RESERVE BANK
OF NEW ZEALAND
TE PŪTEA MATUA

Monetary Policy Statement

December 2013[1]

This *Statement* is made pursuant to Section 15 of the Reserve Bank of New Zealand Act 1989.

Contents

This document is also available on www.rbnz.govt.nz

ISSN 1770-4829

[1] Projections finalised on 27 November 2013. Policy assessment finalised on 11 December 2013.

1 Policy assessment

The Reserve Bank today left the Official Cash Rate unchanged at 2.5 percent.

Growth remains moderate but mixed for New Zealand's main trading partners. Nevertheless, export prices for New Zealand's main commodities, and especially dairy produce, have continued to increase.

New Zealand's GDP is estimated to have grown at over 3 percent in the year to the September quarter and the expansion in the economy has considerable momentum. New Zealand's terms of trade are at a 40-year high, household spending is rising and construction activity is being lifted by the Canterbury rebuild and the response to the housing shortage in Auckland.

Continued fiscal consolidation and the high exchange rate will partly offset the strength in domestic demand. The high exchange rate is a particular headwind for the tradables sector and the Bank does not believe it is sustainable in the long run.

House price inflation is high in Auckland and other regions due to the housing shortage, and demand pressures associated with low interest rates and rising net inward migration. Restrictions on high loan-to-value mortgage lending, introduced in October, should help slow house price inflation. Data to date are limited on the effects of these restrictions. We will continue to monitor outcomes in the housing market closely.

Annual CPI inflation increased to 1.4 percent in the September quarter and inflation pressures are projected to increase. The extent and timing of such pressures will depend largely on movements in the exchange rate, changes in commodity prices, and the degree to which momentum in the housing market and construction activity spills over into broader cost and price pressures.

The Bank will increase the OCR as needed in order to keep future average inflation near the 2 percent target midpoint.

Graeme Wheeler

Governor

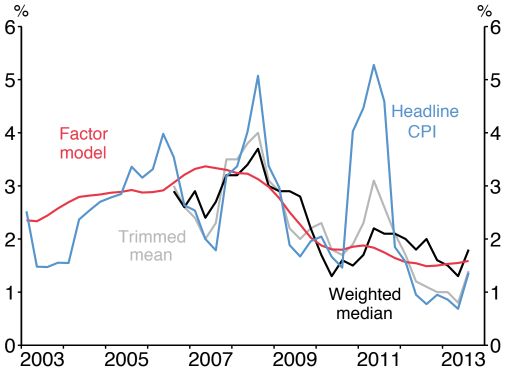
2 Overview and key policy judgements

Monetary policy needs to balance current modest inflation against the likelihood that inflationary pressures will rise over the medium term. The economy continues to strengthen. Looking ahead, demand will be boosted by high export commodity prices, low interest rates, momentum in the housing market, and continued reconstruction in Canterbury. Fiscal consolidation and the high New Zealand dollar are providing some offset. Given this outlook, it is becoming unnecessary to maintain the current degree of monetary stimulus.

Output and inflation developments

Inflation rose to 1.4 percent in the year to the September quarter, after being below 1 percent for the previous year (figure 2.1). While a significant part of the increase has come from specific items like petrol and tobacco taxes, there are signs that underlying inflation is beginning to rise, reflecting growing demand pressure.

Figure 2.1
Headline and selected core inflation measures
(annual)



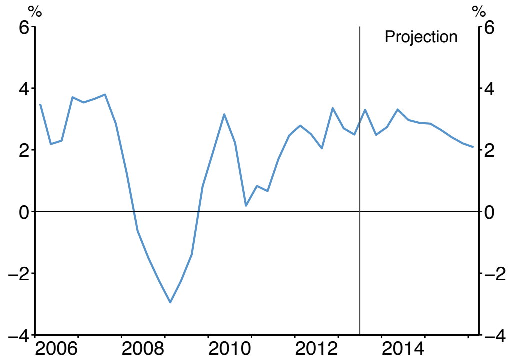
Source: Statistics New Zealand, RBNZ estimates.

Momentum in the economy is strong. Growth has been fast enough to absorb spare capacity, and over the past year has broadened across sectors and regions. While employment and activity have been increasing especially strongly in the construction sector, driven by post-earthquake work in Canterbury, dwelling consents have also been picking up through the rest of the country. Export commodity prices remain very high, and dairy production has rebounded strongly since the drought. Low interest rates are providing further support to domestic demand. However, fiscal consolidation and the high exchange rate continue to weigh on activity.

Economic outlook

Annual GDP growth is expected to average about 3 percent through 2014 before moderating from early 2015 (figure 2.2).

Figure 2.2
GDP growth
(annual)



Source: Statistics New Zealand, RBNZ estimates.

These projections depend on key assumptions about a number of important economic forces. If these assumptions prove incorrect, growth and inflation could evolve differently from the central projection, influencing how quickly or by how much it might be necessary to withdraw policy stimulus. The most important assumptions are:

- that the post-earthquake reconstruction work in Canterbury will total $40 billion in current prices, with rebuilding to take place over an extended period and with limited spill-over into generalised inflation pressure;
- that current high house price inflation eases over the projection;
- that the exchange rate remains high, reflecting New Zealand's relatively strong outlook, and will

decline only gradually over the projection horizon;

- that export prices ease over the projection, but remain at a high level; and
- that fiscal consolidation will offset some of the upward pressure on GDP growth over the medium term.

Construction

Nationwide residential investment has risen sharply from its 2011 trough, boosted by earthquake reconstruction in Canterbury. Building consents in that region are well above their mid-2000s peak. The projections assume that the rebuilding in Canterbury will peak in 2016/17 and continue over much of the coming decade, with limited spill-over of relative price increases into generalised inflation pressure. Practical constraints – such as the time involved in land remediation and apportioning insurance claims – have prevented a faster increase in construction work to date. Data on inflation by sector and region show that construction cost pressures have remained centred in Canterbury.

Elsewhere in the country, residential building activity is picking up. This growth is expected to continue over the medium term, and particularly so in Auckland where the Auckland Housing Accord seeks to fast-track the consent process to increase housing supply. Since the September *Monetary Policy Statement* the Bank has revised up slightly its projection for residential building outside Canterbury.

Risks to the projection stem from the possibility that building work is more inflationary or picks up more quickly than assumed. That might occur if work in Canterbury were to accelerate, placing additional pressure on resources in the sector and possibly boosting domestic demand more broadly. Similarly, there is uncertainty around the outlook for construction elsewhere in the country, including the effect of the Auckland Housing Accord.

The housing market and domestic demand

Annual house price inflation has been picking up over the past two years, rising most strongly in Auckland (inflation of 16 percent) and Christchurch (inflation of 9.5 percent). While annual house price inflation elsewhere in the country is more modest at about 4 percent, price pressures are stronger than that in some provinces, and annual growth in household credit has picked up to 6 percent over the past year. A risk is that house price inflation becomes stronger than forecast, and that households react by substantially increasing consumption.

Contributing to rising house prices are low interest rates, a rise in net inward migration, and region-specific supply issues. These sources of support are expected to ease over the medium term.

Further, restrictions on high loan-to-value (LVR) mortgage lending, introduced by the Reserve Bank in October, are expected to reduce annual house price inflation by between 1 and 4 percentage points over the next year. To date there has been limited data on how the LVR restrictions are affecting housing demand and prices.

Migration flows are a significant influence on demand for housing, and can change sharply with relative economic conditions. This is a source of risk to the outlook. Net inward migration has risen significantly since the September *Monetary Policy Statement*, primarily driven by a fall in departures of New Zealand citizens. There has also been a pick-up in arrivals of New Zealand citizens returning from Australia, reflecting New Zealand's stronger labour market outlook.

Box B (p 8) examines some of the sources of risk to the housing market outlook.

External conditions and the exchange rate

The New Zealand dollar trade-weighted index (TWI) remains very high, and is higher than assumed in the September *Monetary Policy Statement*. New Zealand's high terms of trade and its strong growth outlook relative to trading partners are important reasons for the strength of the currency. With stronger momentum than its trading partners, New Zealand's inflationary pressures will rise more quickly and monetary stimulus is expected to need to be withdrawn sooner in New Zealand.

Growth in New Zealand's major trading partners has been moderate over 2013, and is expected to increase gradually over the projection horizon. GDP growth in the United States has remained near its post-Global Financial Crisis (GFC) average. Economic activity in the euro area and Japan has continued to grow in recent months, but in the euro area, in particular, growth remains very slow. In other parts of Asia and in Australia, GDP growth has moderated to below the average rates of the past decade.

The high exchange rate is having a dampening influence on tradables inflation, by lowering the price of imports. In addition it remains a headwind for activity in the tradables sector, restricting export earnings and increasing the attractiveness of imports relative to domestic production. For some exporters – notably in the dairy sector – the effect on incomes is partly offset at present by high global prices.

The projections assume that the exchange rate eases over the medium term, but remains at a high level by past standards. A higher exchange rate, other things being equal, reduces inflationary pressures and so the need for the OCR to be increased.

The terms of trade

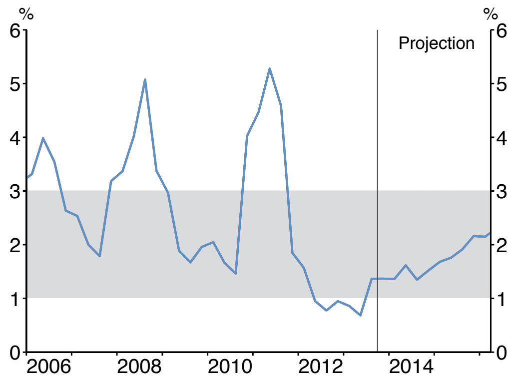
The terms of trade are at a 40-year high. The projections assume that export commodity prices and the terms of trade ease over the medium term. There are, however, plausible reasons why prices might turn out higher or lower than projected. For example, forward prices indicate at present that international dairy prices could hold up more than projected. Alternatively, if the global supply response to current high prices was stronger than expected, there would be downside risk to the projection. Demand from China has been an important driver of international dairy prices.

A higher path for the terms of trade would support domestic incomes, and so domestic demand and inflation pressure. The stronger economic outlook could also support the exchange rate, causing it to decline less quickly than projected, which would put downward pressure on tradables inflation. Box C in chapter 5 traces some of the possible effects of the terms of trade holding up for longer than projected.

Inflation and monetary policy

Inflation is expected to increase over the medium term (figure 2.3), with annual non-tradables inflation rising towards 4 percent as pressure on capacity grows, and wage inflation picking up as labour demand continues to grow. Tradables inflation rises gradually from its currently negative rate and remains subdued because of the high level of the exchange rate and modest global inflation.

Figure 2.3
CPI inflation
(annual)



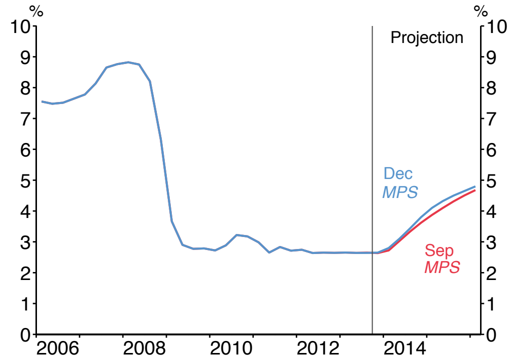
Source: Statistics New Zealand, RBNZ estimates.

Aside from the underlying pick-up in inflationary pressures, increases in indirect taxes on tobacco and petrol are expected to boost annual CPI inflation by up to about 0.3 percentage points each year until 2016. We assume that factors specific to the communications sector will continue to lower prices in the sector over the coming years.

Given this outlook, it is becoming unnecessary to maintain the OCR at 2.5 percent, with GDP growth becoming increasingly self-sustaining. The Bank's assessment is that, consistent with CPI inflation settling near the 2 percent midpoint of the target range over the medium term, growing demand and inflation pressure should warrant a withdrawal of stimulus beginning in 2014. Of course, if the risks discussed above eventuate, inflation pressure would be expected to evolve differently to that projected, requiring a re-assessment of how quickly and by how much it will be necessary to withdraw policy stimulus.

The 90-day interest rate is projected to rise over the next few years by slightly more than we envisaged in the September *Monetary Policy Statement* (figure 2.4) This reflects the view that the terms of trade and domestic demand are somewhat stronger than foreseen in September. The effect of these factors is partially offset by a higher exchange rate than was assumed at the time of the September *Statement*.

Figure 2.4
90-day interest rate

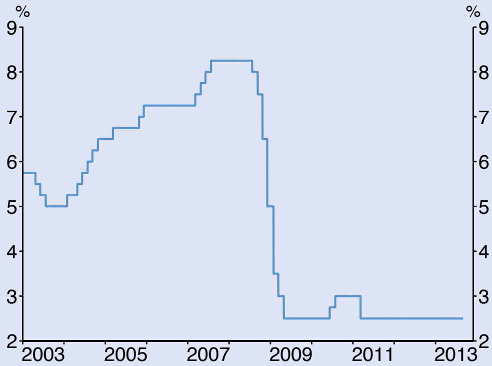


Source: RBNZ estimates.

Box A
Recent monetary policy decisions

The OCR has been held at 2.5 percent since March 2011 (figure A1). Although such an extended period with low interest rates is very unusual historically, the low policy rate has been appropriate in light of low CPI inflation.

Figure A1
Official cash rate



Source: RBNZ.

Annual CPI inflation increased to 1.4 percent in the September quarter. While it was below 1 percent over the past year, the expectation has been that growth in the economy would absorb spare capacity and begin putting upward pressure on inflation. Most measures of annual core inflation have been above 1 percent, even if many have been below the midpoint of the Reserve Bank's target range over the past year or two. Those measures now look to be picking up, and in the projections, annual CPI inflation rises towards the mid-point of the 1 to 3 percent target range.

Over the past few years, the economic recovery has been slow and spare capacity has been absorbed only gradually. Annual non-tradables inflation has been rising, albeit slowly, and was 2.8 percent in the year to September 2013. Unusually weak inflation in the communications sector over recent quarters has held down CPI non-tradables inflation, while tobacco excise taxes have boosted the rate. Overall, the current rate of non-tradables inflation looks broadly in line with past capacity pressure, given the lags between activity and price movements.

The persistently high dollar has weighed on tradables inflation, which has been negative in annual terms since mid-2012. Its average rate since the start of the last cycle in 1998 is 1.1 percent. Adding to downward pressure on tradables inflation has been weak import price inflation related to substantial spare capacity in the global economy. A competitive retail environment over the last couple of years has dampened price increases. Petrol tax increases have boosted the rate of tradables inflation.

Box B
The New Zealand housing market and the effect of LVR restrictions

New Zealand house prices have risen by 18 percent over the past two years as growth in demand to purchase houses has outpaced growth in housing supply. Low interest rates, an external-migration driven rise in population growth, and region-specific supply shortages all contribute to house price inflation.

As a result, strength in house price inflation is expected to persist for longer than assumed at the time of the September *Statement*. Overall, we consider the risks around this outlook for house prices to be broadly balanced.

Permanent and long-term net immigration has been stronger than expected over recent months and is expected to remain high in coming quarters (see figure 5.8). Cycles in net immigration can ebb and flow quite considerably, and these changes can significantly influence house prices and domestic demand. Labour requirements for the Canterbury rebuild – which may be partly met through increased arrivals from offshore – and the softening labour market outlook in Australia could see net immigration flows increase further and pose upside risk to house price inflation.

Interpreting what the composition of migration flows implies for housing demand is challenging. Recent work by the Reserve Bank suggests that an increase in arrivals to New Zealand tends to have a larger effect on housing demand than a fall in departures.[1] Further, while permanent and long-term immigration has increased substantially, total immigration (i.e. including permanent, long-term and short-term movements) points to more modest population pressures.

In Auckland at present, there does appear to be a shortage of accommodation. However, population and dwelling data released from the 2013 *Census of Population and Dwellings* suggest that the shortfall is smaller than previously thought. While rental inflation has been somewhat stronger in Auckland than elsewhere, house price rises in Auckland have substantially outpaced rental inflation. This suggests that demand to purchase houses in Auckland might be rising more quickly than demand for accommodation.

When interest rates eventually increase, demand to purchase homes could fall more than currently expected. This is likely to be particularly the case if people are currently making decisions based on the assumption that interest rates will remain persistently low.

The Reserve Bank's recent introduction of a "speed limit" on banks' new lending at higher loan-to-value ratios (LVRs) is expected to influence conditions in the housing market. In response to financial stability risks arising from elevated and rising house prices, the Reserve Bank introduced a speed limit on high-LVR residential mortgage lending on 1 October. These restrictions limit lending at LVRs of 80 percent and above to no more than 10 percent of banks' new residential mortgage lending.

The limited data available on the effects of LVR restrictions suggest that the impact to date has been broadly as expected. High-LVR lending fell to 12 percent of total new mortgage lending in October and banks appear well placed to meet the restrictions over the six month measurement period to March 2014. The reduction in high-LVR lending is expected to impact house price and sales data in coming months.

We expect that LVR restrictions will subtract between 1 and 4 percentage points from annual house price inflation in the first year of implementation, with smaller effects thereafter. However, the impact is very uncertain, and there may be some short-term volatility in housing market activity that makes the impact difficult to assess for some time. Nonetheless, the Reserve Bank will continue to monitor developments closely to gauge the effects of the policy.

1 McDonald, C. (2013) 'Migration and the housing market', Reserve Bank of New Zealand *Analytical Note* forthcoming.

3 Financial market developments

Low global interest rates and major central banks' determination to keep them that way continue to be key factors driving financial markets. Since the September *Monetary Policy Statement*, major equity market indices have continued to trend higher, credit spreads have narrowed and global government bond yields have fallen. The United States Federal Reserve surprised markets by not beginning to taper asset purchases in mid-September, while the European Central Bank (ECB) unexpectedly cut its main refinancing rate.

Markets are pricing in little chance that the major central banks will raise policy rates next year. By contrast, New Zealand's Overnight Indexed Swaps market implies a high probability that the Reserve Bank will raise the OCR by 25 basis points in March 2014, and around 120 basis points of tightening is priced in for calendar 2014.

Funding conditions remain comfortable for New Zealand's major banks. Access to funding is easy and pricing is about as low as it has been since the Global Financial Crisis (GFC).

Average advertised mortgage rates have been relatively steady, although some banks are offering higher-equity borrowers special short-term fixed rates of below 5 percent. High loan-to-value ratio (LVR) borrowers are now typically being charged 50 basis points more than low-LVR borrowers.

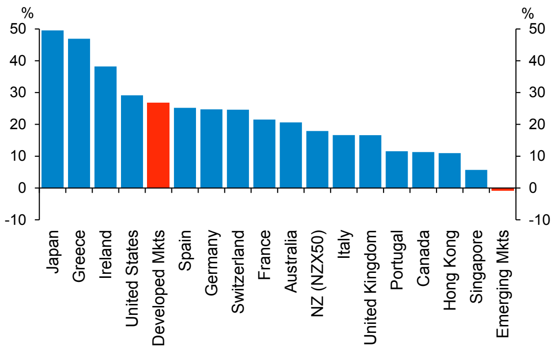
The New Zealand dollar TWI has remained in a tight range since mid-September, between about 76 to 78. Sentiment for Asian currencies and the Australian dollar has been weak. The NZD-AUD cross rate reached a five-year high in late November.

International market developments

Financial market sentiment has been positive, with equity and credit markets performing well. A couple of factors are behind this trend. Firstly, there are signs of improving economic momentum in regions such as the euro area, United Kingdom, Japan and China, and the United States economy continues to grow at a moderate pace. Secondly, low global interest rates and ongoing asset purchases by the United States Federal Reserve and the Bank of Japan are helping to support asset prices.

Stock price indices continue to trend higher. The strong rise in equity markets this year has been broad-based, with gains of more than 20 percent across many of the developed economy markets, according to MSCI indices. For the third year in a row, emerging markets (EM) have significantly lagged this trend (figure 3.1).

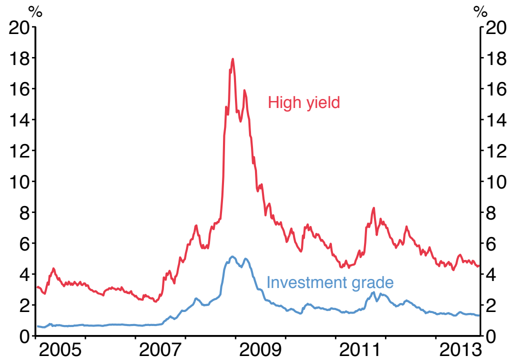
Figure 3.1
MSCI equity market indices
(Percent change for 11 months to November, local currency terms)



Source: Datastream.
Note: Emerging Markets are in USD terms.

Corporate credit markets have remained strong, fuelled by investor demand for yield given low yields on sovereign bonds. The current interest rate on the Barclays Capital global treasuries index is just 1.5 percent, while the yield on global investment grade corporate bonds is 2.9 percent. Credit spreads – spreads of investment grade and high yield ("junk") bonds to government bonds – remain close to post-GFC lows, although they are still above levels prevailing before the GFC (figure 3.2, overleaf).

Figure 3.2
Global corporate bond spreads



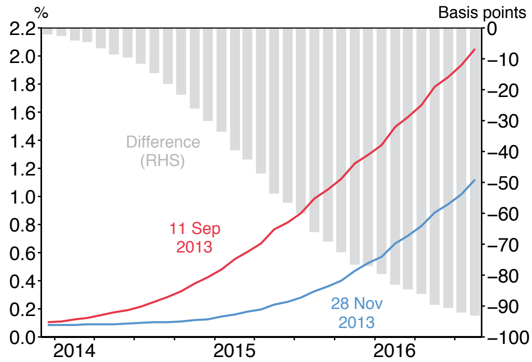
Source: Barclays Capital.

United States monetary policy has continued to be a key focus for financial markets. In mid-September the Federal Open Market Committee decided to leave the pace of purchases of longer-term Treasury securities and mortgage-backed securities unchanged at $US85 billion per month. This surprised markets, which had been expecting a small tapering. The minutes revealed that the decision was a close call, but the Committee underlined its concern about the tightening of financial conditions observed in the months leading up to the meeting. Leading up to the announcement, interest rates rose significantly across the yield curve. The minutes suggested that the Committee was prepared to be patient and await more evidence of sustained improvement in economic activity and the labour market before reducing the pace of asset purchases.

Further communications from the Federal Reserve have emphasised that the reduction of asset purchases is a separate decision from the expected pace of policy interest rate increases. Federal Reserve officials have emphasised that increases in the policy interest rate are a long way into the future.

Financial market participants appeared to heed this message and pushed out the expected timing of interest rate increases. The pricing of Fed Funds futures reveals an expectation that the first United States policy rate hike will occur from December 2015. Prior to the September policy decision, the expectation had been December 2014 (figure 3.3). The delay to the start of tapering of asset purchases led financial market participants to revise up their expectations of how much the Federal Reserve would expand its balance sheet, and pushed out the expected timing of the end of the asset purchase programme.

Figure 3.3
Fed Funds futures – implied interest rates



Source: Bloomberg.

The partial shut-down of the United States federal government for 16 days during October, due to disagreement over the budget and debt ceiling extension, had some adverse impact on short-term funding markets. This was reflected in a spike upwards in interest rates for Treasury bills that were to mature between mid-October and early November, and some evident strain in repurchase (repo) markets.

The ECB surprised the market in early November when it cut its main refinancing rate by 25 basis points to 0.25 percent. The ECB also extended, by one year, its current practice of offering unlimited three-month funds at a fixed rate during open market operations. The policy easing appeared to be triggered by unexpectedly low inflation. The ECB reiterated its forward guidance, namely that it "continues to expect the key ECB interest rates to remain at present or lower levels for an extended period of time".

The rate cut had little sustained impact on the market. Overnight money market rates for cash traded between banks were already close to the zero lower bound and below the main refinancing rate. However, the rate cut signalled that the ECB was responsive to changing economic conditions and market participants debated what further possible policy options might be considered by the central bank.

Central banks in Japan, the United Kingdom, Canada and Australia have left monetary policy unchanged since the September *Monetary Policy Statement*. The Bank of Japan continued with its policy of purchasing assets (mainly Japanese government bonds) to achieve its aim of expanding the monetary base at an annual pace of 60-70 trillion yen. The Reserve Bank of Australia has kept the cash rate unchanged since August, when it was cut to a record low of 2.5 percent. Market pricing implies a small chance of one further 25 basis point rate cut sometime before mid-2014, but no notable change in policy until 2015.

Many EM economies suffered large portfolio capital outflows around the middle of the year following expectations that the United States Federal Reserve would taper asset purchases and a rise in developed-market bond yields. This led to significant currency depreciation for many emerging economies and a significant sell-off in EM equity and bond markets. Following the no-taper decision in September, demand for EM assets has increased and EM currencies have recovered modestly. Overall, however, market sentiment towards EMs appears subdued.

Central banks in some EMs (India, Indonesia, and Brazil) have tightened policy in recent months, citing a desire to keep on top of rising inflation, in part caused by currency depreciation. Many have rebuilt foreign exchange reserves that were depleted between May and August.

China's economic indicators have strengthened over recent months after signs of a slow-down earlier in the year. Following the Third Party Plenum in early November, the Chinese Government announced wide-ranging reform. From a financial markets perspective, the key reforms are the proposed liberalisation of interest rate markets, internationalisation of the yuan, and opening up of the capital account. Comments by the Governor of the People's Bank of China indicate initial steps could be to allow the yuan to trade in a wider band and reduce intervention in the foreign exchange market.

Financing and credit

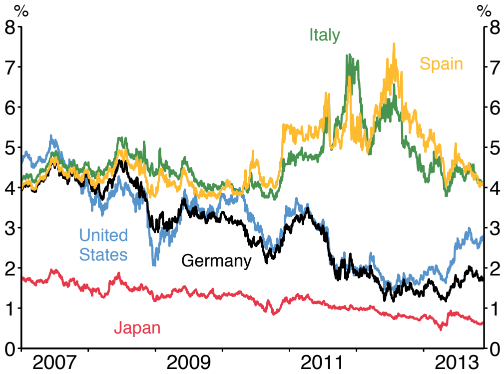
Global bond yields have tended to fall since the September *Statement,* following the significant increases between May and early September. The United States Federal Reserve's decision to continue with asset purchases at the current pace supported bond markets. An additional factor has been markets pushing out the timing at which they expect the first increase in the Fed Funds rate to the end of 2015, influenced by communications from Federal Reserve officials. The yield on United States 10-year Treasuries rose to as high as 3 percent in early September, before falling to a low of just under 2.5 percent. That said, the current yield of 2.7 percent remains well above the average of 1.95 percent over the first half of the year. Bond market volatility has returned to a historically low level after the period of market uncertainty that began when Federal Reserve Chairman Bernanke first raised on 22 May the possibility of tapering of asset purchases.

Bond yields and their volatility have remained suppressed in Japan, with the Bank of Japan actively purchasing Japanese government bonds on a large scale. The yield on 10-year government bonds reached a six-month low of 0.59 percent at the end of October.

Bond yields in Europe have fallen by more than those in the United States, partly driven by weaker inflation and by expectations that inflation will remain low for longer (figure 3.4, overleaf). In particular, investors' attraction to higher yields in troubled economies like Spain and Italy have continued to see those countries' bond spreads to German bunds narrow. Spain's 10-year government bond yield reached 4 percent in early November, some 100 basis points below the level reached around mid-year.

Banks in the euro area have been increasingly able to issue senior unsecured debt. Mid-tier banks in Spain and Italy have been able to issue such debt, and even Irish banks that were bailed out have managed to attract private sector investors for the first time since the GFC.

Figure 3.4
10-year government bond yields



Source: Reuters.

Yields on New Zealand and Australian long-term bonds have risen, contrary to the global trend of falling rates over the past couple of months. In both countries, monetary policy expectations have diverged from those for major economies. Market rates imply that policy rates are more likely to be higher than lower in one year's time, although in Australia the implied policy rate track is fairly flat. Appetite for New Zealand and Australian bonds might have also been adversely affected by the performance of their currencies. As noted below, sentiment for the Australian dollar has been weak because many view the AUD-USD cross rate as overvalued at a time when the economic outlook in Australia has softened. This has reduced investors' appetite for exposure to Australian bonds.

New Zealand's yield curve is steep at the short end, meaning longer-term bonds do not offer much additional yield relative to shorter-term bonds, which has reduced the appetite for the longer-term bonds. The NZ-US 10-year bond spread has hovered around 200 basis points over the past two months after trending down in the first half of the year to be as low as 140 basis points.

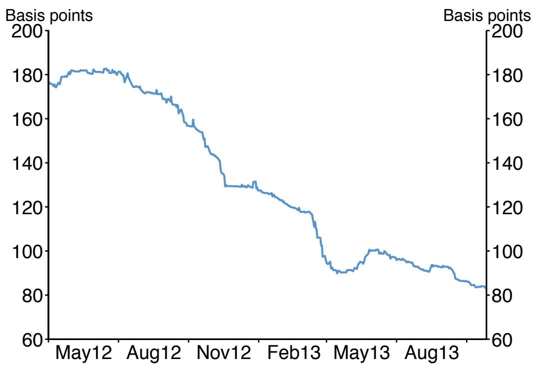
Funding conditions remain comfortable for New Zealand's major banks. Access to funding is easy and pricing is about as low as it has been since the GFC. Non-market funding continues to make up an increasing proportion of total funding, with the share trending higher towards 60 percent.

A year or two ago, banks were competing aggressively to attract retail deposits to improve the share of their funding that is counted as "core" under the Reserve Bank's prudential liquidity requirements. In that environment, deposits became relatively expensive. However, the more recent experience has been one of more comfort with core funding levels and deposit growth remaining strong (around 10 percent per annum) despite less-competitive pricing.

During 2012, banks were paying almost 200 basis points over the one-year swap rate on one-year term deposits. That spread is now down to just over 100 basis points. Over the past 18 months the six-month term deposit spread to six-month bank bills has fallen from around 160 basis points to just over 100 basis points.

With little pressure on funding, new issuance of long-term wholesale debt more reflects the desire to maintain a presence in offshore markets or to roll over maturing debt. Figure 3.5 shows secondary market pricing for domestic bank debt – senior unsecured issues with at least three years remaining before maturity. It shows the ongoing decline in the pricing (spread to swap) of bank debt. A similar trend is evident for domestic corporate debt in general. Long-term domestic bank debt trades at an average spread to swap of about 80 basis points, 75 basis points below its levels of a year ago.

Figure 3.5
Secondary market bank bond spreads
(Domestic senior unsecured issues, residual maturity over three years)



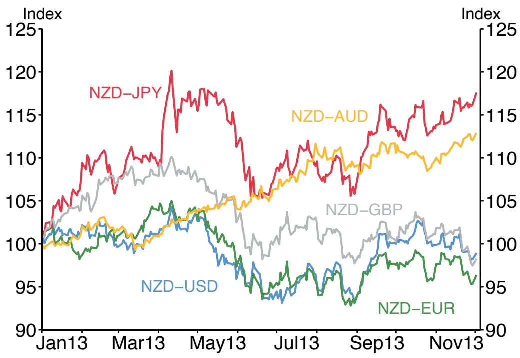
Source: RBNZ.

Foreign exchange market

The New Zealand dollar TWI has oscillated within a fairly tight range – about 76 to 78 – over the past couple of months. Of the major currencies, the Japanese yen has been among the weakest, as the Bank of Japan expands the monetary base at a rapid rate. This has put upward pressure on the NZD-JPY cross rate, though the level at the end of November was still below the peak of 86 in April.

Sentiment for Asian currencies has generally been weak over recent months, particularly so for the Australian dollar, and this has dragged down the New Zealand dollar on the other major cross rates. By late November, the NZD-USD cross rate had fallen to a two-month low to reach about USD 0.81, while at the same time the NZD-AUD reached a five-year high of just below AUD 0.90. As at the end of November, the NZD-USD, NZD-EUR and NZD-GBP cross rates were all slightly below respective levels prevailing at the beginning of the year (figure 3.6).

Figure 3.6
NZ dollar cross rates
(rebased to 100 at 1 January 2013)



Source: Reuters.

Other domestic financial market developments

New Zealand equities have been trending higher this year, albeit at a modestly slower pace than equities in other developed markets (figure 3.1). Market trading activity has been stimulated by new capital raisings this year. Over the year to date, more than $3 billion in new capital has been raised and in the 10 months to October the value of trades was up 44 percent on the previous year, supported by the Government's selling of state-owned enterprises.

Market-implied OCR expectations continue to be consistent with a series of rate increases over the next couple of years. The Overnight Indexed Swaps market is pricing in about 25 basis points of tightening by March 2014 and about 120 basis points through to the end of next year. Swaps pricing is consistent with over 180 basis points of OCR hikes by the end of 2015. The 2-year swap rate has been trending higher through much of this year and reached a two-year high of 3.7 percent in late November.

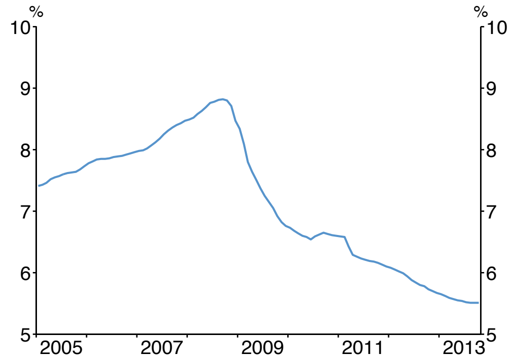
Higher swap rates – which influence banks' funding costs – put some upward pressure on mortgage rates through July-August, particularly for longer term fixed rates. However, average advertised rates for the four major banks have been relatively steady since.

Nonetheless, some low special rates have recently been made available for short fixed terms. This is likely a reflection of lower marginal funding costs and the Reserve Bank's speed limit on high-LVR mortgage lending, which has encouraged banks to attract higher-equity borrowers. Market-leading rates are 4.95 percent fixed for six months and one year, 5.59 percent fixed for two years and 5.99 percent for three years. These are only available for low-LVR (<80 percent) borrowers. Since the LVR restrictions have been introduced, banks have begun to explicitly split the pricing of mortgage rates for high- and low-LVR borrowers. The advertised interest rate premium for low-LVR borrowers appears to be 50 basis points across the range of fixed-rate mortgages for most banks, and additional fees typically apply.

The effective mortgage rate for existing loans (based on a weighted average of existing mortgage stock) currently sits at 5.51 percent (figure 3.7, overleaf) and, after a steady decline, has been stable over the last three months. This profile reflects the net impact of new borrowers opting for the lower special rates, existing borrowers rolling off higher rates from one and two years ago, and the higher floating rate.

Borrowers continue to switch out of floating rates onto fixed rates. At the end of October, the share of floating-rate mortgages was 43 percent compared to 56 percent a year ago. Most of the mortgage rate fixing has been for short terms, with the share of fixed mortgages up to a 1-year term at 30 percent. Thus, the combined share of floating rates and fixed rates of less than one year duration is 74 percent, well up from the trough of 37 percent in mid-2007.

Figure 3.7
Effective mortgage rate



Source: RBNZ.

4 Current economic conditions

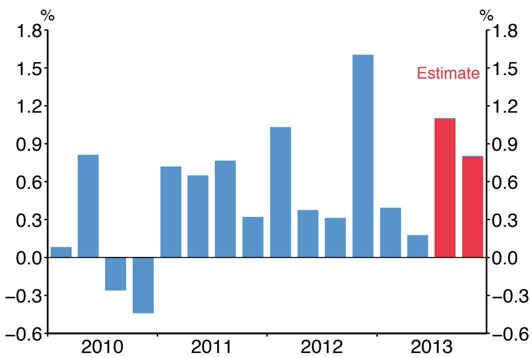
The New Zealand economy continued to strengthen over the second half of 2013. Domestic demand is being supported by low interest rates, increased construction activity and high house price inflation, in addition to the boost to incomes from an elevated terms of trade. Offsetting these factors to a degree is continued fiscal consolidation and the high New Zealand dollar.

Inflation was subdued over the past 18 months due to the gradual nature of the economic recovery since the 2008/09 recession and the elevated New Zealand dollar. However, with economic activity continuing to strengthen, inflationary pressures are starting to build. The CPI increased 1.4 percent in the year to the September quarter. While higher inflation is most evident in construction-related sectors, measures of underlying inflation also appear to be beginning to pick up.

Domestic demand

The New Zealand economy appears to have strengthened further over the second half of 2013, following a drought-affected start to the year (figure 4.1). Overall GDP growth during 2013 has been robust and is estimated to be 2.5 percent in the year to December. Robust growth has seen spare capacity in the economy continue to be absorbed.

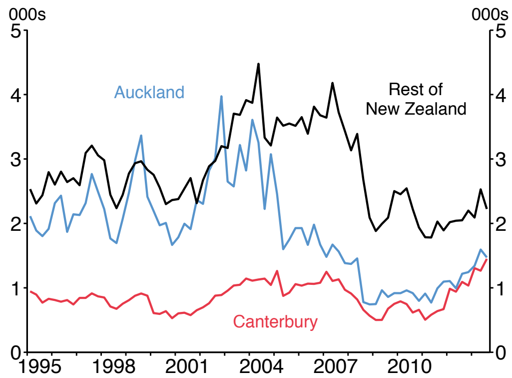
Figure 4.1
GDP growth
(quarterly, seasonally adjusted)



Source: Statistics New Zealand, RBNZ estimates.

Increased construction activity has been a key driver of GDP growth over the past year. Post-earthquake reconstruction in Canterbury has contributed to strong increases in residential and commercial building activity. Residential construction activity has also increased outside Canterbury, although remains subdued relative to history. Residential construction is expected to have increased further over the end of 2013, with the nationwide number of ex-apartment dwelling consents rising 22 percent in the year to September (figure 4.2).

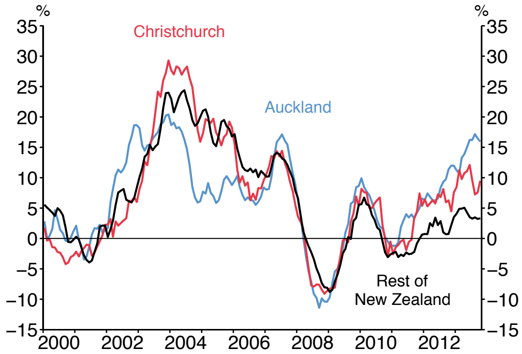
Figure 4.2
New dwelling consent issuance
(quarterly, seasonally adjusted)



Source: Statistics New Zealand.

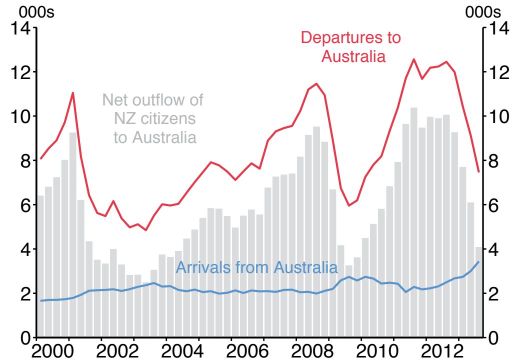
While construction activity has been increasing, specific housing supply issues in Auckland and Canterbury are contributing to pressure on house prices, with annual house price inflation at 16 percent in Auckland and 9.5 percent in Christchurch. Annual house price inflation outside these regions is more modest at around 4 percent (figure 4.3, overleaf). Nationwide household credit growth has been increasing, from an annual rate of 1 percent in early 2012 to around 6 percent currently.

Figure 4.3
House price inflation
(annual, three-month moving average)



Source: REINZ, RBNZ estimates.

Figure 4.4
PLT migration of New Zealand citizens with Australia
(quarterly, seasonally adjusted)



Source: Statistics New Zealand.

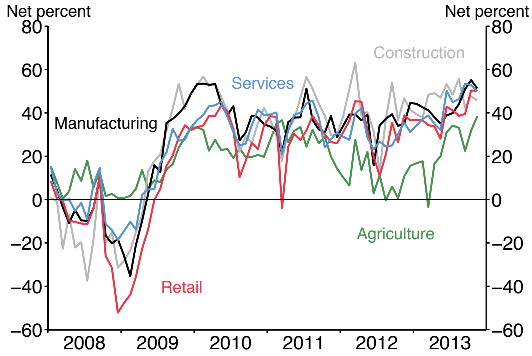
The Reserve Bank introduced speed limits on high LVR mortgage lending with effect from 1 October 2013, to address the financial stability risks posed by rapidly increasing house prices. To date there are only limited data on housing market performance since the introduction of the policy. Reserve Bank estimates suggest that LVR restrictions are likely to lower annual house price inflation by between 1 and 4 percentage points over the coming year. The central projection incorporates an effect of 2.5 percentage points, the midpoint of these estimates. Box B (p 8) provides more-detailed discussion of the housing market outlook, and the implications of LVR restrictions and recent migration data.

On the demand side, house price inflation is being supported by low mortgage interest rates and recent increases in net immigration to New Zealand. Net permanent and long-term (PLT) immigration has increased from an annual outflow of around 4,000 people in mid-2012 to a net inflow of 18,500 people in the year to October 2013. A large part of the recent increase in net immigration comprises movements to and from Australia by New Zealand citizens, as the economic outlook in Australia has softened. In the past six months, the number of New Zealanders departing to Australia has declined sharply and the number of New Zealanders returning has increased (figure 4.4). While the recent increase in net PLT immigration has been steep, past swings in migration highlight the potential for this to reverse quickly.

Also supporting domestic demand is the boost to incomes from an elevated terms of trade, and high dairy prices in particular. In September, Fonterra announced a forecast milk price for the 2013/14 dairy season of $8.30 per kilogram of milk solids. The higher milk price will flow through to farmers' bank accounts over the next year. In addition, it is providing a significant boost to confidence and will potentially stimulate near-term investment and consumption in anticipation of higher income. On the import side of the terms of trade, low import prices are increasing the purchasing power of households, supporting strong growth in retail sales volumes.

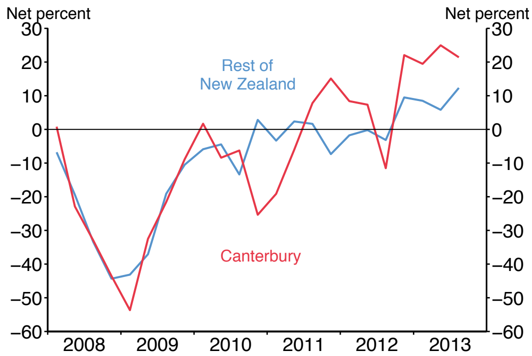
Over the past year, domestic demand has become more broad-based across sectors and regions – as seen in several business surveys (figure 4.5 and figure 4.6, opposite). Nationwide business confidence has been increasing since the end of 2012, as have profit expectations. There are signs that businesses are feeling more confident about investing and hiring additional workers, with the latter being reflected in recent labour market data. In the year to September, the number of people employed increased by 2.4 percent, and the number of jobs filled increased by 2 percent (figure 4.7, opposite). Nonetheless, the unemployment rate remains high at 6.2 percent.

Figure 4.5
ANZBO Own Activity outlook by sector (next 12 months)
(seasonally adjusted)



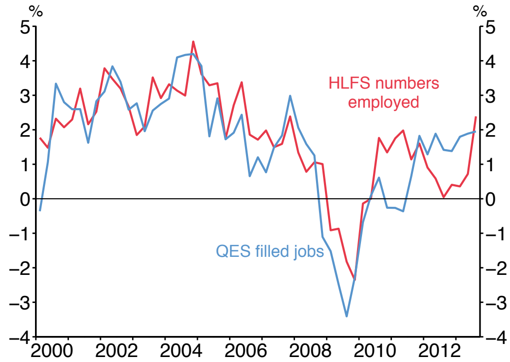
Source: ANZ National Bank, RBNZ estimates.

Figure 4.6
QSBO Domestic Trading Activity (past three months)
(seasonally adjusted)



Source: NZIER.

Figure 4.7
Persons employed and jobs filled
(annual growth, seasonally adjusted)

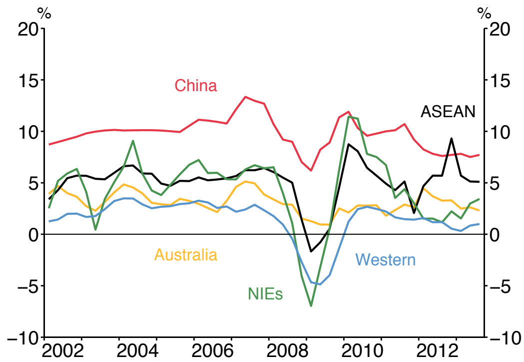


Source: Statistics New Zealand.

External sector

In aggregate, economic growth in New Zealand's trading partners has been moderate over 2013 (figure 4.8). Economic conditions in the euro area and Japan have continued to improve in recent months. GDP growth in the United States has remained near its post-GFC rate. GDP growth has moderated in Asia and Australia, which comprise the majority of our export basket, to below the average rates of the past decade.

Figure 4.8
GDP growth in selected trading partner economies
(annual)



Source: Haver Analytics.
Note: ASEAN includes Thailand, Malaysia, Indonesia, and the Philippines. NIEs include South Korea, Taiwan, Hong Kong, and Singapore. Western economies include the United Kingdom, the United States, Canada, and the euro area.

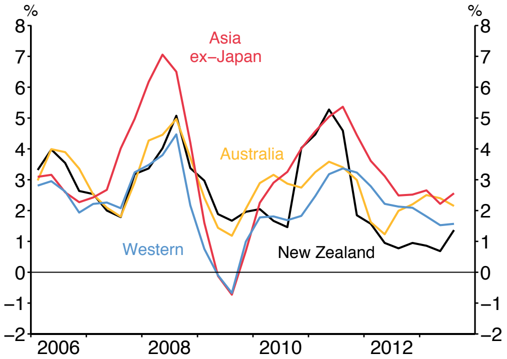
Growth in the United States has remained around the rates seen since 2010, and is currently at 1.6 percent on an annual basis, partly a reflection of the effects of significant fiscal consolidation over the past year. The unemployment rate is declining gradually and is currently at 7.3 percent, although this is partly due to workers exiting the labour force. In the euro area, quarterly growth has now been positive for two consecutive quarters, although the economy contracted by 0.4 percent in the year to September and high rates of unemployment remain. Growth in Japan has continued at an above average pace, supported by public investment and monetary policy stimulus.

Annual GDP growth in China has been relatively steady over 2013, with growth of 7.8 percent in the year to the September 2013 quarter. Growth has been supported by government infrastructure investment, but indicators of domestic and external demand have stabilised. Growth in Asia's newly industrialised economies has increased a little over 2013, mainly reflecting improving domestic demand. Several ASEAN economies have experienced a slowdown in growth, and recent exchange rate depreciation is adding to inflationary pressures in the region.

The Australian economy grew by 2.3 percent over the year to the September 2013 quarter. Investment in the resource sector has peaked after many years of contributing strongly to growth. The economy is growing at a below average pace as resource sector investment slows and the economy depends increasingly on the household sector to drive demand. Lower interest rates are contributing to an increase in activity in the Australian housing market, but broader domestic conditions remain weak. The Australian labour market has softened further, with employment growth slowing and the unemployment rate remaining elevated at 5.7 percent.

The gradual pace of growth and substantial spare capacity evident in developed economies has dampened global inflation in recent years (figure 4.9), and has seen global interest rates remain very low (as discussed in Chapter 3).

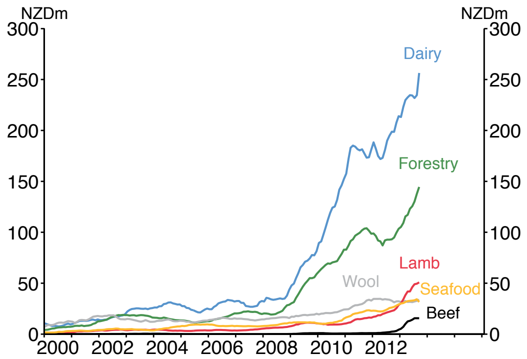
Figure 4.9
Inflation in trading partner economies and New Zealand
(annual)



Source: Statistics New Zealand, Haver Analytics.
Note: Asia ex-Japan includes China, Hong Kong, India, Indonesia, Malaysia, Singapore, South Korea, Taiwan, Thailand, and the Philippines. Western economies include the United Kingdom, the United States, Canada, and the euro area.

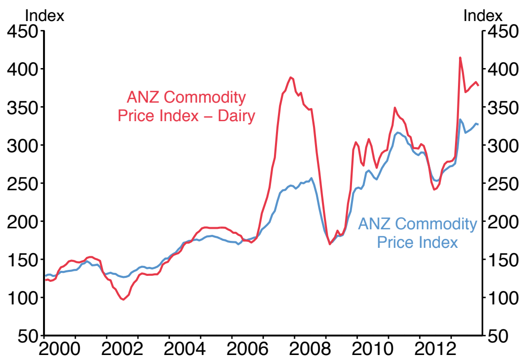
Global demand for New Zealand's export commodities is currently robust, particularly from China (figure 4.10). International dairy prices remain near their record peak reached earlier this year, when tight global supply (in part due to the New Zealand drought) saw the GlobalDairyTrade Price Index jump up 44 percent between February and April. Although New Zealand dairy production is running 5 percent ahead of last season and global supply is recovering, continued strong demand for dairy from Asia has held prices high (figure 4.11). Aside from dairy, aggregate commodity prices are also being supported by recent increases in forestry, lamb and wool prices.

Figure 4.10
Value of selected New Zealand exports to China
(annual total, seasonally adjusted)



Source: Statistics New Zealand, RBNZ estimates.

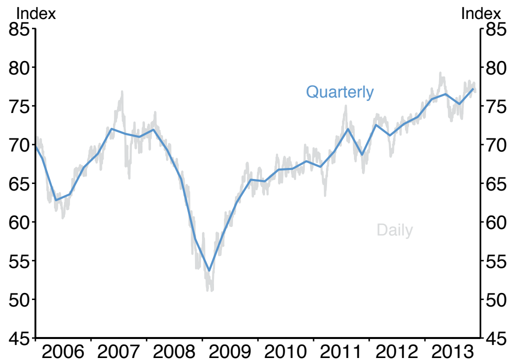
Figure 4.11
Export commodity prices
(world terms)



Source: ANZ National Bank.

The elevated level of the New Zealand dollar TWI reflects low global interest rates, high prices for some of New Zealand's agricultural commodities and New Zealand's relatively favourable growth outlook (figure 4.12). The elevated exchange rate continues to dampen exporters' incomes and reduce the competitiveness of exporters and import competitors. However, by dampening the domestic prices of imported goods, the high New Zealand dollar does allow households and firms to purchase more in real terms.

Figure 4.12
New Zealand dollar TWI



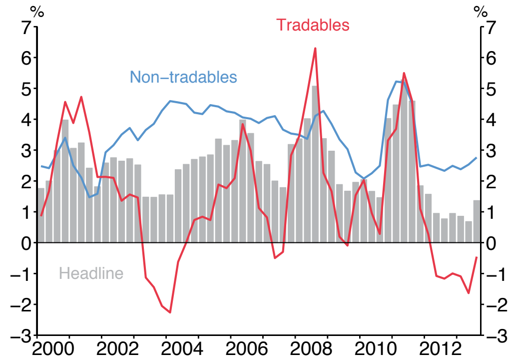
Source: RBNZ.

Cyclical and inflationary pressures

Annual CPI inflation was 1.4 percent in the September quarter, after being below 1 percent for the past year (figure 4.13). Subdued global prices for New Zealand's imports, in part related to the weakness in demand and consequent spare capacity evident in many developed economies, have put downwards pressure on tradables inflation. The effect of subdued global prices on tradables inflation has been reinforced by the elevated level of the New Zealand dollar and competitive conditions in the retail sector.

Non-tradables inflation has also been below average. The gradual pace of the recovery since the last recession, particularly in the labour market, has resulted in modest non-tradables inflation. Competition among providers of mobile and broadband services has resulted in the communications group of the CPI declining significantly, which has also dampened non-tradables inflation. Offsetting these factors to some degree has been the boost to non-tradables inflation from the sizable increases in tobacco taxes over 2013.

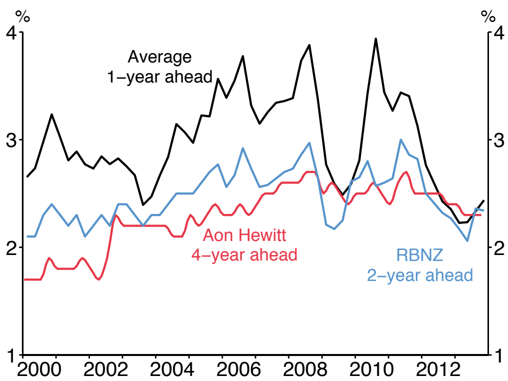
Figure 4.13
CPI inflation



Source: Statistics New Zealand.

Weak headline inflation has seen measures of inflation expectations ease over the past few years (figure 4.14). This has had an important effect on price setting behaviour, especially in the labour market. Low headline inflation and falling inflation expectations have meant that cost of living adjustments to wages over the past 18 months have been modest. The Labour Cost Index (LCI) increased by only 1.7 percent in the year to September,

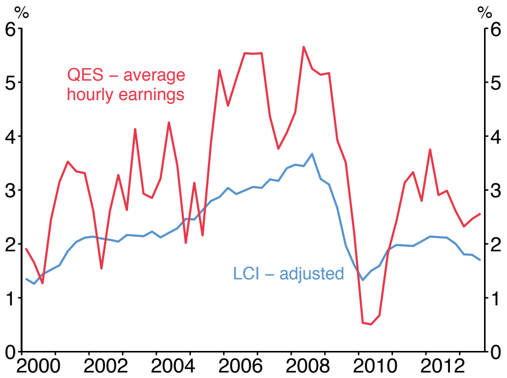
Figure 4.14
Inflation expectations



Source: RBNZ/UMR Research, RBNZ, Aon Hewitt, ANZ National Bank.
Note: "Average 1-year ahead" is the average of the 1-year ahead inflation expectation measures from ANZ National Bank, RBNZ/UMR Research, RBNZ and Aon Hewitt.

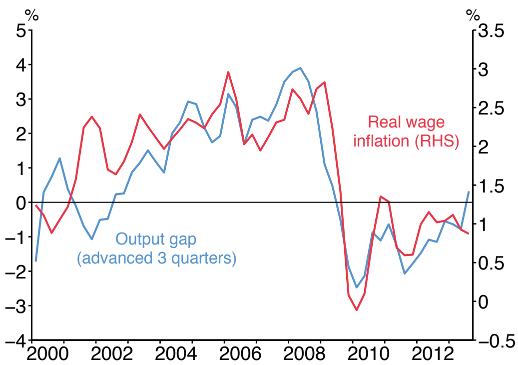
which is lower than the annual increases seen in 2011 and 2012 (figure 4.15). However, while nominal wage inflation has been subdued, real wage inflation has been more in line with measures of cyclical pressure (figure 4.16).

Figure 4.15
Measures of private sector wage inflation
(annual)



Source: Statistics New Zealand.

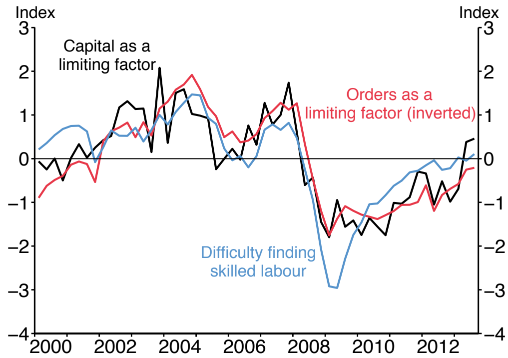
Figure 4.16
Annual real wage inflation and the output gap
(percent of potential GDP)



Source: Statistics New Zealand, RBNZ estimates.
Note: Real wage inflation is private sector unadjusted LCI wage inflation less RBNZ 2-year ahead inflation expectations.

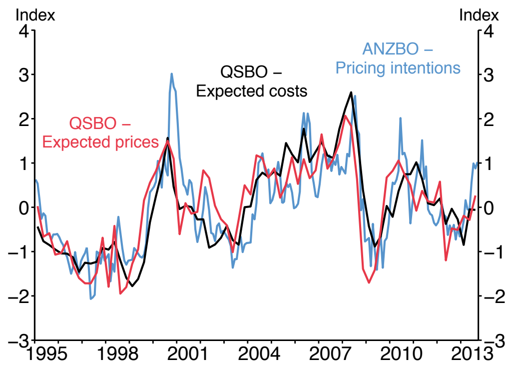
Business surveys indicate that spare capacity that developed during the 2008/09 recession has been slowly absorbed (figure 4.17), and there are signs that non-tradable inflationary pressures are beginning to build. The recent strengthening in demand has seen survey measures of firms' pricing intentions and expected costs tick up in recent months (figure 4.18). Inflationary pressures are most evident in construction-related sectors, with annual construction cost inflation near 10 percent in Canterbury and near 3 percent in the rest of the country (figure 4.19 opposite). To date, there appears to have been limited spillover into nationwide construction costs inflation and generalised consumer prices.

Figure 4.17
Indicators of capacity utilisation
(seasonally adjusted, standardised)



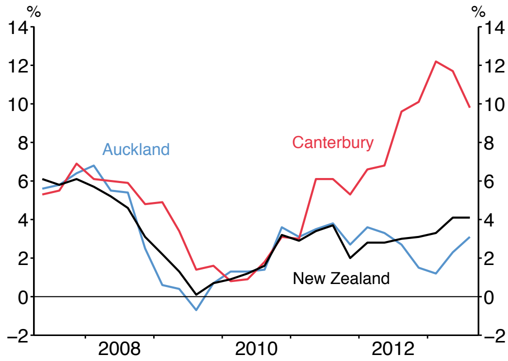
Source: NZIER, RBNZ estimates.

Figure 4.18
Surveyed pricing and cost expectations – next 3 months
(seasonally adjusted)



Source: NZIER, ANZ National Bank.

Figure 4.19
Construction cost inflation
(annual)



Source: Statistics New Zealand.

Since the September *Statement*, the Commerce Commission has announced its final decision on the price that Chorus can charge retail internet service providers for use of its copper line and copper broadband service. We assume that this pricing will come into effect in late 2014 and place downwards pressure on annual CPI inflation, but will review that assumption as needed in response to further information. While the exact magnitude of the effect is uncertain, it is expected to be enough to reduce headline inflation somewhat over the latter part of the projection and affect the headline inflation profile from the September 2014 quarter.

5 The macroeconomic outlook

The New Zealand economy is expected to grow at about 3 percent until early 2015, with growth moderating thereafter. Increasing construction sector output, comprising post-earthquake reconstruction and repairs as well as a recovery in dwelling construction outside Canterbury, remains a key driver of the expansion. The high terms of trade, recent strength in the housing market and low interest rates, support growth in household spending – although the stimulus from these factors is expected to wane over the projection. These factors are partially offset by fiscal consolidation and the dampening effect of the elevated New Zealand dollar on economic activity.

The strengthening domestic economy results in resource pressures accumulating over the projection and annual CPI inflation rising from its current rate of 1.4 percent. Non-tradables inflation is projected to increase towards 4 percent, while the high New Zealand dollar limits tradables inflation. In this environment, the current degree of monetary policy stimulus will no longer be necessary. Rising interest rates over the projection horizon will act to offset building inflationary pressure such that annual CPI settles near 2 percent.

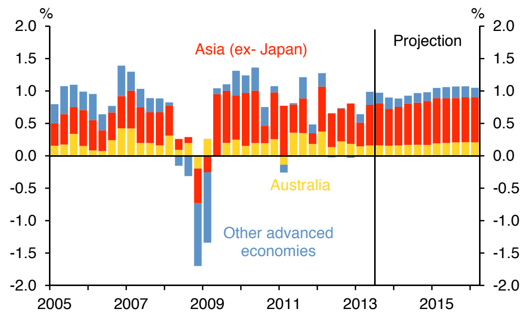
External outlook

Economic growth in New Zealand's main trading partners is forecast to increase gradually over the projection (figure 5.1), resulting in excess capacity in these economies being slowly absorbed. Growth in developed economies is expected to improve as accommodative monetary policy and easing fiscal consolidation flow through to stronger domestic activity. However, progress in implementing structural reform remains important for achieving sustainable growth in the euro area and Japan.

Growth in China is expected to be lower than in recent years, but at around 7 percent is still strong compared with New Zealand's other trading partner economies. Reform will affect the outlook for China. If implemented successfully, the reforms announced following the Third Party Plenum in November are expected to see ongoing growth over the medium term. Growth in China will continue to be a major driver of expansion for the rest of Asia and Australia. Other Asian economies are forecast to grow at a moderate pace, supported by domestic demand and improving external demand from developed economies.

In Australia, growth is expected to remain below average for several years. Investment in the resource sector will decline as a share of the economy. Low interest rates will continue to support activity in the housing market and will lead to stronger growth in consumption and non-resource business investment over time, offsetting some of the drag of the decline in mining investment on GDP growth. Should this not occur, or should resource export growth not strengthen to the degree anticipated, growth could be markedly weaker.

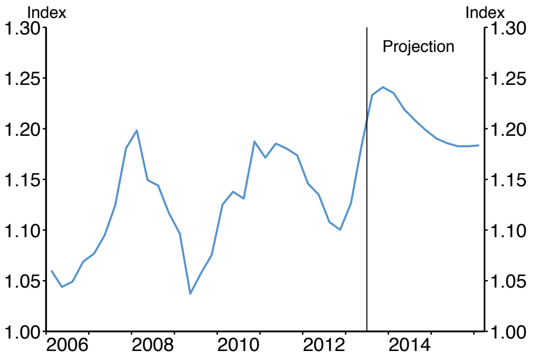
Figure 5.1
Trading partner GDP growth
(contributions to quarterly growth, seasonally adjusted)



Source: Haver analytics, RBNZ estimates.
Note: Asia ex-Japan includes China, Hong Kong, India, Indonesia, Malaysia, Singapore, South Korea, Taiwan, Thailand and the Philippines. Other advanced economies include the United Kingdom, the United States, Canada, Japan and the euro area.

Continued growth in China and strengthening growth in New Zealand's other trading partner economies will increase demand for New Zealand's exports. This is expected to show up particularly in commodity export prices. While export prices are projected to ease over the next year as dairy prices moderate due to a recovery in global dairy supply, export prices are expected to remain high. High export prices, coupled with weak inflation in global import prices, result in the terms of trade also settling at a high level (figure 5.2). Box C (p. 24) discusses the possibility that the terms of trade turn out higher than projected, and the implications for the exchange rate and wider economic outcomes.

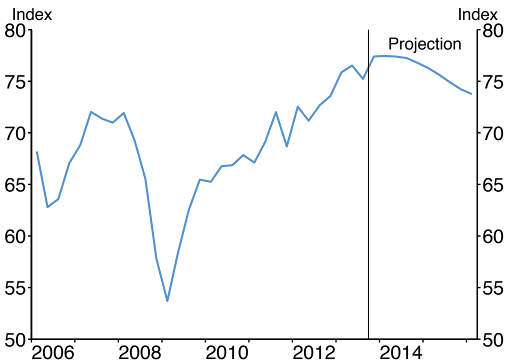
Figure 5.2
SNA terms of trade
(seasonally adjusted)



Source: Statistics New Zealand, RBNZ estimates.

As the global economy recovers gradually, monetary policy in Western economies will return to more normal settings. This, together with the assumption of a gradual decline in New Zealand's terms of trade, is consistent with the projected gradual depreciation in the New Zealand dollar TWI beyond 2014 (figure 5.3). The New Zealand dollar is assumed to remain at an elevated level over the entire projection.

Figure 5.3
New Zealand dollar trade weighted index



Source: RBNZ estimates.

Domestic outlook

The New Zealand economy is projected to continue growing at about 3 percent annually until early 2015, before moderating thereafter. Growth in construction spending has been a key driver of growth, and is expected to remain so over the projection. In part, this is related to continuing reconstruction and repairs in Canterbury. Our assumption that the total repairs and rebuild cost will be around $40 billion (in 2013 dollars) is unchanged from the September *Statement*. Box D (p 29) outlines forthcoming revisions to GDP announced by Statistics New Zealand including the upward revision by 12 percentage points to nominal construction spending in Canterbury in 2012.

There remains considerable uncertainty as to the total cost, timing of reconstruction and the inflationary consequences. As outlined in Chapter 2, the central projection assumes that demand for reconstruction is spread out over an extended period due to non-inflationary factors. In effect, the forecasts assume that the recent growth in construction sector output related to the Canterbury rebuild slows over the projection with the level of rebuild-related output peaking in 2016. However, if demand for reconstruction was stronger than projected, or if it was rising prices for resources that led to the rebuild profile being elongated, the boost to inflation would likely be stronger than anticipated.

Construction outside of Canterbury is projected to increase from currently subdued levels (figure 5.4, p 26). This is particularly the case in Auckland where demand for housing is strong. The Auckland Accord, which is intended to fast-track the consent process for new houses in "Special Housing Areas" in Auckland, is expected to boost residential construction and help meet regional housing demand. Since the September *Statement* the forecasts for residential building outside of Canterbury have been revised up slightly.

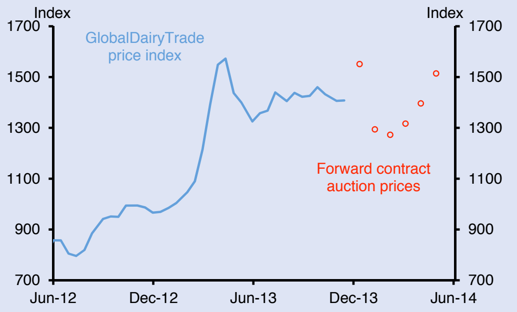
Box C
Scenario: higher terms of trade

Rising export commodity prices over the past year – particularly those for dairy products – have driven a strong rise in New Zealand's terms of trade. The central projection assumes that real prices of New Zealand's export commodities moderate over the next year, and then stabilise at a level that is high by historical standards.

There is considerable uncertainty about the outlook for commodity prices, both over the near term and medium term, and so for the projected terms of trade. A possible alternative scenario is that, as we have seen over much of the last decade, strong commodity prices keep the terms of trade strong for extended periods. This Box considers such a scenario.

Forward contracts for dairy prices over the next six months suggest that dairy prices could indeed remain near currently-elevated levels (figure C1). This could reflect slower-than-expected growth in global dairy supply. A possible driver of higher terms of trade over the medium term could be stronger consumption growth in China that boosts prices for commodities such as dairy, lamb and beef. Proposed reforms in China – announced after the Third Party Plenum in November – could benefit demand for New Zealand's export products over the next decade.

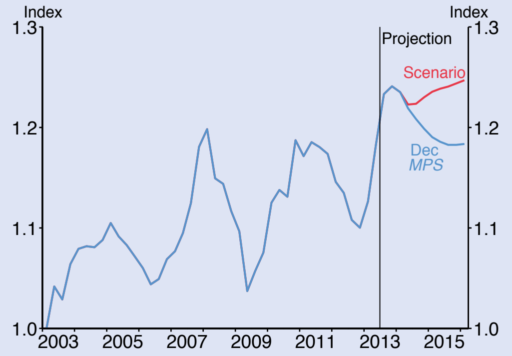
Figure C1
Dairy prices from GlobalDairyTrade platform



Source: GlobalDairyTrade.
Note: Forward contract prices are from the auction on 19 November 2013 and are prices for delivery of product up to six months ahead. The GDT price index is a summary of prices for all dairy products at all contract periods.

In this scenario, the terms of trade ease slightly from the recent peak before increasing in 2014 on a trend similar to that seen over the past decade (figure C2). The driver of the stronger terms of trade is a long-lasting increase in New Zealand's export prices, with all else unchanged. The higher terms of trade boosts domestic incomes, and so consumption and output. This results in greater pressure on productive resources and stronger non-tradables inflation.

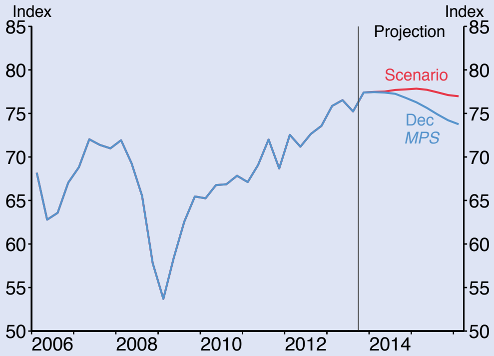
Figure C2
SNA terms of trade
(seasonally adjusted)



Source: Statistics New Zealand, RBNZ estimates.

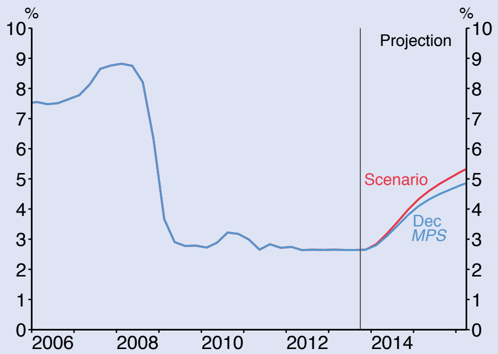
At the same time, the New Zealand dollar is higher (figure C3, overleaf) because of the stronger outlook for the New Zealand economy (and so interest rates). The higher New Zealand dollar dampens output growth, through weaker net exports. The stronger exchange rate also directly lowers inflation in the prices of tradable goods, which partly offsets the non-tradables inflationary pressures associated with stronger domestic demand. Nonetheless, in order to offset building inflationary pressure, the 90-day rate needs to increase by more than in the central projection (figure C4, overleaf).

Figure C3
New Zealand dollar TWI



Source: RBNZ estimates.

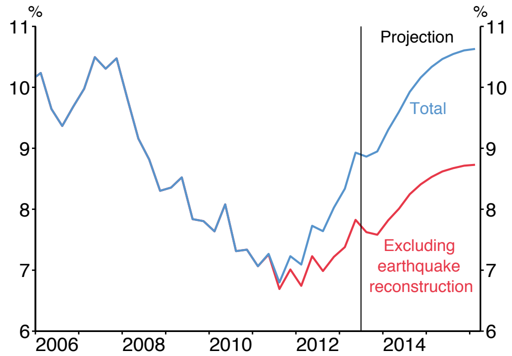
Figure C4
90-day rate



Source: RBNZ estimates.

This outcome for interest rates differs from the outcome of the scenario in Box B of the June *Statement*, in which a higher exchange rate led to a lower outlook for the 90-day rate. The difference is because in the June example, a "portfolio shock" – one that did not reflect any improvement in New Zealand's relative economic conditions – drove the exchange rate movement. In the present scenario, the exchange rate rises because of events that strengthen New Zealand's relative outlook and domestic demand.

Figure 5.4
SNA expenditure on construction
(quarterly, seasonally adjusted, share of potential output)

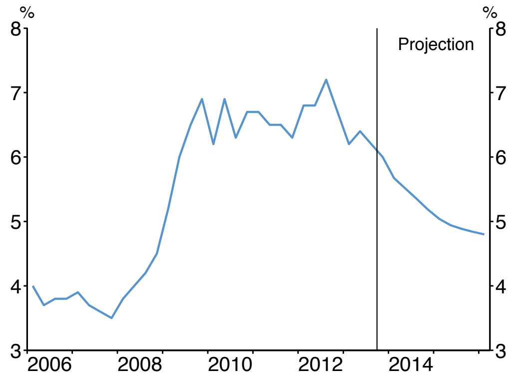


Source: Statistics New Zealand, RBNZ estimates.
Note: Construction expenditure sums gross fixed capital formation of residential buildings, non-residential buildings and other construction (from quarterly expenditure GDP). Ex-rebuild construction expenditure subtracts RBNZ estimates of the direct impact of the rebuild on construction expenditure.

The labour market is expected to improve as the economy strengthens. The unemployment rate is projected to decline gradually as growth in labour demand exceeds that in labour supply (figure 5.5).

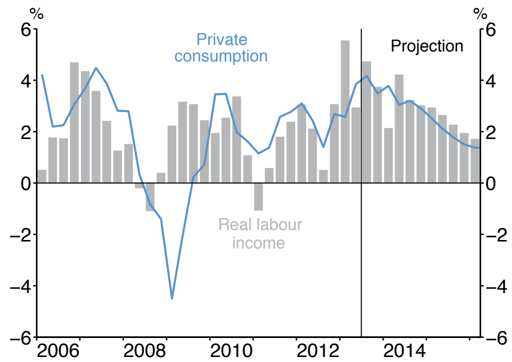
Growth in employment, along with the income boost from the high terms of trade, is expected to support continued growth in real after-tax incomes and consumption over the coming year (figure 5.6). Consumption growth is projected to moderate beyond this as the terms of trade normalises and monetary policy acts to contain inflationary pressure. The projections assume that growth in household spending is in line with that in incomes and the household saving rate therefore remains broadly unchanged at its current rate.

Figure 5.5
Unemployment rate
(seasonally adjusted)



Source: Statistics New Zealand, RBNZ estimates.

Figure 5.6
Private consumption and income growth
(annual)



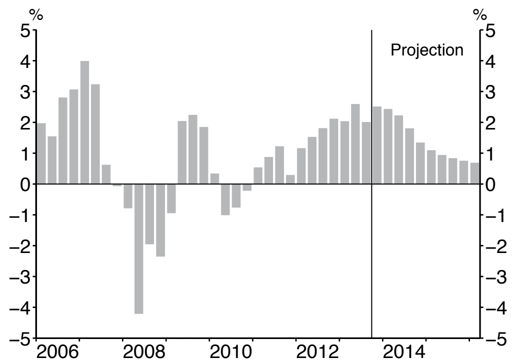
Source: Statistics New Zealand, RBNZ estimates.

High house price inflation is also expected to support household spending. Quarterly house price inflation is expected to remain at around current rates in early 2014 (figure 5.7, opposite) supported by low interest rates, specific supply issues in Auckland and Canterbury and the recent strength in net inward migration.

Beyond this period, house price inflation is projected to ease. Restrictions on high-LVR mortgage lending, introduced by the Reserve Bank in October, are assumed to subtract 2.5 percentage points from annual house price inflation over the first year of implementation (the same assumption as in the September *Statement*). A normalisation in migration flows (figure 5.8, opposite) and rising mortgage rates are also expected to dampen demand to purchase houses.

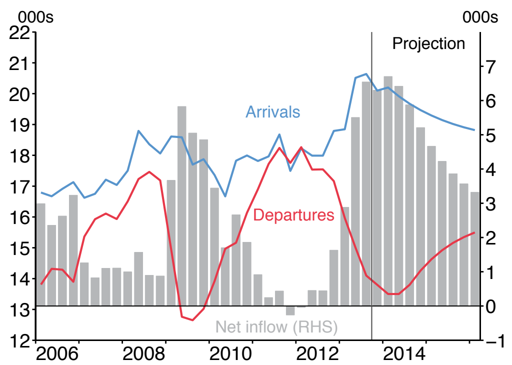
As outlined in Box B (p 8) there are significant risks around the drivers of house price inflation. There is considerable uncertainty as to the current and projected impact of LVR restrictions. The size of the migration flows could also be stronger or weaker than projected, especially given uncertainty around demand for labour from the Canterbury rebuild and the labour market outlook in Australia.

Figure 5.7
House price inflation
(quarterly, seasonally adjusted)



Source: Property IQ, RBNZ estimates.

Figure 5.8
Working-age migration
(quarterly, seasonally adjusted)



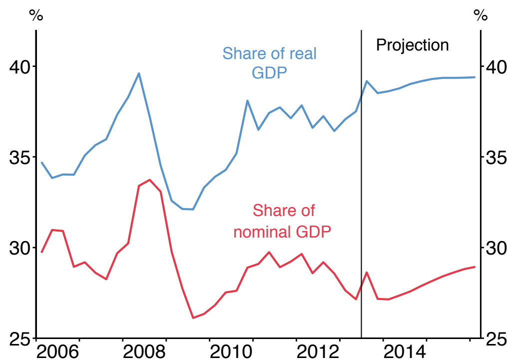
Source: Statistics New Zealand, RBNZ estimates.

Businesses are expected to increase investment from low levels in response to growing pressure on productive capital as the economy strengthens and existing capacity is increasingly absorbed. Increasing business investment will further add to aggregate demand. Partially offsetting these drivers of economic growth is continued fiscal consolidation and the high New Zealand dollar.

The Government's intention to achieve an operating surplus by 2014/15 is assumed to dampen demand by 2 percent of gross national expenditure between 2013 and 2016. Nonetheless, the dampening effect on inflation is expected to be more modest because part of the fiscal consolidation will occur through higher indirect taxes that add to headline inflation.

The high New Zealand dollar is expected to continue to dampen export revenues and support high import penetration, therefore weighing on net exports and growth. Favourable import prices improve the purchasing power of firms and households enabling a strengthening in the volumes of imported goods (figure 5.9).

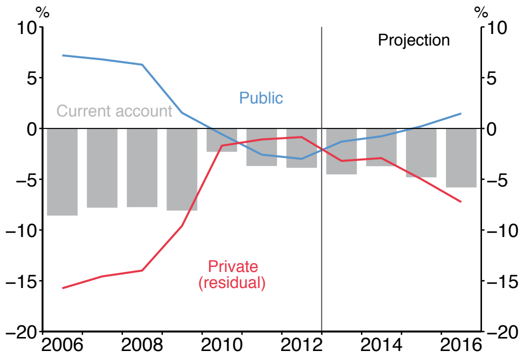
Figure 5.9
SNA imports
(quarterly, seasonally adjusted, share of output)



Source: Statistics New Zealand, RBNZ estimates.

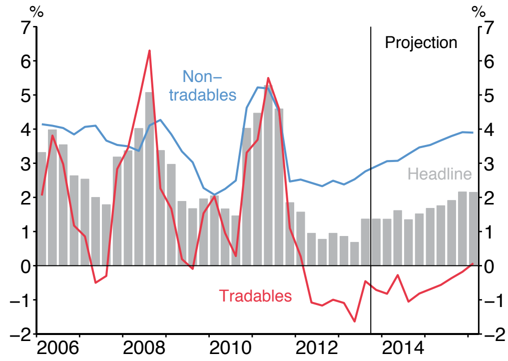
Growth in investment outpaces growth in national savings over the medium term which both supports the New Zealand dollar over the projection and results in a widening current account deficit (figure 5.10, overleaf). While fiscal consolidation is expected to result in the public sector's savings-investment gap decreasing over the projection, the balance for households and businesses is projected to widen.

Figure 5.10
Decomposition of the current account
(annual, share of nominal GDP)



Source: Statistics New Zealand, RBNZ estimates.

Figure 5.11
CPI, tradables and non-tradables inflation



Source: Statistics New Zealand, RBNZ estimates.

As the economy strengthens further, capacity pressures are expected to develop. Increasing domestic inflationary pressures and a gradual depreciation in the New Zealand dollar result in annual CPI inflation increasing gradually from its current rate of 1.4 percent (figure 5.11). With growing demand pressure, non-tradables inflation is projected to increase towards 4 percent by the start of 2016. This above average non-tradables inflation offsets very weak tradables inflation. There is likely to be less need for the current degree of monetary policy stimulus as inflationary pressures build. As such, a gradual removal of stimulus should be appropriate from 2014 (figure 2.4).

Box D
Statistical revisions to New Zealand's macroeconomic accounts

Each year the National Accounts (Income and Expenditure) are released in November. These provide information on the nominal income in the economy and how this is spent or invested in different sectors of the economy over a year. At around the same time, National Accounts (Industry Benchmarks) are released, which use comprehensive industry data on production, investment and the capital stock to update and maintain the quality of quarterly GDP statistics.

At the time that the National Accounts were released, Statistics New Zealand incorporated some changes in methodology to improve the quality and relevance of particular data. The historical revisions have not been incorporated into the projections presented here, with revisions to quarterly real and nominal data not released until mid-December. The full set of revisions will be included in our projections at the time of the March 2014 *Statement*.

In the absence of the full quarterly data, these revisions do not change our assessment of current aggregate economic conditions or inflationary pressures. However, they do inform our understanding of the composition of demand over history and how much construction activity has taken place recently. Some of the significant areas of revision include:

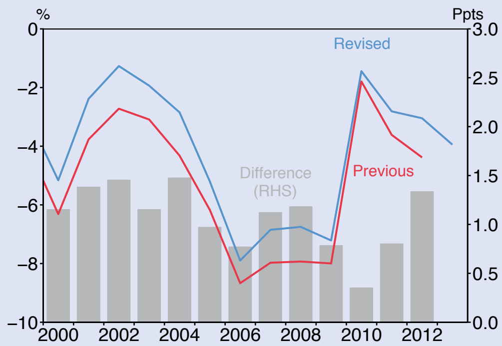
- better measurement of the Canterbury rebuild;
- improved measurement of spending by international visitors in New Zealand; and
- new estimates of spending on imported goods valued under $1,000.

Statistics New Zealand has made changes to improve the capture of non-consented building work that has taken place in Canterbury. As a result, residential investment in current prices is estimated to have been $800 million higher and spending growth in the construction industry is estimated to have been 12 percentage points stronger in 2012. Nominal GDP growth is now estimated to have been 0.6 percentage points higher in the March 2012 year. These revisions do not affect our assessment of the amount of earthquake reconstruction that has taken place, with the rebuild progressing broadly in line with our assumptions.

Using updated survey methodology, Statistics New Zealand also estimates that spending by international visitors has been around $2.3bn higher every year since 2003. Offsetting this, imports of goods are estimated to have been around $0.9bn higher per year since 2000.

These revisions result in higher net exports and a small increase in expenditure on gross domestic product. Within the level of nominal spending on New Zealand goods and services that has taken place, the upward revision to net exports implies lower consumption – about $1.4bn lower per year. These revisions imply that the current account deficit has been smaller than previously assumed. The annual current account deficit was revised from 4.4 to 3.0 percent of nominal GDP in the year to March 2012 (figure D.1).

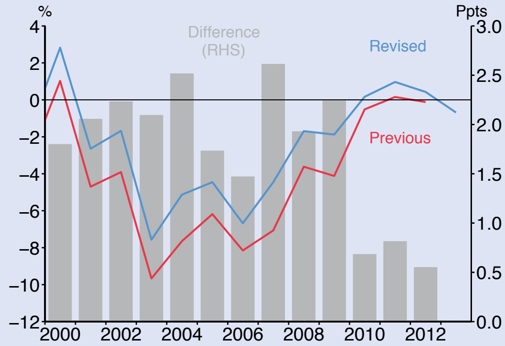
Figure D1
Annual current account
(percent of nominal GDP)



Source: Statistics New Zealand.

The household saving rate has also been higher than previously thought. The household saving rate has been about 1.5 percentage points higher from 1987 onwards, and was 0.5 percent higher in 2012 (figure D2). However, the household saving rate deteriorated by more than expected in these projections over the year to March 2013.

Figure D2
Household saving rate
(percent of household disposable income)



Source: Statistics New Zealand.

Appendix A[1]

Summary tables

Table A

Projections of GDP growth, CPI inflation and monetary conditions

(CPI and GDP are percent changes, GDP seasonally adjusted)

		GDP Quarterly	CPI Quarterly	CPI Annual	TWI	90-day bank bill rate
2005	Mar	1.0	0.4	2.8	69.6	6.9
	Jun	2.0	0.9	2.8	70.8	7.0
	Sep	0.4	1.1	3.4	69.7	7.0
	Dec	-0.3	0.7	3.2	71.5	7.5
2006	Mar	1.4	0.6	3.3	68.2	7.5
	Jun	0.7	1.5	4.0	62.8	7.5
	Sep	0.5	0.7	3.5	63.6	7.5
	Dec	1.1	-0.2	2.6	67.0	7.6
2007	Mar	1.2	0.5	2.5	68.8	7.8
	Jun	0.8	1.0	2.0	72.0	8.1
	Sep	0.6	0.5	1.8	71.4	8.7
	Dec	0.1	1.2	3.2	71.0	8.8
2008	Mar	-0.4	0.7	3.4	71.9	8.8
	Jun	-1.0	1.6	4.0	69.3	8.8
	Sep	-0.2	1.5	5.1	65.5	8.2
	Dec	-0.6	-0.5	3.4	57.8	6.3
2009	Mar	-1.1	0.3	3.0	53.7	3.7
	Jun	-0.3	0.6	1.9	58.4	2.9
	Sep	0.6	1.3	1.7	62.6	2.8
	Dec	1.6	-0.2	2.0	65.5	2.8
2010	Mar	0.1	0.4	2.0	65.3	2.7
	Jun	0.8	0.2	1.7	66.8	2.9
	Sep	-0.3	1.1	1.5	66.9	3.2
	Dec	-0.4	2.3	4.0	67.8	3.2
2011	Mar	0.7	0.8	4.5	67.1	3.0
	Jun	0.6	1.0	5.3	69.1	2.7
	Sep	0.8	0.4	4.6	72.0	2.8
	Dec	0.3	-0.3	1.8	68.7	2.7
2012	Mar	1.0	0.5	1.6	72.5	2.7
	Jun	0.4	0.3	1.0	71.2	2.6
	Sep	0.3	0.3	0.8	72.6	2.7
	Dec	1.6	-0.2	0.9	73.6	2.6
2013	Mar	0.4	0.4	0.9	75.9	2.7
	Jun	0.2	0.2	0.7	76.5	2.6
	Sep	1.1	0.9	1.4	75.2	2.6
	Dec	0.8	-0.2	1.4	77.4	2.7
2014	Mar	0.6	0.4	1.4	77.4	2.8
	Jun	0.7	0.4	1.6	77.4	3.1
	Sep	0.8	0.7	1.3	77.3	3.4
	Dec	0.7	0.0	1.5	76.8	3.8
2015	Mar	0.6	0.6	1.7	76.3	4.1
	Jun	0.5	0.5	1.8	75.6	4.3
	Sep	0.5	0.8	1.9	74.9	4.5
	Dec	0.5	0.2	2.2	74.2	4.6
2016	Mar	0.5	0.6	2.1	73.8	4.8

[1] Notes for these tables follow on pages 35 and 36.

Table B

Measures of inflation, inflationary pressures and asset prices

	2012				2013			
	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec
Inflation (annual rates)								
CPI	1.6	1.0	0.8	0.9	0.9	0.7	1.4	
CPI non-tradables	2.5	2.4	2.3	2.5	2.4	2.5	2.8	
CPI tradablesßœ	0.3	-1.1	-1.2	-1.0	-1.1	-1.6	-0.5	
Sectoral factor model estimate of core inflation ex-GST	1.6	1.5	1.5	1.5	1.5	1.5	1.6	
CPI trimmed mean (of annual price change) ex-GST	1.7	1.2	1.1	1.0	1.0	0.8	1.4	
CPI weighted median (of annual price change) ex-GST	2.0	1.8	2.0	1.6	1.5	1.3	1.8	
GDP deflator (derived from expenditure data)	-0.3	1.5	-1.5	-2.8	0.9	1.0		
PPI - Input prices	2.3	1.9	0.3	-0.5	0.0	0.0	3.3	
PPI - Output prices	1.6	0.5	-0.6	-0.8	0.1	0.8	4.1	
Inflation expectations								
RBNZ survey of expectations - inflation one-year-ahead	2.2	2.0	2.0	1.8	1.7	1.5	1.9	1.9
RBNZ survey of expectations - inflation two-years-ahead	2.5	2.4	2.3	2.3	2.2	2.1	2.4	2.3
ANZ Bank Business Outlook - inflation one-year-ahead (quarterly average to date)	2.7	2.7	2.4	2.3	2.3	2.3	2.3	2.4
AON Hewitt Economist Survey - inflation one-year-ahead	2.3	2.2	2.0	2.0	1.9	1.8	2.0	2.0
AON Hewitt Economist Survey - inflation four-years-ahead	2.5	2.5	2.5	2.4	2.4	2.3	2.3	2.3
Pricing and costs (net balances)								
ANZ Bank Business Outlook - Pricing intentions, next 3 months (quarterly average to date)	20.4	17.9	16.9	15.5	20.3	22.2	29.4	23.7
QSBO Average selling prices, next three months (Economy wide)	23.0	10.0	14.0	9.0	12.7	22.0	24.0	
QSBO Average costs, past three months (Economy wide)	30.8	23.7	26.4	22.2	17.7	26.8	22.2	
Asset prices (annual percentage changes)								
Quarterly house price index (Quotable Value Limited)	3.6	4.2	4.8	6.8	7.6	8.8		
REINZ Farm Price Index (quarterly average to date)	19.9	0.7	-4.4	6.0	-3.2	-5.2	4.6	7.4
NZX 50 (quarterly average to date)	0.1	-0.7	-0.3	8.6	20.9	26.9	28.9	21.5

Table C

Composition of real GDP growth

(annual average percent change, seasonally adjusted, unless specified otherwise)

	Actuals								Projections		
March year	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
Final consumption expenditure											
Private	4.7	2.8	3.5	-1.6	0.6	2.0	2.5	2.3	3.8	2.9	1.7
Public authority	4.7	3.4	4.9	4.5	0.2	1.4	1.9	0.4	-0.3	-0.3	0.6
Total	4.7	2.9	3.8	-0.3	0.5	1.9	2.3	1.9	2.9	2.2	1.5
Gross fixed capital formation											
Market sector:											
Residential	-5.0	-2.1	1.8	-21.3	-9.1	1.8	-10.7	19.1	16.1	23.6	11.1
Business	10.3	-3.4	10.4	-7.6	-13.1	4.0	7.4	6.6	8.0	8.0	5.8
Non-market government sector	6.5	2.3	-10.7	27.7	-3.3	-2.0	-14.6	-11.2	5.9	4.0	5.8
Total	6.5	-2.8	7.1	-8.1	-11.6	3.0	2.3	7.1	9.2	10.4	6.8
Final domestic expenditure	5.1	1.5	4.6	-2.2	-2.3	2.1	2.3	3.0	4.3	4.1	2.8
Stockbuilding[1]	-0.5	-1.1	1.1	-0.5	-1.2	1.2	0.5	-0.4	1.1	-0.6	-0.2
Gross national expenditure	4.8	0.2	5.9	-2.3	-3.1	2.9	3.4	2.1	5.4	3.6	2.6
Exports of goods and services	-0.1	3.3	3.5	-2.7	4.9	2.7	3.0	3.0	-1.4	2.8	2.3
Imports of goods and services	4.4	-1.3	10.6	-4.0	-8.9	11.3	6.2	0.7	7.3	4.6	3.1
Expenditure on GDP	3.4	1.6	3.5	-1.8	1.5	0.2	2.3	2.9	2.4	2.9	2.3
GDP (production)	3.5	2.9	2.9	-1.8	-0.2	1.6	1.9	2.7	2.8	3.0	2.3
GDP (production, March qtr to March qtr)	3.5	3.5	1.2	-2.9	2.0	0.8	2.8	2.7	2.7	2.8	2.1

[1] Percentage point contribution to the growth rate of GDP.

Table D

Summary of economic projections

(annual percent change, unless specified otherwise)

	Actuals								Projections		
March year	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
Price measures											
CPI	3.3	2.5	3.4	3.0	2.0	4.5	1.6	0.9	1.4	1.7	2.1
Labour costs	3.0	3.0	3.5	3.1	1.3	2.0	2.1	1.8	1.8	2.0	2.2
Export prices (in New Zealand dollars)	3.0	2.3	11.8	7.5	-8.4	8.0	-3.8	-5.6	7.1	-1.6	3.8
Import prices (in New Zealand dollars)	7.4	0.7	0.5	17.4	-10.8	3.8	-1.6	-4.0	-2.3	2.1	4.3
Monetary conditions											
90-day rate (year average)	7.3	7.6	8.6	6.7	2.8	3.1	2.7	2.6	2.7	3.6	4.6
TWI (year average)	70.1	65.6	71.6	61.6	62.9	67.1	70.6	73.3	76.6	76.9	74.6
Output											
GDP (production, annual average % change)	3.5	2.9	2.9	-1.8	-0.2	1.6	1.9	2.7	2.8	3.0	2.3
Potential output (annual average % change)	3.1	2.6	2.2	1.8	1.2	1.4	1.5	1.8	2.1	2.4	2.5
Output gap (% of potential GDP, year average)	2.5	2.8	3.5	-0.2	-1.6	-1.4	-1.1	-0.2	0.4	1.0	0.8
Labour market											
Total employment (seasonally adjusted)	2.7	2.0	1.3	-0.9	-0.1	1.8	0.9	0.4	2.6	2.2	1.2
Unemployment rate (March qtr, seasonally adjusted)	4.0	3.9	3.8	5.2	6.2	6.7	6.8	6.2	5.7	5.0	4.8
Trend labour productivity	1.2	1.2	1.0	0.8	0.7	0.7	0.8	0.8	0.9	0.9	1.0
Key balances											
Government operating balance (% of GDP, year to June)	4.4	3.4	3.1	-2.1	-3.3	-9.2	-4.5	-3.0	-0.9	-0.1	0.1
Current account balance (% of GDP)	-8.5	-7.8	-7.7	-8.1	-2.3	-3.7	-3.8	-4.5	-3.7	-4.8	-5.8
Terms of trade (SNA measure, annual average % change)	-1.1	-1.6	8.5	-2.0	-4.7	7.7	1.2	-4.6	9.5	-1.6	-1.7
Household saving rate (% of disposable income)	-8.2	-7.1	-3.6	-4.1	-0.5	0.2	-0.1	-0.6	-0.0	-0.2	0.0
World economy											
Trading partner GDP (annual average % change)	3.9	3.8	4.3	0.2	1.1	4.5	3.4	3.3	3.5	3.8	4.2
Trading partner CPI (TWI weighted, annual % change)	2.4	1.9	3.3	0.9	1.7	2.2	2.2	1.6	1.7	2.1	2.0

Notes to the tables

CPI	Consumers Price Index.
Weighted median inflation	To calculate weighted median inflation, first the percentage changes in all components of the CPI are ranked. The weighted median is the rate of price change that half of all weighted price movements are below, and half are above.
Trimmed mean inflation	To calculate trimmed mean inflation, first percentage changes in all components of the CPI are ranked, then the price changes for a specified weight of the CPI are removed. The trimmed mean is the average of the remaining price changes.
Sectoral factor model estimate of core inflation	Estimates core inflation by up weighting those components of the CPI that most closely reflect the general trend in the CPI inflation and down weighting those that do not. The weightings evolve over time as the volatility of each component changes.
TWI	Nominal trade-weighted index of the exchange rate. Defined as a geometrically-weighted index of the New Zealand dollar bilateral exchange rates against the currencies of Australia, Japan, the United States, the United Kingdom and the euro area.
90-day bank bill rate	The interest yield on 90-day bank bills.
World GDP	RBNZ definition. 16-country index, export weighted. Seasonally adjusted.
World CPI inflation	RBNZ definition. Five-country index, TWI weighted.
Import prices	Domestic currency import prices. System of National Accounts.
Export prices	Domestic currency export prices. System of National Accounts.
Terms of trade	Constructed using domestic currency export and import prices. System of National Accounts
Private consumption	System of National Accounts.
Public authority consumption	System of National Accounts.
Residential investment	RBNZ definition. Private sector and government market sector residential investment. System of National Accounts.
Business investment	RBNZ definition. Total investment less the sum of non-market investment and residential investment. System of National Accounts.
Non-market investment	RBNZ definition. The System of National Accounts annual nominal government non-market/market investment ratio is interpolated into quarterly data. This ratio is used to split quarterly expenditure GDP government investment into market and non-market components.
Final domestic expenditure	RBNZ definition. The sum of total consumption and total investment. System of National Accounts.
Stockbuilding	Percentage point contribution to the growth of GDP by stocks. System of National Accounts.
Gross Domestic Income	The real purchasing power of domestic income, taking into account changes in the terms of trade. System of National Accounts.
Gross national expenditure	Final domestic expenditure plus stocks. System of National Accounts.
Exports of goods and services	System of National Accounts.
Imports of goods and services	System of National Accounts.
GDP (production)	Gross Domestic Product. System of National Accounts.
Potential output	RBNZ definition and estimate.

Output gap	RBNZ definition and estimate. The percentage difference between real GDP (production, seasonally adjusted) and potential output GDP.
Current account balance	Balance of Payments.
Total employment	Household Labour Force Survey.
Unemployment rate	Household Labour Force Survey.
Household saving rate	Household Income and Outlay Account.
Government operating balance	Operating balance before gains and losses. Source: The Treasury, adjusted by the Reserve Bank.
Labour productivity	The series shown is the annual percentage change in a trend measure of labour productivity. Labour productivity is defined as GDP (production) divided by Household Labour Force Survey hours worked.
Labour cost	Private sector all salary and wage rates. Labour Cost Index.
Quarterly percent change	$(\text{Quarter}/\text{Quarter}_{-1} - 1)*100$
Annual percent change	$(\text{Quarter}/\text{Quarter}_{-4} - 1)*100$
Annual average percent change	$(\text{Year}/\text{Year}_{-1} - 1)*100$

Source: Unless otherwise specified, all data conform to Statistics New Zealand definitions, and are not seasonally adjusted.
Rounding: All projections data are rounded to one decimal place.

Appendix B

Companies and organisations contacted by Reserve Bank staff during the projection round

AECOM Ltd
Air New Zealand Ltd
Amalgamated Builders (2001) Ltd
Arrow Group International Ltd
Auckland Council
Ballance Agri-Nutrients Ltd
Barfoot & Thompson
Bay of Plenty Federated Farmers of NZ
Blue Sky Meats Ltd
Budget Rent A Car Ltd
Business NZ
C3 Ltd
Canterbury Earthquake Recovery Authority
Council of Trade Unions
Dairy Direct LTD
Darroch Ltd
Destination Queenstown
Fairfax New Zealand Ltd
Farmers Trading Ltd
Fletcher EQR
Fonterra Co-operative Group Ltd
Foodstuffs South Island Ltd
Fulton Hogan Ltd
Goldmark Group Ltd
H & J Smith Ltd
HamiltonJet Ltd
Harcourts Group Ltd
Hertz New Zealand Ltd
Higgs Construction Ltd
HRS Construction Ltd
Hume Pine (NZ) Ltd
IAG New Zealand Ltd
Infratil Ltd
Invercargill Licensing Trust
Kordia Ltd
Lion Nathan New Zealand Ltd
LJ Hooker Group Ltd
Lockwood Group Ltd
Lyttleton Port Company Ltd
Madison Group Ltd
McDowell Real Estate Ltd
Ministry of Business Innovation & Employment
Mitre10 (NZ) Ltd
Moneyshop Group Ltd
Paymark Ltd
PF Olsen Ltd
PGG Wrightson Ltd
Port of Tauranga Ltd
Raywhite Real Estate
Rotorua District Council
Skyline Enterprises Ltd
Southern Response Earthquake Services Ltd
Southland Building Society Ltd
Southland District Council
Telecom New Zealand Ltd
The Johnson Group Ltd
The Warehouse Ltd
Trojan Holdings Ltd
Two Degrees Mobile Ltd
Westfield (New Zealand) Ltd
Xero Ltd
Zespri International Ltd

Appendix C

The Official Cash Rate chronology

Date	OCR (percent)	Date	OCR (percent)	Date	OCR (percent)
17 March 1999	4.50	29 January 2004	5.25	29 January 2009	3.50
21 April 1999	4.50	11 March 2004	5.25	12 March 2009	3.00
19 May 1999	4.50	29 April 2004	5.50	30 April 2009	2.50
30 June 1999	4.50	10 June 2004	5.75	11 June 2009	2.50
18 August 1999	4.50	29 July 2004	6.00	30 July 2009	2.50
29 September 1999	4.50	9 September 2004	6.25	10 September 2009	2.50
17 November 1999	5.00	28 October 2004	6.50	29 October 2009	2.50
19 January 2000	5.25	9 December 2004	6.50	10 December 2009	2.50
15 March 2000	5.75	27 January 2005	6.50	28 January 2010	2.50
19 April 2000	6.00	10 March 2005	6.75	11 March 2010	2.50
17 May 2000	6.50	28 April 2005	6.75	29 April 2010	2.50
5 July 2000	6.50	9 June 2005	6.75	10 June 2010	2.75
16 August 2000	6.50	28 July 2005	6.75	29 July 2010	3.00
4 October 2000	6.50	15 September 2005	6.75	16 September 2010	3.00
6 December 2000	6.50	27 October 2005	7.00	28 October 2010	3.00
24 January 2001	6.50	8 December 2005	7.25	9 December 2010	3.00
14 March 2001	6.25	26 January 2006	7.25	27 January 2011	3.00
19 April 2001	6.00	9 March 2006	7.25	10 March 2011	2.50
16 May 2001	5.75	27 April 2006	7.25	28 April 2011	2.50
4 July 2001	5.75	8 June 2006	7.25	9 June 2011	2.50
15 August 2001	5.75	27 July 2006	7.25	28 July 2011	2.50
19 September 2001	5.25	14 September 2006	7.25	15 September 2011	2.50
3 October 2001	5.25	26 October 2006	7.25	27 October 2011	2.50
14 November 2001	4.75	7 December 2006	7.25	8 December 2011	2.50
23 January 2002	4.75	25 January 2007	7.25	26 January 2012	2.50
20 March 2002	5.00	8 March 2007	7.50	8 March 2012	2.50
17 April 2002	5.25	26 April 2007	7.75	26 April 2012	2.50
15 May 2002	5.50	7 June 2007	8.00	14 June 2012	2.50
3 July 2002	5.75	26 July 2007	8.25	26 July 2012	2.50
14 August 2002	5.75	13 September 2007	8.25	13 September 2012	2.50
2 October 2002	5.75	25 October 2007	8.25	25 October 2012	2.50
20 November 2002	5.75	6 December 2007	8.25	6 December 2012	2.50
23 January 2003	5.75	24 January 2008	8.25	31 January 2013	2.50
6 March 2003	5.75	6 March 2008	8.25	14 March 2013	2.50
24 April 2003	5.50	24 April 2008	8.25	24 April 2013	2.50
5 June 2003	5.25	5 June 2008	8.25	13 June 2013	2.50
24 July 2003	5.00	24 July 2008	8.00	25 July 2013	2.50
4 September 2003	5.00	11 September 2008	7.50	12 September 2013	2.50
23 October 2003	5.00	23 October 2008	6.50	31 October 2013	2.50
4 December 2003	5.00	4 December 2008	5.00		

Appendix D

Upcoming Reserve Bank *Monetary Policy Statements* and Official Cash Rate release dates

The following is the Reserve Bank's schedule for the release of *Monetary Policy Statements* and Official Cash Rate (OCR) announcements. Please note that the Reserve Bank reserves the right to make changes, if required due to unexpected developments. In that unlikely event, the markets and the media would be given as much warning as possible.

Announcements are made at 9.00am on the day concerned and are posted to the website shortly after.

2014	
30 January 2014	OCR announcement
13 March 2014	*Monetary Policy Statement* and OCR announcement (media conference and webcast)
24 April 2014	OCR announcement
12 June 2014	*Monetary Policy Statement* and OCR announcement (media conference and webcast)
24 July 2014	OCR announcement
11 September 2014	*Monetary Policy Statement* and OCR announcement (media conference and webcast)
30 October 2014	OCR announcement
11 December 2014	*Monetary Policy Statement* and OCR announcement (media conference and webcast)

2015	
29 January 2015	OCR announcement
12 March 2015	*Monetary Policy Statement* and OCR announcement (media conference and webcast)
30 April 2015	OCR announcement
11 June 2015	*Monetary Policy Statement* and OCR announcement (media conference and webcast)

Appendix E

Policy Targets Agreement

This agreement between the Minister of Finance and the Governor of the Reserve Bank of New Zealand (the Bank) is made under section 9 of the Reserve Bank of New Zealand Act 1989 (the Act). The Minister and the Governor agree as follows:

1. Price stability

a) Under Section 8 of the Act the Reserve Bank is required to conduct monetary policy with the goal of maintaining a stable general level of prices.

b) The Government's economic objective is to promote a growing, open and competitive economy as the best means of delivering permanently higher incomes and living standards for New Zealanders. Price stability plays an important part in supporting this objective.

2. Policy target

a) In pursuing the objective of a stable general level of prices, the Bank shall monitor prices, including asset prices, as measured by a range of price indices. The price stability target will be defined in terms of the All Groups Consumers Price Index (CPI), as published by Statistics New Zealand.

b) For the purpose of this agreement, the policy target shall be to keep future CPI inflation outcomes between 1 per cent and 3 per cent on average over the medium term, with a focus on keeping future average inflation near the 2 per cent target midpoint.

3. Inflation variations around target

a) For a variety of reasons, the actual annual rate of CPI inflation will vary around the medium-term trend of inflation, which is the focus of the policy target. Amongst these reasons, there is a range of events whose impact would normally be temporary. Such events include, for example, shifts in the aggregate price level as a result of exceptional movements in the prices of commodities traded in world markets, changes in indirect taxes, significant government policy changes that directly affect prices, or a natural disaster affecting a major part of the economy.

b) When disturbances of the kind described in clause 3(a) arise, the Bank will respond consistent with meeting its medium-term target.

4. Communication, implementation and accountability

a) On occasions when the annual rate of inflation is outside the medium-term target range, or when such occasions are projected, the Bank shall explain in *Policy Statements* made under section 15 of the Act why such outcomes have occurred, or are projected to occur, and what measures it has taken, or proposes to take, to ensure that inflation outcomes remain consistent with the medium-term target.

b) In pursuing its price stability objective, the Bank shall implement monetary policy in a sustainable, consistent and transparent manner, have regard to the efficiency and soundness of the financial system, and seek to avoid unnecessary instability in output, interest rates and the exchange rate.

c) The Bank shall be fully accountable for its judgements and actions in implementing monetary policy.

Bill English

Hon Bill English

Minister of Finance

G P Wheeler

Graeme Wheeler

Governor Designate
Reserve Bank of New Zealand

Dated at Wellington 20 September 2012