15 September 2009

No need to get cross

Explaining the NZD/AUD exchange rate

- **The recent NZD/AUD appreciation reflects diminished New Zealand underperformance, and is entirely justified by fundamentals.**
- **We expect NZD/AUD to continue appreciating for the remainder of 2009.**

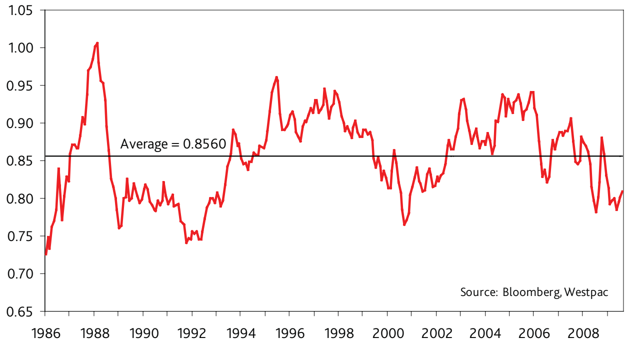
The Reserve Bank claimed in its *Monetary Policy Statement* that "recent strength in the New Zealand dollar relative to the Australian dollar is perhaps the most vivid illustration of gains that are at odds with relative economic developments." Similar views have been expressed by a range of market economists and strategists.

We politely, but strongly, disagree. In our assessment the recent rise in the NZD/AUD exchange rate is entirely justified by relative economic developments in the two countries. Indeed, we predicted back in June that the NZD/AUD was about to turn and would appreciate strongly.[1] That prediction was based on an unexpected, but unmistakable improvement in New Zealand's economic outlook relative to Australia.

We'll start with two simple points. (1) Back in May NZD/AUD came within a whisker of an eight-year low. (2) Despite the recent appreciation, NZD/AUD is *still* 5% below its inflation-adjusted average of 85.6 cents.[2] So in no way do New Zealand's fundamentals need to be *stronger* than Australia's to justify the recent appreciation. Rather, it could reflect diminished New Zealand underperformance.

We have been running our current NZD/AUD forecasting model for the past two years.[3] It has predicted all of the main turning points in the cross in that time. When we constructed the model we found the most important long-run drivers of NZD/AUD were relative inflation and interest rates, while the short-run dynamics were dominated by relative commodity prices, relative GDP growth rates (an announcement effect that occurs in the month the data is released), and New Zealand net migration. We also found that the cross has considerable momentum, meaning it tends to overshoot and then revert to fair value over a period of a few months.

Inflation-adjusted NZD/AUD
August 2009 dollars



So it is easy to understand why the cross fell so far in late-2008 and early-2009:

- NZ interest rates fell faster than similar Australian rates.
- NZ GDP growth grossly underperformed Australian growth.
- NZ's commodity prices fell further than Australia's.
- NZ net migration was extremely low.

Another critical driver, not covered by our model, drove the exchange rate even lower than predicted:

- The international credit crunch posed a greater danger to New Zealand than to Australia.

Four out of five of the factors listed above have now swung markedly in the NZD's favour:

- NZ's GDP growth is no longer underperforming Australia's by such a wide margin, and forecasts are for similar future growth.
- NZ commodity prices have risen faster than Australia's.
- The international credit crunch has eased, removing a major headwind for NZD/AUD.
- There has been a dramatic turnaround in NZ net migration.

[1] Westpac Market Outlook June 2009, available on request.

[2] 1986 to present. The nominal NZD/AUD had an upward trend over the 1990s because New Zealand had a consistently lower inflation rate.

[3] "A forecasting model for the NZD/AUD exchange rate", http://www.westpac.co.nz/olcontent/olcontent.nsf/content/FM_Occasional_Paper_20071019/$FILE/NZDAUD%20Occasional%20Paper.pdf

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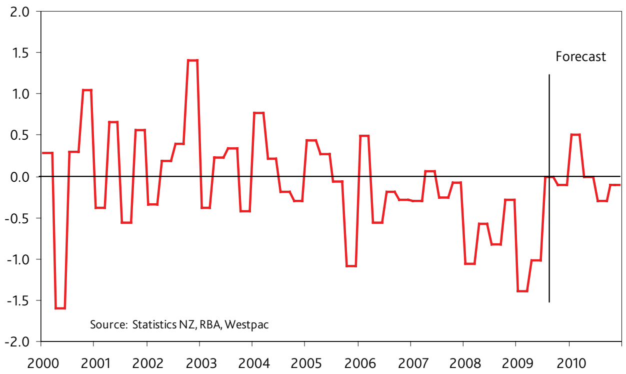
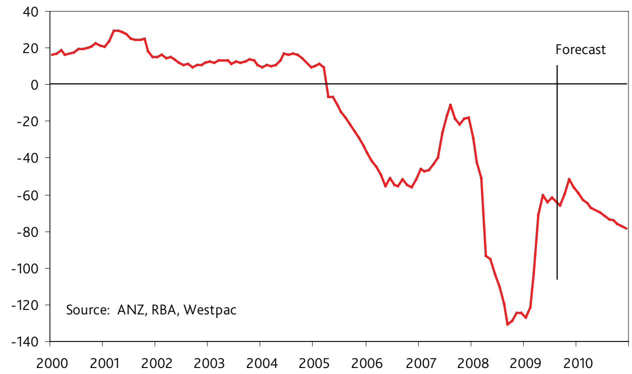
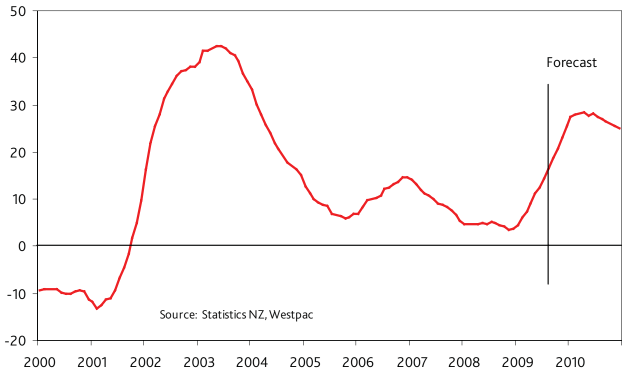
Relative GDP growth, NZ less Aus



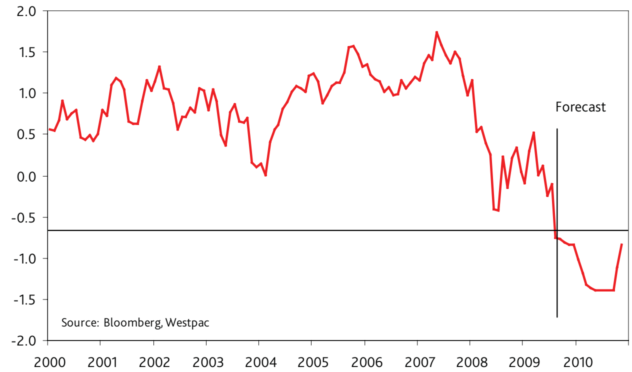
Relative commodity prices, NZ less Aus



NZ annual migration



2-year swap spread, NZ less Aus



It may seem odd to include migration in an exchange rate model. But those familiar with the New Zealand economy will know that net migration is a massive swing factor. New Zealanders moving back and forth across the Tasman Sea are an overwhelming source of variation in New Zealand's population growth and housing market. People are very mobile within Australasia. In addition to *causing* economic cycles, migration between NZ and Australia is an indicator of perceived relative future economic prospects – arguably the ultimate determinant of any real exchange rate, but normally unobservable.

In 2008 net migration to New Zealand was just 3,800, because 48,000 people (1.2% of the population) moved to Australia. Now fewer people are moving to Australia and net migration is on target to hit 25,000 for calendar 2009. That will take population growth from 0.9% in 2008 to 1.4% in 2009. House prices are rising sharply, and the economy has been dragged out of recession earlier than previously expected.

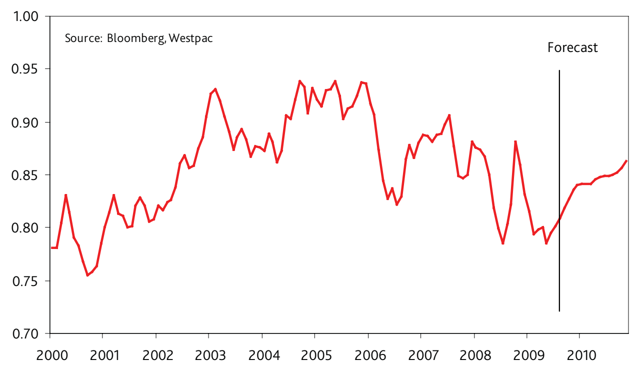
Interest rates are the only factor that has continued to move in a negative direction for NZD/AUD, due to the RBA's current hawkishness and the RBNZ's current dovishness. That may have helped keep NZD/AUD below average, but it was never going to offset all of the four factors listed above.

Overall economic conditions still favour Australia. That's why the exchange rate is low by historical standards. But the difference between New Zealand's and Australia's prospects has turned out smaller than markets expected. The exchange rate has, correctly, appreciated to reflect that.

Forecast

We forecast the NZD/AUD to carry on appreciating towards 0.84 by the end of this year, with a small further appreciation in 2010 that will take NZD/AUD to just-below its historic inflation-adjusted average. That is based on Westpac's economic forecasts for both New Zealand and Australia, which foresee similar GDP growth rates (a marked change after two years of NZ underperformance), higher Australian interest rates, similar commodity price developments, and ongoing strength in New Zealand's net migration. The strong tendency for the NZD/AUD to revert to average, along with momentum, adds to the case for ongoing NZD/AUD appreciation.

Actual and forecast NZD/AUD



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