HOLDING ON AND LETTING GO
Opportunities and challenges for New Zealand’s economic performance

A perspective from the Treasury
2014
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The Persistent URL for this publication is: http://purl.oclc.org/nzt/big-1691

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The art of walking upright here
Is the art of using both feet.
One is for holding on.
One is for letting go.

*From ‘The trick of standing upright here’ by Glenn Colquhoun*
Introduction

This paper sets out what the Treasury sees as the medium-term opportunities and challenges for New Zealand’s economic performance. It explores issues that the Treasury sees as key to a more prosperous, sustainable and inclusive New Zealand that is confident, connected and innovative.

After publishing several papers over the past decade on what matters for economic performance, we decided to re-examine and refresh our views. The world has changed significantly in recent years: we have had lessons to learn from the global financial crisis; the centre of global economic activity is moving towards the Asia-Pacific region; and the current upturn in GDP growth brings with it the chance to build the basis of a rock solid economy for the future.

The work here is an important part of our role to apply evidence, analysis and strategic perspectives to matters of economic performance, in a way that informs public debate on important issues relevant to higher living standards. It contains no policy prescriptions, and no criticism of previous or current policies is intended or should be inferred. Instead, we have set out to highlight our thinking about what matters for future economic performance, in order to stimulate debate and further analysis as we develop our advice to government. In particular, the work we have done so far will support our engagement with colleagues in other agencies and strengthen our collective capability to support government in setting priorities.

In preparing this paper, the words from Glenn Colquhoun’s poem ‘The trick of standing upright here’ resonated with us. We feel that they capture the idea of making progress towards a better future by retaining the things New Zealanders value and that are our strengths, while at the same time stepping forward towards new ideas, insights and solutions. For example, New Zealand should be ‘holding on’ to the principle that prosperity should be inclusive and sustainable, to our excellence in agriculture, and to our generally high quality state services. At the same time, we need to be ‘letting go’ through improving our international connections, continuing to move economic activity more towards investment and export growth, and better enabling all New Zealanders to reach their potential and play a meaningful role in the economy and society.

The content of this paper is the result of the Treasury also embracing ‘the art of using both feet’. It is grounded in our traditional strengths of credible analysis and well-researched evidence – the one foot holding on. While this paper reflects the Treasury’s judgements, it has also been made much richer by the extensive dialogue we have had with a variety of New Zealanders around the country – the one foot letting go. We held a series of workshops with people from businesses, iwi, non-government organisations and social services. We also established a cross-government advisory panel; shared our thinking more widely across government agencies; conducted seminars with guest speakers representing a variety of viewpoints; met with stakeholders in regional centres all across New Zealand to hear what is important to them; and engaged with several other respected thinkers from outside the Treasury.

I’d like to thank everyone who contributed for the generosity with which they shared their views, experiences and expertise. We have reflected much of what we have heard in this paper. It’s important to note too that the work presented here is an iterative process. Our perspectives will continue to evolve as we maintain ongoing dialogue with others, national and international circumstances change, new issues emerge, and fresh evidence and data come to light.
We can look to New Zealand’s future with a lot of optimism. While we live in an increasingly volatile and changing world, there are many opportunities for an innovative and adaptable country and people if we take the initiative to grasp them. I believe New Zealand is well placed to take on the challenges ahead of us.

Gabriel Makhlouf, Secretary to the Treasury
Summary

This paper explores the medium-term opportunities and challenges for New Zealand’s economic performance. The Treasury is New Zealand’s economic and finance ministry and, as the government’s lead economic and fiscal advisor, we have a stewardship role. The Treasury’s role is not just to advise the government of the day – but also to look beyond short-term issues to how to lift New Zealand’s medium-term economic performance and living standards.

The world is changing in a number of ways that we as policy advisors need to be thinking about. New Zealand’s international environment is transforming, especially by the increasing importance of China and India, as well as a shift in global weight towards emerging economies. Combined with the accelerating exchange of people, capital, trade and ideas in the global economy, this transformation brings both opportunities and challenges for New Zealand.

This paper discusses some of the big issues the Treasury is thinking hard about to help New Zealand grasp those opportunities. The Treasury does not have all the answers but we want to be part of the discussion. As well as the Treasury’s own analysis and review of the evidence, this paper reflects what we have learnt from engaging with a range of New Zealanders on what matters for economic performance and living standards.

Our engagement reinforced to us that New Zealanders care about more than just economic growth. While people care about incomes, they also care about education, jobs, the natural and physical environment, health and safety and personal and social wellbeing. People treasure our unique way of life and enduring kiwi values like a ‘fair go’. This paper is focused on New Zealand’s economic performance, so it does not address everything that matters to New Zealanders’ living standards. However, it does take a broad approach to economic performance. We want New Zealand to be prosperous, but we also want that prosperity to be sustainable and inclusive. It is important that New Zealand’s economy supports higher living standards for this and future generations, and that all New Zealanders can play their role in the economy and society.

Many New Zealanders have a good quality of life. A good proportion of New Zealanders have jobs and a strong sense of community. The education system works well for most and we generally have high life expectancy and good health. This provides a good platform from which to further lift our performance and to meet the challenges and opportunities of the future.

But New Zealand does face challenges in each of the three performance dimensions of prosperity, sustainability and inclusiveness. This paper identifies what the Treasury sees as the key strategic challenge in each of these three dimensions.

The key strategic challenge to increasing our prosperity is connecting internationally. The far-reaching economic reforms of the mid-to-late 1980s and the early 1990s have provided a strong foundation for economic growth. While New Zealand has significantly improved its economic performance since the early 1990s, income per person still lags behind the better performing advanced economies. Narrowing this gap will depend on boosting productivity and international connections – which are intertwined. A productive economy attracts international flows of goods and services, people, capital and ideas. And international connections boost productivity by bringing scale, competition, investment and ideas.
New Zealand's small size and distance make it difficult to connect internationally but imperative that we do. Our geographical challenges do not mean New Zealanders should lower their aspirations. Instead it means a greater focus on how New Zealand plays its role in a globalising world – and how to take advantage of the opportunities from an emerging Asia, Latin America and Africa. We think New Zealand can exploit some of the benefits of its size – being small, agile and innovative – and take this to the larger economies of the world.

In terms of sustainability, we see the key strategic challenge as moving towards the export and investment-led economic growth that would underpin living standards in the long-term. Continued improvements in the management of New Zealand's natural resources are important for the sustainability of our economic performance. While there is more to be done, the most pressing challenge to the sustainability of New Zealand's economic performance comes from the composition of economic growth.

While New Zealand's short-term economic outlook is very good, it is dominated by domestic spending, such as consumer spending and housing investment. This type of demand seems unlikely to underpin strong economic growth in the medium-term. By pushing up interest and exchange rates, there is a risk of squeezing out the investment and export growth that New Zealand needs to support higher living standards over the long-term. There are short-term challenges in managing pressures from the Canterbury rebuild and Auckland housing market in the current upturn. Managing this transition will help support the bigger prize that will come from easing some of the underlying supply constraints on the capacity of the economy in the medium-term and enable a vibrant and expanding export sector.

Lastly, but definitely not least, the key strategic challenge to inclusive economic performance is enabling all New Zealanders to participate in the economy and society. The state sector has an important role to play in helping all New Zealanders to develop the skills and capability to find their role in the economy and society, while also providing the wider public services that support participation and which really matter for living standards.

The state sector has a particular role in helping the most disadvantaged overcome barriers to economic and social participation. The distribution of income at any point in time does matter, and a well-designed safety net is the most effective way of protecting the most disadvantaged New Zealanders. However, the more long-lasting impacts on living standards come from employment and educational opportunity, as well as access to quality health and other social services. Given that people often face multiple and interconnected barriers to economic and social participation, the state sector is learning to work more innovatively and collaboratively across agency boundaries.

This paper explores these three strategic challenges in building a prosperous, sustainable and inclusive economy. While we have framed them as challenges, the flip side of any challenge is an opportunity. By focusing on these issues, we can hold on to what we value about living in New Zealand, while stepping into a brighter future in a changing world.
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1 Setting the scene

Asia’s continued meteoric rise and major technological change are among the defining features of the early 21st century. We have already seen major transformation in the types of work we do, the products we produce, the countries we trade with and more generally our role in the global economy.¹ The changing international environment creates significant opportunities and challenges for New Zealand and for our state sector in developing economic and social policy and in delivering services to New Zealanders. In particular, while most New Zealanders continue to have good economic and social wellbeing, some parts of New Zealand society are under economic and social pressure and are not meeting their potential.

As an economic and finance ministry, a key part of the Treasury’s role is to look ahead to the future opportunities and challenges for New Zealand’s economic performance. As well as providing ongoing advice to the government of the day, we have a stewardship role to think about how our economy and state sector system need to evolve in response to a changing world. The analysis and engagement supporting the Statement on New Zealand’s Long-Term Fiscal Position, and the Investment Statement are examples of the Treasury responding to this changing world. Drawing on the latest thinking and empirical evidence, this paper explores some of our recent thinking about what New Zealand will need to focus on for a prosperous, sustainable and inclusive future.

¹ For further discussion see James (2014).
In looking at New Zealand’s future opportunities and challenges the Treasury thinks about a broad range of material and non-material factors that impact on wellbeing. We have developed our Living Standards Framework to help us take these wider impacts into account when we assess policies. Our framework identifies five dimensions to living standards: economic growth, sustainability for the future, increasing equity, social infrastructure and managing risks. While there are many important factors that matter for wellbeing, this paper is focused particularly on New Zealand’s economic performance and applies the Living Standards Framework to our thinking in this area. The diagram above illustrates what we see as three overlapping and interrelated dimensions to economic performance: prosperity (improving economic and social outcomes) sustainability (prosperity for today and tomorrow, including resilience to risk) and inclusiveness (prosperity that is shared broadly, with high levels of economic and social participation).

Holding on to what New Zealanders value

The Treasury’s discussions with New Zealanders have reinforced our understanding that people care about more than just economic growth. People care about incomes – but they also care about education, jobs for them and their kids, the natural and physical environment, health and safety and personal and social wellbeing. While we have always recognised these things in our advice to governments, we are now more systemically applying our new living standards framework to how we think about economic performance.

We want economic growth to bring New Zealand greater prosperity, but it is important to ensure that prosperity is inclusive and sustainable. This means that economic performance cannot be measured only by economic growth or changes in incomes. Instead the Treasury sees three dimensions to economic performance:

- **Prosperity.** Economic performance is about higher incomes and jobs for New Zealanders.

  Incomes matter as they give New Zealanders the opportunities to lead the lives they want to. Higher incomes are linked to better outcomes across a range of social, environmental and economic measures that matter for living standards.

  Economic growth also means jobs – and having a job matters to people over and above the income it brings (see, for example, Layard, 2005).

- **Sustainability.** Economic performance is not just about prosperity today; it is also about prosperity tomorrow – and the future prosperity of our children.

  Sustainable growth depends upon good management of our environment and natural resources, not only as a valuable asset but also as a treasured part of our culture heritage for both Pākehā and Māori. We have a responsibility under the Treaty of Waitangi to recognise that Māori draw identity and whakapapa from the environment, and exercise kaitiaki responsibilities over land and resources.

  Sustainability also depends on good management of our other resources or assets, including our financial, produced, human and social capital. Sustainability is also about the resilience of the New Zealand economy to emerging trends and unexpected events. As we cannot predict the future, a stable macro economy and flexible markets will support businesses and people to respond to a changing world.

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2 For more on the Living Standards Framework see: www.treasury.govt.nz/abouttreasury/higherlivingstandards
Economic performance is about all New Zealanders having a role to play in the economy and society. Economic and social participation matters for its own sake. But sustainable economic performance also depends on getting the most out of our most valuable resource: our people. We cannot take it for granted that economic growth will translate into higher living standards for all New Zealanders. The state sector plays a critical role in making New Zealand a great place to live for everyone, and ensuring everyone has the opportunity to reach their potential.

New Zealand is a good place to live for many New Zealanders. Measures of quality of life, which combine measures across a range of economic, social and environmental indicators, typically rank New Zealand well compared with other higher income countries. New Zealand does particularly well on measures of health, civic engagement, education, environment and life satisfaction (OECD, 2013a).

However, these overall measures mask a lot of differences within these categories and across different groups of New Zealanders. The following sections provide a brief assessment of New Zealand’s performance in each of the three dimensions of economic performance: prosperity, sustainability and inclusiveness.

Prosperity

While New Zealand is not the richest country in the world, our incomes do sit among the advanced countries. These incomes help to support a high quality of life, including access to the quality state services that New Zealanders value.

However, while New Zealand is not at the bottom, our income per person is still lower than in the better performing Organisation for Economic Co-operation and Development (OECD) countries. New Zealand incomes, as measured by gross domestic product (GDP) per capita, began to slip from among the highest in the world around the mid-1950s (Easton, 1997). New Zealand’s ranking fell quite dramatically in the latter half of the 1970s and in the 1980s (see Figure 1).

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4 We typically compare our economic performance to countries that are members of the OECD. Most OECD members are high-income economies and are regarded as developed countries.
Figure 1: GDP per capita in OECD countries
New Zealand, Australia and United States as a percent of the OECD average

Note: US dollar and purchasing power parities (PPPs).
Source: OECD

Economic performance has improved since the early 1990s and New Zealand’s per capita GDP growth has subsequently broadly kept pace with other advanced economies. However, this improvement has been insufficient to close the sizable gap that had opened up with other developed economies. New Zealand’s GDP per capita remains around 15% below the OECD average. This is despite having relatively good economic policies from an international perspective (Barnes, Bouis, Briard, Dougherty and Mehmet, 2011).

While we can increase our incomes through increases in output per person, we can also increase them by getting higher prices on world markets for what is produced. Our terms of trade measure the price of our exports relative to the price we pay for what we import. Improvements in our terms of trade have made a positive contribution to New Zealand’s income per capita since the early 2000s (Conway and Meehan, 2013).

However, without ongoing increases in the terms of trade, which are unlikely, sustained growth in income per capita will require either increases in the hours we work or in how much each worker produces per hour (labour productivity). New Zealanders already work more hours per capita than the OECD average, reflecting high rates of labour market participation, relatively low unemployment, and annual average hours worked that are around the OECD average. Overall, output per hour worked remains the overriding driver of New Zealand’s lower GDP per capita (see Figure 2) and sustained improvements in our incomes depend upon increasing labour productivity. Box 1 provides further analysis of New Zealand’s productivity performance.

Grimes (2006) estimates that changes in our terms of trade explain around half of the variance in our annual GDP growth over 45 years.
Indeed labour productivity performance has continued to drift downward relative to other advanced countries (see Figure 2). However, there is debate as to what extent this reflects the substitution of labour for capital\(^6\) (Parham and Roberts, 2004) or the pulling into the labour force of workers with lower productivity (Maré and Hyslop, 2006). Therefore, we cannot assume that this declining trend will continue into the future (see Section 3 for more on the challenges in understanding the apparent slowdown in productivity since the early 2000s).

**Figure 2: Breaking down GDP per capita**

<table>
<thead>
<tr>
<th>Year</th>
<th>Percent gap with OECD average</th>
<th>Hours worked per capita</th>
<th>GDP per capita</th>
<th>GDP per hour worked (labour productivity)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970</td>
<td>-40</td>
<td>-30</td>
<td>-20</td>
<td>-10</td>
</tr>
<tr>
<td>1974</td>
<td>-30</td>
<td>-20</td>
<td>-10</td>
<td>0</td>
</tr>
<tr>
<td>1978</td>
<td>-20</td>
<td>-10</td>
<td>0</td>
<td>10</td>
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<tr>
<td>1982</td>
<td>-10</td>
<td>0</td>
<td>10</td>
<td>20</td>
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<tr>
<td>1986</td>
<td>0</td>
<td>10</td>
<td>20</td>
<td>30</td>
</tr>
<tr>
<td>1990</td>
<td>10</td>
<td>20</td>
<td>30</td>
<td>40</td>
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<tr>
<td>1994</td>
<td>20</td>
<td>30</td>
<td>40</td>
<td>50</td>
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<tr>
<td>1998</td>
<td>30</td>
<td>40</td>
<td>50</td>
<td>60</td>
</tr>
<tr>
<td>2002</td>
<td>40</td>
<td>50</td>
<td>60</td>
<td>70</td>
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<tr>
<td>2006</td>
<td>50</td>
<td>60</td>
<td>70</td>
<td>80</td>
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<tr>
<td>2010</td>
<td>60</td>
<td>70</td>
<td>80</td>
<td>90</td>
</tr>
</tbody>
</table>

Source: Conway and Meehan (2013), OECD

6 In particular, high unemployment after the 1990s recession, among other factors, may have moderated wage costs relative to the cost of capital. This may have encouraged businesses to use more labour relative to capital and, therefore, reduced the capital available per worker and measured labour productivity.
Box 1: Drilling down into our productivity performance

We can gain a richer understanding of our labour productivity performance by drilling down below the aggregate numbers. For example, one of the reasons for differences in labour productivity across countries is the amount of capital (assets such as building and machinery) which people have to work with. Our labour productivity is two-thirds of Australia’s – our lower levels of capital per worker account for almost 40% of that gap. However, the majority of the gap is down to the quality of our labour and capital and how well we use them (what economists call multi-factor productivity). In addition, there is a chicken-and-egg relationship between capital and productivity: our lower capital levels may hinder labour productivity but our lower productivity may also discourage investment in capital.

Another angle is to look at how the productivity of our industries stacks up. Do we have lower labour productivity than Australia because we happen to be in industries that inherently have lower levels of capital and, therefore, lower levels of labour productivity? Or is it because we are less productive than our Aussie counterparts in each industry? This type of comparison is challenging and the analysis is limited to what are still quite broad industries. In addition, a given industry in one country might have different linkages with other industries. While New Zealand’s industry structure explains around 30% of the labour productivity gap with Australia, most of our economic gap is actually because Australia has a productivity lead across a wide range of industries (see Figure 3). We have to be careful about drawing specific implications from this type of analysis. As these industry classifications are broad, differences in productivity may reflect differences in composition. For example, forestry plays a relatively bigger role in New Zealand’s agriculture, forestry and fishing industry than in Australia, as does hydro generation in the electricity, gas and water industry.

However, it seems unlikely that the majority of our labour productivity difference with Australia is about composition.

If we switch from looking at productivity levels to recent productivity growth, we also find that most of our recent productivity growth performance can be explained by low productivity growth within sectors rather than by the growth of low productivity sectors. However, there has been some drag on productivity from relatively strong employment growth in some low productivity sectors (for example, Conway and Meehan, 2013).

We can drill down even deeper to look at firm-level productivity (New Zealand Productivity Commission, 2014a). For example, New Zealand, like many countries, has a wide dispersion in the level of productivity across firms within the same industry. The productivity of a firm in the 90th percentile (top 10%) can be several multiples of a firm in the 10th percentile (bottom 10%). However, there is uncertainty as to the role of competition and other factors (for example, entry, growth, and firm exit) in driving this dispersion and further research is underway (see Nolan, 2014).
Our labour productivity matters because over the long term, growth in incomes and, therefore, the goods and services that New Zealanders can consume, depends on it. There are a range of explanations for New Zealand’s poor productivity performance and the underlying causes are contested. While there is a wide range of potential explanations, three main themes emerge from the debate. Each theme emphasises different features of the New Zealand economy, which distinguishes it from other advanced economies. One set of arguments emphasises a weakening in the pace of economic policy reform over time and the role of the state sector in restraining economic performance (for example, The 2025 Taskforce, 2009). Another set focuses on the links between New Zealand’s lower productivity, high real interest rates and exchange rate, low level of saving and consequential lower level of investment and exports (for example, Reddell, 2013 and Brook, 2013a). And a third line of argument focuses on the constraints to New Zealand’s economic performance from our small population and distance from international markets (for example, McCann, 2009). 

There are merits in all three arguments and they are not mutually exclusive – but inter-connected. For example, New Zealand’s small size and remoteness mixed with a persistently high exchange rate and real interest rates has been an unhealthy combination. These factors have hindered our ability to connect internationally, while our small size makes connecting internationally critical.

New Zealand has a mixed scorecard on its international connections. While New Zealand has relatively strong flows of people and inward capital, we have weak outward direct investment and low exports and imports as a share of GDP for a small economy. New Zealand’s low levels of business research and development (R&D) may also be a sign that our firms face challenges in funding and leveraging R&D into world-wide returns. These challenges mean that our policy settings need to be cutting edge and focused on international connections if we are to mitigate our geographical disadvantages.

The international environment matters more than ever as recent decades have seen greater global flows of people, capital, trade and ideas. This second phase of globalisation (the first was in the late 19th and early 20th centuries) has been underpinned by substantial changes in communications, transport and organisational technology, as well as deliberate policy decisions. The result is more inter-dependence in countries’ economic prospects, greater worldwide competition, and shifts in trade patterns. While continued global integration seems likely, it is not guaranteed. The contagion of the global financial crisis, for example, was a reminder of the risks of greater integration if economies are not well managed to ensure some resilience to unexpected events (Di Maio, 2013).

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7 Procter (2011) also considers the role of saving and the exchange rate, with a particular emphasis on structural change and the role of exports. For previous Treasury analysis on New Zealand’s productivity performance, see: www.treasury.govt.nz/publications/research-policy/tp/economicgrowth and www.treasury.govt.nz/publications/research-policy/tp

For further analysis see the papers from the 2013 Symposium: Unpicking New Zealand’s Productivity Paradox: www.productivity.govt.nz/event/symposium-unpicking-new-zealand%E2%80%99s-productivity-paradox
In particular, the economic growth, and increasingly outward focus, of the Asia-Pacific region creates unique opportunities for New Zealand. The growth of emerging markets is one part of the wider story of increased economic integration, with emerging market growth supporting world economic growth. Emerging economy growth reflects the opportunity that these economies have to ‘catch-up’ by adopting advanced country technologies and moving into more productive industries. The speed and scale of China’s convergence stands out in particular (see Figure 4). While the very rapid growth witnessed during the past decade is unlikely to be sustained, the scope for ‘catch-up’ is still significant. However, there are risks to this outlook and the process is unlikely to be smooth – emerging economies will not be immune from economic cycles (Di Maio, 2013).

Figure 4: Projected changes in the world economy over time
Percent share of world economy

Note: Real GDP at 2005 purchasing power parities (PPPs).
Source: OECD
Sustainable economic performance

**New Zealand is wealthy in natural resources.** New Zealand has plentiful, clean water; clean air; fertile soil and a climate well-suited to humans, trees, livestock, and agriculture; long coastlines and significant aquaculture resources; significant mineral and petroleum reserves; and extraordinary bio-diversity. The World Bank estimates that New Zealand ranks eighth out of 120 countries and second out of the 34 OECD countries in natural capital per capita; we are outranked only by petroleum-exporting countries (World Bank, 2011).

**New Zealand’s rich resource base creates opportunities as world demand is growing.** The unprecedented speed and strength of emerging market economic growth is increasing pressure on world natural resources and commodity prices. Emerging market demand for commodities is likely to continue to increase as the consumption of meat, milk and fruit rises with incomes. These pressures are likely to sustain at least some of the substantial recent increases in New Zealand’s commodity prices which have been reflected in our improving terms of trade (see Figure 5). However, there are risks of a reversal in commodity prices if world growth prospects weaken or if other countries significantly improve their agricultural productivity and output.

**As well as increasing scarcity of natural resources, there is building evidence of environmental pressures and a strengthening consensus about the need to take measures to slow climate change.** Although there are major uncertainties, resource and environmental constraints will likely moderate growth prospects (see Di Maio, 2013). As an island nation and with an economy reliant on primary production, climate change presents risks for New Zealand. Although we may not be as severely affected by climate change as some countries, impacts may include an increased frequency and intensity of natural hazards and extreme events — although these are nearly impossible to predict with any precision. Any further action by New Zealand in this area will need to be carefully calibrated to ensure that our long-term living standards are protected (see The Treasury, 2013a).

**Figure 5: New Zealand’s terms of trade**

Price of New Zealand’s exports relative to the price of imports

New Zealand has seen a significant improvement in the price of its exports relative to how much it pays for its imports over the past 10 years or so.

Source: Statistics New Zealand
Increasing global demand for natural resource based commodities increases the importance of good management. New Zealand is beginning to deplete some important natural resources. Limits to the supply of renewable inputs, such as freshwater and land, means that the productivity with which we use these resources will become increasingly important. As natural resources play a particularly important role in the Māori economy, there is particular potential from improving productivity in Māori resource-based industries (see Box 2). The way that resources are managed and allocated, and how we decide as communities and a country to use these resources, will become increasingly important for living standards (The Treasury, 2013a).

The sustainability of New Zealand’s economic performance also depends on good management of other types of capital. We look more closely at human and social capital in the next sub-section on inclusiveness. However, there are sustainability issues around the financial and physical or produced capital that underpins long-term economic performance. In particular, while New Zealand’s low inflation and public debt make an important contribution to sustainable economic performance, private sector balance sheets look less robust.

New Zealand has one of the largest net negative international investment positions (foreign assets less liabilities) in the OECD. Household debt levels and domestic credit rose sharply in the years leading up to 2008, although they have fallen somewhat in recent years. While there are finally signs of recovery in the international economy, there remains some risk of an extended period of weak global economic growth. New Zealand’s high level of private external debt, combined with our small size and exposure to commodity prices, make us vulnerable to this type of international volatility; and to changes in market perceptions of the risks associated with New Zealand. Several decades of low private saving has also been associated with elevated domestic demand. This has put upward pressure on interest and exchange rates, perhaps undermining more sustainable export and investment led growth.
Box 2: Māori Economic Development

Māori are playing an increasingly important role in New Zealand’s economy and society and the Treasury is committed to building its understanding of this role. The Māori economy contributes around 5.9% of total New Zealand GDP (BERL Economics, 2011), and we expect this to increase over the coming years. Māori will also represent an increasing share of the labour force over the next 20 years (Bascand, 2012). Increased Māori education and skills will be important to leverage off these assets and raise broader Māori living standards.

Māori enterprise is heavily represented in resource based industries, including significant holdings in fishing, forestry, dairy production, kiwifruit, and sheep and beef. Around 5% of total agriculture, forestry and fishing assets are held by Māori entities (see Figure 6).

Agri-business provides significant economic opportunity. There is about 1.5 million hectares of Māori freehold land. About 40% of this is estimated to be under-performing and 40% is estimated to be un-utilised (Ministry of Agriculture and Fisheries, 2011).

Māori entities are increasingly looking for opportunities to better utilise these assets and build connections with export markets, while also supporting the cultural and environmental objectives of Māori communities. While this provides a significant opportunity, there are also a number of issues including joint ownership of Māori land, the cultural commitment to ensure the retention of land for future generations, and uncertainty over property rights.

Māori entities are playing an increasingly important role across specific regions of the country and are also increasingly diversifying their assets into non-land based industries. Examples of diversification include property, tourism and cultural services and manufacturing (see Figure 6).

Figure 6: Māori assets by sector

![Figure 6: Māori assets by sector](source: BERL Economics (2011))
Inclusive economic performance

**New Zealand generally does well in supporting economic and social participation.** New Zealand has high rates of employment and its education and health systems work well for most, with high rates of participation in tertiary education. The recorded crime rate has been falling since the early 1990s and we are now starting to see a fall in the numbers of people entering the criminal justice system (The Treasury, 2013b).

**New Zealand’s high-quality state services underpin this high performance.** New Zealand’s state services have an enviable reputation internationally, and are generally well-regarded domestically. New Zealand consistently ranks at or near the top in international and domestic surveys that measure public trust in government. For the public services New Zealanders value most (health, education, safe communities, social safety net) recent Kiwis Count survey results show solid satisfaction scores, comparable with those achieved in Canada after a decade of service improvement effort in that country. Through Kiwis Count, New Zealanders have told us that satisfaction with public services has steadily increased over the past six years from a service quality score of 68 in 2007 to 73 in 2013 (State Services Commission, 2013).

**However, performance has been less impressive in gaining traction on some of the big outcomes that matter.** In particular, some New Zealanders experience a range of barriers to economic and social participation. For example:

- **Some groups are still under-represented in employment.** The Māori rate of unemployment is just over twice the national rate. And New Zealand is particularly unusual in terms of the low employment rates for solo mothers.

- **Despite our education system working well for many, New Zealand has a wide gap between the highest and lowest performers,** and too many Māori, Pacific and disadvantaged children fail to reach their full educational potential.

- **Some groups of New Zealanders have much worse health outcomes than others** – such as the high rates of diabetes among Māori and Pacific children.

**Low income is most likely to lead to poor outcomes if it is persistent and associated with material deprivation** (The Treasury, 2013c). This means that although more than 55% of New Zealand children spend some time in a household receiving a benefit before their 14th birthday, the group most at risk of poor long-term outcomes is the 6% who are spending their whole childhood in benefit-dependent households (see Figure 7).

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8 For example New Zealand ranks the best in the world in the Transparency International Corruptions Perception Index 2013 (www.transparency.org/cpi2013/results) and in the International Budget Partnership Open Budget Survey 2012 (http://internationalbudget.org/what-we-do/open-budget-survey).
New Zealand’s state services will also face a number of challenges in the future. New Zealand, like much of the world, is in the midst of an unprecedented demographic transition (International Monetary Fund, 2004). The world population is projected to stabilise by the middle of this century, with more elderly and fewer young. Increasing expectations for more personalised state services and an ageing population will put upward pressure on public expenditures (The Treasury, 2013d).

In New Zealand not only will the labour force be ageing, its ethnic composition will be changing. As well as increasing their share of the New Zealand population, the Māori, Pacific, and Asian ethnic groups have younger age structures and will represent an increasing share of young entrants into the labour force, over the next 20 years and beyond (Bascand, 2012). This reinforces the importance of improving the employment and education outcomes for Māori and Pacific people.
Stepping up to our strategic challenges

This section has identified three dimensions to New Zealand’s economic performance: prosperity, sustainability and inclusiveness. It has explored New Zealand’s performance in each of these dimensions in light of key emerging domestic and international trends.

From this analysis, the Treasury has identified what we see as the priority strategic challenge for each of our three dimensions of economic performance. In order to hold on to what we value about living in New Zealand, while stepping into a brighter future, New Zealand needs to:

- **Connect internationally.** Lifting New Zealand’s international connections and productivity performance is intertwined. Improving international connections can enhance productivity in a number of ways, for example providing scale, competition, investment, and ideas. However, strengthening international connections depends on keeping a focus on improving productivity across the whole economy (see Section 2).

- **Move towards investment and exports.** The good management of all of our capital stocks will be important for sustainable economic performance, including our produced, natural, human and social capital. In particular, New Zealand will need to continue to improve our natural resource management. However, we think the biggest issue for the sustainability of New Zealand’s economic performance is around our stocks of financial and produced capital. New Zealand needs to reduce its foreign debt levels and shift the balance of economic activity towards the investment and export growth needed to support higher living standards over the long-term (see Section 3).

- **Help all New Zealanders play their part.** The state sector plays a key role in helping all New Zealanders develop the skills and capability to find their role in the economy and society, while also providing the wider public services that matter for living standards (see Section 4).

These issues are both challenges and opportunities. By rising to these challenges, New Zealand has the opportunity to lift its medium-term economic performance and living standards. While we have identified a key strategic issue for each dimension of economic performance, these issues are inter-related – in the same way that our three dimensions of economic performance are inter-connected.

The following sections look in more depth at each of these strategic challenges.
Section 1 highlighted that the underlying causes of New Zealand’s poor productivity performance are contested and interconnected. However, whatever emphasis you place on the various explanations, a small and distant economy needs to be focused on how we connect to the rest of the world. This is intertwined with the challenge of lifting our labour productivity. International connections can boost productivity by bringing scale, competition, investment and ideas. But we need a productive economy to attract international flows of goods and services, people, capital and ideas. This section explores the first of the strategic challenges identified in the previous section: the need to strengthen New Zealand’s international connections and productivity performance.

Size and distance matters

New Zealand has an almost unique combination of a small home market and being geographically distant from international markets (see Figure 8). Some countries, such as Australia and Chile, are also far away from other countries, but they have the benefit of a larger home market, bigger cities and mining-related natural resources. Other countries are small, such as Ireland and Denmark, but have the benefit of being much closer to other large markets.
OECD studies suggest that distance to market may explain a substantial share of our economic gap with the better-performing OECD countries. For example, Boulhol, de Serres and Molnar (2008) suggest it may explain almost half of our GDP per capita gap and de Serres, Yashiro and Boulhol (2013) suggest that distance can account for around one-third of the gap in our productivity levels. In contrast, Belgium and the Netherlands get a GDP per capita boost of around 6% to 7% from their location at the heart of Europe (Boulhol, de Serres and Molnar, 2008).

The advent of cheaper transport and communication technology has not meant the death of distance. Instead evidence suggests there may be increasing productivity benefits – known as agglomeration – from the concentration of economic activity in particular locations (see, for example, McCann, 2009). This means that, as New Zealand’s international gateway and only global city, Auckland has particular importance for our international connections and productivity performance. Auckland provides transport and logistics links to the rest of the world, and has tertiary institutions, researchers, businesses and innovators linking New Zealand to global knowledge. The city is also home to a high percentage of overseas-born residents and a large number of companies (both domestic and foreign-owned) doing business internationally. While many of these features are not unique to Auckland, their role is likely to be enhanced if Auckland’s scale and density generate agglomeration benefits over time.

However, although the economic emergence of China and South East Asia has improved our economic location, we are still not that close to Asia – Auckland is not much closer to cities in Asia than cities in Europe are (Boulhol and de Serres, 2008). Furthermore, while we are geographically closer to Asia, we perhaps face greater cultural and language challenges in connecting with Asian countries than with some of our more traditional trading partners. While China provides a strong and growing market, it is also a

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9 These two studies both use a subset of OECD countries (between 20 and 21 of the 34 OECD countries).
more challenging one to do business in, ranking 96th in the World Bank’s Ease of Doing Business index. New Zealand firms engaging with China need to adjust to differences in culture, language, regulation, the role of government in business, and the importance placed on relationships. This implies operating with a different business model that goes beyond relying on contractual agreements. Firms may need to operate joint ventures with local partners and build strong relationships with key business and government officials before gaining market access.

International connections are critical

New Zealand’s size and distance from markets impacts on our economic performance through a number of channels. Most small high-productivity economies rely on international connections – the flows of people, capital, trade and ideas with other countries. The flows of people, capital, trade and ideas can support higher productivity and tend to reinforce each other. For example, inward flows of foreign direct investment bring capital, skills, ideas and the international connections that can help support exports. And overseas direct investment can bring New Zealand firms closer to their export markets, as well as helping to boost firm productivity. Previous analysis by the Treasury has looked at each of these four international flows in some detail (The Treasury, 2009).

Trade can help in overcoming the constraints of small domestic markets. Businesses which export tend to have higher productivity and the competitive pressure which imports bring pushes New Zealand firms to be more productive. Competition forces firms to innovate to improve the quality of their products or to reduce their costs. Through competition, the more productive and profitable firms grow by squeezing out their less competitive counterparts.

However, the combination of our size and distance means New Zealand is often not as well linked into these international flows as are many other small countries. For example, while we have sizeable inflows of foreign direct investment (FDI), our flows of outward direct investment (ODI) are low relative to other OECD countries, particularly in comparison with other small advanced economies. New Zealand’s stock of FDI as a proportion of GDP is 48.7% compared to an OECD average of 31%. However, our stock of ODI is 11.4% of GDP compared to an OECD average of 40.7%.

New Zealand’s trade (both exports and imports) looks low compared with other small countries (see Figure 9). In particular, the average export intensity for small advanced economies has increased from 60% of GDP to 90% between 1990 and 2012. In contrast, New Zealand’s exports to GDP have stayed relatively stable at around 30% of GDP. New Zealand’s export performance may be linked to our exchange rate, which has been at an elevated level for most of the past decade, as well as other constraints to exports (see Section 3).

Empirical evidence suggests there are economic benefits from expanding New Zealand’s trade. Results from cross-country studies vary from modest to very large in terms of the impacts from increasing trade intensity. The uncertainty in these economy-wide studies has led to a closer examination of the trade-growth relationship at the firm-level (for example, Hallak and Levinsohn, 2004 and De Loecker, 2013). Firm level studies find that New Zealand exporters do tend to have higher productivity than non-exporters (Fabling, Grimes, Sanderson and Stevens, 2008).

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At the lower end of estimates, the OECD (2013b) suggests that steadily increasing New Zealand’s trade intensity to reach 40% of GDP (for both exports and imports) would increase real GDP levels by 3% in the long run. And if by 2060 trade intensity were to rise to the levels of other similar sized OECD countries (around 60% of GDP), the level of GDP would be 10% higher.
While better performing firms ‘self-select’ into exporting, exporting also increases incentives to invest and innovate to lift productivity. A small domestic market means New Zealand firms may need to enter international markets at an earlier stage in their lifecycle and therefore incur many of the fixed costs of exporting with a smaller balance sheet. However, if firms can overcome this initial hurdle, exporting can enable them to gain scale. Entry both into exporting and new markets is associated with more rapid employment growth, drawing resources into firms with relatively higher labour productivity. In addition, the investment which accompanies market entry increases exporting firms’ capital levels, raising labour productivity or output per worker (Fabling and Sanderson, 2013).

The benefits of expanding trade are not just from higher exports; imports also play a key role in promoting competition. Competition varies significantly across industries. Based on a range of indicators, the New Zealand Productivity Commission (2014a) concludes that New Zealand’s service industries experience less intense competition than industries in the goods-producing sector. While this difference in competition intensity between services and goods-producing sectors is consistent with international experience, New Zealand’s small domestic market and remoteness may be less able to support a high number of competing firms. However, the small size of New Zealand’s domestic market also means a difficult trade-off between scale in production and competitive pressure.
Moving up the value chain

Interlinked with distance and size, New Zealand needs to foster a greater range of exports. Agriculture, food and beverages comprise a significant share of New Zealand’s exports compared to other OECD countries (see Figure 10). New Zealand also has a relatively low share of products from high and medium-high technology industries in manufacturing exports, around 15% against an OECD average of just over 50% (Ministry of Economic Development, the Treasury, Statistics New Zealand, 2011). While New Zealand’s service exports as a share of total exports are similar to other developed economies, tourism and transport account for over two-thirds of our service exports (New Zealand Productivity Commission, 2013).

![Composition of goods exports](image)

**Figure 10: Composition of goods exports**

Percent of GDP

- Agriculture, food and beverages
- Wood and paper
- Mining products and basic metals
- Manufacturing and chemicals
- Others

Source: International Trade Centre, Trade Map

New Zealand’s overall participation in global value chains (GVCs) is also low compared with OECD countries (see Box 3). Neither New Zealand’s share of exports in GDP nor its participation in GVCs changed significantly between 1995 and 2009. In contrast, many of the small countries that have significantly increased their contribution of gross exports to GDP, such as Ireland and Finland, have done so by playing a greater role in GVCs. As a result, they have seen a substantial increase in both exports and imports. In part this is because their location, together with their product mix and skill sets, has enabled them to benefit from the increased fragmentation of production processes across borders. And, in part it is a result of a deliberate strategy in those countries to strengthen international integration, including foreign and outward direct investment.

Participation in GVCs does bring risks. For example, integrated supply chains mean that the impact of international disruptions, such as the global financial crisis or the Japanese earthquake and tsunami, can reverberate around the world. These risks need, however, to be weighed against the benefits from greater international links and opportunities to reduce risks from exposure to commodity prices.
Box 3: Global value chains

Worldwide, firms are increasingly locating the various activities needed to produce final goods and services in different places, in order to exploit the gains from specialisation and economies of scale. Apple products such as the iPod, iPhone and iPad are classic examples – with design, production of component parts and assembly distributed across a number of countries.

The ‘participation index’ in Figure 11 measures the degree to which a country uses foreign inputs in its exports (backward participation) and the extent to which a country’s products are used by other countries as intermediate inputs in producing their exports (forward participation).

New Zealand’s exports use only a relatively small proportion of foreign inputs and, therefore, have high domestic value added. The foreign content of New Zealand’s gross exports is around 18%. To compare with another small country, the foreign content of Denmark’s gross exports is around 32%. And many other small countries have even higher ratios.

However, our ‘forward participation’ looks more consistent with other small countries. Around 16% of New Zealand’s gross exports are used as intermediate inputs in other countries’ exports, compared with around 19% of Danish gross exports.

Figure 11: Participation in global value chains
Foreign inputs in our exports (backward participation) and domestically produced inputs used in other countries’ exports (forward participation) as a percent of gross exports

Source: OECD Global Value Chain Indicators
New Zealand’s scope to play a greater role in GVCs is influenced by our distance and our export profile. Most economies with a high ratio of domestic value added to gross exports tend to be large economies (with a greater range of domestic suppliers) or major exporters of natural resources (with less complex supply chains). We fall into the latter category because we tend to have a relative advantage in goods and services which have less complex supply chains. For example, in terms of service exports, we have a comparative advantage in the provision of tourism, but our distance from international markets makes it hard for us to be competitive in services where the provider and user need to be in the same place (New Zealand Productivity Commission, 2013).

Primary sector exports, which also play a relatively small role in GVCs, are a key component of our total exports. Continued strong growth in this sector is vital to substantially lift exports. Rising demand for protein in emerging countries creates opportunities in terms of higher primary export volumes and further processing and innovation in primary products will add to total export revenues. New Zealand’s strength in agriculture reflects natural advantages as well the application of research and development to support productivity improvements (see Hall and Scobie, 2006).

New Zealand needs to complement growing agricultural exports with a growing share of knowledge-intensive manufacturing and services exports. We do have a growing number of successful exporters in the high and medium technology sectors, as well as knowledge-intensive services. For example, high technology manufacturing has developed from a small base in the early 1990s to have export earnings of $1.4 billion in 2012 (Ministry of Business, Innovation and Employment, 2013). We need to build further on this success. Increasing the sophistication of our exports is likely to build on existing capabilities, such as our strength in agricultural technologies, and could occur at different parts of the supply-chain.

Moving into more knowledge-intensive goods and services in all sectors will enable us to exploit opportunities for productivity growth and innovation (see Box 4), as well as making us less vulnerable to fluctuations in commodity prices. The development of new products and processes seems increasingly important if New Zealand is to prosper in a globalising world. Innovation – providing new or higher-quality products and services or improving processes – is an increasingly important way to compete with countries with low-cost workers that are providing a wider range of existing goods and services at very competitive prices. This does not necessarily mean coming up with all the new ideas ourselves – innovation is not just about ideas, it is also about applying ideas to create commercial value. The Asian ‘tigers’, such as Hong Kong, Singapore and South Korea, have been successful in taking existing knowledge, understanding it, adapting it and applying it (The Treasury, 2008).
Box 4: Innovation

Section 1 highlighted that our productivity performance is the underlying reason for our ‘economic gap’ with the better performing OECD countries. We can increase output by increasing the quantity of inputs – capital and labour. But if we really want to narrow our economic gap, our businesses need to discover and apply new ways to produce more with the same quantity of inputs – or to produce higher value outputs. That is innovation – and it is at the heart of productivity performance.

Most of the big rise in living standards in the developed world over the past two centuries has come about through technological breakthroughs based on increased knowledge. A lot of this knowledge has been scientific but it has also been practical knowledge about production processes, and organisational, social, legal and marketing knowledge. Governments typically play some role in innovation because of its special characteristics. In particular, once an idea has been developed, others could use it at no extra cost and, indeed, for some forms of knowledge it can be difficult to exclude others from using it (see the Treasury, 2008 for more analysis and references). The complexity, cost and uncertainty of engaging in innovation is also very high (New Zealand Productivity Commission, 2014a).

Cross-country studies provide support to the importance of innovation to economic performance. For example, studies suggest that higher levels of research and development (R&D) spending are linked with higher economic growth. The available evidence indicates greater benefits from private than public R&D (see, for example, the Australia Productivity Commission, 2007).

Overall, New Zealand’s performance as an innovative economy presents a mixed picture. On the positive side, New Zealand’s science base delivers research outputs at a relatively high rate compared with the OECD average. We have a relatively large number of researchers, and our R&D has been growing at a fast rate relative to most other OECD countries.

The relative weakness in New Zealand’s innovation system is in the successful commercial application of new knowledge. New Zealand’s level of spending on R&D has been growing rapidly, but the total remains low by international standards and our level of patenting is also low. Most importantly, New Zealand has particularly low levels of business R&D. Given the significant proportion of R&D performed in public institutions, the relatively low levels of collaboration between business and some public institutions is a concern.

New Zealand faces some significant challenges in raising business R&D because we have a relatively low share of R&D intensive industries, our distance from markets creates risks for innovators, and we have few of the very large firms that dominate R&D around the world. New Zealand’s small size and remoteness means we must strike a balance between enabling collaboration between firms to provide the scale often needed to support innovation versus ensuring there is sufficient competition to keep the pressure on firms to innovate.

The yin and yang of international connections and productivity

That size and distance are a major influence on New Zealand’s economic performance is hardly a new observation. People have long known that being high in isolation and low in population has not done the New Zealand economy any favours.

However, geography is not destiny. Countries can and have overcome the constraints associated with size and distance from markets. New Zealand did so for many years in the first half of the 20th century through close trading relations with the United Kingdom and through innovating and specialising in particular traded goods. While we will have to work hard to take advantage of it, our location is becoming less of a liability with the shifting of global economic power and the increasing predominance of Asia.
It is the strength of international connections, rather than geography, which is important. Taking advantage of the opportunities created by a growing Asia will depend on being more linked into global flows of trade, capital, ideas and people. Improving these connections can enhance productivity in a number of ways but attracting people, investment, trade and ideas also depends on continually improving productivity across the whole economy.

And the productivity of both the tradable and the non-tradable sector matters. New Zealand needs to lift productivity in businesses that do not export, as well as among our exporters. Because non-exporters still represent a big share of the economy, an increase in their productivity would free up resources for the export sector. Non-traded goods and services are also often an input to exports, so a more productive domestic economy can indirectly enhance exporters’ competitiveness. For example, nearly half the value of New Zealand’s gross exports can be attributed to value-added from the services sector. Therefore, improving the productivity of the services sector would lift the quality and lower the price of the intermediate inputs used by firms in other parts of the economy, including our exporters (New Zealand Productivity Commission, 2014a).

As a big part of the non-tradable sector, the productivity of the state sector is particularly important. The state sector provides goods and services that are important inputs to exporters, such as investments in education or infrastructure. And a more productive state sector creates scope to reduce the economic drag from the taxation needed to fund its expenditure. Quality state sector institutions are critical to provide the foundations for long-term economic growth. Box 5 explores some of the issues around the state sector and economic performance.

New Zealand needs to keep focused on developing and maintaining a productive environment to attract people, investment, trade and ideas. We do not want to lose sight of what is fundamental for good economic performance across all countries. The far-reaching economic reforms of the mid-to-late 1980s and the early 1990s have provided a strong foundation for economic growth. They have brought more macroeconomic stability, more micro-economic competitiveness and a more accountable state, as well as increasing labour supply and skills. In addition to supporting improved performance since the early 1990s, the economy is now more flexible and resilient. In particular, the economy has been able to respond to declines in employment in some industries with growth in employment in others. As a consequence, employment increased and the unemployment rate fell until the onset of the financial crisis.

We also need to be looking at all policies through an international lens. While attracting businesses and people depends on continually improving productivity across the whole economy, becoming more globally connected can boost New Zealand’s productivity. The government plays a role in establishing international connections through formal diplomatic relations, multilateral agreements or bilateral trade, double taxation and air services agreements. But policy making can also build stronger international connections by applying an international lens to domestic settings to ensure they are outwardly focused and support internationalisation by firms. For example, how can government and business work together to enhance international connections? Could greater harmonisation of our regulatory settings with other countries help in connecting internationally? How sustainable is our tax system as capital becomes more internationally mobile? And how might an international perspective change how we think about education policy?

Therefore, the challenge of lifting New Zealand’s productivity performance is interlinked with the challenge of boosting our international connections, including lifting the share of international trade in the economy. The next section turns to another, perhaps more immediate, challenge to making this shift: the likely pressures from domestic demand over the next several years.
Box 5: Economic performance and the state sector

New Zealand’s state sector has a good reputation internationally, and is generally well-regarded domestically. But it needs to be at the leading edge if we are to overcome our geographical disadvantages and tackle our persistent social challenges.

The state sector impacts on economic performance and living standards through three main types of levers or interventions:

1. **Government expenditure and revenue.** Central and local government spending add up to more than 40% of GDP. This spending funds a range of services and transfers that make an important contribution to economic performance and living standards. But New Zealanders must also ultimately pay for this spending through their taxes, which can discourage people from working, saving and investing. Therefore, it is important that public services are provided as effectively and efficiently as possible and that revenue is raised in the least damaging way (The Treasury, 2011). It will be important to maintain New Zealand’s efficient broad base and low rate tax system as global competition for labour and capital intensifies, while maintaining its integrity and fairness.

   Over the medium to long-term, an ageing population will place increasing cost pressure on public expenditure and tend to shift expenditure away from areas that are typically seen as good for economic performance (for example, away from education and towards superannuation). There will be a number of choices around the mix and level of taxation and spending to meet the Government’s objective to reduce net debt to 20% of GDP by 2020 and to manage expenditure pressures beyond 2020 (The Treasury, 2013d).

2. **Ownership: the government’s balance sheet.** With over $240 billion in assets, $170 billion in liabilities and $70 billion in equity, the Crown’s balance sheet is large – assets alone are worth more than a full year of total output from the economy (The Treasury, 2014).

   Crown assets play a critical role in delivering public services. Therefore, it is important that public money is invested well and assets are managed effectively and efficiently. There are concerns about the age, utilisation and maintenance of the Crown’s social assets. And there is scope to improve information and processes to support better management of the Crown assets (The Treasury, 2014).

   The Crown’s balance sheet is also important for New Zealand’s resilience to risk. Having low levels of public debt was crucial to New Zealand’s ability to support New Zealanders during the financial crisis and deal with the costs of the Canterbury earthquake. Delivering the Government’s fiscal strategy to reduce net public debt to 20% of GDP by 2020 will help rebuild our buffers against future crises, as well as position New Zealand to support an ageing population (see The Treasury, 2013d).

3. **Regulation.** A certain and predictable regulatory system provides businesses and people with the confidence to innovate, invest in new capital, develop skills, and take risks. New Zealand’s regulatory quality is fairly high, and supportive of an entrepreneurial culture and dynamic economy. For example, New Zealand ranks eighth in the OECD’s measure of the restrictiveness of product markets (OECD, 2014). However, as a small and distant economy, we have to work hard to be at the cutting edge, particularly as other countries continue to improve the attractiveness of their business environment.

   A continued focus on strengthening the regulatory system also remains important. This means keeping a focus on the quality of both new and existing regulation, as well as recognising that the implementation and operation of regulatory regimes matters as much as the design of regulations. The Productivity Commission is currently undertaking an inquiry to identify where and how there may be scope for improvements in the quality and effectiveness of government regulatory institutions and practices (see New Zealand Productivity Commission, 2014b for their draft report).
3 Moving towards exports and investment

The previous section set out our first strategic issue – supporting economic growth that is oriented toward high-value-added activities, which are likely to require innovation, scale, investment, and exporting to new markets. This is likely to be associated with a shift in the balance of economic activity toward exports and investment. This section is about the management of short-term demand pressures to help facilitate this shift, as well as more medium-term issues around reducing supply-side constraints on economic activity.

Have we been here before?

The New Zealand economy has emerged from recession, and the short-term economic outlook is good. New Zealand’s GDP per capita recovered in March 2013 to its pre-recession level. And economic growth appears to be gathering momentum, strengthening from 2.8% in the year to December 2013 to nearly 4% in the year to March 2015.

However, growth is dominated by domestic consumption and the Canterbury rebuild. A strong rebound in residential investment is also expected as a consequence of the rebuild and the growing mismatch between housing supply and demand in Auckland. The combination of the Canterbury rebuild with a cyclical rebound in housing demand in other parts of the country is likely to lift construction activity to the high levels seen in the early 2000s.
Some of the drivers of the current economic upturn were also present during New Zealand’s last economic expansion from 1998 to 2007 – which was long and large by the country’s post-war standards, with average annual GDP growth of 3.6% (Hall and McDermott, 2013) and strong employment growth. The unemployment rate fell from 8% in 1998 to around 4% by 2007.

From 1998 to 2007, strong domestic demand was underpinned by a large increase in net migration, booming house prices, and a lift in key export commodity prices (Chetwin, 2012). There was strong growth in public and private consumption, as well as housing construction. The capacity of the economy to absorb this strong demand was limited by some supply-side constraints. In particular, underlying labour productivity growth appears to have slowed from around 2000.\textsuperscript{11}

The last economic upturn was also associated with a range of emerging domestic and external imbalances: average house prices grew faster than rents and incomes, domestic credit growth was rapid, the current account deficit widened and the exchange rate appreciated above its long-term average.

As a consequence, New Zealand saw strong growth in non-tradable GDP (those industries that are less exposed to international competition), while tradable GDP was broadly flat. Box 6 discusses some of the conceptual and measurement issues around tradable and non-tradable GDP.

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure12.png}
\caption{Breaking down tradable and non-tradable activity}
\end{figure}

\textsuperscript{11} However, the extent and causes of this slow down are subject to uncertainty given sensitivity to choices about business cycle dating, global trends in productivity, and domestic influences such as a strong labour market bringing more lower-skilled workers into employment (Szeto and McLoughlin, 2008).
Box 6: Measurement of tradable and non-tradable GDP

The distinction between tradable and non-tradable GDP aims to measure how much of the New Zealand economy is exposed to international competition.

Statistics New Zealand has recently published measures of tradable and non-tradable GDP using two methods (Attewell and Crossan, 2013). Each measure provides a different insight into the composition of New Zealand’s economic activity:

- The ‘direct’ method measures the extent to which industries face international competition, either in export markets or by competing with imported products. The direct method suggests that around 20% of total GDP is tradable and tradable GDP has been broadly flat during the past decade, while non-tradable GDP has risen steadily.

- The alternative ‘indirect’ method is broader and also includes industries that do not face international competition directly, but their output is included as part of the value of exported or import competing products. Under the indirect method, tradable GDP makes up around 40% of overall GDP. It has grown more strongly than the narrower definition of the tradable sector, although how tradable some of these faster growing industries are is an open question.

However, all measures of tradable and non-tradable GDP must be used with caution. Measuring tradable GDP is difficult because deciding whether an industry as a whole is tradable is less clear cut than for an individual good or service.

Whether a particular industry is classified as tradable or non-tradable is based on a number of measures, including the share of exports in its total output, the share of each product that is imported, and the share of inputs to that industry that are imported. An industry that has a share of exports or imports above a certain threshold will be defined as tradable, while shares below the threshold mean the industry is defined as non-tradable. However, there is no consensus on the appropriate level of the threshold and the measured size of the tradable and non-tradable sectors is sensitive to the level at which the threshold is set.

Even when an industry is classified as non-tradable, there will still likely be firms in that industry that export or are exposed to import competition. The degree of foreign competition will vary over time with, for example, changes in the value of the New Zealand dollar and the development of on-line retailing.

For more on tradable and non-tradable output see the special topic in the Treasury’s Monthly Economic Indicators in April 2012 (The Treasury, 2012a).

While the tradable sector in aggregate saw only limited growth, this measure is masking differences in output growth across industries. Figure 12 shows that a sub-group of industries within the tradable sector has enjoyed relatively strong growth, albeit less robust than the non-tradable sector. These ‘booming’ or resource-based tradable industries have been buoyed by strong international demand, particularly for our dairy products. However, other trade-exposed parts of the economy (the ‘lagging’ tradables’), such as non-food processing manufacturing and exports of services, have seen little growth. This may be a concern if high commodity prices are transitory or if it reinforces our dependence on sectors with less scope for productivity growth.
The role of the exchange rate

The impact of the exchange rate in driving this difference in performance across the tradable and non-tradable sectors has been widely debated. The nominal exchange rate is a measure of how much our currency is worth relative to our trading partners. When the currency is strong, New Zealanders can afford more goods and services on world markets, as any international traveller will understand. A strong dollar also reduces the costs of imports used by businesses, including capital goods. However, a strong New Zealand dollar can also make life harder for firms in the tradable sector – making our exports more expensive in world markets and imports more competitive in the New Zealand market. On the other hand, the greater pressure to be cost competitive may incentivise New Zealand firms to improve their productivity.

The exchange rate is very cyclical. The cycles that occur with a floating nominal exchange rate reflect a range of factors, including New Zealand’s economic performance relative to other countries and whether the exchange rate is acting to offset external shocks, as was the case in the global financial crisis.

While the exchange rate is cyclical, there has been an upward trend over the past 15 years in New Zealand’s nominal exchange rate. Moreover, what matters for competitiveness, especially in non-primary exports, is the real exchange rate. The real exchange rate is the nominal rate adjusted for changes in domestic prices or labour costs relative to foreign prices or labour costs. If the appreciation in the nominal exchange rate had been offset by an equivalent decline in our unit labour costs relative to our trading partners, for example from improving labour productivity, then our competitiveness would not have deteriorated. However, this has not happened and we have seen an appreciation of our real exchange rate (see Figure 13), which may have worked against export growth and the productivity benefits it brings (see Section 2). And while interest rates may currently be at a cyclical low, they have been persistently higher than in other advanced countries.

There is no single compelling explanation for New Zealand’s combination of a high real exchange rate and a high real interest rate – indeed it is likely to reflect a range of factors. One factor is the persistently strong domestic demand in the New Zealand economy, which is linked to low levels of national saving relative to domestic investment. Other explanations point to the existence of a country risk premium, perhaps owing to New Zealand’s persistently high net foreign liability position or currency volatility. The historically high value of the real exchange rate over the past 10 years also partly reflects New Zealand’s buoyant terms of trade, which helps to explain the variation in performance between the agricultural and other parts of the tradable sector. However, the extent of real exchange rate overvaluation is subject to uncertainty, and there is no simple answer to how exchange rate movements affect the real economy (Cassino and Oxley, 2013).

There are choices about the overall monetary and exchange rate regime. As discussed in Box 7, New Zealand has operated a floating exchange rate for nearly three decades. The choice of regime will affect how the economy adjusts to changing domestic and external circumstances, but it is unlikely to make a sustained difference to the level of the real exchange rate. For example, strong non-tradable demand, or low levels of saving, will result in an appreciation of the real exchange rate under any regime – either via a nominal exchange rate appreciation under a floating regime or through domestic inflation under a pegged or fixed exchange rate (Grimes, 2014). At the margin, monetary policy and foreign exchange rate intervention can perhaps take out the worst of the peaks and the troughs of the cycle in exchange rates (McDermott, 2013).

12 In March 2013 the Treasury and the Reserve Bank hosted a forum on exchange rate issues and policy implications. See www.rbnz.govt.nz/research_and_publications/seminars_and_workshops/Mar2013/programme.html
13 An analysis of New Zealand’s exchange rate under different regimes can be found in Sullivan (2013).
Figure 13: Nominal and real exchange rate
Relative unit labour cost measure

New Zealand’s exchange rate has been persistently high over the past 10 to 15 years.

Note: The Unit Labour Cost based real exchange rate adjusts the nominal exchange rate for changes in the labour cost (per unit of output) for a group of 49 (trade-weighted) countries. An increase in the index indicates a real exchange rate appreciation and a corresponding deterioration in New Zealand’s competitiveness.

Source: OECD

Box 7: Alternative monetary and exchange rate frameworks

Choices regarding monetary, capital account, and exchange rate policies are fundamental to macro-economic frameworks. The constraint on those choices is often described as the monetary policy ‘trilemma’, which states that it is possible to have only two of the following three things: a fixed exchange rate, independent domestic monetary policy, and free cross-border capital mobility. It is only possible to control both the exchange rate and domestic monetary policy by restricting international capital flows. Alternatively, capital mobility with independent monetary policy means the exchange rate must float.

Since the float and financial liberalisation in the mid-1980s, New Zealand’s policy choice has been clear: openness to external capital, monetary policy focused on domestic price stability, and a free-floating exchange rate. Compared with past regimes, this choice has secured low and stable inflation and less volatility in output and unemployment. Many other advanced countries have made similarly clear choices between fixed and floating exchange rate regimes, though they vary significantly in financial openness.

Some countries choose to fix their nominal exchange rate, for example, by pegging their currency to other currencies or joining a currency union (such as the euro area). However, this policy choice means a loss of monetary policy independence and therefore greater volatility in inflation, output and employment. The recent crises in peripheral euro zone economies point to the risks involved in choosing a fixed nominal exchange rate.

Many countries have intermediate regimes, in the sense that there is some divergence from the extremes in each of the three objectives. Such divergences include some capital controls, flexible inflation targeting, and some degree of foreign exchange intervention. Intermediate regimes may involve multiple objectives for macroeconomic policy, which can lead to complexity and lack of clarity. It may also undermine the durability of the regime when large shocks force difficult trade-offs across the objectives, and may require the use of extraordinary administrative and regulatory policies to manage domestic pressures.
Overall, this tells us that enduring solutions to imbalances or weak tradable sector performance lie not with monetary policy but in other policy areas. It is about showing restraint as economic activity picks up and also using the opportunity to lift productivity by easing some of the underlying constraints on the supply side of the economy. The following sub-sections look at each of these options in turn.

Showing restraint as the economy hits a new gear

There are lessons to be learnt from the previous economic expansion and the global financial crisis. The global financial crisis highlighted the dangers of booms and busts in asset prices, and recent changes to New Zealand’s monetary policy recognise this (see Box 8). While New Zealand’s low public debt helped in coping with the crisis, in hindsight our fiscal policy settings may have been too loose before the crisis. While strong revenue growth kept the government’s books in the black, growing public spending was putting upward pressure on inflation. This meant that monetary policy had to be tighter – and interest and exchange rates higher – than they otherwise would have been. This experience highlights that distinguishing the cycle from the trend during an economic upswing is always subject to uncertainty.

Fiscal policy can help with managing domestic demand. Even though public finances are likely to improve as the economy picks up, there will be little scope to increase expenditure or reduce taxes without putting upward pressure on interest and exchange rates. This implies a continued pursuit of efficiencies in public spending, including tightly managing the Crown’s investments in the Christchurch rebuild. It may also potentially mean further tightening of government spending if household spending is higher than expected.

There are also more formal approaches to help fiscal policy lean against the economic cycle. Recent changes to New Zealand’s public finance legislation require governments to report on how they are co-ordinating fiscal policy with the economic cycle (The Treasury, 2012b and Brook, 2013b). The Government’s fiscal strategy emphasises the need to use fiscal surpluses over the current economic upturn to repay debt and build up assets. Looking further ahead, another possible tool is the use of a fiscal stabilisation fund. Under this approach, government revenues would be ‘banked’ in good economic times and used to support higher government spending or tax cuts in downturns (Brook, 2013b). For example, Chile used a stabilisation fund to bank some of the large fiscal surpluses it enjoyed off the back of high commodity prices. It was then able to increase public spending to support economic activity and living standards during the global financial crisis.

The aftermath of the global financial crisis has also led to consideration of other tools to support macroeconomic objectives. Many of these instruments, such as higher capital adequacy standards for banks, are primarily about reducing the risks of future financial crises. However, some of these also have the potential to help smooth cyclical fluctuations in economic activity. For example, during the mid-2000s the Treasury and Reserve Bank assessed a range of alternative instruments to manage demand in the economy. One of these, Loan to Value Ratio limits (LVRs), was implemented in late 2013 to address the financial stability risks associated with rapidly rising house prices and residential mortgage lending. There are also other potential instruments that are more directly aimed at easing demand in an upturn, which can be reversed as economic activity weakens. However, there is much uncertainty about whether the costs of microeconomic distortions induced by such instruments would outweigh any benefits for cyclical demand management.
Box 8: Reflections and policy lesson from the global financial crisis

The speed, depth and length of the global recession surprised most policy-makers and advisors. While the initial focus was on getting through the recession, there has also been significant debate about the causes of the crisis and how we can reduce the risks of future financial crises. This debate will continue – and it is also important to acknowledge that the lessons for policy in New Zealand will differ from those of other countries. However, some emerging themes from the debate are:

} **Balancing risks and opportunities from our links with the world:** The speed at which the crisis spread reinforced how interconnected economies are. However, the solution does not lie in trying to insulate ourselves from the rest of the world. Indeed, our connections were also crucial in helping New Zealand through the crisis. Asia, particularly China, and Australia were relatively resilient to the crisis, and their continued demand for New Zealand products has helped mitigate the impact of the global financial crisis on our economy.

} **The important ‘buffer’ role of the Crown balance sheet:** New Zealand’s low levels of public debt at the start of the crisis enabled the Government to maintain government spending – to support New Zealanders and the economy through the recession. As the economy strengthens, it will be important to rebuild this ‘buffer’ by reducing net debt as a share of GDP (see Box 5 in section 2).

} **Building financial sector resilience:** Despite limited disruption to the financial sector in New Zealand, our high level of household, external debt and high house prices means there is no room for complacency. A range of steps have been taken to increase the resilience of banks to any further financial crises. These include adopting tougher international capital adequacy standards; developing an additional tool for the resolution of troubled banks; and introducing regulation that can help prevent the build-up of risks across the financial sector.

} **Monetary policy tools are evolving:** The relatively limited impact of the crisis and New Zealand’s high nominal interest rates meant that our Reserve Bank did not have to experiment with new ways to reduce real interest rates (as compared to the United States and United Kingdom central banks, which had to adopt new approaches as interest rates approached zero). The global financial crisis did highlight the dangers of booms and busts in asset prices; as well as raise questions about the ability of monetary policy to mitigate booms and respond to busts. The new Policy Target Agreement more explicitly allows for the Governor of the Reserve Bank to set monetary policy in light of a wider range of prices, including asset prices. While it is unrealistic to think we can perfectly anticipate or prevent asset bubbles, we can do more to limit their scale and impact.

} **Fiscal policy needs to be co-ordinated with the economic cycle:** Government spending and taxation can make the job of monetary policy harder if it exacerbates economic cycles. For example, increasing spending in an economic upturn may force monetary policy to be tighter than it otherwise would have been, putting upward pressure on interest and exchange rates. Under recent changes to New Zealand’s public finance legislation, governments will now report on how fiscal policy will be co-ordinated with the economic cycle.

A number of potential demand management tools have a housing focus, reflecting the importance of housing in the New Zealand economy. High house price growth is signalling strong housing demand in both Christchurch and Auckland. Increasing housing supply to match that demand will be a key driver of domestic demand and economic growth over the next few years. Reducing constraints on housing supply will be important to help moderate the demand pressure on house prices and improve affordability – making an important contribution to wider living standards. The responsiveness of housing supply to price changes in New Zealand is estimated to be about average in the OECD, but it is about half as responsive as in some of the better-performing OECD economies (New Zealand Productivity Commission, 2012). Improving supply responsiveness would require either increasing the productivity of the construction sector or increasing land supply.
The relationship between housing markets and macroeconomic demand pressures are complex. There are two offsetting impacts on domestic demand from increasing housing supply and it is difficult to know which will dominate:

- **Increasing housing supply implies at least a temporary increase in construction activity which adds to domestic demand and inflationary pressure**, although this would be mitigated if the increase in supply is driven by improved productivity in the construction sector. More construction activity could drive interest rates up above where they would otherwise be, which, among other things, may push up the exchange rate and make life harder for exporters.

- **On the other hand, increasing housing supply may moderate increases in house prices.** This would lessen ‘wealth effects’ from increasing house prices, which can make people feel wealthier and so spend more and save less, exacerbating demand pressures. More responsive supply would reduce the risks of a boom-and-bust cycle with house prices increasing too far and too fast, and a subsequent drop when supply eventually catches up. Therefore, less volatile house supply would moderate risks to financial stability, which has wider consequences for economic activity.

Another policy area that can, to some extent, be co-ordinated with the economic cycle is migration. The evidence points to a small positive impact of immigration on New Zealand’s productivity and economic growth by, for example, bringing new skills and ideas. However, immigration may also contribute to demand pressures, including in the housing market. While there is debate about the empirical evidence, some commentators have argued that it may have put upward pressure on New Zealand’s exchange and interest rates (Reddell, 2013 and Fry, 2014).

Where possible, policy should not exacerbate cyclical pressures by loosening immigration flows as the economic cycle gathers pace. However, there is a limit to which government can control net migration as flows of New Zealand and Australian residents play a large role. In our current economic upturn, net migration is already picking up as more New Zealanders stay home in the face of a slowing Australian economy. In the medium-term, a well-designed migration policy needs to be supported by increases in the capacity of the economy to absorb population increases, particularly through more responsive housing supply.

Using the opportunity to lift productivity

While short-term choices about how we manage the cycle are important, the real prize is long-term economic and productivity performance. Removing constraints to New Zealand’s economic and productivity performance enables the economy to sustain higher levels of domestic demand without putting pressure on interest and exchange rates. For example, improving the poor productivity performance of the construction sector would reduce the extent to which an expansion in housing demand and supply diverts resources from the tradable sector.

Lifting New Zealand’s rate of national saving has a role to play. While New Zealand has low levels of government debt, it has one of the largest net international investment liabilities in the OECD (see Figure 14). Over time, higher national saving would make the economy more resilient by reducing our high net external debt and vulnerability to external shocks. Any reduction in vulnerability may also be reflected in a reduced risk premium on our long-term interest rates.
As New Zealand’s public saving rates are – on average – relatively high by international standards, a substantial increase in national saving will require an increase in our relatively low private saving rates. However, the linkages between policy settings and private saving are complex. The saving rates of households and businesses are influenced by a range of factors, including: the age structure of the population – people tend to save more in their working years and draw on those savings in retirement; the taxation of income from different sources; the provision of government transfers and services; and the saving rate of the government itself.

Higher saving rates should in principle enable greater investment and, therefore, also higher economic growth. Empirical evidence struggles to find any simple and consistent relationship between national saving and economic performance across countries. Perhaps this is to be expected because investment is not constrained by domestic saving but can be financed from abroad. However, there does seem to be some ‘home bias’ to investment, so that domestic investment levels may partly depend on domestic savings. Although New Zealand has an open financial system, its small size and its large distance from major international markets could make it particularly susceptible to ‘home bias’, for example from a lack of understanding of New Zealand opportunities amongst foreign investors. These problems are more likely to be evident for equity than debt, with young and small firms seeking equity finance most likely to be adversely affected (Cameron, Chapple, Davis, Kousis and Lewis, 2007).

Despite limitations in the evidence, there are a number of reasons why higher national saving is likely to improve economic performance. In particular, higher savings would reduce demand pressures, permitting the Reserve Bank to keep interest rates lower than otherwise. To the extent that lower short-term interest rates are also reflected in lower longer-term interest rates, the reduced cost of capital would provide greater incentives for firms to invest (NZIER, 2011). As new capital also brings with it new technology, higher investment may increase the productivity of both labour and capital. Lower interest rates would also reduce upward pressure on the exchange rate over the business cycle, supporting export growth and

Note: The net international investment position is foreign assets less foreign liabilities. Source: IMF, WEO, Statistics New Zealand, the Treasury
the productivity benefits it brings (see Section 2). That may also support an increased share of investment in the tradable sector, particularly if accompanied by changes in tax and regulation settings to reduce differential impacts on investment incentives across sectors.

**Sufficient and well-designed infrastructure is also important for productivity growth.** The state sector typically undertakes benefit cost assessments to measure the potential impact of infrastructure projects on economic performance and living standards. At very low levels of infrastructure, new investments are likely to make a significant contribution to productivity and economic performance and so have high benefit-cost ratios. However, as the quantity and quality of infrastructure increases, new investment will contribute less to economic performance and living standards – and so will have lower benefit-cost ratios. This has been the experience of New Zealand’s roading investment over the past five years or so. Reflecting past under-investment, new projects had fairly high benefit-cost ratios five or so years ago (see Figure 15). However, the average return from new projects has declined over time as the Government has significantly increased investment in roads. Figure 15 suggests that the need for further investment is reduced but that further investment will still bring net benefits.

![Figure 15: Benefit-cost ratios for approved state highway projects](image)

*Source: Ministry of Transport, derived from New Zealand Transport Authority data*

Investments in education and skills are also critical to reducing constraints on the capacity of the economy to support high levels of domestic demand. The next section turns to some of the challenges in equipping New Zealanders to succeed in an increasingly global economy.
4 Helping all New Zealanders play their part

Last, but not least, our third strategic challenge is about enabling all New Zealanders to reach their potential and play a meaningful role in the economy and society. The state sector has an important role to play in helping all New Zealanders to play their part in New Zealand’s future: access to quality government services can have a lasting impact on people’s economic and social outcomes.

A focus on economic and social participation

The Treasury’s focus is on enabling people to participate – or find their role in – the economy and society. While the distribution of income at a point in time does matter, low income is most likely to lead to poor outcomes if it is persistent and associated with material deprivation. Employment and educational opportunities, as well as access to quality public services, are what really matter to peoples’ long-term outcomes.
The Treasury supports a primary focus of policy on removing the barriers and increasing the opportunities for people, especially for people experiencing hardship. In particular, it implies a focus on work, education, and supportive social services, as well as income protection:

} New Zealand needs a labour market and welfare system that helps people move between jobs, occupations and sectors to take up opportunities in new and growing firms and sectors.

} The education system is the key opportunity for young people and in providing the strong general skills that equip people for a changing job market.

} But it is also important to maintain an adequate safety net that provides support for people who are temporarily between jobs or are unable to work for extended periods.

} Other social services, such as health and housing, also have a critical role to play in improving living standards and supporting economic and social participation.

Employment is a key opportunity for adults

The New Zealand people and labour market have become more resilient. New Zealand’s labour market has delivered a relatively low unemployment rate since the mid-1990s. It has provided jobs for an increasing number of New Zealanders wanting to work. And it has been able to adapt to a number of global changes, such as changing markets for our exports and imports, changing consumer demand, technological changes and increasing competition from emerging economies. For example, while these was a gradual decline in manufacturing employment between 1989 and 2012, overall employment continued to grow as new jobs were created in other sectors (Carroll, 2013). The increased resilience of the labour market is important in preventing people getting stuck between jobs and becoming disconnected from the labour market.

While New Zealand’s overall employment rates are high, some groups are still under-represented in employment. These include those with no or low qualifications, Māori, the disabled and solo parents. New Zealand is particularly unusual in terms of the high proportion of our children in sole parent households and our low employment rates for solo mothers. In many OECD countries solo mothers have similar or higher employment rates than partnered mothers. However, solo mothers have significantly lower employment rates than partnered mothers in New Zealand (see Figure 16).

These employment patterns matter because paid work is an important route out of poverty and low incomes. Unsurprisingly, around two in three (63%) of the children in low income households are in households where the main source of income is a welfare payment (Perry, 2014). These families often face multiple barriers to moving into work, including low parental education, health and housing issues. However, overcoming these barriers can bring wider personal and social benefits to the parents, their children and the community. These include the long-term economic, social and fiscal costs from the related impacts of joblessness, like crime or anti-social behaviour, and poor housing, health, and educational achievement.
As the pace of economic change continues to intensify, there will be even more pressure on the state sector to support people to cope with change. This will be particularly the case as the combining forces of globalisation and technology continue to increase the pace of change in our economy. There is a debate about the degree to which employment protection, minimum wages and support for some industries and sectors are levers that should be used to try and insulate people from these changes. However, given that employment opportunities will continue to evolve in an increasingly dynamic economy, our focus is more on supporting people to be adaptable, flexible and resilient.

Therefore, the Treasury supports the increasing focus of the welfare system towards investing in those people who, without support, are most likely to be on benefits long-term. Policies that assist people to move out of long-term dependence on welfare and participate in the labour market are likely to improve outcomes for the most disadvantaged, including the most disadvantaged children, as well as enhance economic growth (The Treasury, 2013c and The Treasury, 2013e).
Education is critical to lifelong outcomes

An education system that supports children to overcome disadvantage and enables all students to achieve is the best way to improve long-term outcomes across generations. Individuals with higher levels of education tend to have higher incomes, a lower risk of unemployment (see Figure 17), and do better on a range of health and other outcomes.

![Figure 17: Educational attainment and unemployment rate](image)

People with no qualifications have substantially higher unemployment rates.

Educational achievement is also linked to higher levels of economic growth. This is partly because higher income countries can afford to spend more on education. However, there is also reasonably strong evidence that higher levels of education support economic performance (see, for example, OECD, 2010).

A child’s educational achievement is driven by many factors beyond the education system. This includes their own ability; the family environment, including attitudes to education and the provision of learning opportunities, such as reading at home; and the community environment. Indeed one of the most important influences on a child’s education achievement appears to be their parents’ education level (The Treasury, 2012c).

However, the educational system does matter for learning outcomes. New Zealand’s universal education system, with national curriculum, provides access to high-quality education for most New Zealanders. But while New Zealand’s educational system performs well overall relative to other OECD countries, there remain challenges across all its levels.

There has been significant recent academic and policy focus on the importance of the early years in preparing children for school. Literacy and numeracy at entry to school are strong predictors of later outcomes because they provide the foundation for school achievement. Prolonged material and social disadvantage in the early years has a critical impact on children’s early development and school readiness, which can have ongoing and long-term negative effects that extend into adulthood. The children who are most at risk of the worst outcomes come from backgrounds with a range of disadvantages, such as families with lower incomes, less education, lower employment and increased levels of stress and anxiety.
Intensive and high quality early childhood education for the most disadvantaged children can significantly improve educational outcomes, particularly when combined with support for positive parenting approaches. In New Zealand, participation rates are lower for children from families with lower socioeconomic status (see Figure 18), and the quality of services is mixed. There is significant evidence that increasing the participation of children from low socio-economic backgrounds in high-quality early childhood education will help to improve educational outcomes for this group who tend to perform less well at school (The Treasury, 2013c).

![Figure 18: Prior participation in early childhood education of children starting school](image)

Note: This chart shows the proportion of children who regularly attended early childhood education in the six months prior to starting school.


Effective early childhood interventions need to be followed and reinforced by an effective schooling system, with an emphasis on high quality teaching. On the whole, New Zealand children and young people perform relatively well in international tests of literacy and numeracy skills, although New Zealand has recently lost some ground in international rankings (OECD, 2013c).

While the system works well for many New Zealanders – it does not work for everyone. More than one in five young people have not achieved NCEA 2 by the time they are 18 years old (see Figure 19). In particular, around 40% of young Māori and around 30% of young Pacific people do not achieve NCEA 2. These ethnic disparities are interlinked with poorer educational achievement of lower socio-economic groups. A higher percentage of the variation in student performance in New Zealand appears to be explained by parents’ socioeconomic status than for the OECD as a whole (The Treasury, 2013e).

A wide range of factors can contribute to student under-achievement, but there is strong evidence that the quality of teaching is key to unlocking student potential (The Treasury, 2012c). This implies a focus on ensuring consistently high quality teaching in all classrooms; use of formative assessment for early identification of children who are falling behind; and effective interventions to address learning and other needs. While lifting teacher quality can improve education for all, we need a particular focus on the most disadvantaged schools and students.
**Figure 19: Percent of 18-year-olds achieving NCEA Level 2 or higher by ethnicity in 2012**

The percentage of Māori achieving NCEA level 2 or higher is around 20 percentage points less than for Pakeha 18-year-olds.

Source: Ministry of Education

**While the compulsory education system provides a critical foundation for participation in the workforce and economy, the tertiary system provides individuals with occupational, industry-specific, and more advanced qualifications.** The tertiary education system is a supplier of the skills the economy needs. People with tertiary qualifications are more likely to be employed and more likely to have higher earnings.

There have been significant increases in the proportion of the workforce with post-school qualifications (including university and vocational qualifications), from around 40% in the mid-1980s to around 60% now. In addition, the proportion of Māori with a bachelors or higher qualification has increased from 4.5% in 2002 to 7.9% in 2012 (Ministry of Education, 2013), with many more highly-skilled Māori entering the labour force each year. This will bring greater diversity to key New Zealand institutions and in turn help strengthen those institutions.

However, New Zealand returns from education vary widely by level, subject, provider, and student group. They also appear low by international standards (see Figure 20). In addition, a number of employers cite soft skills (such as job readiness) and technical skills as issues for recruitment or with existing staff (Stevens, 2012). Going forward the tertiary education system must be equipped to invest in high-value areas.
The skills system will also need to respond to longer-term trends. Big changes in the global and domestic economy are radically changing the nature of work. The ‘great doubling’ of global labour supply from an emerging Asia, combined with technological change, is continuing to reduce low-skilled job opportunities while increasing opportunities for those with high skills. In the face of these long-term trends, New Zealand will increasingly rely on skilled people to ensure our economy is productive, competitive and innovative. This makes education all the more important.

A safety net to catch New Zealanders in need

There will always be some people for whom work and education are not appropriate goals, including the seriously ill and the severely disabled. A well-designed safety net is the most-targeted approach to ensure these people have adequate incomes. Welfare payments can reduce the incentives on others to seek work or education, so it is important that it is complemented by support and encouragement for people to move into and sustain paid work.

Social welfare payments are only part of the total support the government provides. For many households, ‘in-kind’ services (such as schools and hospitals) are a significant part of this support. Over the past decade, the level of total government support has risen for all households (primarily as a result of increased expenditure on education, health and superannuation). Because this increase was relatively untargeted, the overall effect was that social services provided to households in the top half of the income distribution rose almost 20% more than for those in the bottom half (see Figure 21).

Figure 20: Earnings from tertiary qualifications
Difference in earnings for someone with a sub-degree and degree or higher qualification relative to an upper secondary education

Source: OECD (2013d)
Social services that New Zealanders value

The state sector provides a number of services that New Zealanders value. This section explores issues in health and housing, given that they are both important for living standards and can support or hinder economic and social participation.

Health services have a significant impact on living standards and wellbeing. Studies suggest that substantive or persistent health problems have more than twice the negative impact on peoples' life satisfaction than halving their income would. Health can also impact on economic and social participation, such as whether and how much people work, and on productivity (Holt, 2010).

New Zealand performs reasonably well compared with other developed economies in terms of the value for money and efficiency of its health system. New Zealand spends less on health per person than the OECD average, although we do spend more as a percentage of GDP, reflecting New Zealand’s lower per capita income. Despite relatively low per-person spending, New Zealanders enjoy health outcomes comparable with those of other developed economies. For example, potential years of life lost measures deaths that should have been preventable given effective and timely healthcare.\(^\text{14}\) New Zealand has seen similar significant falls in this measure of preventable deaths as other OECD countries over the past 50 years (see Figure 22).

\(^{14}\) Potential years of life lost (PYLL) provides a general measure of overall health system performance, weighting deaths occurring at younger ages.
However, there are some areas where New Zealand’s health system performs less well. For example, rates of some infectious disease are high in New Zealand compared with other developed countries and seem to be increasing. There is also evidence of disparities in health between ethnic groups and that unmet need is higher for those on low incomes. The demands on the system are also changing, with chronic and long-term conditions increasingly important as a source of morbidity.

Health will also become an increasing share of government spending as an ageing population, rising incomes and improved technology push up demand for health care (see Figure 23). In light of these pressures it is critical to continue to look at ways to drive improved productivity and value for money in health service delivery, while maintaining and improving the quality of care provided.

The health system is only one factor driving health outcomes. One example is the inter-linkages between health and housing. In particular, well-maintained housing can improve health outcomes by reducing accidents in the home and some types of illnesses, particularly respiratory illnesses in children (Weinmayr, Gehring, Genuneit, Büchele, Kleiner, Siebers, Wickens, Crane, Brunekreef and Strachan, 2013).
Well-maintained housing can also contribute to better educational and other outcomes. For example, a warm and quiet place to do homework is important to a child’s ability to concentrate (James and Saville-Smith, 2010). And the provision of adequate housing in the right places is key to enabling people to access employment opportunities. Suitable and well-maintained properties can also help to maintain community cohesion and commitment to continued care for the local physical and natural environment (Department of Internal Affairs, 2011).

Housing affordability is also important for New Zealanders’ living standards, given the New Zealand aspiration to own our own home. Rising house prices challenge this aspiration for home ownership as increasing amounts of income are spent on servicing property costs. New Zealanders spend the highest proportion of their income on housing costs after Greece in the OECD (OECD, 2013a).

As well as the provision of financial assistance for housing costs, provision of government-supported housing is essential for some households who face multiple disadvantages in the housing market. The state currently houses 69,000 households in state housing, including some of the most disadvantaged groups in society. However, housing need is usually a symptom of a larger problem facing a household, such as health or employment challenges. Focusing on housing alone can miss the opportunity to tackle the bigger underlying challenges facing individuals. Joining up public services could have significant benefits for tenants, with evidence from the United States pointing to particular benefits for drug and alcohol treatment (United States Department of Human and Health Services, 2005).
The state sector is learning to work differently

Given that long-term economic and social outcomes are increasingly inter-connected, the state sector is learning to work more effectively across agencies and sectors. The public sector reforms of the 1980s were bold and world leading. They allowed the public sector to work in new ways that improved efficiency and service. The public sector needs to hold onto these gains but also focus more directly on results or outcomes. The state sector needs to prioritise, concentrate on the right outcomes and work collectively to use resources better and deliver results.

Delivering results is about making sure the state sector is focusing on the right things that will make a difference to New Zealanders' living standards. It is important that the policy advice that informs government's decisions and priorities is backed up by solid evidence and quality analysis. And once a transfer, service, investment, or regulation is put in place, our job is not done. The state sector needs to be more systematically evaluating whether a policy is having the impact we thought it would on economic, social and environmental outcomes, as well as whether it is delivering value for money. This focus on long-term outcomes and evaluation are key principles behind the increasing focus of the welfare system on investing in people to support them into work. While it is likely to be applied in different ways, the basic principles of this approach have significant potential for improving outcomes across a number of policy areas and population groups (see Box 9).

It is also about continually looking for new – more innovative – ways of working or delivering services. State sector leadership is becoming much more oriented to the need to deliver improvements in living standards over the medium-term, and to encourage more innovation and collaboration to address underlying causes. For example, the Department of Corrections has partnered with Housing New Zealand to refurbish a minimum of 150 houses over the next five years which will also provide offenders with skills to contribute to the Canterbury rebuild. And the Ministry of Education has been working with the New Zealand Rugby League to promote and champion participation in early childhood education.

Diversity of ideas and contestability of advice is also vital to facilitating innovation. We need to harness all the passion and creativity of the public, private and voluntary sectors to find better ways of delivering on the results that matter most to New Zealanders. As an important example, there are opportunities to work differently with Māori organisations to deliver across education, employment, whānau and health outcomes. Māori organisations are increasingly looking to partner with government to deliver services and this provides an opportunity for greater innovation and improved outcomes. While this is particularly important for hard to reach groups, there are also opportunities for public services more generally.

Lifting performance matters as the state sector has an important role to play in helping New Zealanders to achieve their potential. The education and other social services it provides are an important part of this challenge, including supporting the most disadvantaged New Zealanders to participate in the economy and society. However, its contribution to tackling our first two challenges is closely inter-linked. As well as access to government services, a well-performing economy and strong employment rates have long-lasting impacts on New Zealanders' living standards.
**Box 9: From public expenditure to smart investment**

A well-functioning state sector can potentially play an important role in improving the long-term outcomes of groups with a high risk of social and economic issues, such as early school leavers, some groups of sole parents, some Māori and some people with health and disability issues. There is significant potential in new approaches that shift the focus from public expenditure on current services to investment in effective interventions that reduce long-term costs (and improve long-term benefits). This has the potential to improve individual outcomes, reduce pressure on core services and increase the options for managing long-term fiscal challenges.

The evidence suggests the earlier the better: investment in earlier intervention may have a significant and long-lasting impact on employment, education, health and other outcomes. Harvard Professor Malcolm Sparrow highlights the role of government in identifying and addressing ‘bads’ (hazards, threats or harms) to make people safer, healthier and more secure (Sparrow, 2012). Governments need to be vigilant (identify threats and harms early), nimble (flexible enough to organize themselves quickly around threats and harms) and skilful (adept at creating new approaches when existing methods are insufficient).

A focus on using data and evidence to invest early to improve long-term social and economic outcomes, particularly of disadvantaged groups, can help support improvements in the overall system or for targeted interventions with long-term payoffs. Some specific elements that support this type of smart investment are: clarity on the key outcomes; better use of data and cohort information to target those who need it most; clear institutional incentives and accountability to drive performance and innovation; and organisational flexibility and evaluation feedback loops to test, learn and adapt.

Work is emerging based on smart investment principles in the Better Public Services reforms, welfare ‘investment approach’ model and justice sector work. There is scope to expand the use of data, insights and analysis, together with more innovation across agencies to understand where and how to best intervene to lift outcomes. Over time, the greater pay-offs will come from linking across policy or service areas to address the multiple and complex barriers that people often face to economic and social participation.
Concluding message

This paper is a reflection of how the Treasury’s strategic thinking on economic performance is evolving to include the wider elements of living standards. Unquestionably, growth and income matter for economic performance. But they are not the only things that matter. Instead, in this paper we have explored economic performance from the dimensions of prosperity, sustainability and inclusiveness.

Our analysis has identified a key strategic challenge in each of these dimensions:

- For increasing our prosperity, it is connecting internationally.
- For improving sustainability, it is moving towards export and investment-led growth.
- For ensuring inclusive economic performance, it is enabling all New Zealanders to participate in the economy and society.

We recognise that these challenges are not necessarily new, and that they are not short term. We also recognise the considerable progress made, both past and present, to address these challenges. We recognise, too, that as much as these are challenges, they also represent opportunities for Aotearoa New Zealand to lift its medium-term economic performance and living standards.

Ma tini ma mano ka rapa te whai.

By many, by thousands, the work will be accomplished.

Gabriel Makhlouf, Secretary to the Treasury
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