

Some thoughts on the Inflation Outlook and Monetary Policy

A speech delivered to ExportNZ in Tauranga

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by Graeme Wheeler, Governor

Introduction

I would like to discuss New Zealand's recent inflation outcomes, the main factors accounting for them, and the outlook for monetary policy in ensuring that future average inflation over the medium term is near the 2 percent midpoint of the target band. Since the former issues have been covered extensively in our recent *Monetary Policy Statements*, speeches and analytical papers, the main focus will be on our current policy thinking.¹

New Zealand is far from alone in experiencing low inflation. Across the 30 or so economies (mainly advanced economies) whose central banks pursue inflation targeting, headline and underlying inflation have commonly been below specified goals. There are several reasons for this: the level of excess capacity in product and factor markets in several economies remains high; wage outcomes have been subdued, even in countries with low unemployment; measures of inflation expectations have declined; and many commodity prices are appreciably lower than a year ago. In most advanced economies, policy interest rates are at historic lows. In four advanced economies, they are negative².

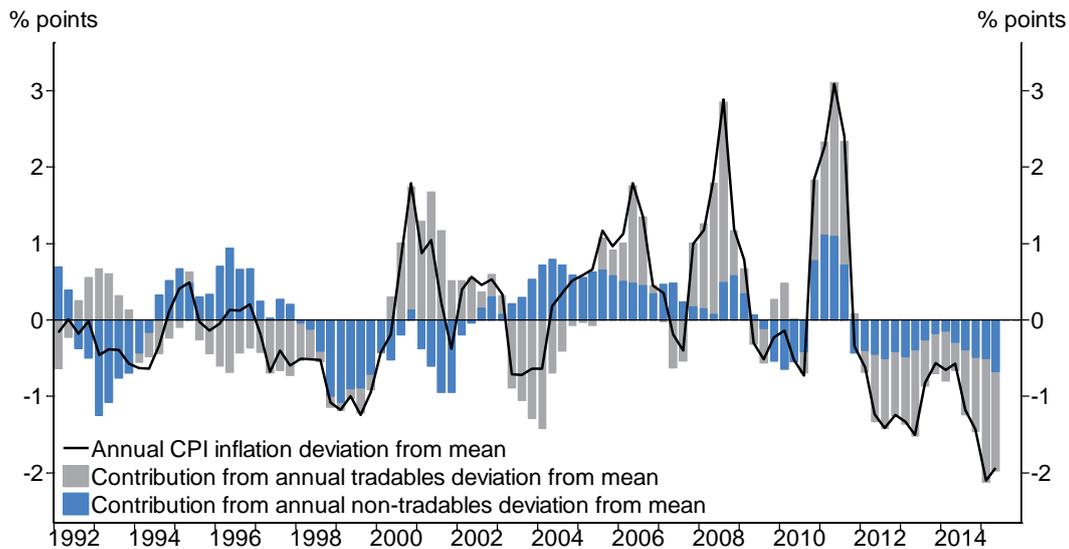
Recent Inflation Performance

Over the past two years annual CPI inflation in New Zealand has been in the lower half of the 1 to 3 percent target band, except for the period since the December quarter 2014, when the fall in oil prices brought CPI inflation to very low levels. Low headline inflation during this period has been primarily due to negative inflation in the tradables sector (figure 1), which accounts for around half of the CPI regime.

¹ See, for example, McDermott (2015), 'The dragon slain? Near-zero inflation in New Zealand', speech on 23 April 2015, and Richardson (2015), 'Can global economic conditions explain low New Zealand inflation?', Analytical Note 2015/3.

² This treats the euro area as one economy. If each economy were treated individually, 22 economies would have negative policy rates.

Figure 1: Contribution to headline CPI inflation
(annual, deviation from 1992q1 to 2015q2 average)



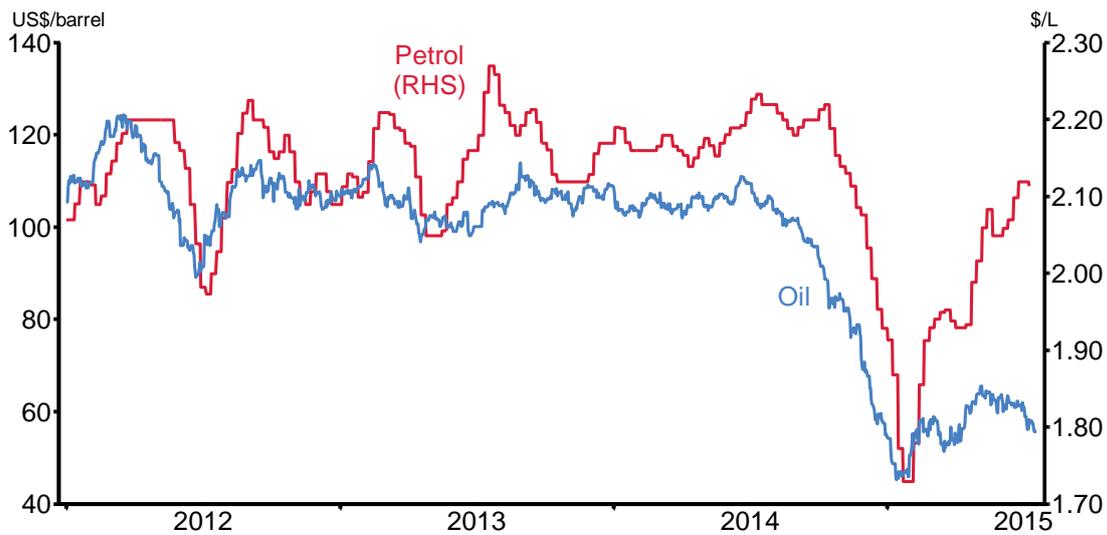
Source: Statistics New Zealand, RBNZ estimates

Annual CPI inflation is currently 1.7 percentage points below the mid-point of the target range and 2.1 percentage points below its long-term average. Of the latter, 1.6 percentage points are accounted for by below-average tradables inflation, with the remaining 0.5 percentage points due to weaker non-tradables inflation.

Tradables inflation has been low for several reasons. The global oversupply of commodities and manufactured goods, and the high level of excess capacity in the advanced economies, have kept cost and price pressures among our trading partners contained.³ The steady appreciation in New Zealand's real effective exchange rate since 2011 (until recently) has been a major factor behind periods of negative tradables inflation over the past three years. And, more recently, the 52 percent decline in oil prices since June 2014 (figure 2) resulted in negative quarterly inflation in the December 2014 and March 2015 quarters.

³ The continuous commodity index is currently about 40 percent below its 2011 peak, and represents the second largest commodity bear market in 50 years (only in the immediate aftermath of the global financial crisis was there a larger decline).

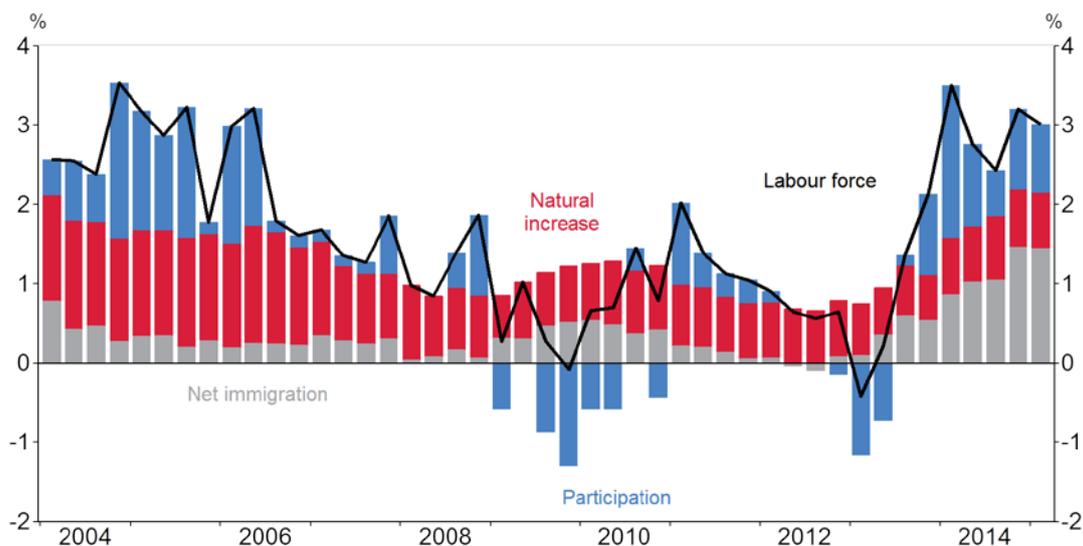
Figure 2: Oil and the domestic petrol price



Source: Reuters, Ministry of Business, Innovation, and Employment

Non-tradables inflation has been relatively low and stable, averaging around 2.5 percent since the beginning of 2012. Low non-tradables inflation largely reflects the impact of strong factor accumulation that has expanded capacity, and enabled strong demand growth to be met without increased inflation pressures. This is particularly the case in the labour market, where record levels of net immigration and historically high labour force participation, along with natural increase, have expanded the labour supply by around 3 percent over the past year (figure 3), and enabled a strong rate of employment growth to be absorbed without any acceleration in wage inflation.

Figure 3: Annual labour force growth



Source: Statistics New Zealand

Non-tradables inflation has been about ½ of a percentage point weaker on an annual basis than the Bank’s modelling estimates would suggest is normal for this phase of the economic cycle, even allowing for the stronger growth in economic capacity.⁴ This underestimate of inflation has also occurred in other countries and could be due to several factors. For example, inflation expectations may be weaker than survey data suggests, the tradables component of non-tradable products and services may be higher than previously thought, or online commerce may be increasing competition and squeezing margins in non-traded sectors, such as retail.

Under the Bank’s flexible inflation targeting framework, *the Policy Targets Agreement* (PTA) specifically recognises that annual CPI inflation will fluctuate around the medium-term trend due to factors such as exceptional movements in commodity prices – like those experienced since mid-2014. Measures of core inflation have recently been higher than headline inflation. One of our preferred measures, from the sectoral factor model, was 1.3 percent in 2015 Q2 – within the Bank’s target range – and has averaged 1.4 percent on an annual basis since the beginning of 2012.⁵

Outlook for Inflation

The Bank expects annual CPI inflation to be close to the midpoint of the 1 to 3 percent target range by the first half of 2016. The rise in headline inflation is expected to mainly come through higher tradables inflation, due to the 14 percent decline in the trade-weighted exchange rate since mid-April and as the decline in oil prices drops out of the annual figure.

There are, however, several risks and uncertainties around the inflation outlook. These include the future path of the exchange rate, which will be influenced by future commodity prices, and the speed with which the recent depreciation feeds through to higher inflation. Our modelling suggests that a 1 percent exchange rate depreciation boosts annual CPI inflation, albeit with a considerable lag, by around 0.1 percentage points. The speed and magnitude of this adjustment over the coming quarters, and its impact on competitiveness, will depend on the currency hedging practices of exporters and the pricing power of businesses to pass on higher import costs. Net migration continues to be strong and, although this exacerbates housing pressures in some regions, it also acts to moderate wage outcomes. The size of the output gap will also influence the path of non-tradables inflation, as will the extent to

⁴ The core measure of non tradables inflation is about 0.5 percent weaker in annual terms than suggested by its past relationship with the output gap and inflation expectations. The average absolute error of the model is 0.3 percentage points.

⁵ The Bank uses several measures to estimate core inflation but puts greatest weight on a sectoral factor model. This model weights those components of the CPI that most closely reflect the general trend in CPI inflation and down-weights those that do not. The weightings evolve over time as the volatility of each component changes.

which subdued price setting behaviour has some structural elements to it, and continues to persist.

Economic and Policy Backdrop

Central bankers have found the post Global Financial Crisis (GFC) years to be a very challenging time for conducting monetary policy. High expectations have been placed upon central banks at a time when the economic, financial and political interlinkages in the global economy seem more complex, and where monetary policy has become the fall-back policy to promote a strong global recovery.

Globally, the corporate and household deleveraging process has been more difficult and prolonged than expected – especially in the euro area. In many economies, deleveraging (or simply reluctance to extend already high debt levels) has been reflected in slow growth in household demand, weaker-than-forecast business investment, and persistent levels of excess capacity.

Our economy has generated better growth and employment outcomes than many other advanced economies in the post-GFC period. There are several reasons for this. Our banking sector was far less adversely affected by the GFC than those in the United States and Europe, Canterbury reconstruction generated strong investment and boosted manufacturing production, and, only 18 months ago, New Zealand's terms of trade were at a 40-year high. Like other forecasters, we have been surprised by the strength of net immigration and its positive impact on productive capacity.

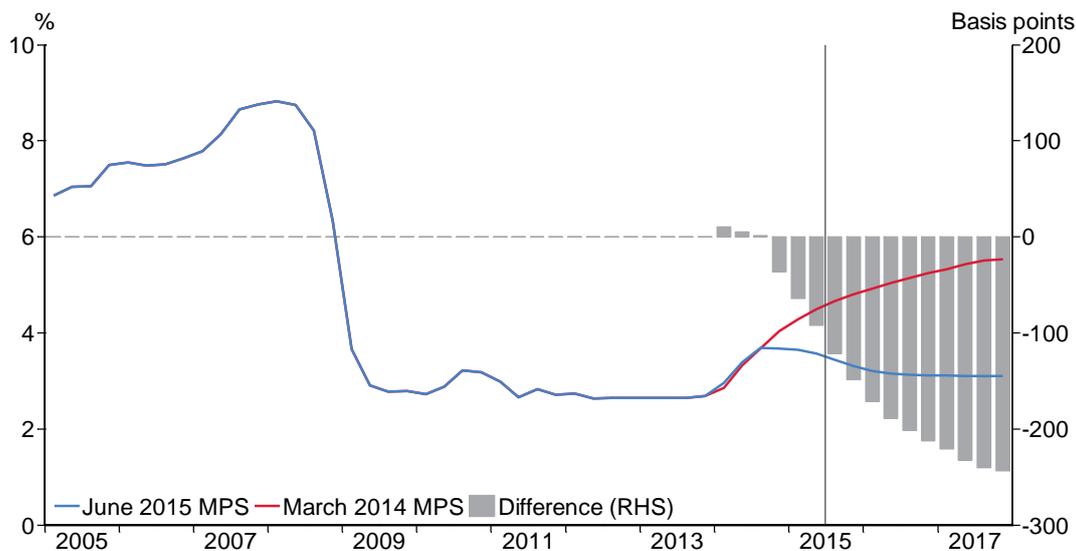
There have also been question marks over the robustness of past empirical relationships, and the effectiveness of traditional monetary policy instruments, in an environment of unprecedented monetary accommodation in the global economy. Central bankers have learned how hard it is to increase inflation expectations when inflation expectations are embedded at low levels and household debt levels are high. They have seen the short-term relationship between inflation and aggregate demand become more uncertain, and their ability to influence long-term interest rates, which has always been limited, has weakened. In addition, in a world of extraordinary global liquidity and asset price inflation, it is more difficult to assess the size of output gaps and the level of the neutral interest rate. One aspect that appears not to have changed much is that monetary policy affects inflation and inflation expectations with a variable and potentially long lag. Monetary policy can take around 12-18 months to have its peak effect on inflation.

Policy Outlook

i) Recent policy developments

In June 2014, the Bank started to scale back the extent of its expected OCR increases (figure 4), and by early February 2015 our expectation was that the OCR was likely to be on hold for some time. Also, by this time the Bank was discussing circumstances where the OCR might be reduced.⁶

Figure 4: The Bank's 90-day interest rate projections



Source: RBNZ estimates

This perspective was reinforced as dairy prices began to fall sharply in March while the exchange rate remained close to its peak. Furthermore, the negative income effects from falling export prices were accentuated by a bounce in landed oil prices and an increase in refinery margins. The latter meant that the expected income gain of around \$400 per household from the initial oil price decline had halved.

Several considerations underlay the Bank's decision to cut the OCR in June 2015. Statistical data revisions and the recent slowing in demand suggested that the output gap was likely to be smaller than forecast, non-tradables inflation looked to be low and stable, and the exchange rate had not adjusted sufficiently to the decline in the terms of trade. The decision to reduce interest rates was aimed at buffering the decline in the terms of trade associated with falling dairy and other commodity prices, and ensuring that the exchange rate contributed to moving inflation back towards the target mid-point.

⁶ Wheeler (2015), 'The outlook for the New Zealand economy', speech on 4 February 2015.

ii) The exchange rate

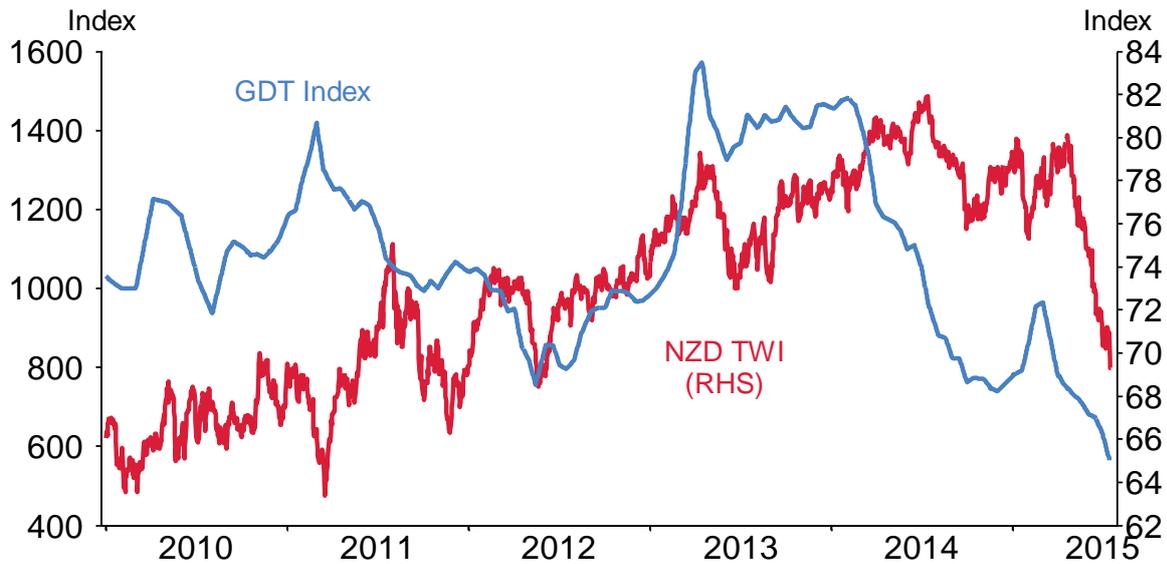
The exchange rate has declined by 14 percent on a TWI basis and 15 percent against the US dollar since mid-April 2015. Other factors, in addition to policy signalling by the Bank, have put downward pressure on the currency. These include falling dairy prices, various domestic economic indicators suggesting some moderation in demand growth, and the strengthening in the US dollar and sterling.

We signalled for some time that we believed the high exchange rate was unjustified and unsustainable. In the June *MPS* we described it as overvalued and suggested that a significant downward adjustment was justified and necessary to put New Zealand's net external position on a more sustainable path. Since the June *MPS*, the exchange rate has declined by 5 percent on a TWI basis and global dairy prices have fallen by 16 percent (figure 5).

In the July OCR review we noted that the exchange rate had declined significantly since April 2015 and, along with lower interest rates, had led to an easing in monetary conditions. We indicated that further depreciation is necessary given the weakness in export commodity prices.

Our models suggest that the real exchange rate is currently in the vicinity of its long-run equilibrium value – if growth, inflation, and the terms of trade were at their long-run trends. However, the exchange rate remains above the level consistent with current economic conditions and, in particular, the current low level of export prices. Reflecting this, our economic forecasts, based on recent levels of the exchange rate and terms of trade, show the current account deficit becoming larger over the next two years. At current levels of export prices, a more substantial exchange rate depreciation is therefore required to stabilise the net external liabilities position relative to GDP.

Figure 5: NZD exchange rate and export prices



Source GDT, Reuters

In this context, we believe that the exchange rate needs to weaken further. In addition, the high stockpiles of whole milk powder in China, the increase in global milk supply, and the trade diversion issues involving Russia make for a very uncertain future, with the potential for further downward pressure on global dairy prices. Also, over coming months, we are likely to see the Federal Reserve and the Bank of England begin the process of normalising their interest rates, and this may assist the currency lower.

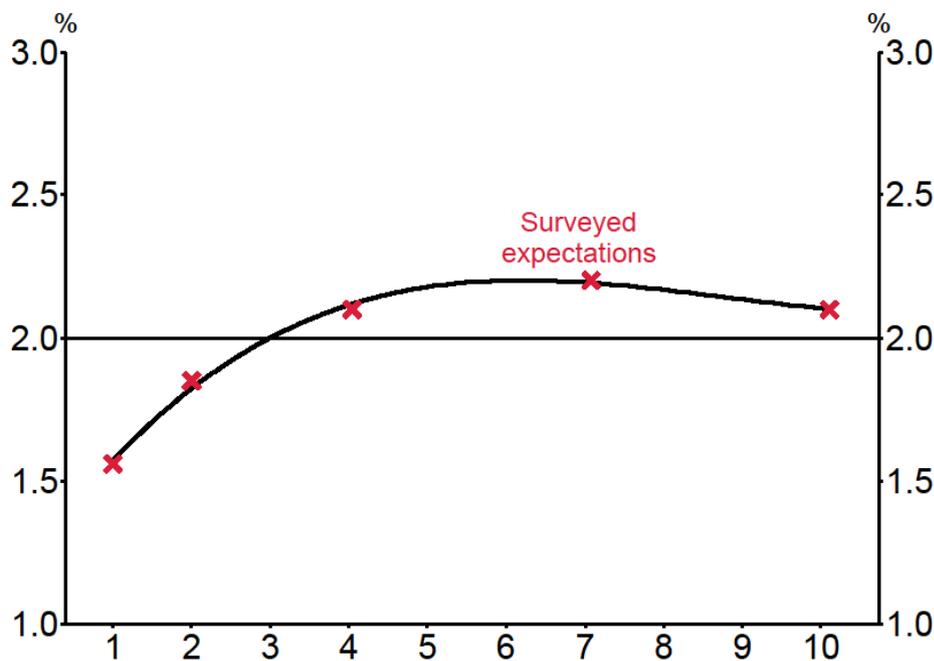
iii) Interest rates

Turning to the interest rate outlook, our conditional projections in the June MPS built in a 50 basis point cut in interest rates over the forecast period. We cut the OCR by 25 basis points in June and indicated that, while further easing may be appropriate, our future policy course would depend on the flow of emerging data. In the July OCR review we reduced the OCR by a further 25 basis points, and indicated that, at this point, some further easing seems likely.

The current level of interest rates remains below New Zealand's neutral rate, as was the case when we raised rates during the period March to July 2014. We view the neutral interest rate as the policy rate consistent with the economy growing at its potential in the medium term and having inflation expectations matching the price stability objective. The Bank's analysis suggests that the neutral 90-day rate currently sits in the 4 to 5 percent range. The Bank is continuing to reflect on this issue as the very low level of global rates could mean that the effective neutral rate may be at the bottom end of, or below, this range.

We view the current monetary policy settings as providing stimulus to the economy at a time when output looks to be growing around 2.5 percent, slightly below potential⁷, and core inflation remains a bit below the mid-point. At the same time, the moderation in wage and pricing behaviour and survey data suggests that inflation expectations have fallen and appear to be closer to the mid-point of the PTA target range than has been the case for several years (figure 6).

Figure 6: Inflation expectations
(annual, years ahead)



Source: ANZ Bank, Aon Consulting, Consensus Economics, RBNZ

The future path of the OCR will be driven by the flow of incoming data, our assessment of the economic outlook, and judgements as to what level of interest rates is needed to achieve the Bank's price stability goal. Several factors will continue to be important in this regard including: whether wage and price-setting outcomes are consistent with the price stability objective; whether the range of inflation expectations data suggests expectations have stabilised at an appropriate level; future movements in commodity prices – especially global dairy prices; and the degree of exchange rate adjustment that occurs and how quickly it passes through into inflation.

Some local commentators have predicted large declines in interest rates over coming months that could only be consistent with the economy moving into recession. We will review our growth forecasts in the September *MPS* but, at this

⁷ The growth rate of potential output is considered to be around 2.6 percent.

point, we believe that while demand and output growth may be a little below trend, several factors are supporting economic growth. These include the easing in monetary conditions, continued high levels of migration and labour force participation, ongoing growth in construction and continued strength in the services sector.

A relevant issue is how rapidly the Bank should seek to return inflation to the mid-point of the target band. There are important trade-offs here that can come at the expense of unnecessary volatility in output, interest rates, and the exchange rate – outcomes that, under the *PTA*, the Bank is required to seek to avoid.

Attempting to return inflation to the midpoint quickly could create the risk of overshooting the inflation goal, un-anchoring inflation expectations, and increasing the volatility of interest rates and the exchange rate, as monetary policy is significantly eased and subsequently tightened. On the other hand, while moving interest rates only gradually might have the benefit of inducing less volatility in output and key relative prices, it would increase the risk that the Bank consistently undershoots its inflation target, and that inflation expectations get anchored at too low a level.

Our judgement in the current circumstances is that aiming to return inflation to around its medium-term target level in about nine to 12 months' time is an appropriate speed of adjustment. This may not always be the appropriate speed of adjustment. Nor does it mean that the Bank will necessarily deliver a precise outcome as the economy is constantly experiencing shocks and disturbances that policy may need to counter or accommodate. Having the scope to amend policy settings, however, is a key strength of the monetary policy regime. In response to these developments, the Bank will review and, if necessary, revise its policy settings to meet its price stability objectives. The time path of inflation may change as monetary policy is recalibrated, but the overall goal of meeting the specifications of the *PTA* will remain the central focus of policy.

iv) The housing market

We are conscious of the impact that low interest rates can have on housing demand and its potential to feed into higher house price inflation. Lower interest rates risk exacerbating the already extensive housing pressures in Auckland by stimulating housing demand, although, outside of Auckland, nationwide house price inflation is currently running at an annual rate of around 2 percent.

Raising interest rates can be a useful policy response in leaning against asset price pressures when they are widely based and wealth effects are spilling over into

demand and triggering broader inflationary pressures. There is currently little evidence of this and, in the present situation, raising interest rates would be inappropriate as it would put upward pressure on the exchange rate and further dampen inflation.

Monetary policy and macro-prudential policy can each affect the housing market. While they have different primary objectives of price stability and financial system stability respectively, there can be important spillover effects between the two policies. In the *Policy Targets Agreement* financial stability is a secondary objective; in the macro-prudential *Memorandum of Understanding*, macro-prudential initiatives need to have regard to their potential impact on monetary policy.

We continue to be concerned about the financial stability risks and risks to the broader economy that would be associated with a major correction in Auckland house prices. In the current circumstances, macro prudential policy can be helpful in reducing some of the pressures arising from the Auckland housing market. The proposed LVR measures and the Government's policy initiatives that it announced in the 2015 Budget should begin to ease the impact of investor activity.

While a strong supply response over several years is needed to address Auckland's housing imbalance, macro-prudential policy can help to lower the financial and economic risks while important regulatory and infrastructure issues are addressed and additional investment in new housing takes place.

Conclusion

In mid-2014, New Zealand's terms of trade were at a 40-year high, but over the past 15 months the economy has experienced several shocks. Export prices for whole milk powder have fallen 63 percent since February 2014, and oil prices are currently more than 50 percent below their June 2014 level. Net immigration and labour force participation are at historic highs and the real exchange rate has declined steadily since April 2015.

We think the economy is currently growing at an annual rate of around 2½ percent. To maintain growth around potential and return CPI inflation to its medium-term target level, some further monetary policy easing is likely to be required. We also believe that further exchange rate depreciation is necessary given the weakness in export commodity prices and the projected deterioration in the country's net external liabilities over the next two years. The Bank will review and, if needed, revise its policy settings in response to emerging economic developments in order to meet the price stability objectives specified in the *PTA*.