Monetary Policy Statement

June 2013¹

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

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1 Policy assessment

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

The global outlook remains mixed with disappointing data in Europe and some other countries, and more positive indicators in the United States and Japan. Global financial sentiment continues to be buoyant and the medium term outlook for New Zealand’s main trading partners remains firm.

Growth in the New Zealand economy is picking up but remains uneven across sectors. Consumption is increasing and reconstruction in Canterbury continues to gather pace and will be reinforced by a broader national recovery in construction activity, particularly in Auckland. This will support aggregate activity and eventually help to ease the housing shortage.

In the meantime rapid house price inflation persists in Auckland and Canterbury. As previously noted, the Reserve Bank does not want to see financial or price stability compromised by housing demand getting too far ahead of the supply response.

Despite having fallen over the past few weeks, the New Zealand dollar remains overvalued and continues to be a headwind for the tradables sector, restricting export earnings and encouraging demand for imports. Fiscal consolidation will continue to constrain aggregate demand over the projection horizon.

Annual CPI inflation has been just below 1 percent since the September quarter of 2012, largely reflecting falling prices for tradable goods and services. While tradables inflation is likely to remain low, annual CPI inflation is expected to trend upwards through the forecast period.

Reflecting the balance of several forces, we expect annual GDP growth to accelerate to about 3.5 percent by the second half of 2014, and inflation to rise towards the midpoint of the 1 to 3 percent target band.

Given this outlook, we expect to keep the OCR unchanged through the end of the year.

Graeme Wheeler
Governor
2 Overview and key policy judgements

Inflation remains subdued, with the CPI increasing by 0.9 percent in the year to the March quarter. Monetary policy needs to balance current low inflation against the likelihood that inflation will pick up over the medium term. In this regard, there is increasing evidence that, despite the recent drought, the pace of GDP growth has recovered. Demand will be further boosted by reconstruction in Canterbury, strong momentum in the housing market and continued low interest rates. While this pick up will be partly offset by fiscal consolidation and continued strength in the New Zealand dollar, inflation is expected to increase towards the midpoint of the 1 to 3 percent target band over the projection horizon.

Output and inflation developments

Annual CPI inflation has been below 1 percent since the September quarter of 2012, and is estimated to remain so in the June quarter of this year. Recent low inflation relates, in part, to declines in specific components of the CPI. Even so, measures of core inflation sit in the lower half of the inflation target band (figure 2.1), and surveyed inflation expectations, which were elevated in 2011, have fallen to around 2 percent.

Figure 2.1
Headline and selected core inflation measures (annual)

Continued strength in the New Zealand dollar and low global inflation have seen tradables prices decline 1.1 percent in the year to the March quarter. Non-tradables inflation has also been below average, driven by the lingering excess capacity associated with the slower than normal recovery in GDP from the 2008/09 recession. While the New Zealand dollar is assumed to remain elevated for some time, there is increasing evidence that the pace of GDP growth is picking up.

GDP expanded 1.5 percent in the December quarter of last year. Since then, many economic indicators have improved further. Business and consumer confidence have risen, as have labour earnings and credit growth, and building activity continues to increase. Trading partner demand remains firm and export commodity prices are well above levels of six months ago. While drought is estimated to subtract 0.5 percentage points from GDP growth through the first half of the year, GDP is still expected to expand by 2.6 percent in the year to the June quarter 2013.

This is not to say that the economy is strong. GDP per capita remains below its 2007 peak and GDP growth is uneven across sectors. Parts of the tradable sector continue to struggle in the face of the high New Zealand dollar. Futhermore, while overall trading partner growth is firm, euro area GDP continues to contract and GDP growth in China has slowed. Nonetheless, it does appear that GDP growth in New Zealand is now becoming more self-sustaining.

Economic outlook

Annual GDP growth is expected to accelerate to about 3.5 percent in the second half of 2014, before moderating (figure 2.2, page 5).

Although the projection is for relatively stable GDP growth, the New Zealand economy is being buffeted by several large opposing forces. The most important of these are:

• The $40 billion of post-earthquake rebuilding assumed to occur in Canterbury;
• High house price inflation;
• Sustained strength in the New Zealand dollar; and
• Further fiscal consolidation.

The central projection is based on assumptions about each of these factors. If these assumptions turn out to
Box A
Recent monetary policy decisions

The OCR has been held at 2.5 percent for the past two years (figure A1). Subdued GDP growth, both domestically and offshore, and persistent strength in the New Zealand dollar have resulted in low CPI inflation. Consequently, it has been appropriate for the OCR to remain at a historically low level.

Figure A1
Official Cash Rate

Despite accommodative monetary policy settings, headline inflation over the past two years has surprised both the Bank and private sector forecasters on the down side. A small number of factors account for most of these surprises:

- The stronger than expected New Zealand dollar has dampened prices for a range of tradable goods, particularly imported durable items such as appliances and furnishings.
- Tradables inflation has also been dampened by some pronounced decreases in the prices of imported items such as food and fuel – the prices of which can be very volatile over short periods. Indeed, reductions in the near-term inflation outlook since the previous Statement are almost entirely accounted for by sharp declines in the price of petrol. Excluding the impact of petrol price changes, inflationary pressures have evolved in line with the March forecasts from the March Statement.
- Non-tradables inflation has also been softer than anticipated. For the most part, this is a result of increased competition among providers of mobile and broadband services, which has resulted in significant declines in the communications component of the CPI.

Inflation has been subdued even after allowing for these factors. Measures of underlying inflation have lingered in the lower part of the Bank’s target band for some time, and inflation expectations have declined. As discussed in chapter 4, this has been partly due to continued strength in the New Zealand dollar and the slow pace of the domestic recovery in recent years.

Inflation is expected to remain low over the coming year, in large part due to on-going strength in the New Zealand dollar. It is inevitable that there will be some unforeseen price movements, some of which could lower inflation further. However, GDP growth has strengthened in recent quarters and stronger growth seems likely to continue over the medium term. Consistent with these conditions, inflation is expected to increase.
be false, the economy could evolve differently to that described in the central projection. The key assumptions and risks are discussed below.

Reconstruction in Canterbury

Repairs and reconstruction in Canterbury continue to have a major influence on the economic outlook. Since the March Statement, the Bank has revised upwards its forecast for post-earthquake rebuilding, consistent with the Budget Economic and Fiscal Update 2013 projection. The total cost of reconstruction is now expected to be $40 billion (in 2013 dollars), revised up from the $30 billion (in 2011 dollars) previously projected. The extra building activity is assumed to occur later this decade, so has limited impact on monetary policy over the projection horizon.

Rebuilding will continue to substantially boost activity in the construction industry for some years to come. Aggregate construction expenditure is expected to rise to a share of total output last seen in the mid-2000s, and remain at that elevated level for the foreseeable future.

While it is clear that reconstruction will add to inflationary pressure, the magnitude of this boost is uncertain. The efficiency and flexibility of the construction industry will have an important influence on the inflation impact of the rebuild. It could be that the co-ordinated and concentrated nature of reconstruction leads to significant economies of scale. Conversely, difficulties in transferring workers and equipment from elsewhere in the country could cause the inflation impact to be relatively large.

Regardless of the efficiency of the construction industry, the inflation impact of the rebuild will be substantially influenced by the speed at which demand for construction work picks up. If demand is spread out over time by the central co-ordination of repairs, or if there are delays associated with land or insurance assessment, competition for construction resources is likely to be relatively orderly and the inflation impact relatively contained. However, if demand picks up rapidly, competition for workers and materials will likely be more intense and inflationary pressures could increase to a greater extent, both within Canterbury and across the rest of New Zealand.

The Bank continues to project that construction demand will increase in an orderly fashion. However, a larger and more widespread boost to inflation than is currently assumed could eventuate.

House price inflation

House price inflation continues to increase. Nationally, prices rose by 9 percent over the past year (April quarter 2013 over April quarter 2012), with prices rising by 14 percent in Auckland and 11 percent in Christchurch. Outside these areas, prices rose by an average of around 4 percent, although there is considerable variation among districts. House price increases are being driven by a combination of supply shortages (especially in Auckland and Christchurch), pent-up demand for housing, and the lowest mortgage rates since the mid-1960s.

The central projection is for the rate of house price inflation to moderate soon. House prices are very high relative to rents and household income. Household debt relative to disposable income, while reduced somewhat since before the 2008/09 recession, is also very high. House price inflation is projected to rise modestly over the coming half year, before tracking lower thereafter. This projection assumes unchanged prudential policy settings.

A key risk is that house price inflation is stronger than forecast. The Bank is concerned that the current escalation of house prices is increasing the probability and potential harm of a significant downwards correction in

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Figure 2.2
GDP growth

(annual)

Source: Statistics New Zealand, RBNZ estimates.
house prices. Furthermore, stronger house price inflation could boost the inflation outlook through its positive effect on domestic demand. Box B explores a scenario where domestic demand, reflected partly in higher house price inflation, is stronger than is projected in the central forecasts.

The New Zealand dollar

The New Zealand dollar Trade-Weighted Index (TWI) remains elevated (figure 2.3). It continues to be a significant headwind for the tradables sector, restricting export earnings and encouraging imports over domestic tradables production. The central projection assumes that the New Zealand dollar TWI will remain elevated.

Fiscal consolidation

Fiscal consolidation is expected to continue to have a substantial dampening influence on demand growth over the projection horizon. The May Budget reaffirmed the Government’s plans to return the fiscal balance to zero by 2014/15, and to continue to reduce government debt beyond this.

Fiscal consolidation is occurring through a combination of limited growth in government spending, fiscal drag and increases in indirect taxes. These measures result in fiscal policy tightening by about 0.6 percent of GDP per annum over the projection. All these measures negatively affect demand. However, the dampening impact on inflation is partly offset by continued increases in indirect taxes.

Inflation and monetary policy outlook

Continued GDP growth of around 3 percent is expected to cause inflationary pressures to pick up over the medium term. Non-tradables inflation is expected to increase and will be boosted further by increases in tobacco excise taxes. Tradables inflation, while likely to rise, is forecast to remain relatively subdued, though it will be boosted by increases in petrol taxes. In aggregate, annual CPI inflation is expected to increase towards the 2 percent target midpoint over the next two years (figure 2.4).

There are several factors behind the strength of the exchange rate. Most obviously, New Zealand’s terms of trade are at historically high levels and interest rates are higher than the extremely low yields available offshore. New Zealand continues to run a sizable current account deficit, reflecting national saving being less than aggregate investment. The demand for capital from offshore required to finance this saving shortfall underpins the high level of the New Zealand dollar.

A key risk is that the exchange rate appreciates from here and becomes even more overvalued. Further appreciation that is not supported by any relative fundamental improvement in the New Zealand economy would pose an additional challenge. A scenario such as this is also considered in box B.
Monetary policy needs to balance current low inflation against indications that inflation will increase over the medium term. Because of policy lags, efforts to offset the current weakness in inflation may have an only limited near-term impact. Furthermore, such efforts could exacerbate medium-term inflationary pressures and risk further acceleration in house price inflation. Nonetheless, continued low interest rates are part of what generates the additional spending and activity that helps return inflation to the mid-point of the target range. Relative to the March Statement, the projection for the 90-day interest rate is slightly higher from the middle of 2015 (figure 2.5). This reflects the inflationary effects of the stronger outlook for domestic demand, offset somewhat by a stronger exchange rate forecast.

Figure 2.5
90-day interest rate

Source: RBNZ estimates.
Box B
Policy scenarios

The housing market and the exchange rate present difficult challenges for monetary policy at the current juncture. Both house prices and the currency appear overvalued. The central projection assumes both annual house price inflation and the New Zealand dollar TWI moderate from early next year. This box considers two scenarios. One where domestic demand, reflected partly in higher house price inflation, turns out stronger than in the central projection, and one where the exchange rate is higher than forecast in the central projection.

Stronger domestic demand

This scenario considers the impact of stronger than expected domestic demand. It allows for house price inflation, private consumption and residential investment – which often cycle together in New Zealand – to all be stronger than is predicted in the central projection.

Annual house price inflation is assumed to peak at 14 percent, approximately 3 percentage points higher than in the central forecast, and remain higher throughout the projection (figure B1). This results in a house price inflation cycle reasonably similar to that seen in the mid-1990s. Private consumption expenditure and residential investment increase to shares of the economy last seen in the mid-2000s.

The resultant increase in domestic demand places more pressure on domestic resources, boosting non-tradables inflation. To contain headline inflation, the 90-day interest rate rises sooner and to a greater extent than in the central projection (figure B2).

A higher path for the 90-day interest rate causes the New Zealand dollar to appreciate, dampening tradables inflation. The higher New Zealand dollar also constrains activity in the tradables sector, through lower export receipts and volumes, as well as higher import volumes – providing some offset to stronger domestic demand. Stronger domestic demand, along with a stronger New Zealand dollar, results in further deterioration in New Zealand’s external balances. In particular, the current account deficit widens by more than in the central projection.
Higher New Zealand dollar TWI

This scenario considers the impact of further appreciation in the exchange rate. Importantly, this appreciation is assumed to be portfolio driven and does not reflect any relative improvement in the New Zealand economy. The New Zealand dollar TWI is assumed to appreciate over the next three months, and remain above the central forecast over the remainder of the projection (figure B3). All else equal, the 90-day interest rate falls and remains below the central forecast so as to ensure that inflation is still likely to increase towards the 2 percent target midpoint (figure B4). The scenario’s interest rate reaction is highly conditional on this assumed persistence in the New Zealand dollar TWI.

Figure B3
New Zealand dollar TWI

The elevated TWI exerts downwards pressure on inflation in the tradables sector by lowering the cost of imported goods and reducing activity and resource pressure in the tradables sector. At the same time, lower interest rates stimulate an increase in household consumption, some of which is imported, and boost momentum in the housing market. Combined, these factors cause the current account to deteriorate.

Figure B4
90-day interest rate
(New Zealand dollar TWI scenario)

The monetary policy responses to these two scenarios are very different. However, in real time it would be difficult to disentangle the relative effects if both started to come through simultaneously. In particular, it would be very difficult to tell if a rise in the exchange rate was portfolio driven or whether appreciation reflected a strengthening in the New Zealand economy that was yet to be revealed in economic data.
3 Financial market developments

Equity markets have trended higher since the March Statement, building on the strong gains made since the middle of 2012. However, it seems that very easy global liquidity conditions provided by major central banks are behind the strength in equity markets, rather than a more fundamental improvement in the world economic outlook.

The New Zealand dollar TWI has recently been driven by some large opposing forces. The Australian dollar and Japanese yen have been two of the weakest major global currencies recently, while demand for the United States dollar has increased. The net result has been a flat New Zealand dollar TWI.

The overnight-indexed swap (OIS) curve is very flat, indicating that the market is pricing in a low probability of the official cash rate changing this year. Marginal funding costs for New Zealand banks continue to drift lower, helping to keep mortgage rates in New Zealand at historically low levels. With strong cash positions, the major banks have recently reduced term deposit rates.

International market developments

Global market sentiment has been mainly buoyant as central bank policies have resulted in easy liquidity conditions and helped drive asset prices higher. Many equity markets have recently recorded post-global financial crisis (GFC) highs or, in the case of the United States, record highs (figure 3.1). In the five months to the end of May, the MSCI world index for developed market equities (in local currency terms) rose by a remarkable 14.8 percent. The flow of economic data seems at odds with the positive trend in equity markets over the past few months. For example, Citigroup’s regional economic surprise indicators – which highlight whether economic data are tracking above or below market expectations – have been tracking down for the United States, Europe, and Asia. The exception is Japan, where economic data have positively surprised.

Share prices in emerging markets have not kept up with the major developed markets, falling by 3.3 percent (in United States dollar terms) in the five months ending May, a possible sign of investor caution towards the global growth outlook. Furthermore, global commodity prices have generally been soft this year, with the DJ-UBS aggregate index down about 2 percent in the five months ending May. Falling prices for industrial metals (down 7 percent) and precious metals (down 17 percent) more than offset an increase in energy prices (up 6 percent).

A common investment theme this year has been investors taking on higher risk in their search for better returns than those on offer in money markets or low yielding government bond markets. As noted later, government bond spreads for higher-yielding bond markets, including Spain and Italy, have narrowed. Furthermore, New Zealand’s higher yielding bond market has also attracted the attention of global investors. Spreads for corporate bond yields have also been on a declining trend and recently reached a post-GFC low, although they remain above levels that prevailed in the years before the crisis. Higher-risk sectors such as CCC-rated and sub-investment grade (high yield) segments have recently outperformed, as investors tilt towards higher yielding markets.

Turning to regional developments, on 4 April 2013 the Bank of Japan (BoJ) announced a range of measures in a further bid to increase inflation. It announced a 2 percent inflation target that it would try to achieve in about two years, and changed its policy instrument from the policy interest rate (already as low as desired at 0.1 percent) to the monetary base. The monetary base is to increase at an annual rate of 60-70 trillion yen (approximately 14 percent of Japan’s GDP), enough to double its level by the end of 2014. This mainly involves buying large
amounts of Japanese government bonds (JGBs) in the secondary market. The size of the programme shocked the market and triggered a significant depreciation of the yen. Since the announcement, the volatility of JGB yields has increased, reflecting uncertainty about the impact of the new policy.

In the United States, the Federal Open Market Committee introduced new language to its policy message. It stated that it was prepared to increase or reduce the pace of its asset purchases to maintain appropriate policy accommodation as the outlook for the labour market or inflation changed. This announcement followed a string of weaker than expected economic releases. However, following that announcement, employment data were much stronger than expected and this triggered an improvement in bond market sentiment, sending United States Treasury rates and the United States dollar higher. Despite the Federal Reserve’s apparent balance in potentially increasing or decreasing asset purchases, the market strongly believes that the next move is likely to be a decrease (so-called tapering) of asset purchases. The timing of such a move by the Federal Reserve, or indeed even the announcement of the timing, remains a key focus for the market.

In Europe, immediately following the March Statement, the Cypriot Government announced that it would impose a one-off levy on deposits in Cypriot banks, including insured deposits. Financial market sentiment in the euro area deteriorated as contagion fears resurfaced. However, following widespread condemnation the proposal was changed so that insured deposits were not “bailed in”. Capital controls in Cyprus were introduced and remain in place. Looking back, the market reaction to the developments in Cyprus was mild compared to previous “shocks” through the European debt crisis.

On 2 May, the European Central Bank (ECB) cut the main refinancing rate by 25 basis points to 0.5 percent (figure 3.2) and left the deposit rate unchanged at zero percent. ECB President Mario Draghi also announced an extension to the ECB’s current refinancing operation policy (which allows banks to borrow unlimited amounts of short term funding, subject to posting adequate collateral) to July 2014 to ensure sufficient liquidity. The ECB also acknowledged the possibility of taking the deposit rate negative, charging banks to hold cash with the ECB and therefore encouraging them to increase lending to the private sector.

The Reserve Bank of Australia (RBA) cut its policy rate by 25 basis points to a record low 2.75 percent on 7 May. The minutes revealed that the soft March quarter inflation outturn and accompanying downward revision to the RBA’s inflation forecasts appeared to have been the key drivers of the decision to lower the cash rate. On 4 June the RBA left the cash rate unchanged and reiterated its previous message that there was “some scope for further easing”.

In China, concerns remain around the country’s financial sector, in particular the growing size of its shadow banking sector and the difficulty in assessing the quality of loans made during a period of significant credit expansion. Fitch downgraded China’s local currency rating one notch to A plus from AA minus, highlighting concern over local government debt, off-balance sheet banking practices, and risks to financial stability stemming from rapid credit growth. These warnings have been echoed by other international bodies. The Government adopted further controls on property prices and introduced regulations to help contain the growth of shadow banking activities and increase their transparency.

Figure 3.2
Policy rates for selected regions

Source: DataStream.

Financing and credit

Global bond market sentiment has swung around since the March Statement. Although policy initiatives and expectations across the United States, euro area...
and Japan have been quite different, 10-year government bond yields in these three regions have showed a similar tendency – much lower rates following the March Statement, followed by much higher rates.

The United States 10-year Treasury rate fell to its lowest level this year, reaching around 1.6 percent on 2 May following a run of disappointing economic releases, before surging higher through the rest of the month to reach a peak of just over 2.2 percent (figure 3.3). This move followed some stronger labour market data, leading to increased speculation that the Federal Reserve might soon begin to wind down its asset purchase programme.

Figure 3.3
10-year government bond yields

As mentioned earlier, the aggressive policy stance adopted by the BoJ surprised the market. Bond yields initially collapsed but then increased significantly with much higher volatility. The 10-year rate on JGBs fell from around 0.55 percent pre-announcement to as low as 0.35 percent, before shooting up as high as 1 percent. These extremes were reached on an intra-day basis so aren’t visible in figure 3.3, which uses daily closes. With growth and inflation effects of the announced large-scale stimulus as yet unclear, uncertainty has increased in the market and caused this volatility. Concerns about the functioning of the market prompted the BoJ to increase open market operations and revise the operational aspects of its bond buying programme in an attempt to settle the market.

Germany’s 10-year rate fell to the same low of 1.17 percent reached during the height of the European debt crisis, before increasing to around 1.5 percent. Cyprus-led concerns proved to be short-lived, with spreads to German bonds for countries like Italy, Spain, Portugal and Ireland narrowing significantly as demand for high-risk assets increased. Indeed, with improved financial conditions Italy and Spain have been able to freely issue government debt at the lowest yields in two to three years.

While there have been signs of improved financial market sentiment in Europe, banking sector fragmentation remains. Lending rates to small-medium sized enterprises (SMEs) remain significantly differentiated across countries. For example, an SME in Italy faces a much higher average interest rate of around 6 percent compared to an SME rate in Germany of below 4 percent (figure 3.4). Banks exposed to the weak peripheral economies are consolidating and rebuilding their capital positions, which is restricting lending and economic growth. Non-performing loans in these peripheral economies are also high and rising, driving the differential in lending rates as default risk increases, and accentuating the retrenchment from these markets. In the euro area, annual private sector credit growth remained negative through to the end of April.

Figure 3.4
New lending rates for SMEs

In late April, New Zealand’s 10-year government bond rate reached 60-year lows of just under 3.2 percent. Yields have since risen, driven by the rebound in global rates. Demand for New Zealand government bonds has been strong from overseas investors as demand for high-yielding assets has increased. In early May the spread to United States 10-year Treasuries fell to as low as 140 basis points, the lowest since 2007 (figure 3.5). Offshore holdings of New Zealand government securities rose to 69 percent in April, the highest level since late 2009 and above the average of the last 15 years of 60 percent.
Reserve Bank of New Zealand: Monetary Policy Statement, June 2013

Some banks have also lowered rates on their call savings accounts.

Figure 3.5
NZ-US 10-year government bond spread

Issuance of Kauri bonds – New Zealand dollar denominated bonds issued in New Zealand by foreign issuers – has lifted during 2013, with around $4 billion of new issues in the five months ending May compared to $2.3 billion over calendar year 2012. The increased issuance has been driven by strong demand for New Zealand dollar assets and limited supply of New Zealand government bonds. In addition, a narrowing of interest rate spread between Australia and New Zealand supported this demand.

Domestic banks are currently well funded. Annual deposit growth is around 10 percent and the major banks are finding it relatively easy to obtain additional long-term funding from offshore markets. Since the March Statement, the four major banks have issued more than $2.3 billion of senior unsecured long-term (more than three years maturity) debt in various markets. The weighted average price of these deals when swapped back into New Zealand dollar floating rates was about 115 basis points over the reference rate (BKBM), approximately 75 basis points below year-ago levels.

Increased Kauri issuance has helped reduce the cost for New Zealand banks of hedging offshore debt issuance. The NZD-USD 5-year basis swap has trended lower this year and is about 20 basis points lower than mid-2012.

With banks able to raise term funding abroad more cheaply, the pressure on retail deposit rates has been downward over recent months. The average six-month term deposit rate for the four major banks is down 15 basis points to 3.81 percent since the March Statement.

Figure 3.6
Indicative funding spreads

Foreign exchange market

The New Zealand dollar TWI appreciated to a post-float high of 79.7 on 11 April. Since then the TWI has fallen around five percent back towards the level prevailing just before the March Statement. The New Zealand dollar has appreciated significantly against the yen and Australian dollar, with offsetting falls against the other three TWI cross rates (figure 3.7).

Figure 3.7
NZD movements against selected currencies since March Statement

The weakness in the yen reflects the aggressive policy stance of the BoJ, with the scale of quantitative easing surprising the market. For Australia, falls in commodity prices, reduced Australian mining investment, a modest global growth outlook, and the reduction in the policy rate by the RBA triggered a significant downturn in sentiment.
for the Australian dollar. Consequently, the NZD-AUD cross rate rose to a three and a half year high, above the AUD 0.84 mark.

Conversely, some improved United States household sector data, expectations of tapering of the Federal Reserve asset purchases (which has also resulted in higher bond yields), and heightened concerns about economic conditions in other countries have contributed to recent United States dollar strength.

Other domestic financial market developments

The New Zealand equity market has continued to perform well. The NZX-50 Index rose by 2.0 percent over April and May, following the 8.8 percent gain in the March quarter, although it has not increased by as much as the MSCI world index this year.

There has been no significant domestic non-financial corporate bond issuance this year. The search for yield has helped to further reduce corporate bond spreads to swap rates. In the secondary market, the average spread to swap of senior bank debt (of at least three years residual maturity) has fallen from 130 bps at the beginning of the year to 90 bps.

The short end of the interest rate market has been underpinned by steady monetary policy and expectations of this continuing over the near term. The 90-day bank bill rate has hovered around 2.65 percent. The OIS market is currently pricing in little chance of the OCR changing over the next few months and about 6 basis points of tightening has been priced in by year-end. Over the next 12 months, the OIS market has priced in about 23 basis points of tightening, similar to the amount priced in just before the March Statement.

Carded mortgage rates have remained broadly stable since the March Statement. However, special rates continue to be offered. The March Statement reported special offers as low as 4.79 percent for a six-month term. Current special rates are just under the 5 percent mark for one and two-year terms, often subject to conditions such as a minimum 20 percent deposit.

The trend of borrowers moving from floating to fixed rate mortgages has continued through 2013. The percentage of mortgages that are on fixed rates has increased to around 50 percent currently, whereas 37 percent of mortgages were on fixed rates a year ago. However, most of the increase in fixed rate mortgages is at six-month to two-year terms, the cheapest part of the curve, so for many mortgage holders re-pricing risk remains over the short term. The average time to re-price fixed rate mortgages has fallen slightly from 14.3 months in December to 13.8 months in April.
Current economic conditions

The New Zealand economy has been experiencing a slower than normal recovery from recession in recent years. However, GDP increased strongly in late-2012, and growth has remained robust in the first half of 2013 (figure 4.1). This is despite drought conditions in the first half of the year that reduced agricultural production. The economy still faces some headwinds, though. In particular, lingering strength in the New Zealand dollar is weighing on competitiveness in the tradable sector.

Annual inflation remains low, with the CPI increasing by 0.9 percent in the year to the March quarter. Inflation has been dampened by the lingering excess capacity following the 2008/09 recession, and the continued strength in the New Zealand dollar.

Domestic demand

New Zealand’s recovery from recession has been weak compared to previous recoveries (figure 4.2). Per capita GDP has yet to recover its 2007 level, and the unemployment rate has been above average for several years.

Over the past year, however, the pace of growth appears to have accelerated. GDP increased by 1.7 percent through the second half of 2012 (figure 4.1). Growth looks to have remained robust in the first half of 2013 despite the effects of drought, with GDP estimated to have grown by 0.9 percent in the six months to June.

Business surveys, such as the Quarterly Survey of Business Opinion and the Performance of Manufacturing Source: Statistics New Zealand, RBNZ estimates.

The housing market has continued to strengthen in recent months, with house sales up 22 percent in the year to April (figure 4.4, overleaf). Increases in housing turnover have been supported by low mortgage interest rates, pent up demand for housing following limited new construction in recent years, and an easing in credit...
conditions over the past six months. In addition, household caution towards debt may be waning with increased credit associated with housing market turnover (figure 4.5). Credit growth remains subdued, but has picked up, and high loan-to-value lending as a share of new lending has been increasing.

Figure 4.4
House sales by region (three month moving average)

![Graph showing house sales by region]

Figure 4.5
Value of house sales and household credit growth (monthly)

![Graph showing value of house sales and household credit growth]

House price inflation has increased strongly, with overall prices up 9 percent in the past year (April quarter 2013 over April quarter 2012). However, significant regional differences exist. House price inflation has been particularly strong in Auckland and Christchurch (figure 4.6), where supply constraints are acute. In the case of Auckland, the ratio of listings to sales remains at lows not seen since 2003 (figure 4.7). House price inflation has been more modest in other regions, but has been increasing.

The strengthening in the housing market and in economic conditions more generally has contributed to increased household spending (figure 4.8, opposite). Increases in household spending have also been supported by the high level of the New Zealand dollar, discounting by retailers (both of which have boosted households’ real spending power), and low interest rates. Spending has increased across a range of household goods and services, not just those associated with the housing market.
External sector

In aggregate, economic growth in New Zealand’s trading partner economies has continued at a moderate pace. However, the pace of growth differs by region and a number of challenges remain, particularly in developed economies. In the United States, real GDP grew by 1.8 percent in the year to the March quarter (figure 4.10) with household consumption and the housing market both strengthening. However the unemployment rate remains elevated at 7.5 percent, and fiscal consolidation will weigh on growth over the coming year. Economic conditions in Japan have improved, with quarterly GDP growth lifting in recent quarters. In contrast, conditions in the euro area remain poor with continuing financial instability, political uncertainty and high rates of unemployment.

Stronger domestic demand has resulted in increased business confidence, with related increases in investment intentions. There has also been continued gradual improvement in the labour market with the number of filled jobs in the Quarterly Employment Survey increasing by 2 percent in the year to the March quarter (figure 4.9). While it has been volatile in recent quarters, employment as measured by the Household Labour Force Survey also increased in the March quarter.

Figure 4.8
Retail sales growth and house price inflation (annual)

Source: Statistics New Zealand, REINZ.

Figure 4.9
QES filled jobs growth

Source: Statistics New Zealand.

While overall global activity has been recovering at a moderate pace, the composition of global growth has changed since before the financial crisis. New Zealand has benefited from its close and growing ties with faster growing economies in the Asia-Pacific region, which now make up a larger share of global trade. In Asia, growth has stabilised after it had slowed markedly over the past 18 months (figure 4.11, overleaf). Encouragingly for New Zealand’s commodity exports, domestic demand in the region remains firm.

The Australian economy grew by 2.5 percent over the year to the March 2013 quarter. In recent years, growth has been supported by large increases in investment in the mining sector. However, while investment spending remains at a high level, the impulse this is providing...
for growth has moderated. In addition, the non-mining business sector remains weak, and the unemployment rate has increased somewhat in recent quarters.

New Zealand’s direct trade exposure to Australia’s mining sector is limited, with exports to Australia oriented towards the household and construction sectors. Encouragingly, there is some evidence that lower interest rates are flowing through to the Australian household sector, with recent increases in household spending and some strengthening in the housing market.

Figure 4.11
GDP growth in selected Asia-Pacific economies (annual)

The gradual pace of growth in developed economies in recent years has dampened global inflation. With global trade volumes relatively flat over the past two years, prices of consumer durables and other manufactured products have been particularly soft.

Global conditions continue to drag on the New Zealand economy, particularly through their impact on the New Zealand dollar. The New Zealand economy has performed well relative to many major economies in recent years, and demand for our commodity exports has resulted in the terms of trade rising to levels well above those that prevailed during the 1990s. In addition, the more robust outlook for the domestic economy has resulted in higher interest rates in New Zealand than in most of our trading partner economies. Central banks in countries representing around two thirds of world output currently have official interest rates between 0 and 1 percent. Furthermore, various types of quantitative easing policies have added more than USD 5 trillion of assets to central bank balance sheets over the past four years. These conditions helped to push the New Zealand dollar to a post float high in April of this year. Although it has since retraced some of its recent increases, the New Zealand dollar remains elevated and the real effective exchange rate is about 18 percent above its 15 year average.

The high New Zealand dollar has negatively affected the New Zealand economy through a number of channels, including dampening export receipts. While increases in global export prices have provided dairy exporters with some insulation from recent strength in the New Zealand dollar, global prices for other commodities have been largely steady. Strength in the New Zealand dollar has eroded returns to these producers.

Figure 4.12
Export commodity prices (monthly)

The strength in the New Zealand dollar has also reduced the competitiveness of exporters. Manufactured export volumes have grown by very little in recent years, and exports of travel services (particularly tourism) have continued to decline (figure 4.13, opposite). In the case of the manufacturing sector, other factors have also had a significant dampening impact on production. This includes softness in global demand and strong competition from emerging economies. Indeed, as in New Zealand, manufacturing has been declining as a share of GDP in many developed economies.
meat production, with lower slaughter weights and a commensurate reduction in export volumes. Combined with the impact on sectors such as electricity generation, drought conditions are estimated to have reduced growth over the first half of the year by around 0.5 percentage points.1

While drought will have a significant impact on agricultural production, the net effect on overall farm incomes will be less severe. This is because drought conditions contributed to strong increases in global dairy prices in early 2013, with GlobalDairyTrade prices up around 60 percent in the four months to April (though prices have now retracted some of these earlier gains – figure 4.15). Nevertheless, drought will still have significant adverse impacts on certain sectors and regions.

Figure 4.13
Export volumes
(seasonally adjusted, 2006 Q1=100)

The high exchange rate has also dampened the price of imports, and encouraged substitution towards these goods and services by New Zealand consumers (figure 4.14). This has resulted in challenging trading conditions for import-competing firms.

Figure 4.14
Real import share of GDP
(seasonally adjusted)

The strong New Zealand dollar has also had some positive effects. As noted above, it has reduced the costs of imports and boosted the purchasing power of New Zealand households and firms. The dampening impact of the New Zealand dollar on tradables inflation has meant that interest rates have been lower than would otherwise have been the case.

In addition to the challenges posed by the elevated New Zealand dollar, the tradable sector has also been adversely affected by drought this year. Drought resulted in a sharp reduction in milk production in the second half of the 2012/13 dairying season. It also constrained

Cyclical and inflationary pressures

As domestic activity has strengthened, it appears that much of the spare capacity that accumulated in the economy following the financial crisis has now been brought back into productive use. Various survey measures of resource pressures, including the proportion of firms citing capital or a lack of demand as major constraints, have tightened (figure 4.16, overleaf). In addition, there has been some tightening in indicators of labour market pressure, such as the proportion of firms noting difficulty

1 This estimate is in line with recent research by C McDonald, G Price and G Kamber “Drying out: Investigating the economic effects of drought in New Zealand” (Analytical Note AN 2013/02) to be released shortly.
finding labour. Some spare capacity remains in the labour market, however, with the unemployment rate being 6.2 percent in the March quarter.

**Figure 4.16**
Surveyed capacity pressures (seasonally adjusted, standardised)

Inflation is very low, with the CPI increasing by 0.9 percent in the year to March. Inflation is expected to remain low through mid-2013, and forecasts for near term inflation are slightly lower than anticipated at the time of the March Statement. This softer near-term outlook is due to the sharp decline in petrol prices in recent months (figure 4.17). Excluding petrol prices, the near-term inflation outlook remains subdued, but is largely unchanged from the time of the March Statement.

**Figure 4.17**
Petrol prices

Even excluding movements in the prices of volatile items such as fuel, weakness in tradables inflation has been a major contributor to softness in headline inflation (figure 4.18). Well contained global inflationary pressures and the strength of the New Zealand dollar have contributed to this weakness. The impact of these factors has been reinforced by discounting among domestic retailers. There has been particular softness in the retail prices of imported durable items such as audio-visual equipment, recreational equipment and appliances. These factors are expected to continue to dampen tradables inflation through 2013 (figure 4.18). The factors influencing tradables inflation are discussed in box C.

**Figure 4.18**
Headline, tradables and non-tradables inflation (annual)

Non-tradables inflation has also been subdued, reflecting the level of excess capacity in recent years and limited pressures on input costs, including wages. In addition, low levels of headline inflation over the past year have resulted in marked declines in inflation expectations (figure 4.19), which have further dampened businesses’ pricing behaviour. Competitive pressures in sectors such as telecommunications have also dampened non-tradables inflation.

**Figure 4.19**
Inflation indicators

Even excluding movements in the prices of volatile items such as fuel, weakness in tradables inflation has been a major contributor to softness in headline inflation (figure 4.18). Well contained global inflationary pressures and the strength of the New Zealand dollar have contributed to this weakness. The impact of these factors has been reinforced by discounting among domestic retailers. There has been particular softness in the retail prices of imported durable items such as audio-visual equipment, recreational equipment and appliances. These factors are expected to continue to dampen tradables inflation through 2013 (figure 4.18). The factors influencing tradables inflation are discussed in box C.
Although aggregate non-tradables inflationary pressures are subdued, some pockets of pressure have emerged. These pressures are centred on demand for accommodation in Canterbury, with strong increases in rental accommodation costs and building costs (figure 4.20). At this stage, spillover from these price increases to other regions and sectors appears to have been limited.

Figure 4.20
Regional construction costs (annual)

Source: Statistics New Zealand.
Box C
Why has tradables inflation been so low?

The Bank regularly reviews its forecasting processes. As part of this process, the Bank has recently examined how it forecasts inflation in the prices of tradable goods and services. Over the past 18 months, tradables inflation was lower than the Bank and private sector forecasters expected (figure C1), and was the main contributor to lower-than-expected headline inflation over this period. Recent weakness in tradables inflation can partly be accounted for by the greater-than-anticipated appreciation of the New Zealand dollar (figure C2), as well as contained global inflationary pressures. However, other factors have also played a role. In particular, subdued domestic demand and the elevated level of the New Zealand dollar have dampened tradables inflationary pressures.

Figure C1
Tradables inflation forecasts (annual)

Source: Statistics New Zealand, RBNZ estimates.

The elevated level of the New Zealand dollar (as well as the change in the exchange rate) has had a dampening impact on tradables inflationary pressures. Persistent strength in the exchange rate results in imported input costs staying low for a prolonged period. As a result, retailers are likely to be more confident about passing reductions in wholesale costs though to selling prices. Businesses have also noted that the high level of the New Zealand dollar has contributed to strong competitive pressures, and reductions in pricing power.

These conditions have had a pronounced impact on inflationary pressures in the tradable sector, and the Bank expects that they will result in tradables inflation remaining subdued for an extended period.
The macroeconomic outlook

Annual GDP growth is expected to accelerate to about 3.5 percent in the second half of 2014, before moderating thereafter. Continued low interest rates and rebuilding in Canterbury are expected to remain key factors supporting economic output, with increasing investment and household spending contributing to higher GDP growth over the next couple of years. However, these factors are partly offset by fiscal consolidation and the elevated New Zealand dollar, which dampen economic activity over the projection.

As the domestic economy strengthens, resource pressures are expected to build, resulting in increased inflation in the non-tradables sector. Inflation in the tradables sector is also expected to increase (though remain low), reflecting an assumed modest depreciation of the New Zealand dollar. Combined with inflation expectations that are assumed to remain anchored near 2 percent, headline CPI inflation is projected to increase gradually towards 2 percent over the medium term.

Outlook

GDP growth is expected to accelerate to about 3.5 percent in the second half of 2014, supported by increasing investment spending. A key contributor to this increase is the acceleration of post-earthquake reconstruction in Canterbury. The total cost of reconstruction is now projected to be $40 billion (in 2013 dollars), revised up from $30 billion (in 2011 dollars) in the March Statement. This update is consistent with that published in the Government’s May Budget. This reflects higher forecasts of repair and rebuilding costs for residential properties, and revised planned expenditure for repairing and rebuilding of commercial properties.

There remains considerable uncertainty around the cost and timing of reconstruction. Most of the upward revision to the Bank’s reconstruction forecast is assumed to occur in the latter part of the rebuild process. The updated timing profile assumes that rebuilding activity will peak in 2016 and 2017 and continue for a number of years thereafter (figure 5.1).

Residential investment elsewhere in New Zealand is expected to recover from currently subdued levels. This growth is supported by continued low interest rates, robust house price inflation and modest population growth — including positive net immigration flows. Combined with reconstruction in Canterbury, total construction expenditure is expected to increase substantially over the projection (figure 5.2).

High annual house price inflation is forecast to persist over the next year and peak at around 10 percent in early 2014 (figure 5.3). This momentum is driven by limited increases in residential investment to date, pent-up demand for housing, and low mortgage interest...
rates. Beyond 2014, annual house price inflation is assumed to ease, reflecting an increase in the housing stock, gradual removal of monetary stimulus, and worsening housing affordability.

Figure 5.3
House price inflation (annual)

The increase in domestic production will continue to support a gradual recovery in the labour market. Employment is expected to continue to grow modestly, but with relatively stronger growth expected in Canterbury. Net immigration is expected to remain high over the projection, reflecting both increased arrivals (in part, in response to the considerable labour demands from the Canterbury rebuild) and a moderation in departures due to the relatively strong outlook for the New Zealand economy. Overall, the unemployment rate is projected to decline to around 5 percent over the next few years (figure 5.4).

Figure 5.4
Unemployment rate (seasonally adjusted)

The outlook for household consumption is expected to be dampened by continued fiscal consolidation. The May Budget reaffirmed the Government’s plans to return the fiscal balance to zero by 2014/15, and to continue to reduce government debt thereafter. Government revenue will increase as the economy strengthens and also through increases in indirect taxes. On-going increases in excise taxes on tobacco and petrol will increase annual CPI inflation by 0.3 percentage points per annum for the next three years, dampening households’ real income.

Limited growth in government transfer spending will further constrain household income growth over the
projection. In particular, the Government has previously announced tighter access to social welfare and student support packages, and reduced contributions to KiwiSaver. In addition, public consumption is projected to decline as a share of GDP over the next few years.

Fiscal consolidation will be a significant headwind to domestic demand over the projection (figure 5.6). However, the downward pressure that this places on inflation is partly offset by the increases in indirect taxes.

Figure 5.6
Fiscal impulse
(June years, share of nominal GDP)

![Fiscal impulse graph]

Source: The Treasury.
Note: Fiscal impulse is total Crown excluding EQC and Southern Response reinsurance payments to the Crown.

Business investment is projected to increase as a share of GDP over the next few years. Firm profitability is expected to improve and capacity pressures will likely build as the economy strengthens. As a result, businesses are likely to increase their investment spending, which has been at depressed levels for the last few years.

External demand

Economic growth across New Zealand’s main trading partners is forecast to be around average in 2013, with a gradual recovery through the remainder of the projection period (figure 5.7).

Annual GDP growth in China is expected to remain around its recent rate of 7.8 percent. There has been little additional stimulus from the Chinese Government to date, signalling that authorities may be comfortable with this pace of growth as they move ahead with their reform agenda.

Stronger projected growth in Asia (ex-Japan) comes from improving export growth, supported by relatively high growth in China and a gradual recovery in global demand. In Japan, growth and inflation are expected to increase gradually, though the degree of improvement will depend on the effectiveness of easier monetary policy and fiscal stimulus measures, and progress on structural reforms.

In Australia, growth is expected to be below trend in 2013 as resource investment reaches its peak, and as economic conditions outside of the resource sector remain relatively subdued. The profile of investment spending over the next few years remains uncertain and there is a risk that resource investment could decline sharply. If output in other sectors does not increase sufficiently to offset weaker activity in the resource sector, aggregate GDP growth could weaken markedly. Interest rate cuts over the past 18 months are expected to lead to stronger growth in consumption and residential investment, supporting activity in the wider economy.

The euro area continues to face significant economic challenges with fiscal consolidation continuing to weigh on growth through the projection. Progress on structural reform and resolution of financial system issues remains important for improving sentiment and establishing a foundation for future growth in the region. Deterioration in financial conditions continues to be an on-going risk to growth in the euro area.
In the United States, the bulk of fiscal consolidation is expected to take place in 2013. Economic growth is expected to increase from 2014 as fiscal consolidation eases and conditions in the wider economy improve, led by a recovery in the housing market. However, because of political negotiations around the budget and the debt ceiling, there remains some uncertainty as to the degree of fiscal consolidation that will take place.

Despite continued slack in major Western economies, robust demand growth in developing Asian economies is expected to support the prices of New Zealand’s exported commodities. As a result, New Zealand’s terms of trade are expected to remain high over the medium term and continue their modest upward trend (figure 5.8). As discussed in chapter 4, dairy prices increased substantially in early 2013, though these increases are expected to be short-lived. Nonetheless, increases in dairy export prices are expected to underpin a substantial improvement in the terms of trade in 2013.

Figure 5.8
SNA terms of trade (seasonally adjusted)

The soft outlook for the major Western economies and stimulatory policy support in these countries are assumed to contribute to the New Zealand dollar TWI remaining elevated over the projection (figure 5.9). Over the medium term, the TWI is assumed to moderate gradually as policy support in some major economies is eventually withdrawn.

The elevated New Zealand dollar is likely to continue to reduce export receipts and dampen growth in export volumes. Exports of services are assumed to remain weak, though robust growth in primary exports is expected to underpin overall export volumes. It would also encourage substitution towards imported goods and services, and is assumed to remain a key factor underpinning high import penetration over the next few years (figure 5.10). The projected recovery in business investment will also contribute to higher import volumes.

Figure 5.9
New Zealand dollar TWI

Figure 5.10
Import share of GDP (seasonally adjusted)

The annual current account deficit is projected to widen to 6 percent of GDP over the next few years. Fiscal consolidation will lean against this widening. However, we project only a very modest improvement in private saving which is more than offset by the considerable increase in investment (figure 5.11). While in part this is due to reconstruction in Canterbury, it also reflects increases in other residential investment and business investment. New Zealand’s net foreign liabilities are projected to rise to about 78 percent of GDP by the end of the projection.
Inflationary pressures

Tradables inflation is forecast to increase modestly from its current subdued rate as the New Zealand dollar begins to depreciate. Increases in petrol excise taxes will also add to tradables inflation. Nonetheless, assumed persistence in the New Zealand dollar is expected to contribute to tradables inflation remaining low over the projection.

Figure 5.12
Output gap (share of potential GDP)

At the same time, the domestic economy is assumed to strengthen. The forecast increases in construction investment and household spending are expected to outweigh the negative influences on the real economy from fiscal consolidation and the high New Zealand dollar. Overall, resource pressures in the economy are expected to accumulate (figure 5.13), particularly in the construction sector, resulting in an increase in domestic inflationary pressure. In addition, increases in tobacco taxes will add around 0.2 percentage points to annual non-tradables inflation.

Inflation expectations are assumed to remain anchored at around 2 percent over the medium term (having fallen in recent years). Combined with an increase in domestic inflationary pressures and increases in tradables inflation, this results in annual CPI inflation increasing gradually to around 2 percent over the next two years (figure 5.13).

Figure 5.13
Headline, tradables and non-tradables inflation (annual)
Appendix A
Summary tables

Table A
Projections of GDP growth, CPI inflation and monetary conditions
(CPI and GDP are percent changes, GDP seasonally adjusted)

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1 Notes for these tables follow on pages 32 and 33.
### Table B

**Measures of inflation, inflationary pressures and asset prices**

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¹ Percentage point contribution to the growth rate of GDP.
### Table D
Summary of economic projections

*(annual percent change, unless specified otherwise)*

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<td>Trading partner GDP (annual average % change)</td>
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<td>1.8</td>
<td>2.2</td>
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Notes to the tables

CPI
Consumer Price Index. Quarterly projections rounded to one decimal place.

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

Export prices

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

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

Exports of goods and services
System of National Accounts.

Imports of goods and services
System of National Accounts.

GDP (production)

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. Historical source: The Treasury. Adjusted by the Reserve Bank over the projection period.

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  \((\text{Quarter/Quarter}, - 1)*100\)

Annual percent change  \((\text{Quarter/Quarter}, - 1)*100\)

Annual average percent change  \((\text{Year/Year}, - 1)*100\)

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

Air New Zealand Ltd
Anton’s Seafood Ltd
Amalgamated Builders Ltd
Arthur Barnett Ltd
ASB Property Finance Services (Christchurch)
Auckland Chamber of Commerce
Auckland Council
Augusta Group Ltd
Barfoot & Thompson Ltd
Bayleys Realty Group Ltd
Bellingham Wallace Ltd
Canterbury Development Corporation (CDC)
Canterbury Earthquake Recovery Authority (CERA)
CBRE New Zealand
Colliers International NZ Ltd
Contact Energy Ltd
Delta Utility Services Ltd
Downer Ltd
Dunedin City Holdings Ltd
Earthquake Commission (EQC)
Fisher and Paykel Appliances Ltd
Foley Plumbers Ltd
Fonterra Co-Operative Group Ltd
Gough Group
Hancocks Ltd
Harcourts Group Ltd
Harris Home Fires Ltd
Heartland New Zealand Ltd
Kirkcaldie and Stains Ltd
KPMG Audit and Risk Advisory Services Ltd
LJ Hooker New Zealand Ltd
MacRennie Commercial Construction Ltd
Motor Trade Finance Ltd
National Aluminium Ltd
Orion New Zealand Ltd
Otago Chamber of Commerce
Port of Otago Ltd
Progressive Enterprises Ltd
Silver Fern Farms Ltd
Steel and Tube Holdings Ltd
Subaru of New Zealand Ltd
Tecpak Industries Ltd
Telecom Ltd
The Fletcher Construction Company Earthquake Recovery
The Neil Group Ltd
Tonkin and Taylor Ltd
Villa Maria Estate Ltd
Wellington Employers’ Chamber of Commerce
Appendix C
The Official Cash Rate chronology

<table>
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<th>Date</th>
<th>OCR (percent)</th>
<th>Date</th>
<th>OCR (percent)</th>
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<th>OCR (percent)</th>
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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.

2013
25 July 2013 OCR announcement
12 September 2013 Monetary Policy Statement and OCR announcement (Media conference and webcast)
31 October 2013 OCR announcement
12 December 2013 Monetary Policy Statement and OCR announcement (Media conference and webcast)

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)
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

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.

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

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.

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

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.

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

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.

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.

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

Hon Bill English
Minister of Finance

Graeme Wheeler
Governor Designate
Reserve Bank of New Zealand

Dated at Wellington 20 September 2012