

New Zealand's Exchange Rate : Why the Reserve Bank believes its level is unjustified and unsustainable

A statement by Reserve Bank of New Zealand Governor, Graeme Wheeler

Introduction

In its September *Monetary Policy Statement (MPS)* the Reserve Bank commented that: "The exchange rate has yet to adjust materially to the lower commodity prices. Its current level remains unjustified and unsustainable. We expect a further significant depreciation, which should be reinforced as monetary policy in the US begins to normalise".

Similar sentiments about the level of the exchange rate being 'unjustified and unsustainable' were expressed in the 24 July OCR review.

The September *MPS* noted that the economy appears to be responding to the policy measures taken by the Bank over the past year and that it would be prudent to undertake a period of monitoring and assessment before considering further policy adjustment. Nevertheless, it is expected that some further policy tightening will be needed to ensure that the objectives under the Policy Targets Agreement are met.

This article discusses why the exchange rate has been strong, why the Reserve Bank believes the level of the exchange rate is 'unjustified and unsustainable', and the impact of the high exchange rate on the broader economy¹. It also looks at episodes of exchange rate correction in New Zealand, and draws possible implications for future exchange rate adjustment.

What is driving the current strength in the exchange rate?

The New Zealand dollar exchange rate is at exceptional levels compared with its history. The Trade Weighted Index (TWI) is above its 90th percentile calculated from historical data. Relative to the US dollar, Japanese yen and the euro the exchange rate is above the 90th percentile. It is close to the 90th percentile against sterling and the Australian dollar.

There are sound reasons why the New Zealand dollar should have strengthened in recent years. Three factors have been particularly important in stimulating demand for New Zealand dollar denominated assets.

¹ The concept of 'unjustified' is part of the Reserve Bank's exchange rate intervention assessment. For further detail on the Reserve Bank of New Zealand's intervention framework see Eckhold, K and Hunt, C (2005) "The Reserve Bank's new foreign exchange intervention policy" RBNZ Bulletin March 2005

First, rising export commodity prices lifted New Zealand's terms of trade late last year to their highest level since 1973, and about 40 percent above the average level of the 1990s.

China's expanding urbanisation and growing demand for protein drove much of this. China is now New Zealand's main export destination, having increased its share of New Zealand's exports from 5 percent to 21 percent over the past decade.

Second, investors have also been attracted by the broad strength of the economy and our higher interest rates. Over the past three years New Zealand's annual GDP growth has been 1.3 percentage points higher than the average of the advanced economies². The differential between New Zealand's OCR and policy rates in other advanced economies, which had been of the order of 1½ - 2 percent since 2009, began to widen in late 2013 as markets factored in the prospect of OCR increases. Countries that cumulatively produce around two-thirds of global output have policy rates between zero and 1 percent, with most having rates close to zero. Meanwhile, the Reserve Bank increased the OCR by 1 percentage point over the period from March to July 2014.

Third, and related to the previous point, the weak and uneven recovery in the advanced economies has seen many central banks adopt unconventional monetary policy as the lower bound on short-term policy rates was reached. Central banks in large advanced economies have kept policy interest rates close to zero and injected over USD 6 trillion of liquidity into global financial markets. This inflated prices of financial and real assets, depressed yields and compressed spreads on risk assets. Yields on 10 year sovereign bonds in Germany were recently at an all-time low, France and Spain reached 250 year lows and the Bank of England's policy rate is at its lowest level since the Bank's inception in 1694. The subsequent 'search for yield' by investors, coupled with excess liquidity and low levels of financial market volatility, generated substantial portfolio inflows into New Zealand and put upward pressure on the exchange rate.

An additional factor exerting upward pressure on the exchange rate over many years has been the persistent gap between savings and investment. Over the past forty years New Zealand has demanded more investment in housing, infrastructure and other assets than its domestic savings could finance. New Zealanders' relatively high propensity to spend means that interest rates need to be higher than elsewhere to achieve similar inflation outcomes. The higher interest rates are also needed to fill the domestic savings gap by attracting the savings of foreigners. This has the effect of putting further upward pressure on the exchange rate.

² Based on the IMF's 36 country classification in its World Economic Outlook database

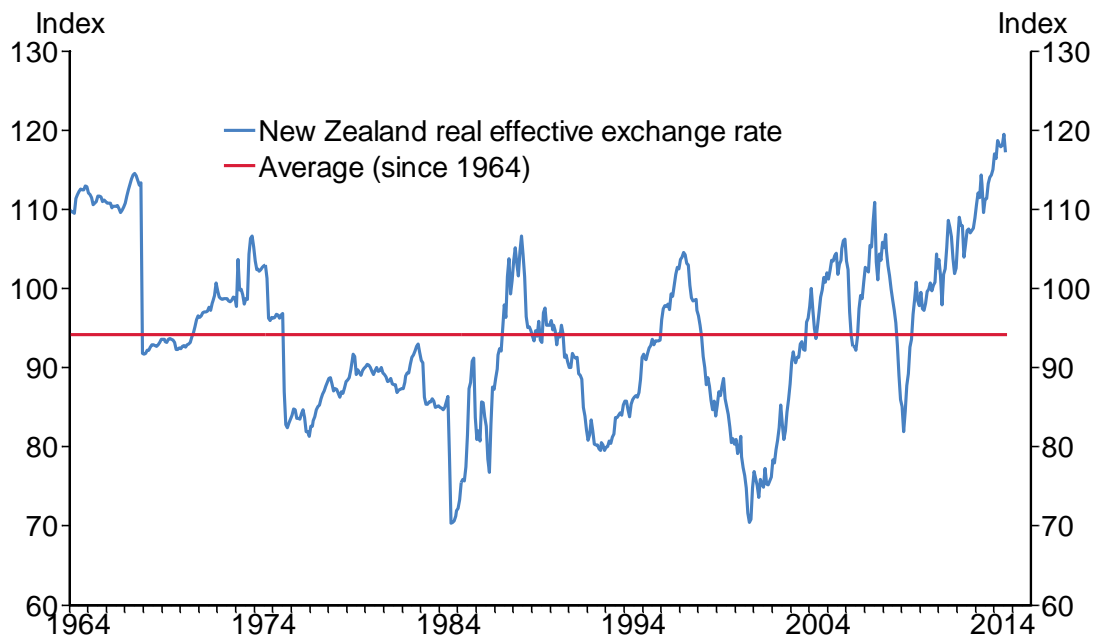
Unjustified and Unsustainable

When assessing the implications of current strength or weakness in the New Zealand dollar, the Bank focuses on two broad concepts – whether the exchange rate is unjustified and whether it is unsustainable.

The Bank examines the real effective (or trade weighted) exchange rate when making this assessment. This corrects the nominal effective exchange rate for differences in relative prices (or relative unit labour costs) between New Zealand and its major trading partners. It is a better measure of overall competitiveness than the nominal exchange rate. An exporter's competitiveness is determined not just by the nominal exchange rate, but also by their cost of doing business relative to their foreign competitors.

Figure 1 shows the movement in New Zealand's real effective exchange rate since 1964. The current level of the real effective exchange rate is well above its 50 year historical average.

Figure 1: New Zealand's Real Effective Exchange Rate



Source: Bank for International Settlements

The level of the real effective exchange rate is considered *unsustainable* when it is clearly deviating from its long-run equilibrium. That is, from where the exchange rate would be expected to settle when business cycle factors have fully dissipated. The long run equilibrium exchange rate will be consistent with external balance over the long term, given certain assumptions regarding the terms of trade, domestic and world growth rates, interest rates, and external debt levels etc. Persistent deviations from equilibrium are likely to result in external debt ratios that eventually become unmanageable and misallocations of resources that inhibit the country's long term growth potential.

The Bank considers that the real effective exchange rate is *unjustified* when the level of the real exchange rate is inconsistent with the economic factors that typically explain its movement during the business cycle.

The Bank uses a range of short term economic models to assess whether the real effective exchange rate is unjustified. These models can normally explain much of the cyclical fluctuation in the real exchange rate. For example, economic variables such as commodity prices, house prices and relative interest rates can account for much of the movement in the deviation of the real effective exchange rate from its long term average level. It is important to note that these cyclical variables are not necessarily the underlying cause of the movement in the real exchange rate. They can be proxies for broader considerations such as the strength of the economy and the expected returns from investing in New Zealand that investors compare against other international investment alternatives.

Even allowing for New Zealand's economic outperformance relative to most advanced economies, New Zealand's real effective exchange rate is above the level that can be justified. In particular, the real exchange rate has not adjusted materially to the recent downward movement in commodity prices - the factor that normally best explains movements in the real exchange rate. Since July, the Bank estimates the real effective exchange rate has depreciated by around 3 percent. Since 11 July 2014, the nominal cross rate against the USD has depreciated by around 7.5 percent.

Global dairy prices have fallen by 45 percent since February 2014 and Fonterra has cut its milk price from \$8.40 per Kg of milk solids in the 2013/14 season to a forecast \$5.30 per Kg of milk solids in the current season. Dairy farm incomes this season are expected to be about \$5 billion lower - equivalent to a 2.2 percent decline in national income³. Despite this, in August, New Zealand's real effective exchange rate was 1 percent higher than its February 2014 level.

³ Dairy exports account for almost a third of New Zealand's annual merchandise exports.

The Bank's analysis indicates that the real exchange rate is well above its sustainable level and also above levels justified by short term business cycle factors.

Other institutions also consider New Zealand's real exchange rate to be unsustainable. In May 2014 the IMF suggested that New Zealand's real effective exchange rate was 5-15 percent above the level consistent with medium-term fundamentals⁴. The Peterson Institute in Washington DC assessed the effective real exchange rate to be 15 percent above its sustainable level, the highest of 34 currencies reviewed⁵.

Unjustified and unsustainable are important considerations in assessing whether exchange rate intervention is feasible. Another consideration is whether conditions in the foreign exchange markets are conducive to having an impact on the exchange rate.

The economic impact of the high exchange rate

The elevated exchange rate affects the economy in many ways. The appreciation of the New Zealand dollar has helped to lower inflation in the tradables sector. Annual tradables inflation has been negative for much of the past two years as a result of the global oversupply of manufactured goods, falling capital goods prices and the high exchange rate. This has boosted the real disposable income of consumers. The high exchange rate has also made it cheaper for some firms to obtain capital goods and access new technologies, and provided an incentive to improve productivity. Through these channels the high exchange rate has helped to spread the benefits of elevated commodity prices.

However, the high exchange rate continues to be a significant and unhelpful headwind for the non-agricultural traded goods sector by restricting export earnings and encouraging imports over domestic tradables production. It imposes high costs on firms that are forced to exit and re-enter markets due to large movements in competitiveness. Its impact has been hardest on export firms that are not experiencing high international prices for their products, and on manufacturers and other businesses that compete with foreign imports.

⁴ IMF Staff Report for the 2014 Article IV Consultation on New Zealand

⁵ Petersen Institute for International Economics, Policy Brief 14/16

An unsustainable real exchange rate diminishes the tradable sector's profitability and affects its investment and employment decisions. It can also result in a smaller than desirable tradables sector. International experience indicates that countries enjoying sustained rapid rates of economic growth have generally had significant growth contributions from competitive tradables sectors and strong international trade linkages.

New Zealand's past experience with elevated exchange rates

Since the float of the New Zealand dollar, New Zealand has experienced four major exchange rate cycles, including the current cycle. Each previous cycle has been notable for an unjustified and unsustainable real effective exchange rate followed by an initial depreciation and then a rapid correction (table 1). On average, once the exchange rate has reached a peak, the peak-to-trough decline has occurred over 13 quarters. The average total decline has been 28%, while the average decline over the first year has been 11%.

Table 1: Periods of depreciation in the Real New Zealand dollar TWI

Year of initial exchange rate depreciation	Peak to trough movement (quarters)	Peak to trough movement (%)	Initial 4 quarter movement (%)
1988	17	-25	-12
1997	14	-33	-10
2007	6	-26	-11

Source: Bank for International Settlements, RBNZ

Several factors led to the depreciation of the real exchange rate in the late eighties. The share market crash of 1987 initiated a period of deleveraging in the New Zealand economy and this was compounded by the strong rise in oil prices in 1990 and a downturn in the global economy in 1991.

The Asian crisis was a key driver of the exchange rate depreciation from 1997. The downward pressure on the currency was exacerbated by a series of droughts from 1997-1999 and the financial shocks of the Russian debt default and the collapse of Long-term Capital Management.

The New Zealand dollar declined significantly from 2007, during the global financial crisis. The failure of Lehman Brothers, and the subsequent crisis in the US and in global financial markets drove a significant downturn in demand for New Zealand's exports and damaged business and consumer confidence.

Conclusion

Our modelling work indicates that the real effective exchange rate is above the level that can be justified by cyclical economic variables and that its current level is unsustainable over the longer term.

The nominal TWI is currently 4 percent below the historical high reached in July 2014. This decline in the TWI is small in relation to the 45 percent fall in global dairy prices since February 2014. We expect a significant further depreciation of the exchange rate as a result of the weakening in price of our dairy and log exports.

Past experience suggests that when the New Zealand dollar begins depreciating from an unjustified and unsustainable level, the ultimate adjustment can be large. Some of this reflects the limited overall liquidity in the New Zealand dollar markets, and the potential for pricing discontinuities when overall investor sentiment changes markedly and investors cut or exit their positions in volume.

Several factors could cause such a change in financial market sentiment. These include a deterioration in global risk appetite as the result of an adverse economic or geo-political shock, further declines in New Zealand's commodity export prices, a slowing in New Zealand's or China's economic growth, and stronger indicators of economic growth in the US. Under the current US outlook, the Federal Reserve is expected to start raising interest rates in the second or third quarters of next year. A stronger outlook for the US economy would likely trigger greater investor flows into the US dollar on the expectation that the Federal Reserve would begin to tighten sooner.

In the Reserve Bank's view, the combination of these factors makes the New Zealand dollar susceptible to a significant downward adjustment over the coming six to nine months. Such an adjustment would be welcomed by the Bank as a move towards a more sustainable exchange rate level.