

When will New Zealand catch up with Australia?

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Preface

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Abstract

New Zealand's average income, defined as GDP per capita, is now three quarters that of Australia and even lower than in Australia's poorest state, Tasmania.

Over the last seven years, New Zealand has grown slightly faster than Australia, but at these rates, it would still take 140 years to close the trans-Tasman income gap. To catch up with Australia in five to 10 years, New Zealand would need to grow at between 4.7% and 7.6% per year. This exceeds New Zealand's highest average annual growth rate over a five-year period of 4.6%, in the early 1960s.

These calculations hold Australian growth rates constant at its annual average over 2000 to 2007. If Australia were to grow faster than its recent performance, the growth rates required of New Zealand to catch up with Australia would be even higher. While such growth rates are not impractical, New Zealand is not currently on track to achieve them, given its recent poor record on labour productivity.

Catching up with Australia is not impossible, but very unlikely without major changes to New Zealand's policy directions. The challenge is for its policy makers to put forward sensible policies and to carry them through to fruition in the years to come.

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1. Introduction

One of the government's top priorities of recent years has been to return New Zealand incomes, defined as GDP per capita, to the top half of the OECD rankings (see, for example, Clark, 2001, and Cullen, 2002). In response to this laudable goal, the Treasury showed that "to reach the median OECD income per capita would require an unprecedented increase in the average annual rate of economic growth" and considered that New Zealand's ranking was likely to slip further (Mawson and Scobie, 2001). New Zealand's ranking indeed fell from 20th highest income per capita in the OECD in 1999 to 21st by 2004 and 22nd by 2006 (OECD, 2008).

More recently, in light of rising trans-Tasman migration,¹ the political focus has switched to closing the gap with Australia. The National Party has campaigned on narrowing the trans-Tasman wage gap (see, for example, English, 2008), while the ACT party has campaigned on outperforming Australia and bringing New Zealanders home (Hide, 2008). In contrast, Finance Minister Michael Cullen and the Council of Trade Unions have called on businesses to raise wages closer to those paid in Australia to stop the exodus of kiwis across the Tasman (see Young, 2008, and Council of Trade Unions, 2008).

To close the gap with Australia, New Zealand must grow faster. In this paper, we estimate how much faster New Zealand would need to grow, for how long, to catch up with Australia.

2. Current gap

In the year to June 2007, New Zealand's GDP averaged NZ\$41,100 per person, equivalent to US\$31,100. This is 74% of Australia's average of US\$42,300 per person.

In Table 1, we use purchasing power parity (PPP) to adjust for differences in the cost of living between countries. In PPP terms, the corresponding ratio is 76%. This implies that, if the basket of goods and services used in deriving PPP is typical of what Australians and New Zealanders consume, the average living standards of New Zealanders in 2007 were 24% lower than those of Australians (or equivalently, relative to living standards in New Zealand, Australia's were 32% higher).

¹ According to Statistics New Zealand (2008) the net outflow of permanent and long-term migrants to Australia was 32,300 in the year ended July 2008, its highest level since April 1989.

Table 1 GDP per capita, 2007

	In national currency	In nominal US\$	In PPP terms	Relative differential with NZ (PPP terms)
Tasmania	42,924	36,140	30,067	13%
South Australia	44,281	37,283	31,017	16%
Queensland	47,527	40,016	33,291	25%
Victoria	48,037	40,445	33,648	26%
NSW	48,829	41,112	34,203	28%
ACT	64,591	54,383	45,244	70%
Western Australia	68,032	57,280	47,654	79%
Northern Territory	68,711	57,852	48,130	81%
Australia	50,264	42,320	35,208	32%
New Zealand	41,147	31,125	26,645	

Note: (1) In June 2007 prices

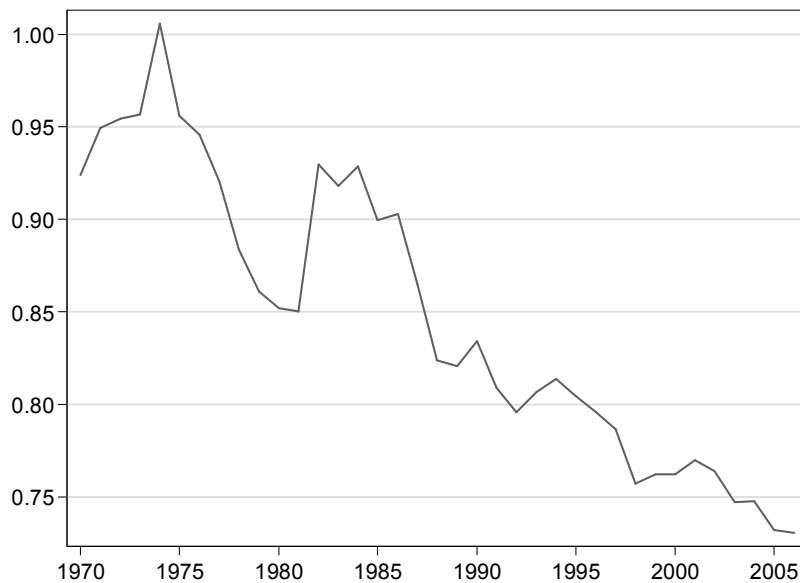
Sources: Australian Bureau of Statistics, Statistics New Zealand, OECD

Average incomes in Queensland and New South Wales, where two thirds of the New Zealand diaspora live, were 25% to 28% higher than those in New Zealand.² Incomes were lower in New Zealand than in even Australia's poorest state, Tasmania.

The income gap between New Zealand and Australia is not only significant, but also widening, as shown in Figure 1. In 1974, New Zealand's average income was slightly higher than Australia's. By 1990 it was 16% short of Australia's and by 2000 it was 23% short.

² According to the 2006 Australian Census, 38% of New Zealanders living in Australia live in Queensland and 27% in New South Wales.

Figure 1 Ratio of New Zealand to Australian GDP per capita



Note: GDP is measured in PPP terms

Source: OECD (2008)

3. Catching up

3.1 How long to catch up

Over 2000 to 2007, New Zealand's average income grew at an average of 2.02% per year, compared with 1.81% average annual income growth in Australia (Table 2). If incomes in these two countries continued to grow at these rates, it would take New Zealand 140 years to close its income gap with Australia (Table 3).

In some Australian states, incomes are not only higher than in New Zealand, but have also grown faster over the last seven years. At these rates, New Zealand would never catch up with Tasmania, Queensland, Australian Capital Territory, Western Australia and the Northern Territory. New South Wales has recently experienced weaker growth than New Zealand. At these rates, income levels in these two regions would converge in 34 years.

Table 2 Recent growth rates

Average annual percentage change in real GDP per capita

	1990-2007	2000-2007
Tasmania	1.95	2.07
South Australia	1.70	1.91
Queensland	2.22	2.29
Victoria	1.83	1.49
NSW	1.79	1.28
ACT	1.92	2.18
Western Australia	2.76	2.98
Northern Territory	1.67	2.55
Australia	1.99	1.81
New Zealand	1.95	2.02

Source: Australian Bureau of Statistics, Statistics New Zealand

Table 3 Time until New Zealand catches up, under current growth rates

To catch up with	Number of years
Tasmania	Never
South Australia	146
Queensland	Never
Victoria	45
NSW	34
ACT	Never
Western Australia	Never
Northern Territory	Never
Australia	140

Notes: (1) If New Zealand and (each state of) Australia continue to grow at their average annual rates for 2000 to 2007

Source: NZIER

3.2 How fast to catch up sooner

To catch up with Australia sooner, New Zealand would need to grow significantly faster. If New Zealand's growth accelerated by half a percentage point (about 25% higher than the average annual rate for 2000 to 2007), it could close the gap with Australia in 41 years (Table 4). If New Zealand's growth rate doubled, the income gap would disappear in 13 years. At the latter, New Zealand would be able to close the gap with Tasmania in two government terms of office (six years) and

with Australian Capital Territory, Australia's richest non-mining state, in just over a generation (30 years).

Table 4 Time until New Zealand catches up, under faster growth rates

To catch up with	At current growth rate (2000-2007)	Current growth +0.5%	Current growth +1%	Twice the current growth rate
Tasmania	Never	28	13	6
South Australia	146	26	14	7
Queensland	Never	100	31	13
Victoria	45	23	16	9
NSW	34	21	15	9
ACT	Never	164	65	30
Western Australia	Never	Never	1,547	57
Northern Territory	Never	Never	130	41
Australia	140	41	24	13

Notes: (1) (Each state of) Australia is assumed to grow at its average annual rate for 2000 to 2007

(2) The average annual growth rate for New Zealand for 2000 to 2007 was 2.02%

Source: NZIER

For New Zealand to close the income gap with Australia in 10 years, it would need to grow at 4.7% per year, as shown in Table 5 and Figure 2. To close the gap in five years, it would need to grow at 7.6% per year.

Table 5 Growth rates for New Zealand to catch up

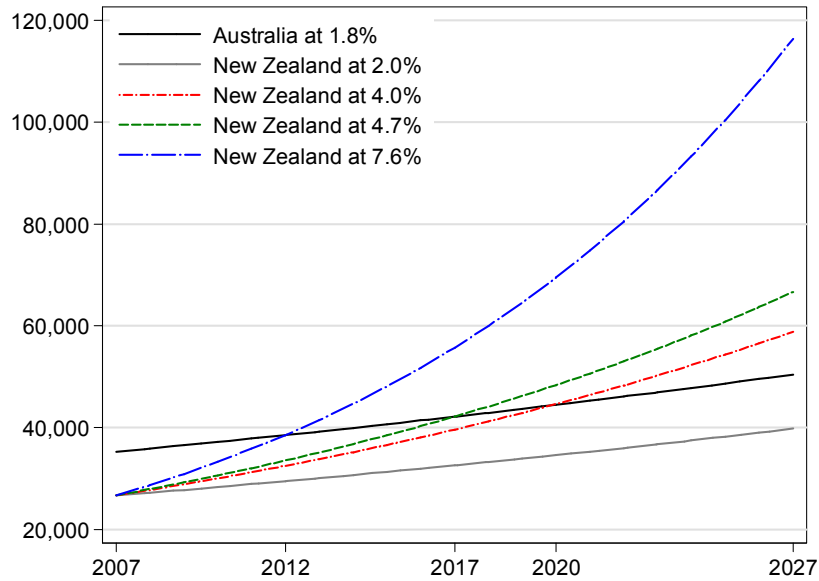
Average annual percentage growth in GDP per capita

To catch up with	In 5 years	In 10 years	In 20 years
Tasmania	4.6	3.3	2.7
South Australia	5.1	3.5	2.7
Queensland	6.9	4.6	3.4
Victoria	6.3	3.9	2.7
NSW	6.5	3.8	2.6
ACT	13.6	7.7	4.9
Western Australia	15.7	9.1	6.0
Northern Territory	15.4	8.8	5.6
Australia	7.6	4.7	3.2

Notes: (1) (Each state of) Australia is assumed to grow at its average annual rate for 2000 to 2007

Source: NZIER

Figure 2 Projected GDP per capita by growth rate
 US\$, 2007 prices and PPPs, average annual percentage growth rate



Note: (1) 1.8% and 2.0% are respectively Australia's and New Zealand's average annual rates of growth in per capita GDP for 2000 to 2007

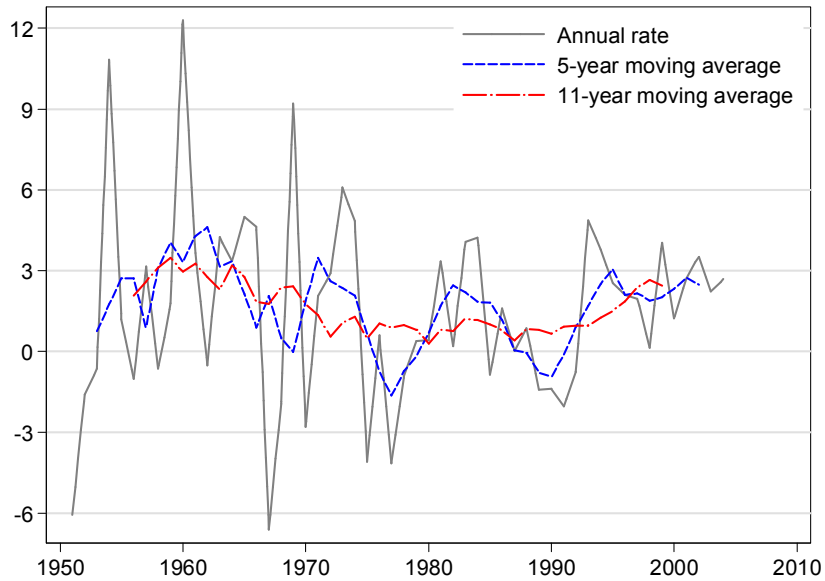
Source: NZIER

3.3 Could we do it

How do these growth rates compare with New Zealand's past performance? Over the last five decades, there have been seven years in which New Zealand has achieved annual growth rates of at least 4.7%, including three years of annual growth in excess of 7.6% (Figure 3). The highest average growth over a five-year period, however, was 4.6% per year (around the early 1960s), while the best performance over an 11-year period was only 3.5% (around the late 1950s).

Figure 3 New Zealand's growth rates

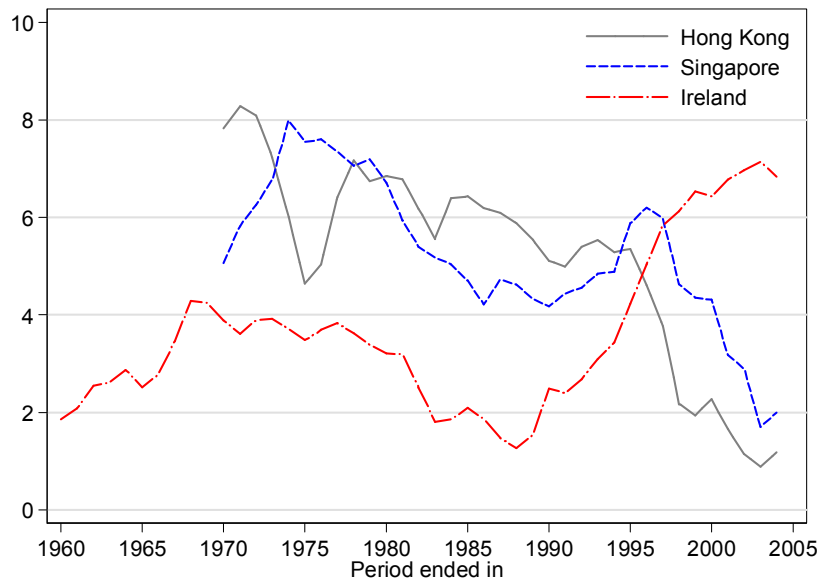
Average annual percentage change in real GDP per capita



Source: Heston *et al.* (2006)

Figure 4 Growth rates, 10-year moving average

Average annual percentage change in real GDP per capita



Source: Heston *et al.* (2006)

Growth rates of 4.7% and 7.6% are high, but not impossible. Many countries have been able to sustain similar rates of growth for a long period, even at high income levels. For example, Ireland's 10-year moving average growth rate has exceeded 5% per year for the last 15 years, as shown in Figure 4, lifting Ireland from the

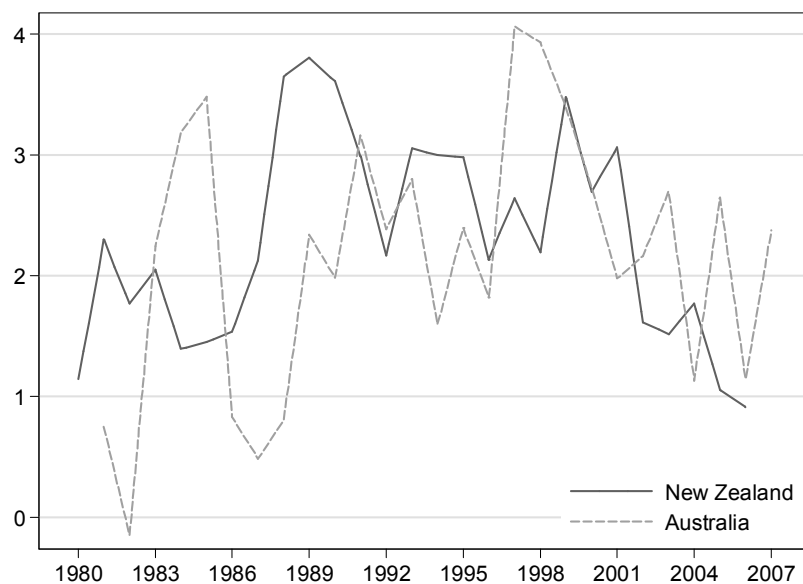
poorest country in the OECD in 1970 to the top five since 2002. Meanwhile, New Zealand slipped from 8th place in 1970 to 22nd in 2006.

Improved living standards cannot be achieved simply by increasing wages. In a competitive labour market, wages are set at the marginal product of labour. Increasing wages beyond this just causes inflation, raising the cost of living and making no gains in terms of real wages and living standards. To increase real wages requires an increase in labour productivity. When the labour market is tight, as recently, higher labour productivity is essential to achieve higher GDP per capita.

As Figure 5 shows, from the mid-1980s to mid-1990s, New Zealand outperformed Australia in labour productivity growth. Since 2000, however, it has performed significantly worse. Moreover, New Zealand's labour productivity growth is slowing. If these trends continue, it is unlikely that New Zealand could attain the faster growth necessary to close the income gap with Australia.

Figure 5 Labour productivity growth rates, three-year moving average

Average annual percentage change in labour productivity



Note: (1) New Zealand data refer to the former measured sector, while Australian data refer to the market sector – these two sectors are comparable

Source: Statistics New Zealand, Australian Bureau of Statistics

4. Conclusion

In 1974, New Zealand's average income was slightly higher than Australia's. A little over 30 years later, in 2007, it was only three quarters of Australia's.

Over the last seven years, New Zealand has grown slightly faster than Australia. At these rates, it would take 140 years to close the trans-Tasman income gap. To catch up with Australia in five to 10 years, New Zealand would need to grow at between 4.7% and 7.6% per year. This exceeds New Zealand's highest average annual growth rate over a five-year period of 4.6%, in the early 1960s.

These calculations hold Australian growth rates constant at its annual average over 2000 to 2007. If Australia were to grow faster than its recent performance, the growth rates required of New Zealand to catch up with Australia would be even higher. While such growth rates are not impractical, New Zealand is not currently on track to achieve them, given its recent poor record on labour productivity.

Australia now has the 10th highest income of the 30 OECD countries. It is difficult to see how New Zealand could climb to the top half of the OECD rankings, little own match Australia in the top third.

While many commentators believe that Australia is a lucky country, OECD (2006) argues that it has "made its own luck" through a series of structural reforms and the introduction of a sound macroeconomic framework, which have strengthened its resilience to economic downturns.

There is no reason why New Zealand can't also make its own luck. In a recent study on the income differential between New Zealand and Australia, NZIER (2006) stresses the importance, for achieving growth, of a freer market, freer trade and a better regulatory environment. The OECD and the Treasury have made similar recommendations.

Catching up with Australia is not impossible, but very unlikely without major changes to New Zealand's policy directions. The challenge is for its policy makers to put forward sensible policies and to carry them through to fruition in the years to come.

References

- Clark, Helen (2001). Address to the Institute of Professional Engineers New Zealand. 9 March.
<http://www.beehive.govt.nz/speech/address+institute+professional+engineers+new+zealand>
- Council of Trade Unions (2008). Social services and wages still matter. CTU Media release, Thursday 22 May.
- Cullen, Michael (2002). Budget speech. <http://www.treasury.govt.nz/budget/2002>
- Mawson, Peter and Grant Scobie (2001). Climbing the OECD Ladder: What does New Zealand have to do? New Zealand Treasury.
- English, Bill (2008). Speech to the National Party Annual Conference. Wellington, Saturday 2 August. www.billenglish.co.nz
- Heston, Alan, Robert Summers and Bettina Aten (2006). Penn World Table Version 6.2, Center for International Comparisons of Production, Income and Prices at the University of Pennsylvania, September 2006.
- Hide, Rodney (2008). New Zealand's biggest pledge card, containing the juiciest election bribe ever. <http://www.act.org.nz/>
- NZIER (2006). The New Zealand-Australian income differential. NZIER working paper 2006/05. <http://www.nzier.org.nz/includes/download.aspx?ID=80456>
- OECD (2006). *Economic Survey of Australia 2006*. OECD, Paris.
- OECD (2008). *OECD Factbook 2008: Economic, Environmental and Social Statistics*. OECD, Paris.
- Statistics New Zealand (2008). International travel and migration: July 2008. <http://www.stats.govt.nz/products-and-services/media-releases/international-travel-and-migration/international-travel-migration-jul08-mr.htm>
- Young, Audrey (2008). Cullen challenges employers to push up wages. *New Zealand Herald*, Friday 8 February.