

Insight

Flight of the Kiwi

Kiwis fly to Australia in search of a better nest

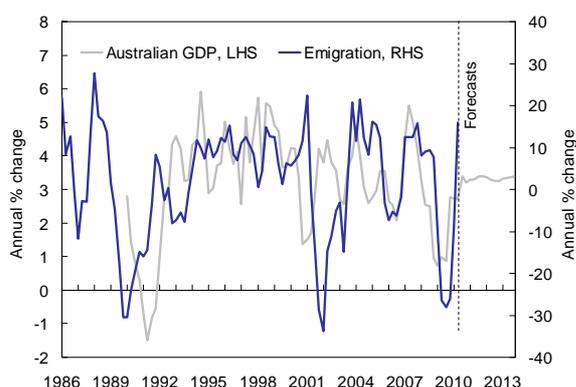
The continuous flow of Kiwis to Australia is closely linked to Australia's economic performance. The big difference in income between Australia and New Zealand is likely to be a major factor.

Life style factors and incomes in New Zealand are still appealing enough to attract a healthy flow of immigrants that more than compensates for the flow across the ditch – which is why the Treasury has previously termed this a brain exchange rather than a brain drain.

But this is a costly business, in economic and social terms. Local and international evidence shows that it usually takes immigrants some time to adjust to their new home country and start being fully productive; it is the next generation – the immigrants' children – that does as well, if not better, than the locals.

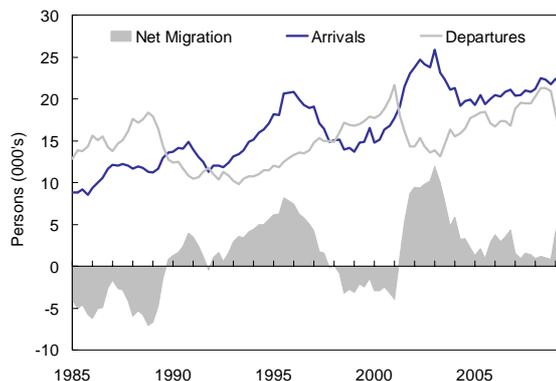
If we want to grow the population and overcome the economic disadvantages of being a small country, then slowing the loss of talent to Australia could be a sensible target, rather than just relying on immigration.

Figure 1 Emigration & Australian GDP



Source: Statistics New Zealand

Figure 2 Net migration flows



Source: Statistics New Zealand

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All the signs are for the flow across the ditch to continue unabated, as the income difference between Australia and New Zealand continues to grow. NZIER built a simple model to estimate how many migrants we might be talking about over the next 15 years.

The income gap is a factor

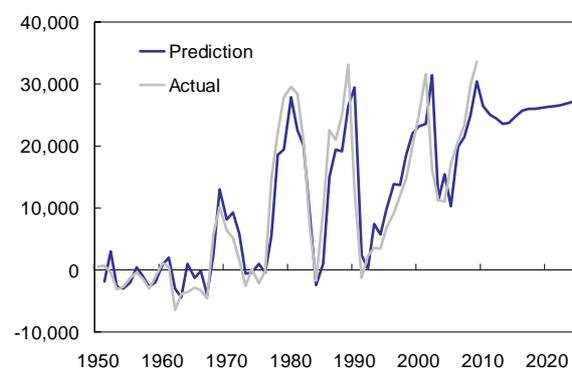
Since time immemorial people have migrated between countries and continents in search of better prospects. 'Better prospects' is shorthand for the range of social, political, and economic factors that cause people to migrate, such as to maintain family ties, escape political suppression or violence, pursue a certain lifestyle, or follow work opportunities.

We focus on how differences in expected income between Australia and New Zealand might explain the persistent net outflow to Australia. We follow Hatton's model of emigration¹, looking at:

- **the income gap** – we take the ratio of GDP per capita in Australia to GDP per capita in New Zealand. The data suggests there is a 2 year lag between a change in the income gap and net migration. This is common sense: it will take some time between people noticing a change in the income gap, making a decision to migrate, and actual migration.
- **income growth in New Zealand** – we look at GDP per capita in New Zealand. It may seem a bit counterintuitive, but the idea is that income growth in New Zealand gives New Zealanders more resources to cope with the cost of migration, and this increases the net outflow.
- **the net outflow rate in the previous 4 years** – the idea is that past migration affects future migration. For example, a network of migrants and associated services help to reduce the cost of migration; this attracts migrants. Also, recent migrants are more likely to migrate back. The data suggests that, in statistical terms, such impacts last about 4 years.

The regression results shown in table 1 are as we expected. The model coefficients are statistically significant, and when we compare the modelled net outflow data to historic data, we see the model performs well (see figure 3). The net outflow is predicted to rise to 26,000 a year, reflecting the combined effect of the growing income gap and a larger population.

Figure 3 Actual and predicted net outflow of migrants to Australia



Source: NZIER

¹ Hatton, T, 1995. A Model of U.K. Emigration, 1870-1913. Review of Economics & Statistics, Vol. 77 (3)

Table 1 Regression analysis of net outflow rate to Australia

	Coef.	Std. Err.	z	P>z	[95% Conf.	Interval]
Net Flow Rate (Departures-arrivals)/NZ Population						
Lag year 1	1.07	0.12	8.98	0.00	0.83	1.30
Lag year 2	-0.57	0.18	-3.24	0.00	-0.91	-0.22
Lag year 3	0.31	0.17	1.76	0.08	-0.04	0.65
Lag year 4	-0.22	0.12	-1.88	0.06	-0.44	0.01
Log of the ratio of Australian GDP to NZ GDP						
Lag year 1	37.20	8.22	4.52	0.00	21.08	53.31
Lag year 2	-31.69	8.59	-3.69	0.00	-48.53	-14.85
Natural log of GDP Growth (Lag of 1 year).	23.59	8.01	2.95	0.00	7.89	39.30
R ²	0.8835					

Source: NZIER

New Zealand would lose a net 26,000 people a year

If economic growth for the 2010-2025 period in New Zealand and Australia were to be at the rates currently projected by the OECD, then we should expect a net 412,000 people to emigrate between now and 2025. This is the equivalent of the whole population of Wellington, including the Hutt Valley and the Kapiti Coast, moving to Australia.

The following table summarises the results if we apply the model to actual GDP, population and migration data, and forecast GDP and population data out to 2025.

The relative smaller increase in the net outflow between the two decades of 2005-2015 and 2015-2025 is due to faster GDP per capita growth and slower population growth predicted for the decade between 2015 and 2025.

Table 2 Modelled net outflow to Australia by decade

	Net outflow by decade	Average GDP growth	Average GDP gap	Average population growth
1995-2005	167,885	2.0%	28.5%	1.2%
2005-2015	255,317	1.3%	31.7%	0.7%
2015-2025	264,977	1.8%	34.6%	0.6%

Source: NZIER

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