

Trans-Tasman interest rates – why is New Zealand paying more? occasional paper



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Introduction

Interest rates have come down on both sides of the Tasman in response to a slowing global economy and reduced inflation pressures. Table 1 highlights just how far official interest rates have declined internationally. Leading the easing-charge has been the United States, while New Zealand has been second to last in the easing stakes and has the highest official interest rate out of the group of countries in the table.

Table 1: Official interest rate comparisons since January 2001

	Current cash rate	Easings since 1 Jan 2001
New Zealand	5.75	75
Australia	5.00	125
US	3.75	275
Canada	4.50	150
UK	5.00	100
Euroland	4.50	25

There are now reasonable arguments being mounted on both sides of the Tasman that the end of the monetary policy easing cycle has been reached. In this note we question:

Why is it that the Reserve Bank of Australia (RBA) has allowed their official interest rate to go as low as 5%, whereas the Reserve Bank of New Zealand (RBNZ) has got stuck at 5.75%?

We conclude that there is room for the Official Cash Rate (OCR) to be cut further in New Zealand *even if* the RBA has finished its easing cycle. We find very little evidence that the NZ economy differs in terms of its business cycle position and relative inflation pressures. Instead, the official interest rate differential between Australia and NZ is mostly due to the differing inflation objectives and the balance of risks these objectives infer. The RBA has been far more willing to favour growth over inflation when assessing the current policy risks.

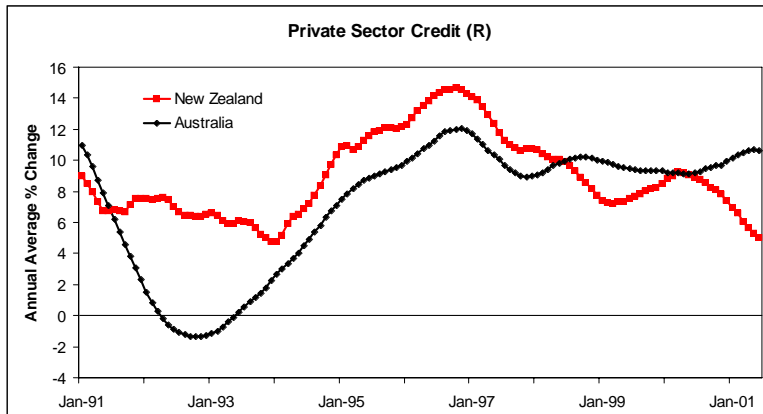
Explaining monetary policy differences: the usual suspects?

The relative business cycle position

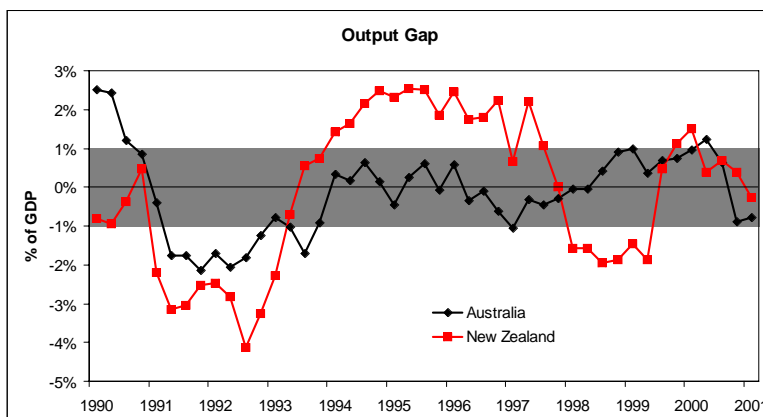
Australia and NZ are currently sitting in very similar positions when it comes to measures of spare capacity, in particular the 'output gap', capacity utilisation, and deviations of the unemployment rate from long-term averages (see figures on next page). In addition, business and consumer confidence are converging, with a recovery being evident in Australia following their post-GST slump in activity.

Perhaps the largest difference is the more up-beat credit and money statistics in Australia, with private sector credit still growing at reasonably healthy levels, while NZ's credit growth is languishing at their 1992-recession levels. People appear far more confident about taking on credit in Australia. A host of reasons are likely supporting this situation, including better household wealth positions, improved asset prices and house price developments, and lower real and nominal interest rates.

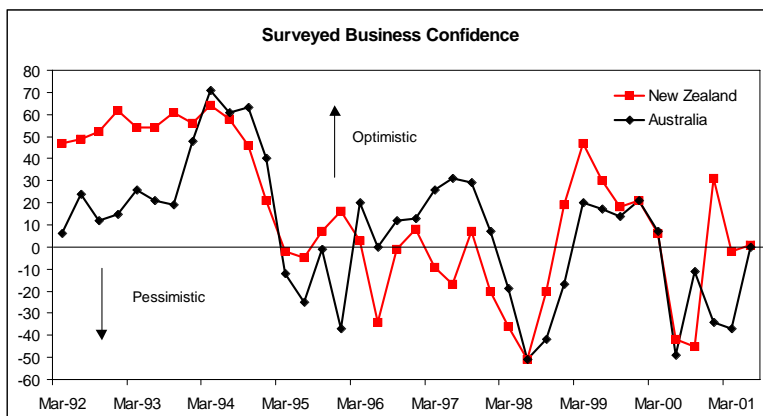
Looking at recent developments in both economies also paints a relatively similar picture. Domestic spending has been quite weak, with export earnings being the key driver of economic growth (Table 2).



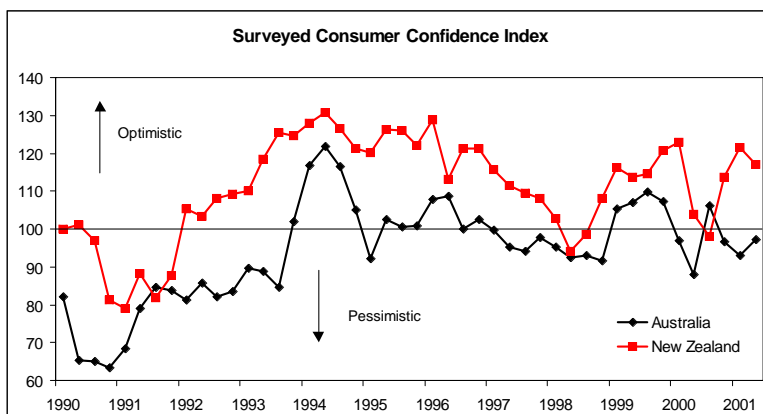
PSCR growth much weaker in New Zealand.



Australian output gap slightly more negative than New Zealand's.



Business confidence converged.

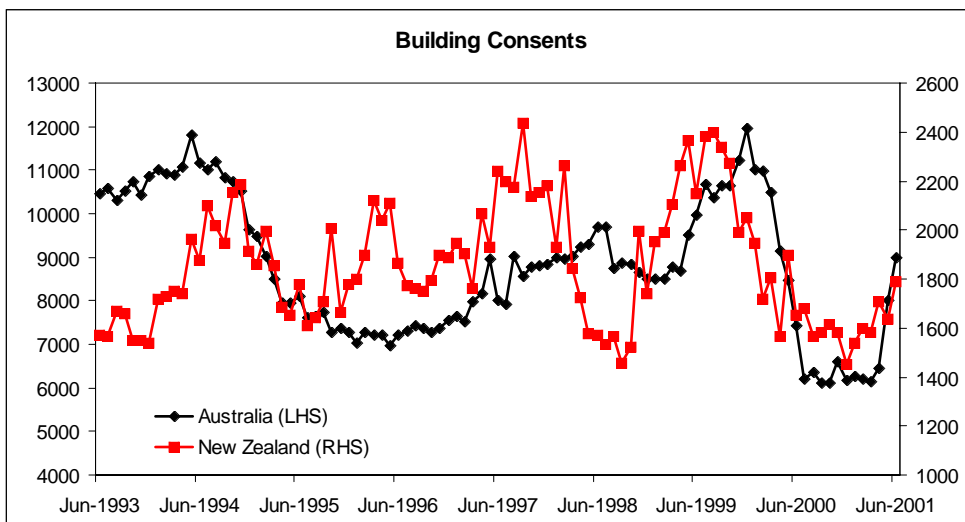


Consumer confidence converging.

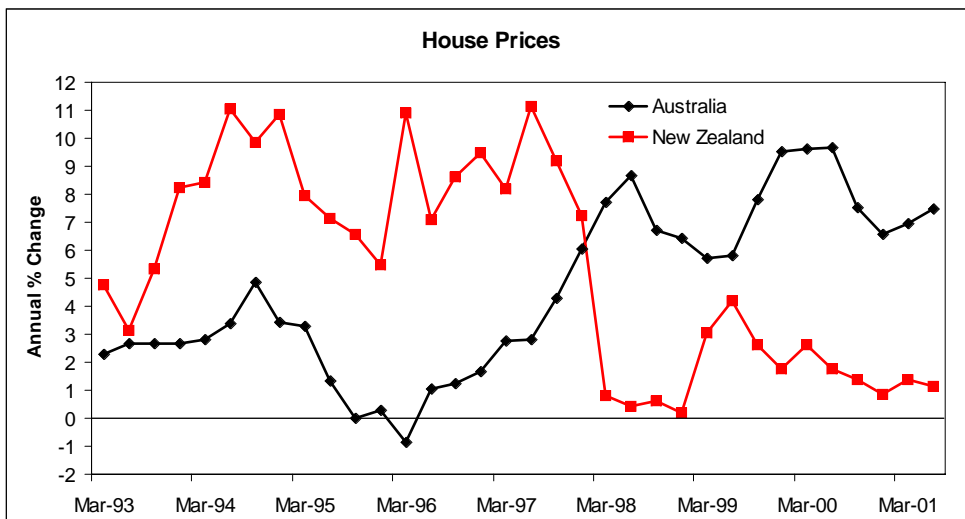


Table 2: GDP Growth by Major Component

Year ended March 2001	Australia	New Zealand
GDP growth	3.3	2.5
Consumption	3.5	1.3
Residential investment	-9.6	-16.1
Total Investment	0.4	-0.1
GNE	2.2	0.0
<hr/>		
Export Volumes	9.3	6.9
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Year ended June 2001		
Building Permits	-35.0	-19
Real Retail Sales	0.9	1.5
House Prices	5.2	1.2

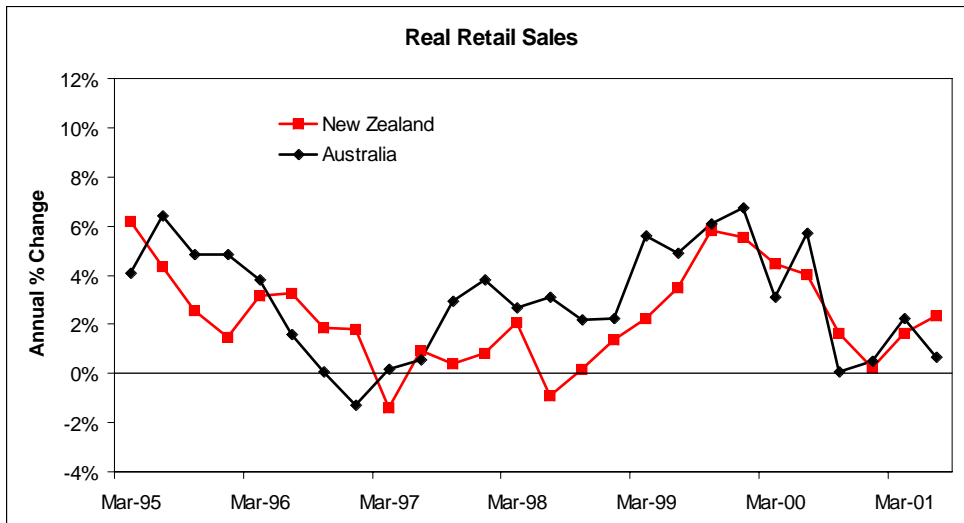


Australian building consents bounce back.



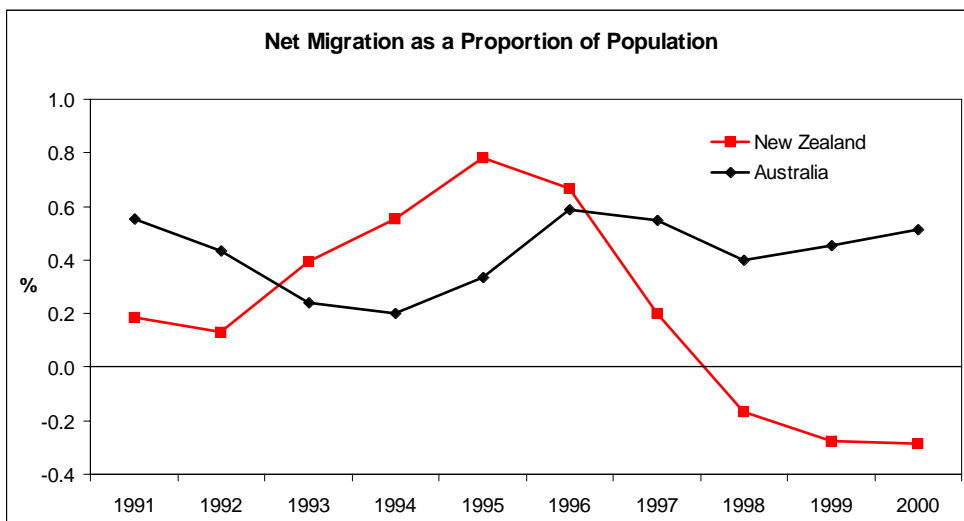
House price growth relatively slow in New Zealand.

Australia's domestic spending has been more volatile than New Zealand's over the last 12 months, given the impact of the introduction of GST on people's spending decisions as well as the Sydney Olympics. Following the post-GST spending slump, a recovery in housing has been evident, while retail spending has remained remarkably robust. Business investment has, however, continued to languish although investment confidence is again on the rise.

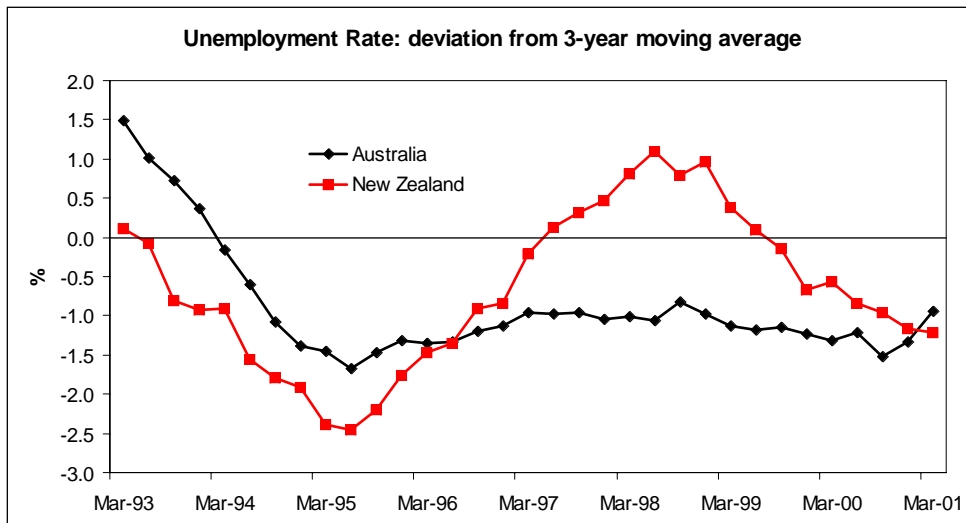


Meanwhile, domestic spending in NZ has been subdued, with some signs of activity picking up only recently. Retail sales have held up well with export revenues flowing into the regions, but business and residential investment has been weak.

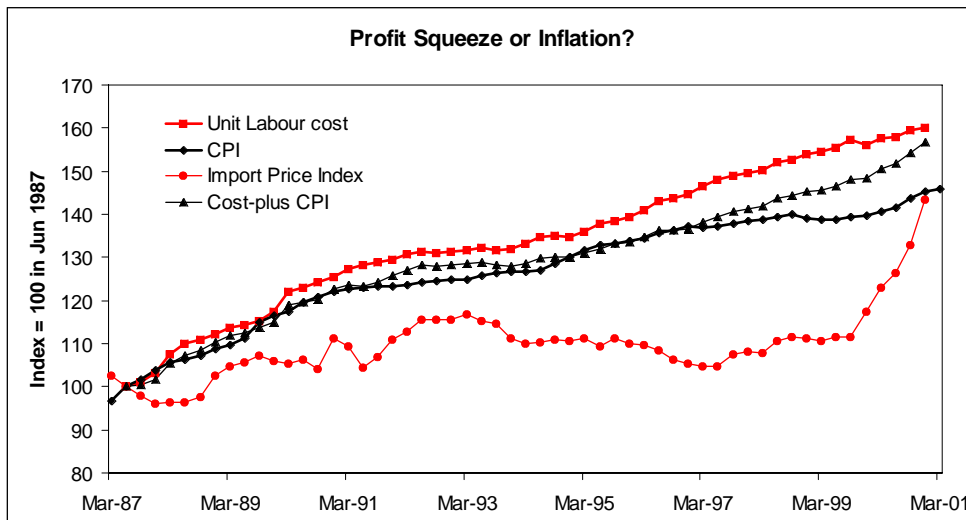
Relative migration flows has been one of the drivers of weak residential activity. NZ has seen a significant net outflow of migrants over recent years, compared to the rapid growth in immigration in the mid-1990s. Australia, by contrast, has continued to be a net recipient of migrants, with this 'valve' proving less significant on their overall business cycle.



Perhaps the only factor that suggests tighter capacity constraints in NZ is the labour market, where unemployment is lower and skilled labour shortages are biting. However, in making this assessment there must be a view on the level of 'structural' unemployment, and the deviation of actual unemployment from that level. Unemployment, in particular long-term unemployment, has been persistently higher in Australia than NZ. When looking at the deviation of current unemployment from its 3-year average, both the Australian and NZ labour markets look to be in a reasonably similar position.



More importantly, it is consumer price inflation that central banks are trying to keep low and stable, not wages. Given the level of competitiveness in final consumer markets, the 'cost-plus' mentality of the 1970s and 1980s is now long gone. In NZ, we have found very little evidence that higher wage pressure immediately implies higher consumer prices. Instead, profitability is more likely to be affected by a rise in unit labour costs rather than end consumer prices. The end of the cost-plus pricing mentality is highlighted in the graph below, where unit labour costs and import prices have been far outpacing end consumer prices.

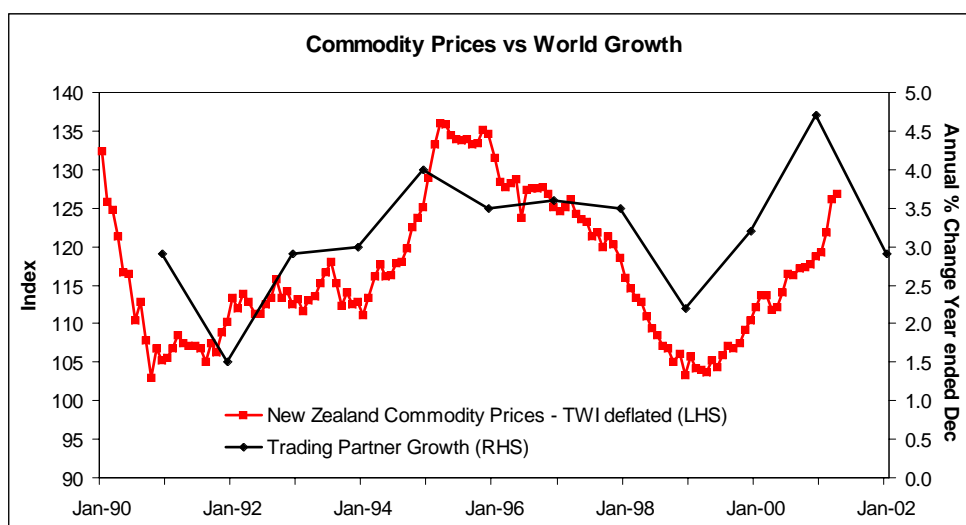
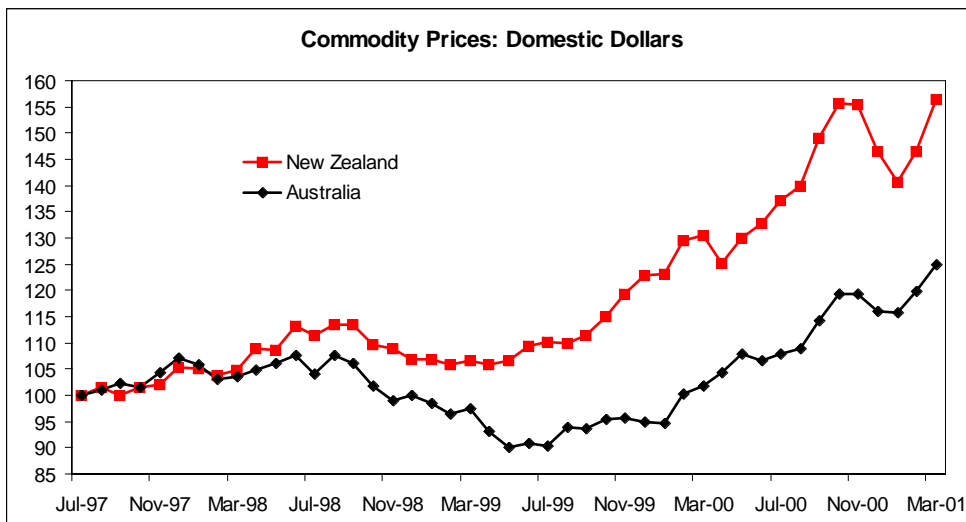
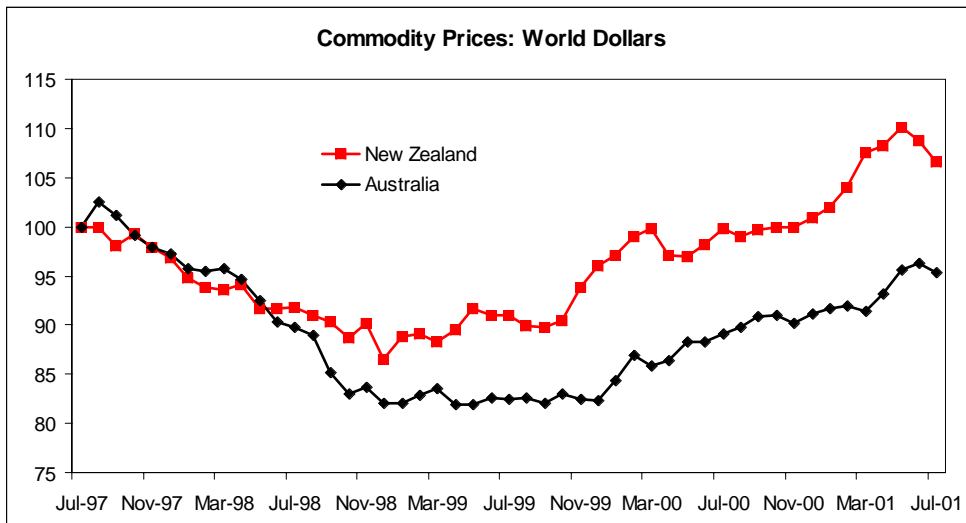


On balance, when it comes to starting points for monetary policy, there is very little difference between NZ and Australia at present, with demand potentially stronger in Australia over the near-term.

Trading position and commodity prices

With a similar starting point for monetary policy, is New Zealand's higher OCR related to the better international trading conditions for NZ?

As already mentioned, the key growth-kicker over the last 18 months has been export revenue growth in both countries. Commodity prices have risen by a similar rate, although NZ's commodities have performed slightly better in world price terms since the 1997 downturn. This is also apparent in commodity prices in local dollars given that both currencies have had a significant depreciation.



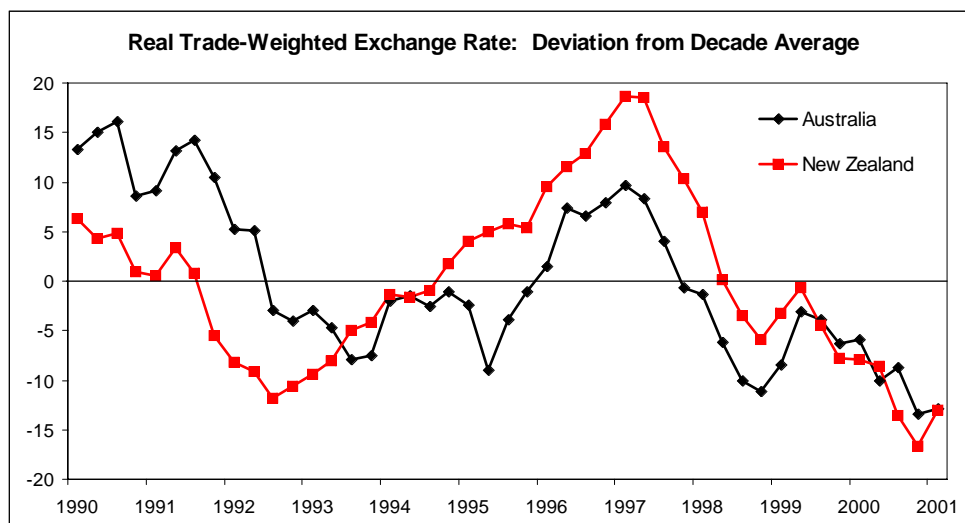
It is sometimes argued that Australia's commodity prices may start to suffer sooner than NZ's due to the global slowdown. Australia's hard commodities are more linked to industrial production – rather than consumption – which is slowing fast. However, there has been little evidence of this to date, with both countries' commodity prices likely

to suffer similar fates to a prolonged global slowdown. Foot and Mouth disease is assisting prices at the moment for NZ, but a restocking of herds in the US and Europe will eventually reduce this window of opportunity.

In terms of export volume growth, both NZ and Australia have done well over recent years. However, a large part of the growth in NZ has been in response to drought recovery, with farms again reaching their carrying capacity under normal weather conditions.

Looking forward, a large proportion of Australia's commodity exports is not limited by the biological growth cycle. This implies Australia has more immediate scope for increasing export volumes. Investment in the mining industry in Australia is already picking up, with increased volumes no doubt arriving down the track.

In terms of export competitiveness, both NZ and Australia have experienced similar depreciations in their trade-weighted exchange rates, with similar domestic inflation levels. The NZ and Australian real (inflation adjusted) exchange rates are both some 15% below their decade averages.



Meanwhile, both economies are about as open to trade as each other, with exports accounting for around 23% of GDP in both countries. Meanwhile, both countries are exposed to similar trading partner demand patterns. The Consensus growth forecasts for NZ and Australia's key trading partners are virtually identical.

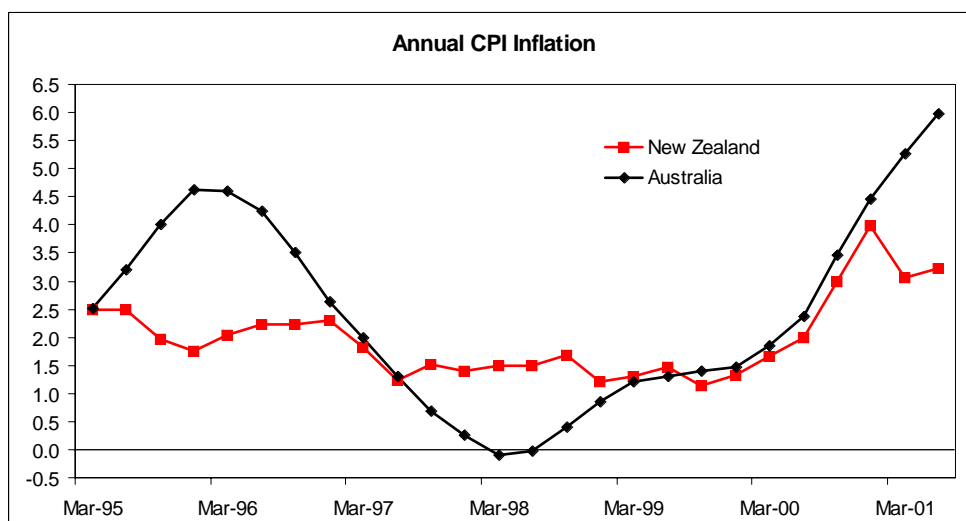
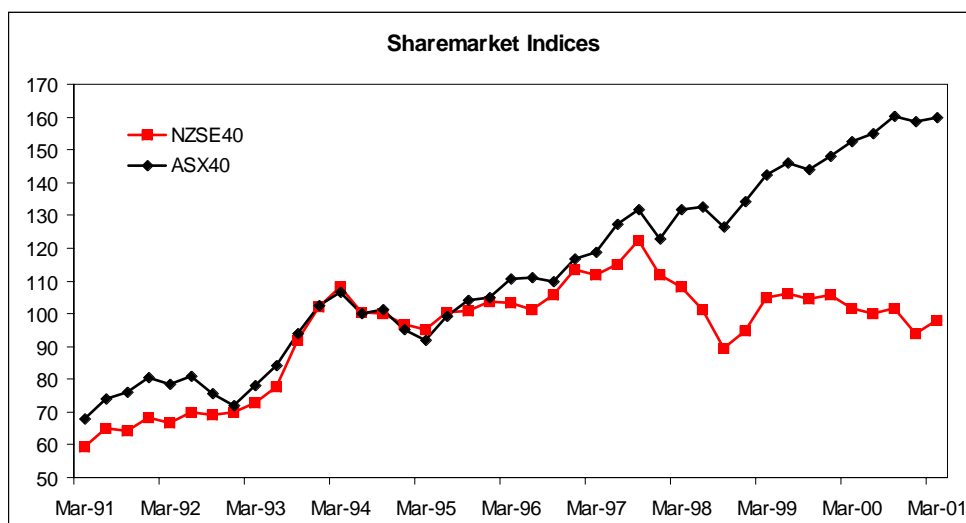
On balance, there is not much cause for a different monetary stance if it is the international picture that is important.

Asset price behaviour, inflation expectations, and monetary conditions

With real activity and capacity looking similar across the two economies, is it differences in inflation that can explain the interest rate differential? The things we may expect to see different include actual consumer price inflation, asset prices, inflation expectations, and broader measures of inflation in general.

Asset prices have been rising more strongly in Australia than NZ over recent years. House prices and Australian share prices have well outstripped those in NZ since the mid-1990s. Indeed, NZ household wealth has gone sideways, if not backward since 1996. This is not an environment in which inflation is likely to prove a persistent problem.

In terms of consumer price inflation, NZ has experienced lower headline inflation than Australia, largely due to GST being implemented in the latter country. Inflation expectations also appear lower in NZ on a persistent basis, although pricing intentions have risen in both countries recently, given the rise in headline inflation in both economies.



Overall, given the relatively stronger domestic spending level in Australia, and the higher inflation starting point, Australia should have higher nominal interest rates than NZ. In other words, 'financial conditions' in Australia are far more accommodating than in NZ, despite the level of activity and inflation environment being stronger. By financial conditions, we include a combination of interest rates (short-term rate and yield curve slope), the exchange rate, and asset prices such as housing and equity prices.

Neutral interest rates and potential growth

In searching for reasons why NZ has not eased by as much as Australia, one culprit may be a difference in 'neutral interest rates'. A neutral interest rate is the level at which monetary policy is neither adding nor subtracting from spending pressure in the economy. If, for example, the neutral interest rate is higher in NZ than Australia, then the RBNZ would not have to lower the OCR by as much in order to generate the same amount of stimulus in the economy.

The neutral interest rate depends on factors that determine the supply and demand for savings in the economy. There are various ways of 'guesstimating' what a neutral interest rate may be for a country including:

- Looking at the real growth rate of the economy
- Looking at historical short and/or long-term interest rate behaviour; and
- Using cross-country comparisons of the neutral rate plus a country specific risk premium.

In our June *Markets Report* we used these techniques to estimate NZ's neutral (nominal) interest rate. These results are reproduced in Table 3 and suggest that NZ's neutral interest rate is between 5 and 6%.

Work on the Australian neutral interest rate indicates that it is in the same range. For example, in the RBA's economic model, the neutral real interest rate is set at 3.5%¹. Using the mid-point of the RBA's inflation target (2.5%) this suggests that the neutral nominal interest rate is around 6%.

Again, we find no strong evidence to suggest that differing neutral nominal interest rates are the reason behind NZ's current higher interest rate.

Table 3: NZ Neutral Interest Rates

	Real	Nominal (Real +1.5%)
Average growth of real GDP growth	3.30	4.80
Average growth of trend GDP	3.00	4.50
Average real short rates	5.25	6.75
Average long-rates less estimate of 'average' term structure	4.15	5.65
US real neutral + risk premium	3.00 to 4.00	4.50 to 5.50

Transmission mechanism

Another possibility for the difference in interest rates is that Australia is less sensitive to changes in interest rates than NZ in terms of its spending behaviour. In other words, interest rates need to be shifted by more in Australia to generate the same 'bang for buck'.

At a broad level, the structure of the Australian economy is very similar to NZ, with both more or less equally exposed to external trade and domestic demand. In fact, the domestic economy plays a bigger role in Australia, suggesting that they would be more sensitive to interest rates, all other things equal, than NZ.

In addition, both economies have similar debt servicing levels at present in terms of ratios to disposable income, current account deficits, and overall private sector debt as a proportion of income. The private sector in both NZ and Australia increased their debt holdings by similar amounts over the 1990s in response to financial market liberalisation, improved growth expectations, and greater opportunities for investment as the government sectors downsized and sold assets. Again, there is no reason at all to assume NZ is more sensitive to interest rate changes than Australia.

One means of empirically testing whether the 'transmission mechanism' is fundamentally different is by looking at the sensitivity of the output gap to changes in the exchange rate and interest rates over the last decade or so. Our estimates of these sensitivities suggest that they are broadly similar². This confirms that there is no significant difference in the responsiveness of the Australian and NZ economies to changes in the interest rate.

Differences in goals or forecasts?

Our analysis suggests that there are no strong reasons for New Zealand to be wearing higher interest rates than Australia at present in terms of business cycle starting points, inflation behaviour, trading position, neutral interest rate, or transmission mechanism. Meanwhile, the two economies are facing the same uniform economic shock, that is, a slowing global economy. We are thus left with only two remaining suspects that might explain the difference in stance between the two central banks:

- The RBA and RBNZ are chasing different goals; and/or
- The two central banks view the risks ahead internationally quite differently i.e., have different forecasts or risk weighting.

¹ See Beechey M, N Bharucha, A Cagliarini, D Gruen, and C Thompson (2000), "A Small Model of the Australian Macroeconomy", *Reserve Bank of Australia Discussion Paper*, 2000-05.

² These estimates are outlined in the Appendix.

In terms of goals, the RBA are focussed on keeping annual consumer price inflation between 2-3% over the course of the business cycle. By contrast, the RBNZ are focussing on keeping annual consumer price inflation between 0-3%. The mid-points of these targets simply a 1% wedge between the two economies. So, does the inflation target difference explain the difference in the current stance of monetary policy?

A useful means by which to assess the relative stance of monetary policy is via a 'Taylor Rule'. The Taylor rule suggests the correct stance of monetary policy (or level of nominal interest rate) can be assessed by³:

- How far actual inflation is from its target,
- How much spare capacity exists in the economy; and
- The level of neutral interest rates.

In terms of Australia and NZ, both have a broadly similar output gap and real neutral interest rate. To a large extent, the difference in the stance of monetary policy suggested by the Taylor rule depends on the deviation of inflation from the target.

Table 4: Taylor Rule Assumptions and Estimated Interest Rate

	New Zealand	Australia
Output Gap	0.4	0.8
Headline inflation	3.2	6.0
Underlying inflation	2.0	3.3
Target inflation rate	1.5	2.5
Real neutral interest rate	4.0	3.5
Implied short-term interest rate using headline inflation	8.3	12.2
Implied short-term interest rate using underlying inflation	6.5	8.2

The Taylor rule estimates imply that interest rates should be *higher* in Australia than in NZ. This is the case if the rate of 'headline' inflation is used in the analysis, or more sensible measures of 'underlying' inflation that ignore the impact of GST and other one-off price level shocks. This suggests that the RBNZ's lower inflation target is not a legitimate reason for having interest rates higher than in Australia. Overall, we are hard pushed to explain the difference in interest rates between NZ and Australia because of the difference in their inflation target. Again we run out of excuses for higher interest rates in NZ.

The level of the interest rate suggested by the Taylor rule is higher than NZ and Australia's current interest rates. This is essentially because the Taylor rule is not forward looking and is being influenced by current high inflation. What is important here is the level of the interest rate in New Zealand in comparison to Australia.

What about risk taking?

We suggest that the main difference between policy stances is related to the balance of risk taking the two central banks are showing. Given the RBA's explicit medium-term inflation target, they appear more able to ease rates in the face of projected slowdowns than the RBNZ.

However, the RBNZ must also take due consideration for the short-term volatility of its actions on both interest rates and real GDP, as well as the inflation goal. In other words, the RBNZ should also take a medium-term view on inflation developments when deciding on its interest rate stance.

³ For details on the Taylor rule see Taylor (1993), "Discretion versus Policy Rules in Practice," *Carnegie-Rochester Conference Series on Public Policy*, 39, pp 195-214. The Taylor rule equation is outlined in the appendix.

We believe that the RBNZ is still placing considerably more weight on the current inflation rate relative to its target range, and is thus more eager to return the inflation rate to within its band at a faster pace. Overall, they weigh heavier the risk of inflation remaining above the 3% target range more than they weigh the risk of growth proving to be weaker than anticipated.

What is the bottom line?

We have argued that there are no real reasons for higher interest rates in NZ other than the balancing of risks between the central banks. Part of this may be due to different interpretations of the global economic slowdown and the likely impact on domestic inflation. In recent empirical work we showed that in comparison to NZ, Australia is impacted relatively quickly by the US business cycle⁵. However, given sufficient time NZ is highly exposed to developments in the international economy and faces the same risks as Australia.

In part, the balance of risk also comes down to different biases in terms of the balance of risks to inflation and short-term economic growth.

There is no right or wrong answer at present, only time will tell. However, we favour cutting interest rates further in NZ given the low inflation pressures, and the risk to global growth.

⁵ See Conway (2001), "US Slowdown: Implications for the New Zealand and Australian Business Cycles". *Occasional Paper*, Westpac Institutional Bank, 2001.

Appendix

- A) To assess the sensitivity of the Australian and NZ economies to changes in the interest rate we estimate the following 'IS' equation¹:

$$Y_t = \alpha + \sum_{i=1}^4 \beta_i r_t + \sum_{i=1}^4 \Pi_i q_t + \sum_{i=1}^4 \Phi_i Y_t^{US} + \varepsilon_t$$

In this equation Y and Y^{US} is the output gap in the domestic country (Australia or New Zealand) and the US respectively. The variables r and q are the real interest rate and real exchange rate respectively. Both of these variables are expressed as deviation from their long-run trend. The β 's, Π 's, and Φ 's are estimated coefficients, the α is a constant and ε is the residual. The equation is estimated with 4 lags. This equation is estimated for both Australia and New Zealand.

To assess whether both economies have a similar degree of sensitivity to changes in interest rates we compare the sum of the β coefficients. In the case of New Zealand the β 's sum to -0.015. In the equation for Australia the analogous figure is -0.013. This supports our assertion that there is no significant difference in the degree of interest rate sensitivity across the two economies.

- B) The Taylor rule is specified as:

$$i_t = r_t + \pi_{t-1} + \gamma_1(\pi_{t-1} - \pi_t) + \gamma_2(Y_{t-1})$$

where i is the nominal interest rate, r is the neutral real interest rate, π is the rate of inflation, π^T is the inflation target, and Y is the output gap.

¹ This equation is based on the work of Dennis R (1997), "A Measure of Monetary Conditions", *Reserve Bank of New Zealand Discussion Paper*, G97/1.