business sector. In a survey-based study of the impact of broadband on productivity, Grimes et al (2009) found that, controlling for differences between the knowledge intensity of the business of different types of firms, the availability of broadband increased productivity by approximately 10 percent across all firms but that all of that productivity gain can be attributed to adoption of slow relative to no broadband, with no discernable additional effect arising from a shift from slow to fast broadband.
- There is no evidence of spillover or other public benefits from this investment that would justify public investment by comparison with waiting until the private sector can build a business case to invest. The fact that the private sector will not build the network alone, even though there is no market failure in the ability to efficiently recover costs from users of the network, suggests that this project may well be based more on officials' and ministers' ignoring the costs of destroying the real option to delay investment and the uncertainty around use rather than any inefficiency in private sector provision.
- The Government's broadband project also raises questions about disruptive regulatory intervention in the industry, and about the appropriate governance of commercial operations involving central government. Direct involvement of ministers in deciding which firms will be partners with the Crown in this project, and ongoing involvement by ministers in major decisions of the planned Crown-owned company, are not consistent with best practice, as modelled in, for example, the SOE framework.

The Taskforce believes that the public has a right to see a comprehensive independent analysis of the costs and benefits of the broadband investment proposal before any commitment of public funds is made. And in line with the analysis above, this analysis should include a dynamic assessment of the benefits of delay in the investment, or of less expansive proposals, in the presence of uncertainty about demand and the ability of a broadband investment to generate more (economically valuable) traffic.

Further, the Taskforce is aware that the broadband initiative is just the most publicly visible of a number of "visionary" but economically questionable investments such as those being undertaken through the infrastructure fund of the Ministry of Research, Science and Technology. All such projects should be subject to the rigorous and publicly available dynamic analysis of costs and benefits that we have outlined above.

## 10.6 Conclusion

If the economy is to achieve the growth rates required to achieve parity in per capita incomes with Australia in the future, more infrastructure will be needed. The government will have an important role in the development of those components of our infrastructure that cannot efficiently be provided by the private sector. But it is important that the government does not overplay its hand by investing in advance of viable levels of demand for the infrastructure, or by investing only because it ignores costs (such as the value of the real options destroyed by investing in a world of uncertainty) that are built into any robust economic analysis. Every proposed investment must be supported by an analysis which demonstrates that the expected benefits are substantially greater than the costs.

The importance of the government not overplaying its hand arises from the fact that public funds have an opportunity cost in alternative investment projects, that the taxes required to fund the projects impose deadweight losses on the economy, and from the potential for the government to crowd out private sector investment in markets where the only justification for public investment is a desire to subsidise an official vision of the path of future economic development. In this context, only a requirement for rigorous and transparent economic analysis of all large public investment proposals can ensure that New Zealand makes timely investments in the infrastructure that it actually needs to increase its rate of economic growth.

# 11 Research, innovation, tertiary education

- New Zealand makes substantial investments in public R and D spending, but has relatively low levels of private R and D spending. There is weak evidence of a direct link between public sector R and D spending, or more intensive planning of that spending, and higher rates of economic growth.
- Higher levels of private sector R and D will result from competitive pressures on firms and a policy environment that encourages innovation as a response to those pressures, not from public subsidies to private R and D.
- The research and tertiary education sector has high levels of Government micro-management, with funding channelled towards “official visions” of New Zealand’s economic development path. There are potentially large gains to be obtained from reducing regulation and barriers to evolution of the sector, and a greater focus on competition for the available funding. The Taskforce recommends that research funding should be fully contestable.
- The majority of fundamental research funded by the public sector is undertaken through tertiary education institutions, but existing governance structures and micro-management are constraining the sector’s contribution to the economy. The Taskforce recommends changes to current policies on student enrolment caps, funding for international PhD students, and student loan eligibility criteria.

## 11.1 Introduction

In our first report, we pointed out that by some measures New Zealand is making substantial investments in research and development (R and D). In particular, New Zealand ranks fourth in the OECD for the proportion of the workforce engaged in research. This reflects a substantial public investment in basic research undertaken in universities, Crown Research Institutes (CRIs) and private research institutions. However, on most other measures New Zealand’s R and D performance is very low and has been for some time. Gross domestic expenditure on research and development in 2005 was 1.2 percent of GDP compared to the OECD average of 2.3 percent, and the R and D expenditures of countries such as Sweden (3.7 percent), Finland (3.5 percent), Japan (3.4 percent) and Iceland (2.8 percent).

At 0.7 percent of GDP, New Zealand’s public sector expenditure on R and D is low by world standards, but this is partly explained by the absence of defence spending on R and D. By comparison with other OECD countries, New Zealand stands out for the limited amount of private sector R and D spending undertaken, at 0.5 percent of GDP, or less than one third of the OECD average of 1.6 percent (Guillemette 2009: 28). Many think this is concerning because the economic evidence suggests strong links between business expenditure on R and D and economic growth, but weak or no links between public R and D expenditure and economic growth (Guillemette 2009: 28; Johnson et al: 2007).<sup>63</sup> Crawford, Fabling, Grimes and Bonner

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<sup>63</sup> For the specific case of New Zealand, Johnson, et al (2007) find a positive impact on labour productivity from private R and D investments for the period 1962 – 2002, but no effect on productivity from public R and D

(2007) suggest that New Zealand's low level of measured private sector R and D activity may be explained by geography, industry structure and firm size in New Zealand, but there can still be little doubt that higher levels of private investment in R and D in New Zealand would be positive for economic growth.

In this chapter, we explore in more detail the issues relating to research, innovation and tertiary education raised in our first report<sup>64</sup>. We consider the importance of private sector R and D and policies that may promote it in New Zealand. We consider current policy in science and technology, and the institutional barriers to higher performance that currently exist in the public science sector. Finally, we consider tertiary education policy and options to increase the contribution of the tertiary sector to growth in New Zealand.

## 11.2 Policy on R and D and its links to innovation

New Zealand Government policy on innovation is currently focused on publicly funded science, on public sector planning of a "science and innovation system", on priorities for funding set by politicians and officials, and on attempting to use publicly funded research through the CRIs to compensate for the limited amount of private R and D expenditure being undertaken (Ministry of Research, Science and Technology 2010). The Taskforce sees a number of problems with this approach.

We noted in Chapter 2 that innovation is the fundamental driver of the productivity increases that underpin economic growth. But despite the increasing tendency for New Zealand's politicians and officials to assume that innovation rests on new discoveries in the fundamental sciences, the evidence is that productivity increases are at least as likely to come from improvements to the organisation and management of production. Science and technology policy appears to have been based on a misinterpretation of the literature on economic growth. It has promoted excessive attention to invention as a determinant of productivity growth to the neglect of attention to the role of conditions affecting access to knowledge of innovation and the adoption of innovation. As we note in section 12.6 below, Wal-Mart and the competitive pressure that it has generated across the retail sector has been one of the largest drivers of productivity improvement in the US economy in the last decade.

Basic research can define whole new technologies, markets and strategies that will increase the productivity of the private sector. A focus on domestically-sourced scientific invention as a driver of innovation has potential application in a small number of areas where New Zealand has critical mass in scientific research on problems that are unique to New Zealand. But New Zealand accounts for a very small proportion of global innovation (0.2 percent of total R and D in the OECD) (Guillemette 2009: 29) suggesting that across the vast majority of the economy our policy should be focused on maximising access to the best technology from overseas. Perhaps the

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investments. They also found evidence of positive spillovers to other industries from private R and D investment but no effect from public R and D investment.

<sup>64</sup> See page 95 of the first report of the 2025 Taskforce.



greatest example is the impact that refrigeration had on the New Zealand economy, even though it was not invented in New Zealand. The current policy focus on planning the commercialisation of publicly funded research by New Zealand scientists will be supported by the scientists, venture capitalists and officials who are the beneficiaries of public investment in this process, but there is no evidence that it represents a viable strategy for increasing economic growth.

The path of technical change is uncertain, so a pluralist approach to innovation driven by the investment of firms themselves makes much more sense than large investments in micro-managing the supply chain of ideas and inventions and attempting to plan a science and innovation system. The private sector can be expected to invest heavily in R and D when it is under intense competitive pressure, expects there to be a large pay-off, and the firms doing the investment can capture enough of the gains to cover the cost and risk of undertaking the investment. New Zealand needs to provide the firms operating in New Zealand with much stronger incentives to invest in innovation, but public funding of investment in new technologies will not create that demand.

For firms, R and D spending is one component of the overall process of innovation that enables them to adapt and grow, staying a step or more ahead of competitors from around the world. But it is only one component, and even in-house or contracted research is only one way of positioning a firm at the leading edge of technology. Licensing arrangements, joint ventures with foreign investors, and foreign direct investment itself are also ways of enabling New Zealand to benefit from technological advances. As just one example, most banks here are Australian-owned, but whether their formal R and D spending is physically undertaken in Australia or New Zealand doesn't affect the ability of New Zealand firms and businesses to benefit from the product innovations and technological advances the Australian bank operations here introduce as a result of the parent banks' R and D spending<sup>65</sup>.

### 11.3 Public funding of research

New Zealand makes very substantial public investments in research. Each year The Foundation for Research, Science and Technology invests \$500 million, the Ministry of Research, Science and Technology invests \$100 million, the Health Research Council invests \$90 million, and the Marsden Fund of the Royal Society invests \$50 million in addition to support for research at tertiary institutions provided through Student Component Funding, the Performance Based Research Fund, and a range of more specialist funding sources including through government departments. This investment is available to support researchers in both the public and private sectors, and supports a share of the workforce employed in research that is among the highest in

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<sup>65</sup> In some senses, therefore, our low level of national savings, which results in a large proportion of companies operating in New Zealand being foreign-owned (and few offshore firms owned by New Zealanders) may, at the margin, contribute to lower R and D spending taking place in New Zealand. A typical firm is probably more likely to have their principal research and development operations located near head office than associated with a small foreign branch or subsidiary. But R and D spending undertaken for the group as a whole is likely to benefit New Zealand operations too.

the OECD.<sup>66</sup> Here we consider some opportunities for the Government to obtain greater value from this relatively large research workforce.

## Number and size of institutions

New Zealand has eight universities, eight CRIs, over 20 polytechnics and wananga, and a range of privately funded research organisations. The first problem with this structure is that it divides the publicly funded research effort into many different institutions which:

- i Increases institutional overheads in management and governance, in finance and HR systems and in the difficulties of employing specialist skills in relatively small institutions;
- ii Creates institutions that have limited diversity in their revenue streams, and thus are more vulnerable to changes in funding priorities and competitive pressure and more limited in their ability to adopt strategies that explore genuinely innovative but high risk research paths; and
- iii Increases the volume and intensity of the private interest lobbying for policy that supports individual institutions or groups of institutions.

A second problem with so many institutions is that it disperses research capability across a wide range of institutions, with the result that many important research projects will require capability from a number of organisations. Even where the institutions involved are all public, the transaction costs of co-operation across multiple institutional boundaries are much higher in practice than are acknowledged in the “NZ Inc” approaches frequently espoused by officials.

Callaghan (2009: 22) has argued that the “institutional structure of the research and science system is too fragmented, with too many institutions, too many policies to protect them from competition, and too many government agencies involved in trying to manage it”. The case is amplified by the fact that while the CRIs each have a specific mandate in an area of applied science, they all overlap with the fundamental science undertaken in the universities to a greater or lesser extent. The Government’s decision to merge the Ministry of Research, Science and Technology with the Foundation for Research, Science and Technology (FRST) is a step in the right direction, though ultimately the real test of this merger will be whether it can substantially reduce the cost of the current investment in “planning the science system”. It is important that the Government extends this initiative with a more active consideration of consolidation within the sector.

## Contestability of funding

Following the introduction of contestability for public research funding and evaluation of applications for funding on the basis of scientific merit, the universities steadily increased market share. In response to the claim that this threatened the loss of important national research

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<sup>66</sup> This is consistent with the earlier observation that New Zealand invests a relatively small proportion of GDP in R and D because the costs of undertaking research in New Zealand are lower than in many other countries (due to lower salaries, lower capital intensity and limited investment in technology relating to defence).

capability, recent governments have moved to increase the portion of funding that is ring-fenced for CRIs.<sup>67</sup> The two areas of such funding are the CRI Capability Fund (previously known as NSOF), which has more than doubled in value over the last 10 years, and Strategic Research Platforms (previously known as Stable Funding and prior to that Picking up the Pace).<sup>68</sup> As a result, around 40 percent of the funding available through FRST is currently not contestable.

The problem with providing CRIs with long-term guaranteed funding is that the opportunity to fund superior quality and more relevant research is lost simply because competitive funding bids are not sought. As a result, there is a risk, if not a likelihood, that the quality and overall performance of the Ministry of Research, Science and Technology system will be degraded. Limiting the contestability of funding also reduces incentives to co-operate: the higher the proportion of their funding that is guaranteed through platforms or other mechanisms, the stronger the CRIs' incentives to retain the grants for their own staff and the less they are penalised for producing weaker scientific outcomes by limiting co-operation. As Callaghan (2009: 20) concluded, "The Foundation for Research Science and Technology needs to disentangle the process of encouraging wealth generation from the process of maintaining stability of funding for Crown Research Institutes".

A further problem with guaranteeing funding for the CRIs is that it encourages their continued reliance on public funding. CRIs currently obtain 70 percent of their total funding from government sources compared to 40 percent for the universities. This high level of government funding appears to be inconsistent with the claim that CRIs are strategic research organisations that create opportunities for business and help compensate for New Zealand's relatively low level of business R and D (Ministry of Research, Science and Technology 2010: 33).

### Determination of funding strategies by officials

Continuing the approach of much of the last decade, the Government has recently issued a strategy for science and innovation which notes that "Because innovation is central to the Government's economic growth agenda, this agenda was an important driver in setting priorities" (Ministry of Research, Science and Technology 2010: 15). The funding priorities direct a very large share of the available funding to "high value manufacturing and services" and "biological industries".

The Taskforce is concerned by the potential loss of efficiency that results from the development of strategies for the allocation of public research funds that are designed to promote official visions of the path of economic development in New Zealand. This is particularly concerning given that the current strategy accords such minor importance and limited funding to research outside the sciences, despite the importance of non-scientific research in contributing to

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<sup>67</sup> We know of no systematic evidence that competitive funding threatens the long-term capability of the New Zealand research sector. Moreover, the only capability that is of national interest is capability that produces high quality science, and in that case competitive funding will be no threat to retention of the capability.

<sup>68</sup> Platform funding is not specific to CRIs but the eligibility criteria for platforms (and previously those for stable funding) have the appearance of being designed to limit access exclusively to CRIs.

productivity improvements. As Callaghan (2009: 15) noted, "...there has been an 'investing in predetermined boxes' approach to New Zealand's funding of scientific research, based on a presumption that our small size requires us to focus our investment effort – focused of course where public servants deem that we might be successful... [But] we would be most unwise to plan in advance where these capabilities and talents are likely to arise. No public servant has the prescience needed to make pre-selected allocations or to micro-manage our research".

## Barriers to efficient evolution

FRST grants are made on the basis of the capability represented by individual scientists applying for funding, but the grants are made to the employer of the scientists and are not attached to the scientists personally. The FRST will not allow grants to move between institutions when scientists move unless the institution in whom the grant was originally vested agrees. This creates two types of barriers to efficiency in the research sector: the research may be undertaken by scientists other than those to whom the grant was awarded, and (given the importance of FRST grants to sustain the work of laboratory scientists) a barrier to the free movement and efficient reallocation of capability between institutions.

A further barrier to the efficient evolution of the system arises from the fact that the CRIs report to the Minister, whereas the independence of the universities is enshrined in the Education Act. This has two consequences. First, it means that without an explicit policy framework, consolidation within the sector will be difficult and too focused on issue-specific lobbying. Second, it means that lobbying the Minister for more stable funding may be a more effective means of addressing problems with institutional performance than the pursuit of innovative structural solutions. Solutions considered might include the US system of "national laboratories" where administration and systems costs are lowered by close links with a university, but a national mandate for a particular type of research is maintained. The 2025 Taskforce is disappointed that the recent CRI Taskforce made little progress in addressing these issues.

## Summary

To obtain the best value from public investment in research, the Government should follow a number of simple rules. First, funding must be fully contestable, based on assessments of scientific excellence and potential contribution to our economy and society. Second, if the Government requires that a portion of the funding be focused on projects with direct application to business, they should determine the allocations based on offers of co-funding from the private sector, not official visions of the future of the economy. Third, the Government needs to create a framework that facilitates evolution of the institutional structure of the sector if this is the most efficient outcome.

## 11.4 The contribution of tertiary education to economic growth

Despite the focus of the Ministry for Research, Science and Technology on CRIs, a majority of the scientific research and the vast majority of all fundamental research is undertaken within tertiary education institutions, whether measured by funding or headcount of researchers. In this section we consider the effectiveness of the governance, management and funding mechanisms associated with this research effort in the tertiary education sector.

The world's pre-eminent tertiary education system is in the US, and the key characteristics underlying its success are its diversity and the intense level of competition for students, staff and funding that it generates. The diversity of the US system arises from the presence of a large number of private universities, some specialising in graduate teaching and research and others in undergraduate teaching, and from the heterogeneity of models for the organisation and funding of universities at the state level. The US has also promoted research in universities and specialised research facilities through very large competitive federal grant programmes.

A recent study of the drivers of research output in universities finds that the more competitive and the less regulated are university systems, and the higher the proportion of research funds obtained through competitive grant programmes, the higher are their research outputs (Aghion et al 2009). The development of more contestable research funding in the past 15 years through competitive grant schemes and the Performance Based Research Fund has had positive impacts on the research effort of the universities (Evans and Quigley 2006), but the New Zealand tertiary education system continues to be distinguished by its homogeneity and the limited nature of competition.

We noted in Chapter 3 that the quality of the human capital investment, and the level of workforce education, are important determinants of the growth prospects of any country. Universities and other tertiary institutions have a significant contribution to make to the creation of a workforce with strongly developed critical thinking and problem-solving skills and knowledge relevant to specific sectors of the economy.

While the argument is sometimes advanced that greater benefits could be obtained if the government was more directive about the subjects that students could study, it is not clear why students and parents lack incentives to make the necessary investment in obtaining information about job prospects and income potential in different occupations. In relation to the specific suggestion that economic growth could be promoted by larger numbers of science graduates, the evidence is that the number of New Zealand students undertaking research degrees in science is already well in excess of the ability of New Zealand firms and research institutions to provide them with appropriate employment. This once again suggests that it is incentives for firms to invest in research that will employ graduates rather than the supply from tertiary institutions on which government policy should focus.

In the view of the Taskforce, improvements in the tertiary education sector are unlikely to come from planning its output of graduates and research, but rather from the creation of improved governance structures, greater competition and potential for diversity, and removal of regulatory constraints on the evolution of the research and tertiary education system. Indeed, tertiary education is riddled with examples of regulation that is unnecessary to achieve the social purposes that are the legitimate preserve of government interest.

The most fundamental barrier to efficiency and responsiveness in the tertiary education system in New Zealand is the governance structure of the universities. The Education Act establishes a structure for university councils that makes them too large, and that, by mandating a substantial role for staff and student representatives, inhibits effective strategy development and decision-making. As a result there is a danger that university Councils become focused on the agendas of particular interest groups rather than focusing on maximising the value of the institution.

The complexity of governance and management within New Zealand universities is further increased by the requirement that enrolments and other aspects of university operations must be negotiated through plans approved by the Tertiary Education Commission (TEC). The TEC appears in effect to be an extremely costly alternative to effective governance in the universities. Reform of the governance structures of universities would more likely ensure higher value to society at lower cost than oversight by the TEC, particularly if regulatory constraints on competition were removed.

Among the regulatory constraints that limit the contribution of universities to economic growth in New Zealand, the following are illustrative:

- The current combination of caps on enrolments as a mechanism to limit government funding of universities and government regulation of tuition fee increases has a range of perverse effects. One is that it reduces competition by limiting the ability of each university to attract more students. It also limits the ability of those universities that have invested the most in reputation for teaching and research to reflect that in the tuition fees that students pay. While we understand the budget constraints that have caused the Government to impose these constraints, a much more efficient response would be to cap total government funding of the university sector and to deregulate tuition fees.
- New Zealand provides government funding for international PhD students studying at New Zealand universities as a means of increasing the research effort in universities and attracting to New Zealand quality research students from other countries. However, government also requires that tuition fees for these students be set at the domestic student level. This is inefficient given that many international PhD students would pay higher fees, and that many international PhD students impose higher costs on the university than domestic PhD students. The Taskforce believes that the Government should consider capping government subsidies for international PhD students at current levels, and deregulating the fees that universities charge. This is likely to provide an efficient mechanism through which the universities could leverage the Government's support for international PhD students into substantially higher tuition fee income.

- The Taskforce is aware that there is widespread popular support among students and their parents for the current regime of interest free student loans. If it is not possible to return to charging interest on student loans we support the move of the Government to tighten the eligibility criteria for student loans, and in addition would extend this approach. In particular, given the projected level of emigration to Australia in the next 15 years and the challenge that this will provide to the rate of loan repayment, we suggest that the tightening of criteria should include parental or other guarantees which will reinforce the distinction between loans and allowances. The Government may also consider allowing the banks to manage the loan scheme as they do in a number of other countries.

In general, the Taskforce believes that if the Government wants a more responsive university sector that is more focused on the contribution that research and the training of researchers can make to economic growth, it should start by deregulating the university system, reforming its governance structures, and increasing the scope for competition wherever possible.

## 11.5 Conclusion

New Zealand is currently making substantial investments in publicly-funded scientific research, based on the view that this can compensate for limited private R and D spending in New Zealand. The Taskforce is not convinced that either the strategy or the structure within which it is being spent is likely to be effective in maximising the return on this level of public investment. The current strategy is too focused on system planning, on science and lobbying from the science sector, and on supporting the survival of the CRIs as independent institutions, and is insufficiently focused on competitive determination of the best use of government funding.

To increase the likelihood that the current investment will have a positive impact on growth, the Government needs to do two things:

- Shift the balance to private funding of R and D by giving private firms much stronger incentives to make these investments. The recently announced technology development grants and technology transfer vouchers are a step in the right direction, but reducing corporate taxes so that businesses had stronger incentives to invest would likely be more effective. This will assist in creating a clearer distinction between public funding of research that builds the capability to innovate and private funding that is actually focused on specific innovations. Changing the balance between the public sector and the private sector would be consistent with the theme developed in Chapters 7 – 9 above.
- Remove the policy and structural barriers that inhibit competition and evolution of the institutional structure of the research and tertiary education sector. In general, the Taskforce believes that if the Government wants universities and CRIs to be more responsive and more focused on the contribution that research can make to economic growth, stronger incentives and less regulation will be more effective than planning the system from the centre.

A rapidly growing New Zealand economy will almost certainly have much greater private investment in R and D. Thus, a focus on higher rates of growth will likely result in a more dynamic private research and development environment in New Zealand and stronger demand for the specialised skills obtained by graduates from tertiary institutions.



## 12 Minimising the cost of doing business and reducing inefficient regulation

- Regulation may enhance economic growth by addressing externalities or monopoly power that reduce market efficiency, but many New Zealand regulatory frameworks cannot be justified in this way.
- Focusing on economic growth will require reconsideration of regulation that is constraining development or limiting the scope for technological advance and entrepreneurial activity in New Zealand. The Government's response to the recommendations of the Regulatory Responsibility Taskforce will be an important indicator of its approach to this need.
- Among many examples of change needed, the Taskforce recommends that urgent attention be given to further reform of the Resource Management Act, taking it back to its original intent as an effects-based law which is otherwise broadly permissive.
- Houses in New Zealand are now among the most expensive in the world relative to income, due mainly to the lack of availability of land for development. Law changes should require councils to take explicit account of any differences between the price of residential-zoned undeveloped land and other undeveloped land in similar areas.
- New Zealand's labour market flexibility was reduced substantially over the past decade. Increases in the minimum wage and abolition of the youth minimum wage have had a serious effect on youth unemployment. The youth minimum wage should be reinstated.
- A regulatory regime for hazardous substances and new and genetically modified organisms is necessary, but the New Zealand regime is overly restrictive and out of step with Australia, Europe and the USA. New Zealand's regime is stifling advances that can improve productivity, reduce the impact of pests, and reduce the impact of chronic illness, and is diverting research that could be done here to Australia and elsewhere.

### 12.1 Introduction

Regulation is the imposition by government of controls on the activities of private firms or individuals. Regulation may enhance economic growth by addressing externalities or monopoly power that reduce efficiency in markets. But regulations may be created to serve the interests of particular, politically powerful, groups within society, and / or provide those groups or the regulators themselves with the ability to constrain or raise the costs of efficient activity. Regulations that serve these interests, or that provide regulators with unnecessarily wide discretionary power, frequently restrict the scope for changes in the organisation and functioning of markets that could make a positive contribution to economic growth.

A focus on economic growth would generate a reconsideration of regulations that constrain economic growth. In our first report, we commended the idea of a Regulatory Responsibility Bill, and we remain of that view. In this report, we look at some specific situations where regulatory reform is urgently needed. From a wide range of potential examples that could be considered if the Taskforce had unlimited resources (and patient readers), we have chosen to focus on five issues.

## 12.2 Resource Management Act

The Resource Management Act (RMA) was introduced in 1991. From the outset it generated a stream of complaints about its capacity to impede efficient changes in land use in response to changing economic opportunities and thus to raise the costs of development. However, there has been less clarity about exactly what the problems with the RMA are and how they may be addressed.

Distilling the different arguments placed before us, the Taskforce considers that the fundamental problem is that the RMA encourages local government to see the changed use of private land as a privilege that they bestow, rather than a right which might be modified only in narrow and well-specified predictable ways. The RMA was intended to be an effects-based statute; that is, it was intended to provide a mechanism by which the adverse effects of activities could be addressed but be permissive otherwise. It was also intended to reduce transaction costs by creating a single mechanism for the consideration of development proposals. But in practice the RMA has provided council staff with wide ranging monopoly power to approve or decline land use and development proposals. Consequently, local councils have tended to use the RMA as a prescriptive tool for environmental and urban planning (Young 2001: 67).

The flexibility that the RMA provides for local councils has resulted in a wide range of practices that reduce efficiency and inhibit economic growth without necessarily improving environmental outcomes. These practices include the limited use of cost-benefit assessments as a basis for decision-making, the hearing of applications by local body councillors who lack the professional expertise to make judgements on the issues before them, and the ability of councils to use information requests and requirements for external expert appraisals to delay consideration of applications and to raise the costs that they can impose on developers (McShane 2003).

The RMA provides extensive scope for community input, but the ability of interested parties to appear in and delay proceedings, and to appeal decisions to the Environment Court, without engaging legal counsel or expert evidence, provides positive encouragement for frivolous and vexatious opposition. Property developers also inform us that most councils do not offer faster processing time or lower processing costs for development proposals that have high environmental merit. This encourages proposals that maximise development profits rather than environmental enhancement, so as to cover the costs imposed by delays in processing by councils and subsequent appeals.

We have heard mixed messages about the 2009 amendments to the Resource Management Act. Some of the changes are definite, if modest, steps in the right direction. Restrictions on the ability of councils to collect a consent fee where the processing deadline is not met are helpful if not completely effective in enforcing the statutory deadlines. A requirement now that objectors must have some legitimate interest in the issues affected by a consent being sought, and the restriction on allowing competitors to use the consent process to slow the emergence of competition, may help without removing the ability of interested parties to raise applicants' costs at virtually no cost to themselves. The ability to take major contested consent cases straight to the Environment Court should also speed up the process in these cases, though delays in obtaining a date for an Environment Court hearing can be substantial. Limiting such appeals to points of law will also reduce the number of spurious objections. On the negative side, we have heard of at least one council concluding that its costs will rise, and the complexity of handling applications will actually increase in some cases. If true, it seems quite contrary to the direction in which change is needed.

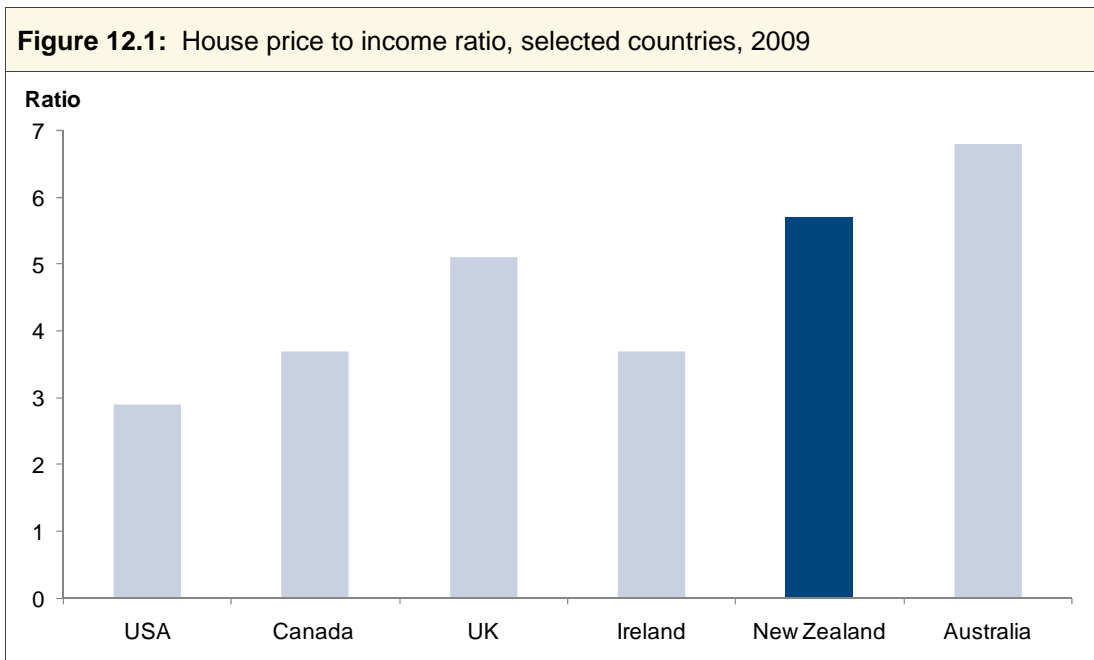
The Taskforce has reached the conclusion that the RMA continues to be one of the most important regulatory barriers to higher rates of growth in New Zealand, and as such we recommend urgent attention be given to further reform. This reform should move the practice of application of the RMA back towards the original intent of the legislation; that it be an effects-based statute which is otherwise broadly permissive and that has the effect of reducing compliance costs. Reform could occur through further amendments to the Act such as those that have been discussed since the late 1990s:

- A complete separation between the planning functions of councils and decisions on applications for resource consent would focus consideration of applications on effects and place decisions entirely in the hands of professional commissioners.
- A statutory limitation on the fee that councils could charge for assessing a resource consent application would require that councils only contested applications when it was in the interests of ratepayers that they do so, since it would be ratepayers who were meeting the costs of the proceeding.
- Wider scope for the Environment Court to award costs against councils and other objectors to resource consents when their objections were not sustained by the Court.
- An increase in the right to compensation for those whose land values are reduced by council planning decisions.
- Clarification that the only harms and benefits that should be considered are those that relate to human welfare, and that "intrinsic values" are not to be considered.

These changes could be achieved as part of a comprehensive review of the RMA which considered approaches to addressing tangible environmental externalities that would involve lower costs and less intrusion on private property rights than the current legislation. However, given the time that would no doubt be required for such a review, we recommend that the Government proceed with the amendments suggested above while the more fundamental review takes place.

## 12.3 Barriers to increasing the supply and reducing the cost of housing

Houses in New Zealand are now among the most expensive, relative to incomes, anywhere in the world<sup>69</sup>. For example, in vast swathes of the United States – a much richer country than New Zealand – good houses cost far less than an equivalent house in a similar-sized New Zealand city. This suggests that one of our most important markets is not working efficiently (the supply of new houses represents around 5 percent of our GDP, which is bigger than the dairy industry). New Zealand houses cost too much mainly because too few real resources are devoted to house-building, that is, to providing people with the houses they want and need. Aside from the economic inefficiency involved, this situation creates a wealth transfer of dubious social merit: young families find buying a house in our major cities very difficult, while old people trading down capture a windfall gain from inflated values arising from the restrictions that are placed on opening up new land for residential investment.



Source: Demographia (ratio of median house price to median household income)

We welcome the review of the Building Act that is underway, including the announcement recently of a certificated approved design model that will allow large house-building operations to use the same designs in different council areas, without going through the whole consent process in each individual region. However, the biggest obstacle is the availability of land for development, and in this the issues with the RMA outlined above, and their interplay with the power of councils to create district plans, are most important.

<sup>69</sup> See, for example, 5<sup>th</sup> Annual Demographia International Housing Affordability Survey: 2009 Ratings for Metropolitan Markets ([www.demographia.com/dhi-ix2005q3.pdf](http://www.demographia.com/dhi-ix2005q3.pdf)).

The most valuable use of land in this country is not for grazing dairy cows (worth maybe \$20,000 per hectare in normal times), but for housing. At present, urban sections, of less than a tenth of a hectare, in middling suburbs not particularly close to city centres, sell for more than \$300,000. Council zoning restrictions and arbitrary “urban limits” prevent the release of sufficient land to lower the overall price of housing. Grimes (2009) demonstrates that just inside the Auckland Metropolitan Urban Limit, where housing development is permitted, land trades at around 10 times the price of otherwise identical land which is outside the boundary. This is a striking example of costly inefficient regulation that has been set in place with no proper economic cost-benefit analysis. Such an analysis should focus on the real revealed preferences of individuals, not on poorly defined preferences of local bodies couched within the “intrinsic values” criteria of the RMA.

There is no shortage of land in this country, but local authorities prevent it being used for its most valuable purpose. That has to change. When it changes, housing will be a great deal more affordable: our incomes will stretch further. We think that legislative changes should require councils to take explicit account of any differences between the price of residential-zoned undeveloped land and other undeveloped land in similar areas. These differences should be reported on publicly each year by local authorities, and there should be a strong presumption that scarcity of zoned land, judged largely by reference to price indicators, should prompt action by the relevant council to increase the supply of land zoned for residential development. With the creation of the Auckland “super city”, it will be critical that planning rules of this type are consistent with promoting economic growth.

## 12.4 The labour market

New Zealand has a relatively flexible labour market by the standards of some OECD countries, but this flexibility was reduced substantially over the period 2000 – 2009. International indicators of labour market rigidity in New Zealand tend to highlight our minimum wage, the law on temporary and fixed-term contracts, and constraints on the ability of firms to reduce their workforce. If New Zealand is to generate substantially more private sector investment and growth, a reduction in the burden of labour market regulation will be critical.

The Government introduced two useful reforms allowing new employees and employers to mutually agree to a trial or probationary period of up to 90 days and focusing the Employment Court on the substantive issues in employment matters rather than the traditional focus on procedural matters. The real benefit of these provisions is to help enable new entrants to the workforce or those with a chequered track record to find employers willing to take the risk of hiring them in the first place. The best protection workers have is a strong and highly competitive labour market in which they have credible alternative employment options.

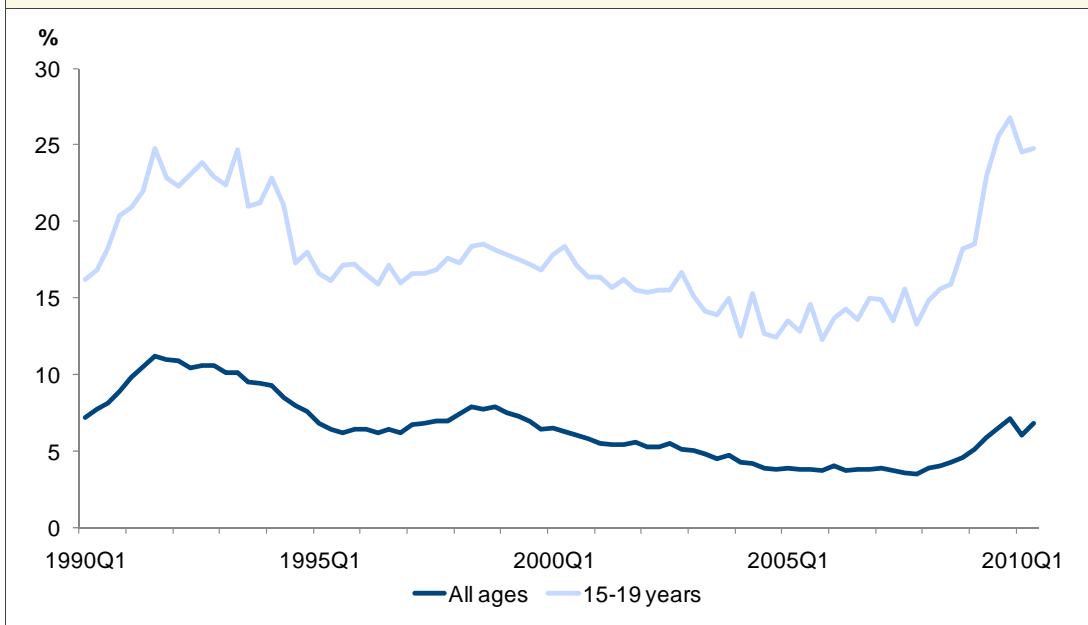
In the last decade, New Zealand has introduced substantial real increases in the minimum wage. The minimum wage was increased sharply during the boom years of labour shortages, and in 2008 the separate lower youth minimum wage was abolished (putting all young employees on the same minimum wage as adults). In 2008, New Zealand had the second

highest minimum wage in the OECD relative to the median wage at 59 percent of the median wage, up from 51 percent of the median wage, in 2002. Only France, whose minimum wage at 64 percent, was more generous, and the OECD average is for the minimum wage to be at 46 percent of the median wage (OECD 2010a).

These changes have had a particularly serious impact on youth unemployment (Figure 12.2). Making sure that young people are easily able to get into the workforce is important for them and for the wider economy.

High minimum wages are also likely to seriously impede any determined efforts to reduce long-term welfare dependency. The case for any minimum wage at all is questionable, and we believe it should be reduced in value, but as a minimum we believe the Government should move to lower the real value of the minimum wage by holding it constant in nominal terms. Further, and as a matter of urgency, the youth minimum wage should be reinstated to assist in addressing the chronic youth unemployment problem currently facing New Zealand.

**Figure 12.2: Unemployment rates in New Zealand**



Source: Statistics NZ, seasonally adjusted

The prospects for economic growth in New Zealand would be further enhanced by two additional reductions in the burden of labour market regulation. The first is to remove the ability of the Employment Court to determine whether an employer's decision to terminate employment as a result of serious misconduct was reasonable, and restrict the purview of the Court to the question of whether the finding of serious misconduct was reasonable. The second is amendment of the Employment Relations Act to allow unrestricted use of fixed term contracts, removing the current requirements to show genuine reasons for the use of such contracts. In each of the last two cases, these changes would also serve to bring New Zealand broadly into line with Australian labour market regulation.

Part of ensuring that we have a responsive labour market is ensuring that immigration procedures are predictable, efficient, and practical. That appears to be far from the case at present. Whatever the level of immigration, the composition of immigration is critical. It is not obvious that there are large productivity advantages to becoming a retirement home for wealthy Americans, Canadians and Europeans, though there are notable examples where immigrants of this type have had a material and beneficial impact on economic development in New Zealand. New Zealand needs well educated, skilled and committed people who are near the beginning of their working life, determined to work and achieve in ways that will benefit both them and us. We want to make it easier to get and keep the people who know us – successful foreign students who study in our universities, for example, or foreign spouses of expatriate New Zealanders.

The other thing that matters is responsiveness. General skill shortages typically tell us more about how overheated the economy is – a matter for macroeconomic policy – than anything specific to the labour market. But in a small country, specific highly specialist skills will often best be found abroad. To make that work well for everyone, employers need a prompt and predictable Immigration Service.

## 12.5 Regulation of research: new organisms and genetic modification

For thousands of years, humans have practised selective breeding to select for the most desirable qualities in plants and animals, and they have greatly enhanced agricultural production by transplanting plants and animals to different locations around the world. The ability to select desirable characteristics has been dramatically enhanced by the modern science of genetics, which has allowed much more precise targeting of specific genetic features of plants and animals. This has such wide application that it has become essential for the advancement of fundamental knowledge in ecology, biology and medicine. The range of applications includes the understanding of ecosystems, the preservation of endangered species, the use of genetically modified “animal models” to test the effects of potential treatments for human disease (particularly chronic and neuro-degenerative disorders), investigation of the regenerative ability of cells and the potential to modify cells to cure disease and replace organs, and the commonly known applications in increasing the productivity of plants and animals used for food.

Over the last 15 years, genetically engineered plants have become widespread. They are currently grown on more than 2 billion acres in more than 20 countries. Consumers eat genetically modified plant products in large quantities in the US – often unlabelled in products such as oils and processed foods. More than four-fifths of the soybean, corn and cotton acreage in the US in 2009 used genetically engineered crops, and any product that has beet sugar, soybean or cane sugar in it (which includes many products on supermarket shelves in New Zealand) has an 85 – 95 percent chance of having some genetically modified content.

New Zealand has world class scientific capability in genetic modification in plants and animals, and our scientists are at the forefront of genetic research on animals. This has potentially important economic implications for New Zealand. It may impact on the productivity of our own agricultural industries, on our ability to preserve endangered species and find environmentally friendly means of controlling pests such as possums, and on the development of intellectual property that may have commercial value in an international context.

Despite the existence of this capability in New Zealand, productivity has been dramatically reduced, and the costs of undertaking research dramatically increased, by the regulatory environment that New Zealand has created around hazardous substances, and new and genetically modified organisms. The Hazardous Substances and New Organisms (HSNO) Act 1996 establishes the regulatory regime for hazardous substances (such as petrol, herbicides and cosmetics), new organisms (such as plants and micro-organisms that could be imported into New Zealand) and genetically modified organisms.<sup>70</sup> Regulation is managed by the Environmental Risk Management Authority (ERMA). Under the New Zealand regime, even low risk research on genetic modification requires specific approval (though in some cases enforcement of the regulations may be delegated to a committee at the research institution). Research that is classified as higher risk is subject to case by case review by ERMA, which may include public notification and consultation before a decision to approve or decline the research proposal is made.

The Royal Commission on Genetic Modification, which reported in July 2001, heard a profusion of complaints from scientists about the impact of the regulatory framework. In particular, they pointed out that New Zealand was out of step with Australia, Europe and the US in requiring specific regulatory approval for even low risk research involving genetic modification, for example, research confined to laboratories, for its requirements for public consultation, including requirements for consultation with Māori, and for the costs that the regime imposed on scientists wanting to undertake this work. The Royal Commission recommended a number of minor changes to the approval processes for low risk research, but no fundamental change in the regime.

Of particular concern in the current regime managed by ERMA are:

- the total cost of applications (both indirect and direct costs). This includes opportunity costs of delay in beginning research, legal costs and the stringent information requirements,
- public (including Māori) consultation costs, and
- data protection issues and the fact that since an approval is given to the organism or substance and not to the applicant, subsequent importers/users of a substance or organism can free-ride on the costs incurred by the first applicant.

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<sup>70</sup> A wide range of other legislation may apply depending on the particular type of research being undertaken.



Where ERMA requires public notification of proposed research, scientists have told us that this can add more than \$250,000 to the cost of the research project. Public notification also creates the potential for sections of the community to attempt to hold the project hostage until the research organisation agrees to buy their support in one form or another. These costs ensure that less scientific research can be funded from the fixed budgets provided to public funding bodies.

One of the most important new fields of research in biotechnology relates to stem cell research – research investigating the use of cells from embryos or adults to repair or replace diseased or damaged tissues. Stem cells are already used to treat diseases of the blood such as leukaemia, but under the HSNO Act the genetic modification or importation of genetically modified human cells requires an approval from ERMA. In addition, the legislative and regulatory regimes that are potentially relevant to the conduct of stem cell research in New Zealand include the following:

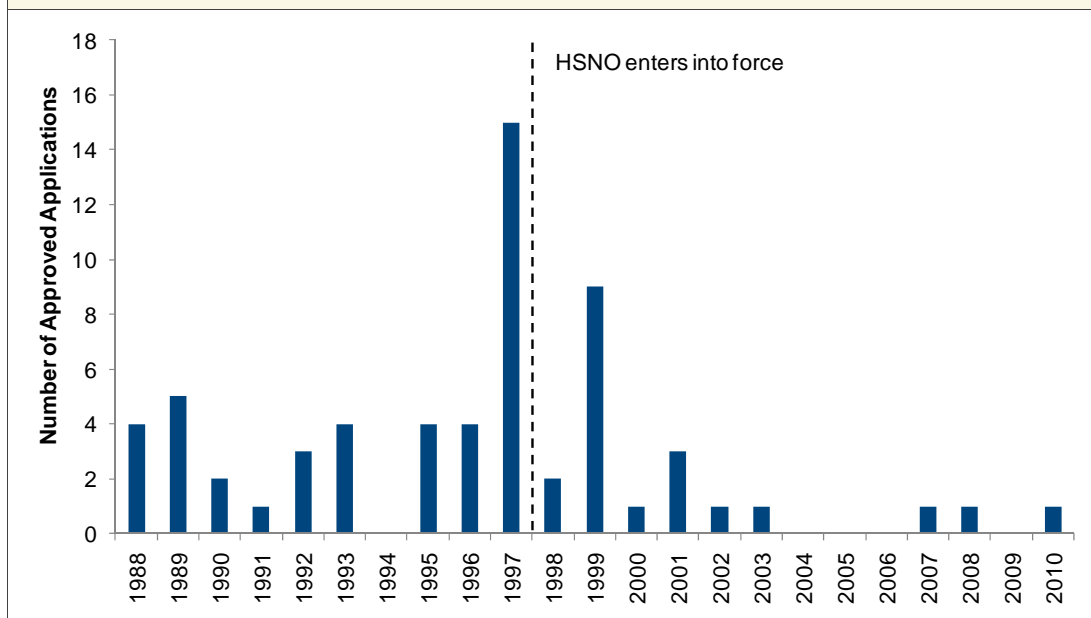
- Hazardous Substances and New Organisms Act 1996,
- Human Tissue Act 2007,
- Code of Health and Disability Services Consumers' Rights 1996,
- New Zealand Public Health and Disability Act 2000,
- Health Research Council Act 1990 (Gene Technology Advisory Group),
- Operational Standard for Ethics Committees (Ministry of Health, 2002),
- Professional codes of conduct and registration requirements of health and disability professional bodies,
- Approval requirements of research funding organisations,
- Injury Prevention, Rehabilitation and Compensation Act 2001,
- Health Information Privacy Code 1994,
- Human Assisted Reproductive Technology Act 2004,
- Internationally recognised conventions and statements (such as the Declaration of Helsinki), and
- Health Act 1956 (addresses the use of human stem cells found in blood, including cord blood).<sup>71</sup>

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<sup>71</sup> "Stem cell Research in New Zealand", Ministry of Research, Science and Technology (2006).

The effect of the regulations applying in New Zealand today has been to drive high value research involving genetic modification offshore. The Taskforce has been made aware of numerous examples of New Zealand scientists paying for research to be undertaken in Australia, Europe and the US because this is so much cheaper than meeting the regulatory requirements, including the delays caused by “case by case” decision-making by officials and requirements for consultation. There are no systematic data on the extent of the work that New Zealand is funding in other countries, though some indication of the extent of that practice can be gauged from Figure 12.3. Approvals of genetically modified research fell dramatically following the introduction of the HSNO regime, and have continued at very low levels since that time. However, it is likely that some of this reduction results from the effect of the HSNO regime diverting New Zealand science into less fundamental work in the field of genetics as well as the conduct of research outside New Zealand.

**Figure 12.3:** Number of GMO field trials and outdoor developments in New Zealand before and after the introduction of HSNO



Source: Treasury using data from the Environmental Risk Management Authority

There is universal acceptance in the scientific community of the need for a regulatory regime for research into hazardous substances and new organisms. But the intensity of the focus on risk management and absolute risk reduction associated with the HSNO Act has resulted in a significant decrease in the number of new non-GM plant species introduced into New Zealand and a significant reduction in research relating to genetic modification. Given New Zealand's reliance on the primary sector as a major contributor to the economy, foregoing potential opportunities to introduce new plant species could have large implications for New Zealand's productivity potential and our ability to stay at the frontier of relevant contemporary research.

However, if we take a step back from the issues above, we see the bigger issue/design choice for the HSNO regime is the underlying risk management framework and the adoption of a

stringent precautionary approach. The current settings of this framework (risk averse) then flow through to these other issues (such as high application costs).

By adopting a particularly stringent risk management framework in relation to research on hazardous substances and new organisms, New Zealand is imposing regulatory costs on the approval of such research that are higher than those in Australia, the US or Europe. Consequently, New Zealand is systematically constraining the ability of its scientists to develop technologies that have the potential to improve productivity, reduce the impact of pests, and reduce the impact of chronic illness. Our scientists continue to undertake the relevant work at the cost of paying for key components of the research to be undertaken in Australia, the US or Europe, not because of their superior scientific capability but because of their lower regulatory costs. A Government focused on economic growth would not persist with this perverse and inefficient approach to regulating an area of modern scientific advance that is so fundamental to the ability of scientists in New Zealand to contribute to knowledge, well-being and innovation.

## 12.6 The retail sector and pharmacies

Given the size of the retail sector in the economy of all developed economies, regulations that inhibit its efficiency can have a substantial impact on economic growth. Productivity in the retail sector has improved dramatically in the last 20 years as a result of changes in ownership structures, the large scale application of high technology to retail formats, and changes in management and logistics associated with the emergence of “big box” formats, such as Wal-Mart.<sup>72</sup> Even where retailers have not adopted the same approaches to the use of technology, they have been required to find substantial productivity enhancements of other types to compete with large scale retailers.

The ability of New Zealand to obtain the same level of productivity in retail services is limited to some extent by the size of our market, though integration with Australian markets assists in reducing the impact of this disadvantage. But in addition, a wide range of regulatory restrictions impact on the emergence of new retail formats, from the RMA to labour market regulation, occupational licensing regime and related restrictions. For us a striking example is the retention of restriction on ownership of pharmacies by those who are not qualified pharmacists. This restriction has the effect of limiting the benefits of outside capital investment in the pharmacy sector, and of restricting the development of a wide range of potential synergies with other retail activities. Those who have observed the benefits that consumers gain in choice and price when alternative arrangements for the sale of pharmacy products are possible, as they are in many OECD countries, will have no doubt that the New Zealand restrictions protect existing pharmacies from competition at the cost of the consumer. Given the material impact that the price of products and services in pharmacies has on the public budget and the budgets of individual consumers, we suggest this as a topic for investigation by the Productivity Commission.

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<sup>72</sup> For an analysis of the very large impact that Wal-Mart has had on the measured productivity of the US, see Van Ark et al (2008: 41) and Basker (2007).

## 12.7 Conclusion

To increase New Zealand's rate of economic growth we need to reduce the costs of doing business, and foster a pervasive culture of enterprise and opportunity across the economy. Among many examples that might have been chosen we have outlined the issues associated with five different types of regulatory restrictions.

Changes to the RMA that limit the potential for cost escalation within the resource consent process and limit assessment to the effects of development proposals would have a positive impact on economic growth. If combined with a more liberal regime for the creation of land zoned for the building of houses, the cost of housing in New Zealand could be reduced substantially. Changes to labour market regulations also have the potential to increase economic growth, particularly if they create greater flexibility for employers in contractual terms and salaries paid. Reintroduction of a youth minimum wage would be particularly helpful in addressing the current problem with youth unemployment. The current regulatory regime relating to hazardous substances, new organisms and genetic modification imposes unreasonable costs on scientific research that is critical for the development of New Zealand's agricultural and biotechnology sectors, as a result of which much of that research is being undertaken in Australia and other countries. And finally, we consider the significance of regulatory restrictions which lock in historical market structures, and highlight restrictions on the ownership of pharmacies as one example of these.

# 13 Foreign direct investment

- New Zealand has become less open to foreign direct investment over the last five years, with very little public debate about the costs and benefits of – and winners and losers from – this policy shift. New Zealand is now one of the OECD countries least open to inward foreign investment.
- It is critical that New Zealand reverses this stance if we are serious about matching the per capita income of Australia by 2025. We will not be able to rely on domestic investors and domestic savings alone to achieve this goal. A precondition for this is informed public debate about the costs of controls on foreign direct investment and the validity of the arguments made in support of those controls.

## 13.1 Introduction

Foreign direct investment (FDI) is a form of international economic integration that brings gains to both the country of origin and the country of destination. In contrast to international trade, which involves arms' length transactions, FDI involves intra-firm trade and transactions in both tangible assets and intangible assets such as knowledge and reputation. And in contrast to flows of portfolio investment, FDI flows impact on both short-term growth through initial investment and long-term growth through the introduction of superior production processes and technology that are the economic motivation for the investment.

The economic reforms of the late 1980s and early 1990s created substantial investment opportunities as government retreated from ownership in many sectors, economic integration with Australia increased, and a more favourable business environment for trade and investment was created. As a result, New Zealand has the 9<sup>th</sup> highest level of FDI as a proportion of GDP among OECD countries. However, over the last decade the flow of FDI has slowed as government policy has both created fewer opportunities and become increasingly restrictive towards FDI.

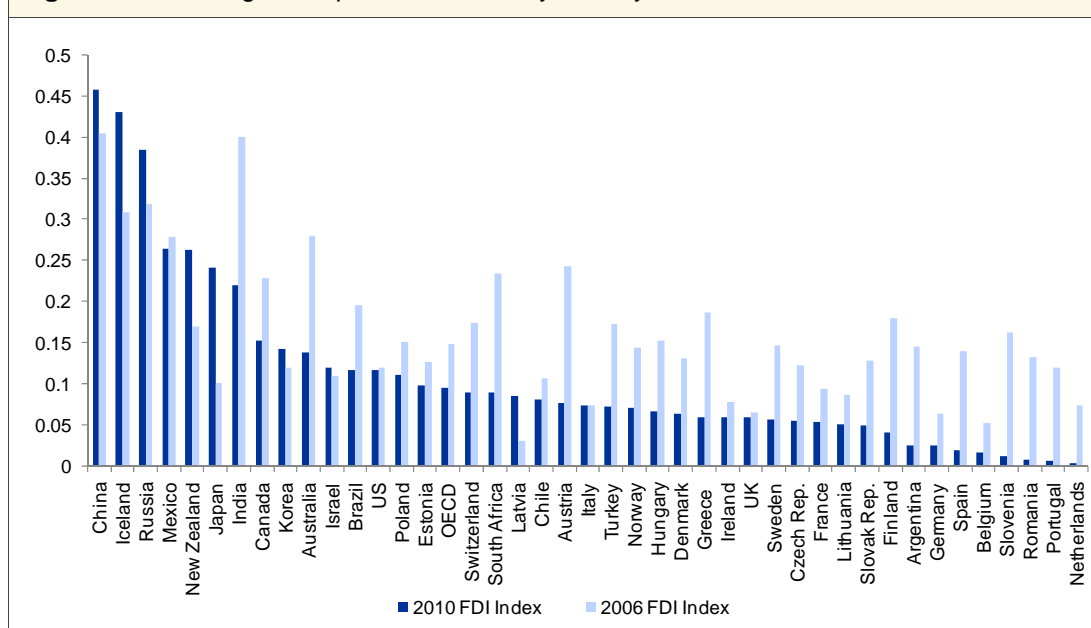
In this chapter, we review New Zealand's current position on FDI, including the recently announced outcome of the Government's review of New Zealand's FDI regulations. We provide an assessment of the costs and benefits of FDI for a country like New Zealand, and consider two cases that illustrate why current policy settings and sentiment are damaging for growth. Finally, we consider who benefits from FDI.

## 13.2 New Zealand's current position on FDI

In the last decade, New Zealand's openness to FDI has been substantially reduced. The OECD undertakes a thorough analysis of restrictions on FDI across member countries and other large economies, and in their most recent update rank New Zealand the sixth most restrictive country, behind China, Iceland, Russia, Indonesia and Mexico. Remarkably, New Zealand is now more restrictive than India and Japan, more restrictive than the average for the non-OECD countries surveyed, and substantially more restrictive than the OECD average.

Further, New Zealand's position is in marked contrast to that of both small and large economies in Europe. In particular, openness to foreign investment is a hallmark of small high income economies in Europe such as the Netherlands, Belgium, and Denmark. New Zealand's position on FDI appears to present a major challenge for those who wish to see small European economies as models for New Zealand's future economic development.

**Figure 13.1: Changes to openness to FDI by country, 2006 and 2010**



Source: OECD

Note: On the y-axis, numbers are between 0 (open) and 1 (closed)

The OECD's analysis of New Zealand's relatively high level of restrictions on FDI in comparison with other countries can be more easily undertaken on the basis of the sectoral data provided in Table 13.1. The restrictions are a combination of criteria associated with formal investment review processes, and implicit restrictions arising from quotas, government ownership stakes and limitations on the sale of specific strategic assets.

The OECD judges New Zealand to have a materially more restrictive regime than Australia, particularly in relation to agriculture and forestry, fishing and mining. The effect of New Zealand's more restrictive FDI regime on its economic growth is therefore compounded by the fact that the restrictions are most rigorously applied to those areas in which New Zealand has a comparative advantage with much of the rest of the world. In the remainder of this chapter, we explain why it is unlikely to be possible for New Zealand to close the income gap with Australia by 2025 if it maintains its current stance on FDI.

**Table 13.1:** The OECD FDI Restrictiveness Index by industry – selected countries

	All OECD Countries	Australia	Canada	Denmark	New Zealand
Agriculture and Forestry	0.128	0.100	0.000	0.000	0.350
Fishing	0.320	0.100	0.600	0.225	0.700
Mining	0.122	0.100	0.150	0.000	0.300
Manufacturing	0.030	0.100	0.100	0.000	0.200
Electricity	0.123	0.100	0.100	0.000	0.200
Construction	0.055	0.100	0.100	0.000	0.200
Distribution	0.029	0.100	0.100	0.000	0.200
Hotels and Restaurants	0.030	0.100	0.100	0.000	0.200
Transport	0.227	0.243	0.267	0.083	0.383
Media	0.180	0.210	0.700	0.000	0.200
Telecom	0.092	0.300	0.350	0.000	0.400
Financial Services	0.053	0.150	0.067	0.002	0.233
Business Services	0.067	0.128	0.100	0.181	0.200
Real Estate	0.283	0.300	0.000	0.900	0.200
Total FDI index	0.095	0.138	0.153	0.063	0.263

Source: Kalinova, Palerm and Thomsen (2010), "OECD's FDI Restrictiveness Index: 2010 Update", *OECD Working Papers on International Investment*, 2010/3

Note: numbers are between 0 (open) and 1 (closed). The higher the number, the more restrictive the regime.

New Zealand's general screening regime for FDI accounts for some of the difference between our openness to FDI and that of the other countries listed in Table 13.1. Even where the conditions imposed as a result of the screening process are minimal, the delay in confirmation of purchase agreements that results from the requirement for screening is a material deterrent to potential foreign investors. In addition, a range of factors such as the presence of a large state-owned firm in relevant markets, and the existence of specific restrictions, such as the prohibition on foreign ownership of New Zealand fishing quotas, are reflected in the OECD analysis of investment barriers.

The next version of the OECD analysis is certain to show New Zealand as having an even more restrictive regime following the outcome of the review of the overseas investment regulations announced at the end of September 2010. The revision adds an "economic interests" test to the "strategic assets test" introduced in 2008, and provides ministers with a power of veto that may be exercised on a case by case basis. As a *New Zealand Herald* editorial interpreted these policy changes "Overseas investment policy, rather than being based on a clear set of principles that are applied without fear or favour and that recognise the limits on foreign control, will be hostage to the ministerial pen." In addition the *Herald* noted that "The regulations are an invitation for pressure groups to create as much fuss as possible to get the ministerial thumbs-down for what may well be desirable bids in terms of efficiency and economic benefit".<sup>73</sup>

<sup>73</sup> *The New Zealand Herald* (2010) "No place for Xenophobia or self-interest" Tuesday, September 28 p A10.

## 13.3 Foreign direct investment and economic growth

When a government is ambitious to create higher levels of economic growth, and is able to create policies and institutions consistent with that growth, foreign direct investment is likely to play a significant role. One reason for this is that foreign direct investment links capital and technology, so a favourable environment for investment is particularly attractive to foreign firms which have advantages in production technology over domestic firms. FDI is linked to productivity gains and technology transfers through the introduction of new processes, managerial skills and know-how in the domestic market, employee training, international network of production, and access to markets.

While much of the literature has focused on the benefits that developing countries receive from FDI, studies conducted over the last decade have provided strong evidence that these effects work within the OECD countries as well (Ghosh and Wang 2009). A second reason is that the global economy is very much larger than any national economy, so that the capital and technology required to drive higher levels of economic growth are more likely to be available if markets are open to foreign investment.

Domestic firms have better knowledge of and access to domestic input suppliers and domestic markets, which means that if a foreign firm decides to enter the market, its higher productivity must compensate for the advantages enjoyed by domestic firms. The fact that foreign firms place a higher value on the assets of a domestic firm, or are willing to bear the costs of “greenfields establishment” in a foreign market, means that they must see a way to generate a higher level of income from the asset than the current owner or have a technology superior to any domestic producer.

There is substantial evidence in the international literature that foreign-owned firms are more productive than domestically-owned firms. For example, an empirical comparison of domestic and foreign-owned firms in the UK found that foreign firms do have higher productivity than domestic firms and they pay higher wages (Girma et al 2001). Rao and Tang (2000) suggest that foreign-controlled firms are on average 10 to 20 percent more productive than domestically controlled firms and exert significant positive productivity spillovers on domestic firms.

One reason that foreign direct investment has positive “spillover” effects on other firms in the economy is that it promotes competition. In a small and distant economy such as New Zealand, foreign direct investment may also be an important stimulus to competitive responses by domestic firms. The transport costs associated with imports may protect domestic firms from competition, but foreign firms can avoid those transport costs by establishing a production facility in the domestic market. For this reason, restrictive product market regulations, in particular those limiting new entry, hinder technology transfer and have a negative impact on productivity, although most studies relate only to manufacturing industries (Crafts 2006). Another reason is that a foreign-owned firm will need to establish links with domestic suppliers. Smarzynsk (2002) shows that positive spillovers from FDI take place through backward linkages to domestic suppliers of intermediate inputs.



The benefits of FDI also apply to outward investment from New Zealand, of which there is at present relatively little. In a recent paper on 14 industrialized countries, Herzer (2008) showed that outward FDI has positive long-run effects on domestic output. The paper also finds that the long-run causality between outward FDI and growth is bi-directional.

## 13.4 Two examples: Auckland airport and dairy farms

In this section we illustrate contemporary debates about foreign direct investment in New Zealand using two examples: Auckland International Airport and dairy farms. Further, we use these examples to illustrate the costs of restrictions on foreign direct investment in New Zealand.

### Auckland International Airport

In July 2007, the shareholders in Auckland International Airport (AIAL) received offers to buy their shares from two sources: Dubai Aerospace Enterprises sought a controlling stake and the Canada Pension Plan Investment Board (CPPIB) made a partial takeover offer for a 40 percent shareholding. The offer from Dubai Aerospace would have created the opportunity for Auckland Airport to be developed as a hub for Emirates Airlines connecting the Middle East with the Americas, an opportunity that could potentially have had a material impact on economic growth in New Zealand. However, the opposition of the New Zealand Government and local councils (which have equity stakes in the Airport) to foreign control of the Airport resulted in the offer being withdrawn. Then in March 2008, as a result of the “uncertainty and debate” surrounding the CPPIB offer,<sup>74</sup> the Government announced an amendment to the Overseas Investment Regulations to add an additional factor to be taken into account in assessing whether an overseas person or entity can acquire “sensitive land”. The new factor required that consideration be given to “whether the overseas investment will, or is likely to, assist New Zealand to maintain New Zealand control of strategically important infrastructure on sensitive land”.

The decision of the Government to block the sale of Auckland International Airport shares achieved a partial nationalisation of one of the property rights associated with a major asset. More importantly, the decision achieved this without any formal analysis of the costs of the policy and the benefits actually likely to accrue from it, and without the Government having to provide even one dollar of compensation to the existing shareholders.

The announcement of the amendment to the Overseas Investment Regulations resulted in a sharp reduction in AIAL’s share price, wiping an estimated \$300 million off the value of the company.<sup>75</sup> This loss resulted from the confiscation by the Government of the right to sell to interests outside New Zealand – a portion of the right to alienate the property – and is a reasonable measure of the private loss. However the cost to the economy overall, as a result of increased uncertainty, deterrence of foreign investment, and owners of assets selling to foreign

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<sup>74</sup> “Strategic assets to be protected in national interest”, Media Statement, Hon Dr Michael Cullen, 3 March 2008.

<sup>75</sup> See “Cullen defends investment rule change”, 6 March 2008, <http://tvnz.co.nz/view/page/1320238/1618678>.

investors before their assets become large enough to be viewed by the Government as strategic, is likely to be very much higher.<sup>76</sup>

The action of the Government in blocking foreign investment in Auckland International Airport has had two direct effects on New Zealand economic growth. First, it is likely to have had the effect of discouraging other domestic investors from investing in the development of infrastructure assets that might subsequently be deemed to be of strategic importance or on sensitive land. Almost any asset could be deemed to meet these criteria depending on the whims of the Government of the day, with the result that investors face the risk of value-destroying decisions to remove their ability to sell the asset to the highest bidder if the potential purchaser is a foreign-domiciled individual or company. That threat of arbitrary government confiscation of wealth has a chilling effect on new investment, reducing its volume and reducing dynamic efficiency by directing investment into projects that are less likely to trigger the strategic importance and sensitive land criteria.

Second, the premium being paid for the airport assets by Dubai Aerospace and the CPPIB strongly suggested that they had plans, possibly including additional investment in the airport, which would have created additional wealth from its operations. Blocking the sale precluded New Zealand from obtaining the benefits of that increase in wealth.

## Dairy farms and rural land

In recent months, foreign investment in New Zealand farms has provided a focus for debate about the costs and benefits of foreign direct investment in New Zealand. The debate began when, in response to an application by a Chinese company to buy a large corporate dairy farming operation in New Zealand, the Prime Minister stated that he was “genuinely worried” about large foreign purchases of New Zealand farmland, and concerned at the prospect that New Zealanders would become tenants in their own country.<sup>77</sup>

The Taskforce has reviewed the comments made by the different parties to this debate. Analysis of the debate is made more difficult by the fact that it is not clear whether the debate is about foreign ownership or about Chinese ownership. Substantial amounts of new foreign investment in rural land have occurred in 2010 without creating the controversy associated with the dairy farms issue, creating the impression that the issue may have more to do with China than with foreign investment per se. Contributions to the debate have been highly emotive, and particularly notable for the absence of any explicit theories about how harm to New Zealand could be caused by foreign or Chinese ownership of dairy farms.

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<sup>76</sup> The Regulation Review Committee’s response to New Zealand Business Roundtable and Wellington Regional Chamber of Commerce’s submission included the argument that the regulation trespasses unduly on personal rights and freedoms. It agreed with the Treasury that a loss in share value does not amount to a taking and share value fluctuation is “something that shareholders simply have to accept”. This latter point is wrong: the drop in share price was predictable given the Government’s change in the rules and it was the direct effect of the taking resulting from the loss of shareholders’ rights to sell to overseas interests.

<sup>77</sup> *New Zealand Herald* (2010) “Key Fears Foreign Buyers of Farmland” Editorial Wednesday 28 July.

The Taskforce is aware that some Māori consider that the traditional concept of kaitiakitanga (guardianship) of land to be passed to future generations provides a barrier to the sale of land to foreigners. But it is not clear why this concept would apply only to rural land, or why Government policy should be used to impose it on those New Zealanders who do not afford it primacy in the determination of policy. In addition, and unlike the confiscation and forced sale under Crown pre-emption that occurred in the 19<sup>th</sup> century, there is no mechanism by which Māori can be forced to sell land to foreigners. More importantly, it is not clear how a focus on retention of land in domestic ownership has been balanced against the creation of new employment for Māori, and the increase in income required to continue to provide Māori with the government funding for health and education that FDI would provide.

The importance of a robust debate is that if, after that debate, we decide that there are traditions associated with ownership of agricultural land and our sense of attachment to ownership of land which require us to prohibit Chinese or all foreign ownership of dairy farms, there should be no misunderstanding of the cost to New Zealand associated with that decision and the private interests who will benefit from it.

The Government therefore has an opportunity to provide leadership by shaping this debate around analysis of costs and benefits rather than popular sentiment. The issues that need to be considered as part of that debate include the following:

- If a foreign owner is prepared to pay more for a New Zealand asset than any New Zealand national, this must be because they place a higher value on the land than potential domestic owners. Obtaining more value from existing assets, by investing in them or changing the production technology applied to them, is a driver of economic growth, and blocking such investment will reduce economic growth. This is particularly true for land, which is a scarce resource: since we cannot create any more of it, we need to constantly be searching for the best ways of using it.
- There is no compulsion to sell, so protection of cultural values means the imposition of collective values on individuals who may not hold them. No farmer can be forced to sell to a foreign investor; they have the option to sell to a New Zealand national at a lower price. There is no threat to Māori land, because there are no mechanisms for other than voluntary transactions that advantage buyer and seller associated with any sale of modern dairy farms.
- Incumbents are disadvantaged by having the potential market for their ownership rights, and thus their wealth, reduced. As with Auckland Airport, this is a confiscation of value held by current owners. Potential New Zealand resident purchasers of dairy farms obtain the benefit that by precluding offers from foreign investors they will be able to buy farms at a price less than the world market price. Low land prices also provide advantages to anyone who has

acquisition of land as an investment strategy, allowing them to purchase at low prices and protecting relatively inefficient use of the land.<sup>78</sup>

- The nationality of land is not changed by changes in its ownership. It is not possible to dig it up and take it overseas, so there is no loss of the assets offshore. There is simply no validity to the claim that “once lost it is gone for good”. It is always possible for New Zealanders to buy it back and some iwi have an explicit strategy of using funding from Treaty settlements to do so (Morgan 2010).
- The use and the deployment of the outputs from the land will always be subject to New Zealand government regulations precisely because they can never be removed from New Zealand. It is therefore very different to the intellectual property associated with companies purchased by foreign firms, since that intellectual property of a company, and the future research and development associated with it, can be relocated outside New Zealand at modest cost and with no effective government means of stopping it.
- The claim that importance should be attached to ownership of farmland by the family who will farm it is inconsistent with a tradition of ownership of New Zealand farmland by individuals and companies who employ others to farm it for them that is as old as European settlement in New Zealand. Without that tradition, share milking would not exist, and barriers to entry in the dairy industry would be raised for all those who could not afford to buy a freehold interest in a dairy farm.

An example raised as part of the debate has been the New Zealand wine industry, in which there has been substantial foreign investment and consolidation in the last decade. New Zealand’s wine exports have increased at the rate of 24 percent annually for the past 20 years. New Zealand’s annual wine exports increased from \$800 million in 2008 to reach \$1 billion by 31 July 2009 (one year earlier than New Zealand Winegrowers had originally projected that this milestone would be reached).<sup>79</sup> Much of the recent growth in the wine industry has occurred through foreign funding of consolidation of inefficient wineries and capital investment in wine production. So there is a need for those who are concerned that “Much of our prime wine growing areas are now in foreign ownership”<sup>80</sup> to show exactly how foreign investment in the New Zealand wine industry has disadvantaged New Zealand given that it appears to have had a significant positive impact on national income.

In the context of the dairy industry, raising barriers to foreign investment in dairy farms has the added cost to New Zealand that it protects Fonterra from an influx of shareholders who may have views about the structure for the industry that are inconsistent with the current co-operative form of

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<sup>78</sup> Morgan, Tukoroirangi Morgan (2010) “Foreign Land Sales: We Must Learn From History” *New Zealand Herald* 30 August page A13.

<sup>79</sup> New Zealand Winegrowers (2009) “New Zealand achieves \$1 billion wine export milestone” press release 16 September.

<sup>80</sup> See <http://savethefarms.org.nz>.

organisation. It also limits the opportunities for the New Zealand dairy industry to become integrated into higher value global supply chains than those that we can create ourselves.

The dairy industry has thus far had only limited success in extending the traditional model of global distribution of milk produced in New Zealand into a viable model for offshore investment that would make the New Zealand dairy industry a truly global business. This suggests to the Taskforce that the potential for foreign investment to bring an influx of competing views about structure and strategy is something that should be welcomed by anyone who has a serious interest in promoting economic growth in New Zealand.

## 13.5 Who stands to benefit from FDI?

Where foreign direct investment involves the purchase of existing assets in a country, as it will almost certainly do to some extent if the firm has a physical presence, the transaction immediately tells us that the foreign firm places a higher value on those assets than any other national or international firm. In many cases, precluding FDI will therefore have the effect of depressing the prices of assets in New Zealand to the disadvantage of those who currently own assets.

More important, however, is the role that the capital and superior technology associated with FDI plays in expanding domestic markets faster than would be possible if only domestic investors participate. In particular, the role of FDI in generating more employment and/or higher paid employment, based on the productivity differences of foreign firms, makes it clear that there is a broad national interest in promoting FDI. That interest shows up in increases in national income, with resulting benefits that include higher tax revenue to spend on government programmes or, as we would prefer, lower tax rates to fund the existing level of government expenditure. Growth-enhancing investment will bring an increase in employment and/or higher paid employment associated with the greater capital intensity of production resulting from FDI.

While there is strong evidence that FDI is beneficial, it is important to be clear that the national interest in promoting FDI has very broad human impacts. In particular, benefits include higher wage rates and increased government income. Popular sentiment and private interest lobbying against FDI must be weighed against the material improvement in employment and prosperity for the population as a whole.

## 13.6 Conclusion

Over the last five years, New Zealand has become increasingly less open to FDI, and recent discussion of foreign ownership of farmland is the most recent evidence of the sentiment that has driven this trend. This trend has emerged without informed public debate about the costs and benefits of foreign ownership, and without a clear understanding on the part of the public about the negative impact that restrictions on foreign investment have on New Zealand's rate of economic growth.

The combination of New Zealand's general screening regime for FDI and specific barriers to investment in individual sectors of the economy increasingly suggests that New Zealand is less open to investment from foreigners than Australia or the prosperous small economies in Europe. The changes to the overseas investment regulations announced by the Government at the end of September 2010 have increased the barriers to foreign investors by increasing uncertainty by extending the scope for ministerial discretion without clear guidelines on the way in which such discretion will be exercised.

All too frequently, opposition to foreign investment is driven by private interest lobbying, thinly veiled in the New Zealand flag to protect its modesty. However, the debate needs to begin with a clear public appreciation that there is no national economic benefit in restricting foreign investment in New Zealand. The beneficiaries of restrictions on foreign investment are New Zealand citizens and New Zealand investment companies who wish to buy New Zealand assets and pay less than the world market price for them.

When restrictions are imposed on foreign investment, the losers are current owners of assets in New Zealand who have property rights and wealth confiscated by restrictions on the nationality of those to whom they can sell assets, and the population as a whole who would benefit from the increase in employment and the increased ability of government to support education and healthcare as national income rises.

If New Zealand is to match the per capita income in Australia by 2025, then New Zealand's policy on foreign investment must be aligned with policies in a wide range of other areas to focus on economic growth. New Zealand's foreign investment regulations should create a stronger presumption for acceptance of growth-enhancing investment, to remove obvious blockages to foreign investment in areas such as fishing quotas, and to reduce the potential for arbitrary political decisions to respond to populist sentiment by increasing restrictions on FDI. Such a reversal of the increasingly restrictive stance on foreign investment being taken in New Zealand is critical if the 2025 target is to be achieved. It would be a serious sign to business and the public of the Government's determination to achieve the 2025 goal, and it can be implemented relatively quickly.

# 14 Can active industry policy close the gap with Australia?

- It is sometimes argued that to close the income gap with Australia, New Zealand needs more “smart active” government policy where public sector support is provided to the development of particular sectors or the creation and expansion of particular firms.
- There is evidence that active industry policy has had a positive impact in some developing countries but it is difficult to implement in developed countries like New Zealand, with strong institutions and infrastructure and a private sector capable of identifying the best investment opportunities. The record of government in “picking winners” is poor, and governments are demonstrably inferior to the private sector when it comes to exiting from poor choices.
- Government policy should focus on creating an environment that incentivises increases in the productivity of all firms, not just in those firms supported by the government.

## 14.1 Introduction

There is a substantial body of theoretical and empirical evidence to support the proposition that market price signals are necessary for the efficient allocation of resources and the incentives to increase wealth that are a requirement for economic growth. Further, the failure of the Soviet economic system and the substantial role of private enterprise in driving economic growth in China have comprehensively discredited pure central planning models of economic growth. However, policymakers in many developed countries continue to be fascinated by the potential for government to complement or actively promote private sector growth through a range of active industry policy interventions that involve identifying individual sectors of the economy, and even individual firms, that should receive government support to promote higher rates of growth.

In this chapter, we consider recent proposals for active industry policy in New Zealand, and provide an assessment of the potential that they hold to assist New Zealand in closing the per capita income gap with Australia.

## 14.2 Active industry policy

Active industry policy, or “state guided capitalism” as it has been termed by Baumol et al (2007), involves governments identifying national comparative advantage and then implementing a development strategy which exploits it. Active industry policy may involve investment in public goods and infrastructure, but normally goes further to include subsidies to firms or sectors associated with the development strategy, and sometimes direct government ownership of firms implementing the strategy.

There is a big difference between state-guided capitalism and the legitimate role of government in the provision of public goods. Government provision of basic infrastructure, roads, water and sanitation systems, education, police and judicial systems and investment in basic research is common. These activities represent the creation of a platform on which all economic activities are based, so do not involve taking risky and poorly informed bets with public money.

The rationale for active industry policy begins by assuming that the private sector lacks the knowledge to generate growth without the assistance and wisdom of officials. However, there is no reason to think that, in a developed economy, officials have greater wisdom about the existence of opportunities to generate growth than do private entrepreneurs. In fact, since it is not their own money they are risking, the incentives of officials are entirely different from those of private sector entrepreneurs.

A key challenge to active industry policy arises from the fact that the direction of technical change is uncertain. This means that picking a limited number of winners substantially reduces the likelihood of success by comparison with a large number of private firms pursuing diversified strategies. Picking winners does not involve centralised setting of prices, wages and output targets, but it does suffer from the primary dynamic inefficiency of central planning: lack of diversity in decision-making and risk-taking. Active industry policy that is designed to help the winners may inadvertently disadvantage firms in the industries that turn out to be where the real opportunities lie.

If the government is going to pick winners, a lot of resources will be expended on lobbying to obtain government favours and this lobbying is not growth-enhancing. In the extreme, activist government promotes the risk of corruption and disproportionate allocation of gains to political insiders, as has been the case in the state-guided capitalist models of Asia. The benefits that this focus on lobbying provides for ministers and officials may promote the continuation of the system.

Active industry policy means that all firms and households in the economy have to pay higher taxes to fund government support of firms in, or direct investment in, a small part of the economy. The deadweight costs of active investment policy are amplified by the fact that politicians and officials will often be reluctant to admit the costs of poor investments, which means that the misallocation of resources may continue to distort activity in the economy for long periods.

The apparent success of active industry policy in countries such as Taiwan and Singapore in the last 50 years has raised the level of interest in this strategy for developing countries. Lin and Monga (2010) suggest that in developing countries the distance from the frontier may make it easier to identify particular strategies that have a high probability of success. This is because developing countries normally offer a combination of low labour costs, limitations on the rights of workers, and the ability to utilise state control to promote particular projects or firms. These authors claim that in developing countries the lack of physical and social infrastructure, and lack of market mechanisms to provide information, will make it more difficult for the private sector to identify and exploit the country's comparative advantage. They therefore claim that private sector investment will be deterred by the combination of high uncertainty and inability to capture the benefits arising from information about failed strategies, so government will need to take the risks



of early movement into new industries. This approach also underlies Greenwald and Stiglitz' (2006) attempt to revive the credibility of infant industry policy in the case of developing countries.

Despite their positive assessment of the potential for active industry policy in a developing country context, Lin and Monga (2010: 2) note that:

*...the sad fact is that almost every government in the developing world has attempted, at some point in its development process, to play that facilitating role, but most have failed....these pervasive failures in developing countries are mostly due to the inability of governments to come up with good criteria for identifying industries that are appropriate for a given country's endowment structure and level of development. In fact, government's propensity to target industries that are too ambitious and not aligned with a country's comparative advantage largely explains why their attempts to "pick winners" resulted in "picking losers".*

Even this highly qualified enthusiasm for active industry policies appears to the Taskforce to have little applicability to New Zealand. China, Singapore, Malaysia, Korea, Vietnam and Taiwan were a very long way from the international development frontier when they began their drives for industrialisation and modernisation. It is one thing for the governments of China and Vietnam to identify that they have a labour cost advantage over developed countries and to invest in the development of labour-intensive manufacturing. It is quite a different matter to make the claim that it is possible to generate faster growth for New Zealand by choosing among a wide range of established industries using skilled labour to identify areas in which the government will focus subsidies or invest directly. In an advanced economy such as that of New Zealand, with an established physical infrastructure and high quality education, research, and legal institutions, proponents of active industry policy must explain why there is a role for government in investment.

### 14.3 The case for active industry policy in New Zealand

The New Zealand Institute (Boven et al 2010) has recently attempted to make such a case based on the "diagnostic approach" to identifying economic constraints in developing countries and the economic structure of Denmark, a model for which active industry policy could aim. They suggest that to generate higher economic growth, New Zealand:

1. Needs to focus on the internationalisation of high value, differentiated export sectors, prioritise labour productivity improvement efforts on these sectors, and reallocate resources from low to high productivity sectors.
2. Should increase efforts to develop entrepreneurs, to train managers and others to become high-skilled workers, and to ensure adequate capital supply.
3. Should aggressively invest in information and communications technology, niche manufacturing with high value-added, and differentiated goods and services based on primary production (Boven et al 2010).

Boven et al suggest that an aggressive investment strategy means the investment of billions of dollars of taxpayers' money in those firms and sectors identified through such a strategy.

The key problem with this approach is that it offers no evidence that there are specific binding constraints that are inhibiting the private sector from pursuing the opportunities that exist in these sectors, and no evidence that active industry policy is required to address these constraints. The claim (Boven 2010: 49-50) that over-reliance on economic liberalisation has led to New Zealand committing less effort than other OECD countries to the challenge of internationalisation is unconvincing, because there is overwhelming evidence that economic liberalisation is a necessary condition for the economy to take advantage of internationalisation (see Aghion et al 2008 and the references therein).

There is no doubt that New Zealand's wealth would be higher if we could substitute output in high value sectors for output in low value sectors. There also seems little doubt that if New Zealand shared a land border with Western Europe it would have an economic structure like that of Denmark with a much higher proportion of highly differentiated exports based on the low transportation and transaction costs associated with trade within the European Union. But in the absence of evidence that there are specific constraints on private investment to exploit these opportunities, the Taskforce does not see a role for active industry policy in New Zealand.

In another recent attempt to advocate a role for active industry policy in New Zealand, Procter (2010: 50) suggests that "A key reason industry policy has a part to play is that there are increasing returns to production of these high value, knowledge intensive exports. In effect, industry policy compensates for the initial lack of scale and institutional market richness, and so facilitates the shift to a higher growth path".<sup>81</sup> In this case, a key role for active industry policy is to keep firms "centred in New Zealand until the point where they reap sufficient increasing returns for them to choose to remain in New Zealand in substantial quantities without particular government action". To limit the potential for an active industry policy of this type to generate rent-seeking, and to recognise that "the government has weaker incentives than business and worse knowledge than business as a whole about where New Zealand has the capabilities to support world competitive knowledge-intensive businesses", Procter recommends that industry policy, including government-funded venture investment, should focus on growing high value businesses that are already in New Zealand to a size where the increasing returns anchor them profitably in New Zealand.

Here again the Taskforce doubts the evidential support for the policy prescription being advanced. If firms are already operating in New Zealand, then it is not clear why private investment will not occur in similar firms which can benefit from knowledge spillovers from the existing firms, and in complementary facilities and capabilities.

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<sup>81</sup> The increasing returns are claimed to arise from knowledge spillovers such as learning effects from exporting, increases in the stock of workers with relevant skills, and the emergence of complementary capabilities such as distribution networks.

Moreover, we noted in Chapter 2 the empirical evidence of wide dispersion of measured productivity in every sector and industry across all countries. This means that even in “high productivity” sectors, there will be some firms that have much lower measured productivity than others. Growth will depend on a process of reallocation of activity toward higher productivity producers, both among existing plants in a sector, and through entry to and exit from a sector (for example, Foster, Haltiwanger, and Krizan (2001)). Governments have a poor track record in making these reallocation decisions, and the different types of subsidies to the “chosen” firms and sectors envisaged by Procter (2010) and Boven et al (2010) are likely to have the effect of reducing the incentives for reallocation and thus productivity growth in those sectors. The fundamental challenge therefore still appears to be the creation of a taxation and regulatory environment that makes New Zealand an attractive long-term location from which successful businesses will operate.

## 14.4 Conclusion

There is evidence that active industry policy has been successful in a small number of developing countries that were very far from the technological frontier at the time that the policy was introduced. In these cases, active industry policy addressed the problem that their institutions and infrastructure were inconsistent with attracting private investment despite their low labour costs. However, the Taskforce finds wholly unconvincing the claim that this approach to policy is of relevance to New Zealand given the quality of our institutions and infrastructure.

The case against active government industry policy is not that markets are perfect. There is a role for government in the provision of public goods, and not all private sector firms will be successful. The case against active government industrial policy is that whatever the shortcomings of private enterprise in generating growth, government is worse. The track record of governments in picking and hanging on to losers is well established, and the costs of this are amplified by the fact that active industry policy will concentrate national resources in sectors and firms chosen by officials. Given the evidence that there is a high probability of the government picking and hanging on to losers rather than winners, and since active industry policy reduces the diversity of strategies being pursued in the economy, the failure of government-supported firms is much more costly for the economy than the mistakes made by private sector firms.

It is true that New Zealand will have higher economic growth if it can consistently shift resources from sectors with low labour productivity to those sectors with high labour productivity, and shift resources from low value-added to high value-added sectors. But there is no evidence that investment directed by politicians and officials will achieve this result: in fact, the subsidies and other forms of government support for chosen sectors and firms are likely to reduce the intensity of reallocation, entry and exit from those sectors, and reduce productivity growth as a result. Globalisation and the complexity of the contemporary global environment have reinforced the importance of policies that are consistent with this focus on productivity gains.

The choice between government policy that focuses on growth by providing levels of taxation and regulation consistent with growth across the whole economy, and active industry policy that focuses on growth in sectors and firms chosen by politicians and officials, is stark.

New Zealand can only achieve the 2025 goal if Government is committed to focusing on creating an environment that maximises growth across the whole economy. Government investment should be confined to public goods and those activities such as infrastructure, education and basic research where there is a plausible case that pure private provision will not result in the growth-maximising levels of investment. This precludes the adoption of active industry policy.

# 15 Conclusion

The findings of the Taskforce set out in this report may be briefly summarised as follows:

1. The income gap between Australia and New Zealand is very large. In our first report we estimated it to be 35 percent. Based on OECD projections, by 2025 the income gap will have risen to 42 percent. To close the gap by 2025 New Zealand will need to grow by slightly more than 2 percent per annum per capita faster than Australia for the next 15 years.
2. Closing the income gap matters. Our average real incomes affect our material standard of living; they determine the quality of the houses, healthcare, education and environmental protection that we can afford. The income gap could also result in the emigration of over 400,000 New Zealanders during the next 15 years. The skills and enterprise of these emigrants would be a huge loss to the New Zealand economy, especially given that taxpayers would have spent perhaps \$30 billion educating and providing medical care for them.
3. There is no reason why the income gap between Australian and New Zealand cannot be narrowed. New Zealand possesses most of the natural advantages and disadvantages that Australia has, including good economic and social institutions, abundant natural resources, hard working, and creative and increasingly well-educated people, and is strongly integrated into trade with countries with higher growth rates.
4. We can close the gap without economic and social upheaval. Many of the changes required are already in place in Australia and other developed economies, although to grow much faster than Australia our policies will have to be materially more growth-friendly. To have the choice to introduce change incrementally, substantial changes in public policy must be implemented very soon.
5. Closing the gap requires unwavering focus on growth-promoting public policy. Strong political leadership will be needed to ensure a consistent policy focus on allowing the private sector to drive productivity, sustainable employment creation and growth. Unless this happens, those of us who remain in New Zealand will find ourselves spending an increasing portion of our incomes travelling to Australia or other countries to visit our wealthier brothers and sisters, children and grandchildren.

To close the gap with Australia, New Zealand must achieve a major increase in productivity (output per worker). Increases in productivity and the private capital investment normally associated with it, are very strongly influenced by policy choices. Too frequently, governments make policy choices that are inconsistent with a focus on growth and prosperity. To generate higher levels of growth, governments must consider the implications for productivity and capital investment of every decision they make and every new regulation they enact. They must explain to the public why a decision that will inhibit economic growth is inconsistent with the national interest and why private interest lobbying for alternative approaches must be rebuffed.

To facilitate this focus on growth, the Government should establish processes to ensure that all new policies, initiatives and legislation are assessed against a requirement that they contribute to the objective of raising economic growth. It should also seek out and remove policies that inhibit growth wherever they may be found, and should ensure that the Treasury and the Productivity Commission provide expert and timely advice to Government on this issue as well as promoting better-informed public debate.

This focus on growth will mean:

1. Lower levels of government spending and lower rates of taxation, consistent with rapid return to a structural fiscal surplus that will allow the real exchange rate to fall, encouraging a rebalancing of output back to the tradables sector and a reduction in private borrowing from offshore. The immediate and achievable target should be to quickly return core Crown operating expenses back to the proportion of GDP achieved in 2005 – 29 percent.
2. A comprehensive review of the boundary between the private sector and the public sector that will reduce government involvement in commercial activities that can be better provided by competing private firms, put the capital, expertise and innovation of the private sector to work for public purposes, provide middle-income families with wider choice in return for the opportunity to pay a larger share of the cost of education and health costs, and focus on providing New Zealanders with productive employment rather than benefits.
3. Introducing more robust analysis of the business case for major public investment projects, particularly through the adoption of best practice private sector methodologies.
4. Focusing on policies that create an environment within which the private sector finds it attractive to invest in R and D rather than increasing publicly-funded research, and improving the return from existing public investment by reducing micro-management of research and tertiary education, reforming and simplifying governance, maximising the contestability of funding and removing barriers to the efficient evolution of the system.
5. Undertaking fundamental reviews of the regulations that are most obviously barriers to increasing productivity and innovation, reducing costs, and encouraging private investment. Priority should be given to a more fundamental review of the RMA to bring it back to its original intent as an effects-based, broadly permissive law, increasing labour market flexibility and reinstating the youth minimum wage, and reducing the costs of the regulatory regime relating to hazardous substances and new organisms.
6. Creating a more positive environment for foreign direct investment, including removing the uncertainty that exists because of recent decisions, statements, and changes to the overseas investment regulations.
7. Institutionalising better processes for vetting the quality of government spending and regulation, for example, through a taxpayers' bill of rights or independent fiscal council in respect of government spending and a Regulatory Responsibility Act in respect of regulation.

The vulnerability created by New Zealand's structural fiscal deficit and level of external indebtedness creates severe limits on policy flexibility. But the Taskforce is convinced that only by making New Zealand a more attractive environment for private sector investment and innovation, and by providing stronger incentives for every part of the private sector to play its part in generating that growth, will our growth rates and our per capita incomes increase by comparison with those in Australia.

Far too much effort over too many decades has been spent on the search for clever new government initiatives that will drive higher rates of growth and create greater prosperity in New Zealand. At their core, those policies reflect the idea that we can overcome the disincentives for business investment and growth in New Zealand created by high tax rates and regulation by choosing some potentially high-growth sectors of the economy to benefit from special government support. Governments consistently back losers rather than winners and find it difficult to exit poorly performing investments.

Moreover, there is ample evidence that active industry policy poses substantial political and institutional risks, including capture by private interests, and investment of taxpayer funds in projects that reduce efficiency for long periods (the Think Big policies of the early 1980s being one of New Zealand's best modern examples). But most importantly, active industry policy is a second or third best response to barriers to private sector investment and risk taking. Globalisation and the complexity of the contemporary global economic environment have not changed the fundamental sources of economic growth. The first-best policy response is to address directly the tax rates and the regulatory constraints that discourage higher productivity, innovation and private investment across the whole economy.

The fundamental point is that to grow much faster than Australia we will need policies which are materially more growth-friendly than those in Australia, and at this stage we are a long way from having such policies.

# Appendix 1: Recommendations from the first report of the 2025 Taskforce

## Recommendations

### Government spending

#### General

1. Government operating spending (as measured by core Crown operating expenses) as a share of GDP should be reduced by 2012/13 to 29 percent, the same share as in 2004 and 2005.
2. Beyond 2012/13, government spending as a share of GDP should be reduced materially further. To achieve this, the level of core Crown operating expenses per person should be capped in real terms.
3. The Public Finance Act should be amended to require the Minister of Finance to specify publicly a medium-term target for core Crown operating expenses, either in real per capita terms or as a share of GDP. In each Fiscal Strategy Report, the Minister of Finance should be required to report publicly on steps being taken to ensure that that goal is met.
4. The Government should undertake an in-depth examination of the scope for further institutional changes to strengthen long-term spending discipline. Examples of such institutions could include a Taxpayer Bill of Rights and/or an independent Fiscal Advisory Council.
5. Expert taskforces should be established to scrutinise each major area of government spending, with a view to proposing more effective models for delivering those services that the public sector will continue to fund.
6. Processes for evaluating government spending should be materially strengthened, including greater use of rigorous and transparent cost-benefit analysis for both new spending proposals and periodic reviews of the value that is being obtained from existing spending programmes. Enhancing the quality and rigour of such analysis should be a key priority for the Treasury.

#### Specific

7. Ambitious welfare reform measures should be undertaken as a matter of priority to reduce the very large number of people of working age currently receiving welfare benefits.
8. Early steps should be taken to lower the actual and prospective costs (as a share of GDP) of New Zealand Superannuation. The eligibility age should be increased progressively, with increases linked to ongoing improvements in life expectancy, and for some years payments should be indexed to the CPI rather than to after-tax wages.



9. Remaining KiwiSaver subsidies should be abolished.
10. Health:
  - a. A funder-provider model should be reintroduced in the hospital sector, allowing much greater private sector involvement in the provision of taxpayer-funded services.
  - b. Universal (unrelated to income or health status) subsidies for doctors' visits should be abolished.
  - c. Subsidies for prescription pharmaceuticals should be substantially reduced, with those in generally good health and not on low incomes paying the full price up to a cap.
11. Education:
  - a. The substantial increases in subsidies since 2005 for early childhood education and day-care should be reversed.
  - b. A funder-provider model should be adopted for the school sector, allowing new providers to enter, with all-up per student funding equivalent to that for existing state schools.
  - c. In the meantime, governance and accountability structures in the school sector need to be reformed to provide better incentives for stronger performance and greater accountability for teachers, principals and schools.
  - d. Government-imposed fee caps on university fees should be abolished.
  - e. Market-based interest rates should be reintroduced for student loans.
  - f. Governance of the public tertiary sector should be reformed, including exploring the rationalisation of the non-university sector and the establishment of universities as independent foundations.
  - g. A full review should be undertaken to identify, and recommend reform of, those areas in which various government education agencies (Tertiary Education Commission, Education Review Office, Ministry of Education) have become overly prescriptive, and to explore other, less intrusive, monitoring and accountability options to achieve policy ends that pass a cost-benefit test.

## Taxation

12. Average tax rates should be substantially reduced, as ambitious expenditure restraint permits. Cutting core Crown expenses to 29 percent of GDP would, for example, allow the maximum personal tax rate, and the company and trust tax rates, all to be reduced to 20 percent.

13. Serious reforms should be undertaken to reduce the high effective marginal tax rates facing many middle income taxpayers with dependent children as a result of the abatement provisions of the Working for Families tax credit scheme.
14. Reductions in average tax rates should be achieved by reducing income taxes, and doing so having regard both to the importance of administrative simplicity and minimisation of tax avoidance on the one hand, and to the evidence that taxes on capital income can be particularly detrimental to economic performance on the other.

#### Government assets

15. All businesses owned by central government which are operating in markets where competition is actual or feasible should be sold.
16. Local governments should be strongly encouraged to sell their trading enterprises.
17. To strengthen governance while businesses remain in public ownership, an independent Crown Commercial Appointments Commission should be established, to be responsible for making recommendations to Ministers for Board positions on all Crown commercial enterprises and for vetting and publishing suitability assessments of all appointees to such boards.
18. The New Zealand Superannuation Fund should be wound up and its assets used to reduce gross government debt.
19. Congestion charging should be introduced in central Auckland and in any other cities where a cost-benefit analysis supports doing so. Full road-user charging, differentiated by place and time of road use, should be introduced as it becomes economically efficient to do so.
20. Rigorous and transparent cost-benefit analyses should be restored to the prime place in guiding decisions on all public capital spending, including infrastructure spending. All such cost-benefit analyses for projects involving the outlay of more than \$50 million should be formally reviewed by Treasury.
21. Mining:
  - a. A governance framework should be put in place to facilitate the best economic use of those mineral resources in which the Crown has a direct ownership interest (under both land and sea).
  - b. Mining developments on or under sensitive Crown land should generally be permitted provided that they pass a full cost-benefit analysis.
  - c. Development of mineral resources should be undertaken by private operators, with the Crown securing its financial interest through appropriate royalty-type arrangements.

## Regulation

### General

22. A Regulatory Responsibility Bill should be enacted, based on the draft proposed in the recent report of the Regulatory Responsibility Taskforce.
23. Property rights should be added to the list of rights specified in the Bill of Rights Act.
24. Substantially improving the quality of regulatory impact analysis being undertaken before legislation is introduced and/or government regulatory powers are extended should be treated as a matter of high priority by Ministers and central government agencies. Such analysis should be an integral part of all policy development and review processes, to ensure that the full costs and benefits, to all sectors, are appropriately and rigorously factored into government decision-making.
25. An independent Productivity Commission should be established as a centre of microeconomic and regulatory analytical expertise. The Commission should be authorised (and resourced) to undertake reviews of matters referred to it by Ministers, and of issues it identifies as requiring further in-depth analysis and research.

### Specific

26. A high quality independent taskforce should be constituted as a matter of urgency to review resource management law from first principles, including identifying the policy goals that should be served by such legislation and assessing the best ways of achieving those goals.
27. When determining the zoning of land for residential purposes, local authorities should be required by statute to take explicit account of any differences between the price of residential-zoned undeveloped land and the price of other undeveloped land in similar areas. These differences should be reported on by local authorities each year, with a strong presumption that scarcity of zoned land, as reflected primarily in price differences, should prompt action to increase the supply of residential land.
28. A system of tradable water rights should be established urgently.
29. Labour market:
  - a. Labour law should be amended to strengthen the freedom of negotiation between workers and their employers, including, for example, streamlining provisions governing dismissal of workers, and putting less emphasis on procedural matters.
  - b. Statutory provisions allowing enforceable mutually-agreed probationary periods for new employees should be extended, from the current maximum of 90 days for those working for small firms to a maximum of 12 months for employees of firms of any size.

- c. For employees earning in excess of \$100,000 per annum, employment relations should be governed by the standard provisions of contract law rather than by the Employment Relations Act.
  - d. The youth minimum wage should be reinstated as a matter of urgency, and minimum wage rates should be reduced to the same ratio to average wages that prevailed in 1999.
30. Immediate notice should be given that from 1 January 2011 all remaining tariffs will be removed.
  31. Foreign investment restrictions should be further reviewed, starting with a strong predisposition that a much more liberal regime should be introduced.
  32. Emissions trading legislation and any future emissions reduction targets the Government adopts should be independently monitored and periodically reviewed. Such reviews should focus on monitoring the economic impact of any carbon abatement goals, and the impact of chosen abatement regimes (here and abroad) on prospects for achieving the 2025 goal.
  33. A review of the Commerce Act should be undertaken, with a focus on restoring the primacy of economic efficiency considerations and long-term consumer interests in the design and conduct of competition policy.
  34. The Government should strongly encourage the transformation of Fonterra into a conventional company structure with fully-traded outside capital, using any appropriate instruments at its disposal.
  35. Zespri's monopoly on the export of kiwifruit to markets outside Australia should be removed.

## Appendix 2: List of submissions received by the Taskforce in 2010

The following individuals and organisation made submissions to the Taskforce.<sup>82</sup>

Warren R Lewis
New Zealand Business Roundtable
Local Government Forum
Paul Callister
Weshah Razzak
Peter Maire
New Zealand Venture Investment Fund limited
Adrian Dixon
John Reynolds
Road Transport Forum
Barrie Saunders
New Zealand Institute
Wyatt Creech
New Zealand Vice-Chancellors' Committee
New Zealand Seafood Industry Council
NZ Manufacturers and Exporters Association
Kerridge & Partners
Ralph Norris
New Zealand Council of Trade Unions
Federated Farmers
Young Enterprise Trust
David Greig, ACIL Tasman
Ministry of Research Science and Technology
Department of Labour
New Zealand Nurses Organisation

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<sup>82</sup> This list includes all submissions received between January and November 2010.

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