Chapter one: The growth challenge

Why growth matters

Higher living standards for New Zealanders means having in our lives the things we value. This varies from person to person and changes over time – it is likely to include such things as good health, a satisfying job, a high-quality natural environment, material goods, community participation, security, freedom, opportunities, and a whole host more. Most New Zealanders also place a high value on social characteristics such as social inclusion, trust among people and groups, cultural richness, democracy, and the absence of significant poverty.

Although living standards include many goods not traded in markets, a large proportion of what matters to individuals and families has to be paid for. Whatever mix of elements New Zealanders value, income is important. Raising the living standards of New Zealanders depends on our ability to achieve and sustain a steady rate of growth in per capita incomes.

In recognition of the fundamental importance of economic growth to the living standards of current and future New Zealanders, we have chosen to focus much of our briefing on this area. While growth is not the sole source of wellbeing for New Zealanders, nor the only objective of government, our ability to achieve the other things we value depends to a large extent on our growth performance.

The living standards of New Zealanders depend on our growth performance

Growing incomes give individuals and families choices, and provide the means to acquire many of the things we value – including better essentials as well as more extras. Economic growth also gives the government choices. This includes the ability to invest more in education, health, environmental protection, physical and social infrastructure, and assistance to those in need, and to provide for those who will retire in future decades.

Measuring New Zealand's economic performance

The story of New Zealand's economic fortunes over the last three decades is now a familiar one. Our economy faced a number of significant external shocks in the 1970s, including the oil price shocks and loss of market access to the United Kingdom.

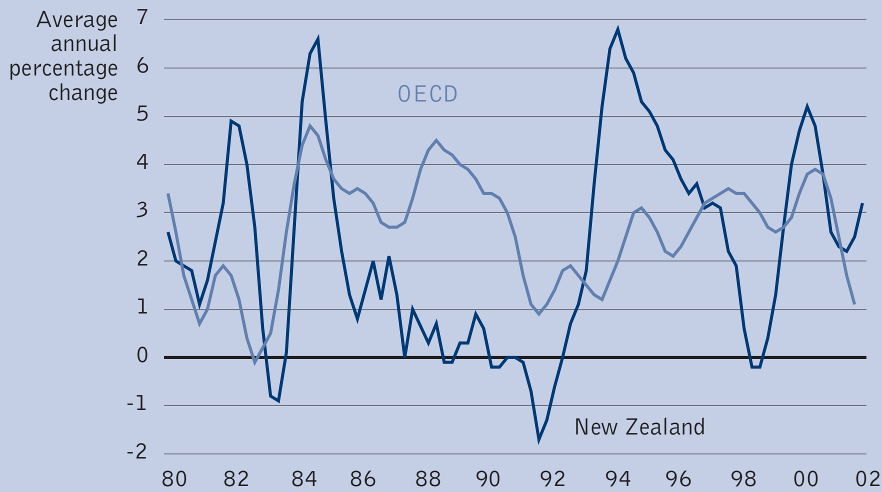
In response to these shocks, the Government attempted to maintain a high level of economic activity and employment and continued to insulate New Zealanders from changes in the global economy. By the start of the 1980s, these policy responses had generated problems – the economy faced high inflation, large fiscal deficits and a large current account deficit. There were increasingly restrictive regulatory policies that hindered private sector adjustment.

Subsequent economic reform in the 1980s and early 1990s aimed at freeing up the private sector and correcting some of the macroeconomic imbalances.

Growth picked up in the 1990s

So how did this impact on New Zealand's economic growth? Change in gross domestic product (GDP) is the measure most commonly used to describe economic growth. New Zealand's **real GDP growth** stagnated over the late 1980s and early 1990s during, and immediately following, the comprehensive economic reforms. Growth picked up over the 1990s but, towards the end of the decade, was affected firstly by the slowdown in the growth of our trading partners resulting from the so-called "Asian crisis", and secondly, by two consecutive years of drought.

Ebbs and flows: real GDP growth



Sources: Datastream, Statistics New Zealand

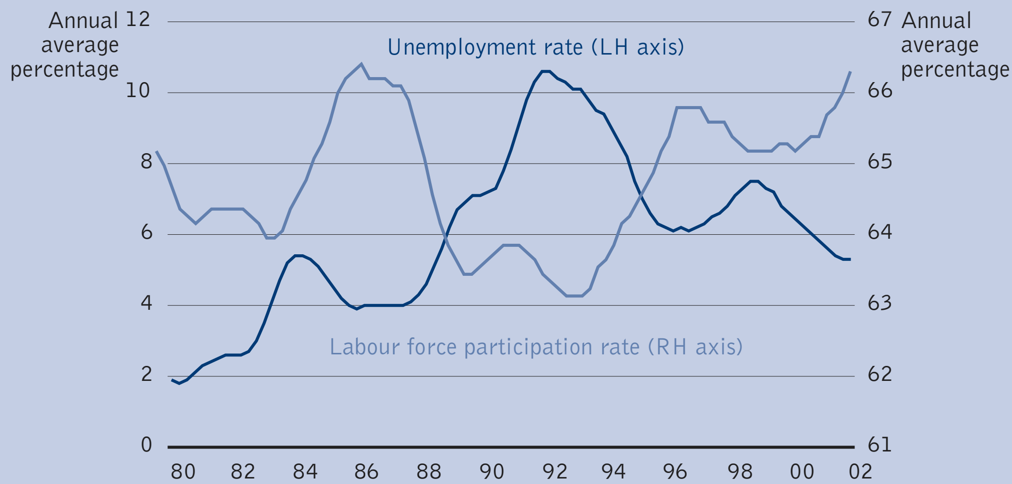
In contrast to many previous episodes of slow growth, the economy rebounded quickly and real GDP growth has averaged over 3% since 1998/99, despite the recent slowdown in the global economy. On the basis of current forecasts, New Zealand's real GDP growth is expected to average 3.3% over the five years to the end of 2003, compared with expected average growth of 2.6% across the OECD.

On balance New Zealand's growth performance over the 1990s has been significantly better than in the previous two decades. This improved performance is also reflected in a number of other economic indicators where New Zealand is performing well, relative both to history and to other countries.

New Zealand is doing well on a range of measures

Since the labour market reforms of the late 1980s and early 1990s, New Zealand has recorded a marked improvement in **labour market performance**. Over the 1990s and more recently, employment growth has been amongst the best in the OECD, and current unemployment levels are below the OECD average, and below most OECD countries including Australia. New Zealand's employment rate is also high. Total employment has risen by 27% since 1992, reflecting a strong and sustained rise in the labour force participation rate.

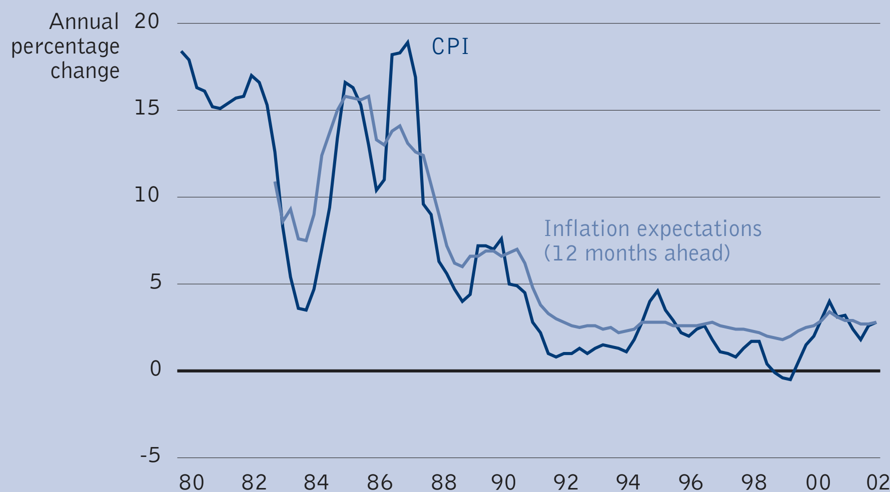
Working well: labour market performance



Sources: Statistics New Zealand, NZIER

New Zealand's **inflation performance** has improved markedly over the 1990s. During the 1970s and 1980s, inflation as measured by the Consumer Price Index (CPI) was amongst the highest and most volatile in the OECD. The 1990s saw both average CPI inflation and volatility fall below those of most other countries, contributing to marked declines in nominal interest rates, and helping both businesses and individuals make more informed saving and investment decisions. Since the start of 1992, inflation has averaged 1.8% although, over the last two years, it has averaged closer to 2.6%.

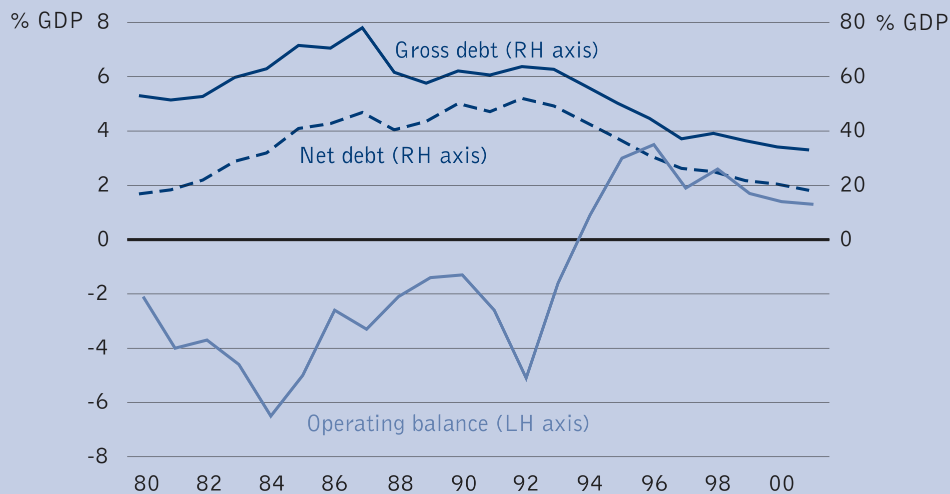
Taming inflation: movements in the CPI



Sources: Statistics New Zealand, National Bank of New Zealand

There has also been a significant turnaround in the **government's financial performance**, which has moved from deficits to consistent operating surpluses – although, since the mid-1990s, the size of these surpluses has reduced as a share of GDP. The build-up in government indebtedness has been reversed, and the deterioration in New Zealand's international credit rating during the 1980s has been partially reversed. Lower debt levels put the government in a better position to cope with shocks to the economy, and reduce volatility. Currently, New Zealand's gross public debt-to-GDP is one of the lowest in the OECD.

Balancing the books: the government's financial position



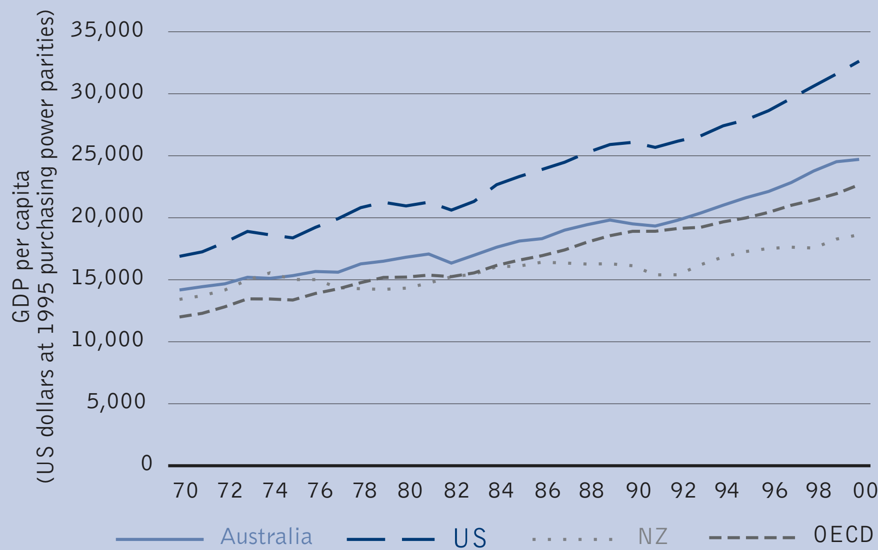
Source: The Treasury

One indicator where we don't seem to be doing as well is the **current account of the balance of payments**. Persistently high current account deficits leave New Zealand vulnerable to external shocks and a possible loss of investor confidence that, in turn, could lead to sharp falls in the exchange rate and rises in interest rates. There are some signs of the current account deficit being lower on average since the start of the 1990s. The 2.2% of GDP deficit recorded in the year to March 2002 was a 13-year low. However, New Zealand's obligations to the rest of the world have continued to rise and at current levels are among the highest in the OECD.

Our income per capita is low compared to other OECD countries

What matters for rising living standards is not necessarily growth in overall GDP, but growth in GDP per head of population (GDP per capita). GDP per capita gives us an idea of the average income of New Zealanders, and the growth rate of GDP per capita shows us how fast average income is rising. Despite the significant improvements that have been made across a range of economic indicators, New Zealand's real income per capita continues to be lower than in many other OECD countries.

Lagging behind: New Zealand's relative GDP per capita performance



Source: OECD

The shocks of the 1970s saw a major drop in our per capita income ranking across the OECD. The subsequent economic reform of the 1980s and early 1990s accompanied a period where per capita income declined relative to that of the OECD.

Since 1992, growth in New Zealand's real per capita income has been closer to that of other developed countries. However, because of our previously poor relative growth, significant differences in GDP per capita remain.

New Zealand is richer in an absolute sense today than it was 30 years ago, but the increase has not been nearly as substantial as that recorded in most other OECD countries. In 1974, New Zealand was ranked sixth in the OECD in terms of the level of real GDP per capita. In 2000, New Zealand was ranked 20th.

In the early 1970s, the purchasing power of New Zealand's real GDP per capita was comparable with that of Australia and the OECD. By 2000, however, New Zealand's real GDP per capita had declined to about 75% of real GDP per capita in Australia.

The income gap between New Zealand and other OECD countries has also widened over the past 30 years. In 1970, for example, only one OECD country had a per capita income that was greater than New Zealand's by over 30%. By 2000, 12 countries did.

Accounting for growth

One way of better understanding New Zealand's growth performance over the past decade is to break it down into its component sources. "Growth accounting" looks at how the amount of output produced by an economy can be attributed to changes in inputs (such as labour and capital), and how well they are used (that is, productivity).

Note that growth accounting only gives us a *description* of how much these inputs contribute to growth, rather than an *explanation* of exactly how they interact to produce growth.

Growth – taking it apart

At its simplest level, growth accounting is concerned with growth in physical capital and employed labour, and growth in total factor productivity (TFP) – which measures the economy's ability to produce more output with the same level of inputs.

Sources of real GDP growth[1]	*Business cycle one*[2]		*Business cycle two*[2]	
Employment growth (% pa)[3]	2.3		1.4	
Contribution to real GDP growth		*1.5*		*0.9*
Capital stock growth (% pa)	1.9		2.8	
Contribution to real GDP growth		*0.7*		*1.0*
TFP growth (% pa)	0.8		0.5	
Contribution to real GDP growth		*0.8*		*0.5*
Real GDP growth (% pa)		3.0		2.4

[1] All figures are expressed as trend growth – that is, the growth rate per year taken from the peak of real GDP in one business cycle to the next.

[2] Business cycle one runs from the fourth quarter of 1990 to the second quarter of 1997. Business cycle two runs from the second quarter of 1997 to the first quarter of 2002. However, it may not represent a full business cycle.

[3] Based on full-time equivalent employment. One part-time worker is assumed equivalent to half a full-time worker.

Sources: Statistics New Zealand, The Treasury

Looking at the first two columns in the table above, growth in real GDP between 1990 and mid-1997 was characterised by strong growth in the labour input, with the number of full-time equivalent workers employed growing at over 2% per annum. This strong employment growth in the early 1990s probably reflects the impact of labour market reform at this time, and the lack of employment growth in the second half of the 1980s. Over the same period, growth in the stock of capital, while still positive at just under 2% per annum, was somewhat weaker than over the second half of the 1980s. TFP growth between 1990 and mid-1997 was 0.8% per annum.

In the current cycle since mid-1997 (the second two columns), the contribution to growth of capital and labour has become more balanced, with growth in the stock of capital increasing by nearly 1.0% per annum and employment growth slowing to less than 1.5% per annum.

These changes in composition can be seen in other countries. For example, during the late 1980s, a larger share of Australia's output growth came from labour input growth as opposed to labour productivity. Since the early 1990s, labour productivity growth has played a larger role.

Taking a growth accounting perspective, a large part of New Zealand's improved growth performance in the 1990s was probably due to increases in the use of capital and labour, and a smaller amount was due to productivity growth.

Increased labour and capital contributed to growth in the 1990s

Although international growth accounting comparisons are problematic, over the 1990s New Zealand also looks to have relied more heavily than other countries on increases in inputs (for instance, employing more people) rather than productivity, to generate growth. Most other OECD countries, including Australia, have generated higher rates of productivity growth over the past decade. Better-performing OECD countries like Australia and the US have been able to generate both high employment and high productivity growth.

Looking at this picture, it seems that if we're to raise New Zealand's rate of economic growth, we'll need to lift our productivity growth rates significantly from those observed over recent years. This is a tough challenge. For example, to achieve economic growth of around 4% per annum, assuming historical growth in labour and the stock of capital, New Zealand's TFP growth would need to reach around 2% per annum.

Although growth in TFP of 2% per annum is quite high by historical standards, there are recent examples of high rates of TFP growth being achieved by some small, developed economies. During the 1990s, Australia, Ireland and Finland all achieved TFP growth in excess of 2% per annum.

We still need higher productivity

There is still room for New Zealand to increase labour and capital inputs through higher employment and more investment. As an example, increasing labour market participation by women and older workers could see some growth in labour input over the next five years. But looking further ahead, the projected ageing of the population will see slower growth of the working-age population. With unchanged labour productivity growth this will tend to result in lower rates of overall GDP growth.

While growth in labour and capital inputs will continue to be important, the key message here is that the big gains will come from productivity growth. We need to use our inputs better to produce more for the same effort.

Explaining New Zealand's growth performance

There are a number of explanations we can put forward about why New Zealand hasn't had better growth. One explanation attributes New Zealand's relative economic performance to the time it takes for the full benefits of policy changes to be felt in the economy. Another explanation attributes New Zealand's relative economic performance to our particular circumstances – specifically our small size, physical isolation, and industry structure.

We think that both explanations are useful in helping us think about the direction future policies should take.

Policy time lags

There is some room for optimism that we may yet reap further benefits from the economic reforms of the 1980s and 1990s.

This programme of reforms was extensive, and led to major changes in terms of what was produced in our economy, and how this was done. Given the fundamental nature of some of these changes, it may take time for them to have an effect on the behaviour of firms, workers, and investors – and thus on growth. For example, there may be productivity improvements in the pipeline as those who entered the workforce in the late 1990s continue to enhance their skills, and firms benefit from a more stable macroeconomic environment.

Further benefits from the reforms will not be enough to catch up

However, we think it would be unwise to rely simply on waiting for the high levels of growth needed to catch up with other OECD countries to happen on the back of past reforms. Partly this is because, as time passes, we are failing to observe any significant upward shift in our growth gear. Partly it is because there appears to be little serious research work that can give us confidence that lags will ride to the rescue. And partly it is because New Zealand has some particular characteristics – including its size, its distance from markets and its industry structure – that suggest some different policy approaches may be needed. We discuss how these characteristics might impact on growth in the next section.

Size, distance and factor mobility

A second way of thinking about our past growth performance and future growth prospects is by focusing on the impact of New Zealand's small size and physical isolation on our economic performance.

People, capital and firms are internationally mobile

Our world is characterised by an increasing degree of factor mobility – that is, the mobility of people, capital and firms – across borders. Although national borders still matter, they frequently do not constrain the international movement of people, financial capital, and companies as they seek out the best returns and opportunities. For instance, New Zealand nurses, teachers, builders, accountants and scientists are operating in an international labour market.

Such mobility generates real opportunities for an economy like New Zealand. It opens up overseas opportunities for New Zealand workers and investors, and allows foreigners to work and invest here.

However, this mobility also raises risks for a country like New Zealand. We are small and a long way from major markets. There is a growing body of theory and empirical evidence that cities, regions and countries in which labour and capital are concentrated offer higher returns because of the spillover effects and the cumulative benefits of greater skills, knowledge and investment. Economic geographers have found that large, densely populated areas are more productive and innovative, grow faster, have higher wages, and attract people, capital and activity. This is known as the "agglomeration effect".

Agglomeration in action

This map of New Zealand shows the change in population between 1996 and 2001 using census data. Auckland – the region with the largest city – attracted by far the greatest number of people. In general, less densely populated regions such as Southland, Otago and the West Coast tended to lose people. This shows how the process of agglomeration may work within New Zealand, with population growth concentrated in more densely populated areas, resulting in a continuing urban, largely northbound drift.

If the agglomeration theory is correct, small, distant countries like New Zealand may face disadvantages relative to larger, more proximate countries in terms of being able to attract and retain the skilled labour and capital required to lift productivity and growth. From a New Zealand perspective, Sydney, Melbourne and London compete with Auckland and Wellington as locations for New Zealand labour and capital.

This competition for skilled labour is becoming more intense through time, placing New Zealand employers under increasing pressure to match the pay and conditions offered by foreign employers. And this pressure is likely to increase – it is estimated that the working-age population across OECD countries will reduce by 65 million people over the next 25 years. The resulting increase in the competition for labour may make it more difficult for New Zealand to retain the skilled labour required to lift productivity and growth.

Agglomeration can become a self-perpetuating process and can lead to either virtuous or vicious circles. For example, if skilled labour and capital leave New Zealand, this may mean reduced return on New Zealand-based factors. In this case, the incentive for labour and capital to remain in New Zealand reduces. This will ultimately make it even harder to close the gap with other developed countries.

Size and proximity matter for growth

There is a vigorous debate as to whether these tendencies towards agglomeration are becoming more or less important over time. It is certainly true that transport and communications costs are reducing through time, and that new technologies offer some new ways to overcome the effects of distance. This has led some to proclaim the death of distance, the implication being that New Zealand will increasingly be able to compete with overseas agglomerations for skilled labour and capital. New Zealand's reputation as a clean, pleasant and safe place to live and work also helps in this regard.

However, tacit knowledge, handshake relationships, trust and so on remain important, especially as trade in specialised products increases. It is the importance of this tacit knowledge that is the real tyranny of distance: knowledge moves in social rather than digital networks. Speed to market, knowledge of market preferences, reputations, informal norms and unexpected interactions are the sort of things that reinforce agglomeration effects and make small, distant countries less able to participate in the global economy. Indeed, the continued importance of agglomerations like Silicon Valley suggests that rumours of the death of distance have been exaggerated.

Although we are not sure that the world is characterised by these agglomeration effects, we think that it's likely. Agglomeration forces, combined with increased factor mobility, might account for some of the difficulty New Zealand has faced trying to keep pace with larger, more centrally located OECD economies. What is more, the interaction of openness and factor mobility with New Zealand's size and location confers both risks and opportunities for the future. The challenge for us is to extract maximum value from the opportunities and to manage the risks.

Moving forward

Whichever way we look at New Zealand's growth performance, there is one thing that is certain: we need to do better. While our growth rate is projected to be around the OECD average for the foreseeable future, that's not going to be enough to close the relative income gap. And factor mobility makes our growth performance *relative* to other OECD countries particularly important – if New Zealand can't generate the same level of per capita income as other countries, it risks losing people and businesses to more dynamic, prosperous economies.

We're growing at the OECD average – but we need to do better

Different perspectives on understanding economic growth teach us different lessons: we need to improve our productivity performance; we shouldn't discount the possibility that benefits from the reforms are still in the pipeline; and we need to take size and distance seriously. Regardless of which perspective we take, the key challenge for economic policy is to move New Zealand's growth rate above the OECD average in order to close the income gap.

This then raises the question of what exactly the role is for economic policy in raising growth.

New Zealand's economic growth comes from the productive efforts of New Zealanders at home, at work, in business and in their communities. It is the result of thousands upon thousands of choices made by individuals and firms every day. The government's policies, actions and words shape the environment in which these decisions are made, setting a context and tone, and creating incentives and disincentives.

In this sense, government policies have a key role in assisting growth. But the complexity of the interactions that produce growth also suggests that there are limits to what governments can achieve. We need to be cautious and realistic about the role of policy in altering the path of per capita income, and how long this might take. What is more, government actions are not costless. We therefore need to take care to develop well-designed policies that deliver more benefits than they cost.

Economic policy development is at the best of times an inexact science. Getting good policies will therefore require cautious experimentation, careful monitoring and evaluation, and a willingness to adjust or abandon policies that don't work.

The next two chapters consider the role of policy in maintaining the improvements of the 1990s, and generating further growth relative to other OECD countries.