



Economic Development Indicators 2007

PRODUCED BY
Ministry of Economic Development
The Treasury
Statistics New Zealand

Introduction

This document summarises the key findings of the Economic Development Indicators Report 2007.

The report provides a broad range of indicators relevant to New Zealand's economic performance. It has been prepared to inform economic policy making in general as well as to feed into the government's ongoing work on economic transformation. It updates and expands on two previous reports, completed in 2005 and 2003.

Such indicators allow us to monitor progress towards economic goals, and to benchmark New Zealand's performance against that of other countries both in terms of high-level outcomes, such as income levels, and the underlying factors that may influence these outcomes over time, such as levels of innovation and skills.

On their own, indicators cannot help us evaluate the effectiveness of economic policy, but over time the direction or pace of change in a particular indicator or set of indicators may provide information on whether policy is broadly on the right track.

Viewed together and over time, these indicators provide useful information about trends, future direction, and how different parts of the innovation system relate to each other. Individually they provide, at best, only an indication of change in a particular area.

For some of the indicators in this report the most recent available international data was for earlier than 2006 – in a few cases much earlier. Therefore a number of the government's more recent policy

changes, such as the tax treatment of R&D, are not reflected in this report.

The 2007 report includes a larger number of indicators than the previous reports, is organised slightly differently, and provides indicators in two new areas (New Zealand's economic relationship with Australia and its states and Auckland – an international competitive city).

In general the report uses Organisation for Economic Co-operation and Development (OECD) countries, together with an OECD average or median measure, as the comparison group. In comparing growth rates across time it focuses on Australia, the United Kingdom, United States and Denmark.

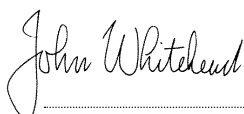
There are a number of issues to bear in mind in interpreting this report:

- There is not a simple or obvious causal relationship between performance on particular indicators, economic performance overall, and economic policy.
- Indicators are affected by cyclical and temporary influences, as well as government policy.
- Many of the efforts of government and businesses to improve New Zealand's economic performance will deliver results only over much longer periods.
- Virtually all of the data used in this report is drawn from surveys, which have a margin of error and may be distorted by different respondents' opinions and interpretations.

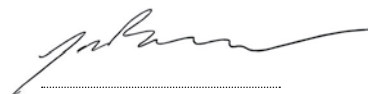
In spite of these issues, we are comfortable that the overall picture presented by the report is robust. ■



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Copies of this summary and the full report, *Economic Development Indicators 2007*, is available:

- **on-line** at www.med.govt.nz/indicators
- **by e-mailing** economicindicators@med.govt.nz
- **by calling** the Ministry of Economic Development on 04 472 0030.

1 Well-Being and Prosperity

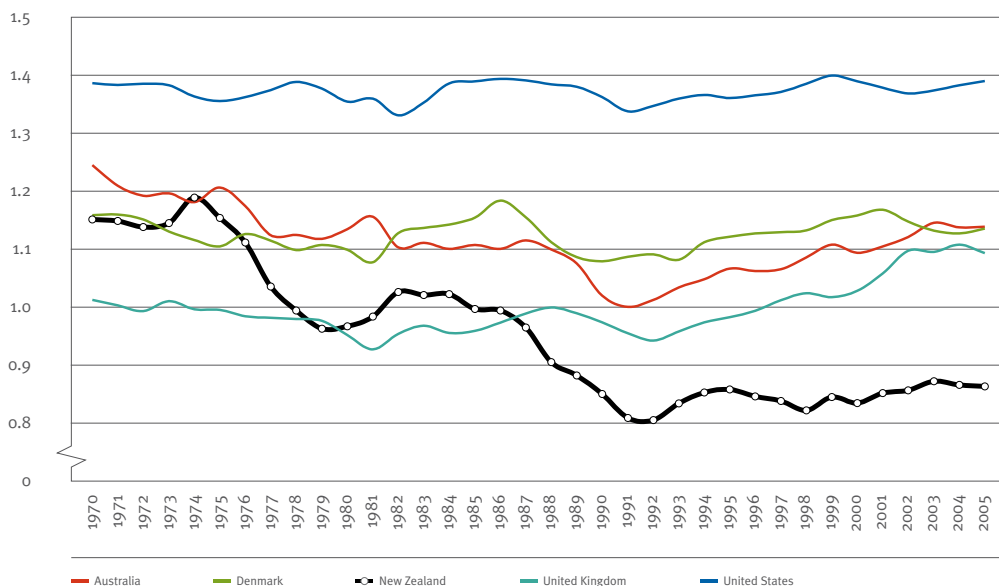
- A country's well-being is determined by a wide range of factors, from its material living standards to the nature and quality of its social and environmental situation.
- New Zealand ranks more highly in the OECD on quality of life indicators (which depend on a range of factors, including income) than it does on the two narrower economic measures: what New Zealand earns – gross national income (GNI) per capita – and what New Zealand produces – gross domestic product (GDP) per capita.
- The recent growth rate in GDP per capita has been somewhat higher than the OECD average but the level of GDP per capita remains lower.
- The difference between GDP and GNI is greater in New Zealand than in most other economies in the sample. This is because income accruing to foreign investments in New Zealand greatly exceeds that accruing from New Zealanders' overseas investments.
- Household wealth in New Zealand has grown strongly since 1995, the biggest increase being in housing wealth.
- Income inequality among households increased between the 1980s and 1990s, giving us a higher degree of income inequality than the OECD average and countries such as Denmark, Australia and the UK, but has stabilised more recently.

2 Immediate Drivers of Income Growth

- Improvements in material living standards (GDP per capita) can be attributed to increases in either labour utilisation or labour productivity (total income generated per hour worked). New Zealand has a relatively high labour utilisation rate compared with its OECD counterparts, but a relatively low labour productivity.
- Given the limits to improving labour utilisation further, future improvements in material standards must come primarily from labour productivity growth.
- The measured growth rate in labour productivity for the whole economy has been at or below the level in benchmark countries since 1980.
- This measure includes sectors where it is difficult to measure productivity, so the rate might be misleading. In the measured sector, where more accurate measures are available, the average growth rate of labour productivity has exceeded that of Australia since 1988.
- The amount of capital available per hour worked has increased in recent years.
- The whole economy measure of multi-factor productivity (MFP) growth remains low by OECD standards, but measured sector MFP growth is similar to Australia's.

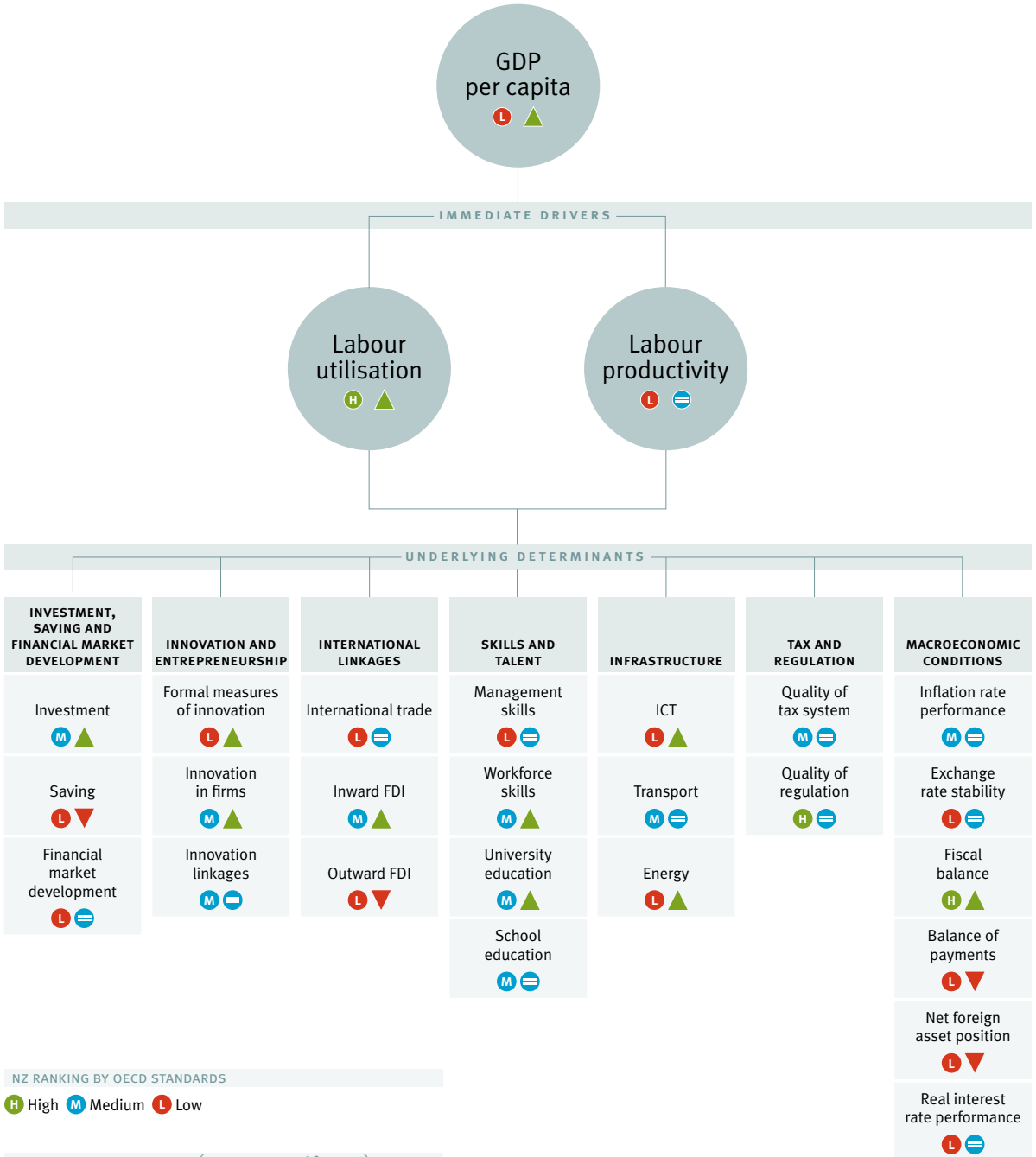
FIG.

1.6 Real GDP per capita as a proportion of the OECD average



Source OECD Factbook 2007

NEW ZEALAND'S PERFORMANCE RELATIVE TO THE OECD AGAINST KEY INDICATORS



These ratings of performance represent only broad aggregated judgements across a number of indicators. They should be interpreted in conjunction with the fuller picture of performance described in each chapter of the full Economic Development Indicators Report 2007, available on-line at www.med.govt.nz/indicators.

3 Underlying Determinants of Productivity Growth

Firm and Market Performance

Investment, Saving and Financial Market Development

- The level of New Zealand's total fixed investment, as a percentage of gross domestic product (GDP), is around the OECD average.
- Business investment as a percentage of GDP has been around the OECD median over the last ten years.
- Plant and machinery investment, as a percentage of GDP, has been towards the top of the OECD since 1970.
- Housing investment as a percentage of GDP has been on the increase since the mid-1990s, but still falls close to the benchmark OECD economies.
- Government investment spending has increased over the past decade following a sharp decline in the mid-1980s, but still falls short of the high rates seen in the 1970s and 1980s.
- Household and national saving rates are low and have been falling more quickly in New Zealand than in benchmark economies, creating a need for overseas funds to supplement domestic savings in financing domestic investment.
- While the banking sector is very well developed, the venture capital and sharemarket are small compared with the better-performing OECD economies.

Innovation and Entrepreneurship

- Innovation underpins aggregate productivity growth, and entrepreneurship drives innovation.
- Indicators in this section present a mixed but improving picture for entrepreneurship and innovation in New Zealand.
- Overall, New Zealand ranks low relative to other OECD countries on the formal measures of innovation activity – research and development (R&D) and patenting. This underperformance can be explained by our distance from major world centres, lack of large firms and relatively large primary sector, suggesting that New Zealand has to be better than other countries in promoting innovation.
- Our basic science base is delivering relatively high levels of research outputs 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 the OECD.
- New Zealand firms have high entry and exit rates.
- New Zealand firms have on average somewhat higher innovation rates than European Union firms across a range of measures but very low levels of R&D.
- The level of high and medium-technology products exported by New Zealand firms is also far behind the OECD average, although sophisticated technology underpins the primary sector, which the OECD classifies as a “low technology intensive” sector.
- Although the level of business R&D is very low in New Zealand, it is growing much more rapidly than the OECD.
- Commercially viable innovations are often developed by a firm working in collaboration with other agencies. Proxy measures of collaboration across the innovation system suggest strong research links between business and government in New Zealand but weaker research links between business and universities, and internationally.

4 Underlying Determinants of Productivity Growth

Business Environment

International Linkages

- International linkages are important for productivity and economic performance. Such linkages support knowledge flows from overseas, help foster business relationships, provide markets for our exports and support the import of technology embodied in new equipment.
- New Zealand's share in world trade is 0.36 per cent and has been relatively static, in line with the OECD average. As a percentage of GDP, New Zealand's share of exports and imports falls in the lower half of the OECD, which is unusual for a country of New Zealand's size.
- High levels of inward and outward foreign direct investment (FDI) are important for small, open economies like New Zealand's. The stock of New Zealand's inward FDI is high by OECD standards, with "greenfield" investment about average. Outward FDI is among the smallest in the OECD as a percentage of GDP.
- Flows of people (and their knowledge) also contribute to economic growth in New Zealand. Our net immigration has been high relative to the benchmark economies, with a significant share of these people educated to tertiary level.
- International students are a source of current export earnings, a potential source of future skilled migrants for New Zealand, and an important way of developing international networks. The number of foreign fee-paying students in the university sector has diminished in recent years.

Skills and Talent

- Skills and talent are important to economic transformation.
- Management skills have a big impact on organisational performance. New Zealand's perceived availability of management skills ranks below that of Australia, the UK and many OECD countries.
- Education levels are important because more highly educated people tend to be more productive.
- The education level of New Zealand's workforce is above the OECD median and improving. However, we have significant numbers of people at the lowest levels of literacy and numeracy.
- New Zealand's university graduation rate is one of the highest in the OECD, and our best university is similar in quality to the median leading universities in OECD countries. The mix of fields of study, however, may not be optimal from the perspective of economic growth. New Zealand's 15- to 20-year-olds have lower enrolment rates than the OECD average, indicating a higher proportion of students leaving school and not enrolling in tertiary education.
- Māori and Pasifika educational achievement in schools is below average but improving.

Infrastructure

- Appropriate infrastructure has a positive effect on the economy as a whole by contributing to increasing productivity levels and maintaining New Zealand as an attractive country in which to do business.
- The quality of much of New Zealand's infrastructure appears to be at or below the OECD average.
- New Zealand's information and communications technology (ICT) infrastructure quality appears to be below that of most OECD countries, but recent improvements in certain areas (such as broadband subscriptions) are encouraging.
- New Zealand's transport infrastructure quality appears to be slightly below the OECD average, but is equivalent to that of many countries with dispersed populations such as Norway, Finland and Australia.
- The perceived quality of energy infrastructure is low in comparison with other key countries, but is improving.

Tax and Regulation

- New Zealand's tax and regulatory settings influence the incentives for businesses and workers to locate or undertake additional economic activity in New Zealand.
- New Zealand is second in the world for overall ease of doing business. However, there is scope for further improvement in certain sub-indicators, particularly: ease of employing workers; ease of enforcing contracts; ease of closing a business; and ease of dealing with licences.
- New Zealand's competition and employment regulations are very efficient by OECD standards (within the top seven).
- New Zealand's total tax burden, measured by our tax to GDP ratio (35 per cent), is around the OECD median.
- The share of total taxes collected from personal and corporate income in New Zealand is high by OECD standards because New Zealand does not have a social security tax on wages and salaries,

which is common in OECD countries. As a result, our tax on wages and salaries (including social security taxes and parts of income tax) is relatively low, whereas our tax on income from capital (taxes on corporate profits, interest, etc) is relatively high by OECD standards.

- New Zealand's corporate tax rate is similar to rates in Australia and the UK, but high relative to some small economies (particularly Singapore, Ireland and Chile).
- Across the working population, New Zealand's average tax wedge on personal income is relatively low compared with other OECD countries, even when the combined effect of income tax and GST is taken into account. However, there is variation in incentives to work more.
- New Zealand's tax law is very easy to comply with.

Macroeconomic Foundations

- GDP growth rate volatility has decreased since the 1980s and early 1990s, but is higher for New Zealand than for comparator countries.
- While inflation is still within the target band, it has increased since 2003.
- New Zealand's high government surpluses compensate to some extent for low savings elsewhere in the economy and provide a buffer against shocks.
- New Zealand's real long-term interest rate has been reducing along with global interest rates since the early 1990s, but is higher and more volatile than in most of the benchmark economies.
- New Zealand's terms of trade have increased since 2003, increasing national income.
- New Zealand's current account deficit and level of external liabilities have increased since the 1980s and are larger than in all of our comparator economies.
- New Zealand's real effective exchange rate has been more volatile than that of comparator countries.

5 New Zealand's Economic Relationship with Australia and its States

- New Zealand appears to be more highly integrated with the Australian economy than with that of any other country, but is still less integrated than the Australian states are with each other.
- New Zealand's economic performance will be an important determinant of our ability to compete with the Australian states for key resources, such as highly skilled workers and investment.
- New Zealand's growth in gross domestic product (GDP) per capita has been in the middle of the Australian states, but our level of GDP is lower than all of those states other than Tasmania.
- Australia has become an important destination for emigrating New Zealanders, resulting in a large and growing New Zealand diaspora. However, the magnitude of the net outflows are not a great deal bigger than that experienced by some of the Australian states to other parts of that country.
- New Zealand is a net importer from Australia of a number of high-value services, although we have a higher proportion of our workforce in finance, insurance and business services than do most Australian states.
- Australia accounts for a large and growing proportion of foreign investment in New Zealand, which has led to a large negative net investment position from New Zealand's perspective.

6 Auckland – an Internationally Competitive City

- Large, outward-facing, global cities play an increasingly important role in economic development.
- Auckland's gross domestic product (GDP) per capita is lower than all but one of the international benchmark cities chosen, but only slightly so in most cases. However, it is substantially lower than the cities (predominantly large) with the highest GDP per capita.
- Importantly, Auckland is also assessed as offering a high quality of life by international standards, offsetting to some degree its lower GDP per capita.
- Auckland's productivity levels (GDP per worker) are lower than the average of a sample of 78 metropolitan regions in the OECD and below most comparator cities (Brisbane, Melbourne, Adelaide, Seattle, Vancouver and Copenhagen).
- The difference in productivity between Auckland and New Zealand as a whole – the Auckland "premium" – is in the middle of the comparator cities, suggesting that, in the New Zealand context, Auckland is contributing normally to economic growth.
- Auckland's population growth rate is very high by international standards. This is driven by high levels of inward international migration. Within New Zealand, Auckland has experienced low net population outflow over recent years relative to the region's population.
- With regard to the underlying factors that influence productivity growth, Auckland's performance is mixed:
 - Auckland's levels of patent applications per capita are relatively low by international standards, as is its share of the working age population with a tertiary education.
 - Auckland City's share of employment in high-tech services and goods manufacturing is broadly in the middle of the international comparator cities.