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# Monetary Policy Statement

September 2010<sup>1</sup>

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

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<sup>1</sup> Projections finalised on 3 September 2010. Policy assessment finalised on 15 September 2010.

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# 1 Policy assessment

The Official Cash Rate (OCR) remains unchanged at 3.0 percent.

While the global and domestic economies continue to recover, the outlook has weakened since our June Statement. We consider it appropriate at this point to keep the OCR on hold.

The earthquake that struck Canterbury on 4 September has significantly disrupted economic activity and is likely to continue to do so for some time yet. Many homes and businesses have been damaged, as have significant parts of Canterbury's public infrastructure. Eventual reconstruction and repairs will require considerable resources over the next year or two, particularly in the construction sector. If, in the aftermath of the earthquake, the prices of some goods and services increase temporarily, monetary policy would remain focused on the medium-term trend in inflation. The Policy Targets Agreement explicitly instructs the Bank to look through temporary price increases generated by a natural disaster.

Looking more generally at the domestic economy, the household sector remains cautious, with consumer spending soft, house sales falling and house prices remaining flat. With continued soft demand for credit, this suggests household spending will not increase to the extent previously projected.

The pace of expansion in the global economy appears to have slowed in recent months with forward indicators of US growth, in particular, deteriorating noticeably. Nevertheless, continued strong growth in Australia and China will support demand for New Zealand exports, reinforcing the continued contribution of high export commodity prices.

Overall, despite the weakened outlook, we still expect that growth will progressively absorb current surplus capacity over the next few years. In addition, changes to indirect taxes and earthquake impacts will cause headline inflation to spike higher over the coming year. Previous experience of GST increases, the fact that annual CPI inflation has been near 2 percent for the past year and a half, and the subdued state of domestic demand suggest this inflation spike will have little impact on medium-term inflation expectations.

Over time, it is likely that further removal of monetary policy support will be required. The pace and extent of further OCR increases is likely to be more moderate than was projected in the June Statement.

Alan Bollard



Governor

## Box A

### The economic impact of the Canterbury earthquake

The earthquake that struck Canterbury on the morning of September 4 has caused significant loss and trauma. It will also impact economic activity in Canterbury, but potentially elsewhere in New Zealand. This box discusses the likely channels through which the earthquake will affect the economy over the coming couple of years, and provides an initial estimate of how the pattern of growth could be affected over the next year or so. The Canterbury region represents about 15 percent of the national economy and material changes in economic activity there will show up at a national level. While GDP is likely to be higher than otherwise during the reconstruction period, it is important to stress that in aggregate New Zealand is worse off, not better off as a result of the earthquake.

The earthquake has caused considerable damage to buildings and other assets like water and waste systems and roads. Estimates of the cost of this damage are subject to considerable uncertainty and will inevitably be revised.

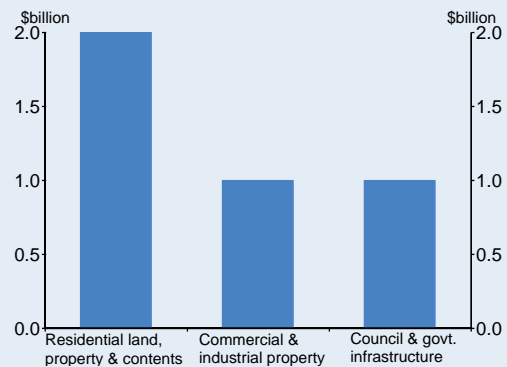
The Earthquake Commission (EQC) has estimated its exposure to be in the range of \$1 billion to \$2 billion, with a figure toward the upper end of this range most likely. Earlier this week around 50,000 claims had already been lodged, including 2,000 that were likely to have damage exceeding \$100,000. About 25 percent of claims are likely to be for minor or contents-only damage. According to the 2006 Census there are approximately 220,000 dwellings in the Canterbury region.

Using the EQC estimate as a starting point, the estimates below of the effect on GDP assume damage of \$2 billion to residential land, property and contents. This compares with a capital value of around \$60 billion for residential property across the Christchurch City, Selwyn District and Waimakariri District council areas.

There has also been substantial damage to commercial property and infrastructure especially within Christchurch's central business district. The capital value of commercial and industrial property, and infrastructure assets, across the three council areas is about \$15 billion and \$4.6 billion respectively. On top of this are central government-owned

assets like schools. Damage of \$2 billion across commercial and central and local government assets is assumed for the GDP estimates presented below.

Figure A1  
Assumed damage estimates



Source: RBNZ estimates.

This \$4 billion estimate of damage to assets compares to an economy-wide net capital stock, excluding land, of over \$560 billion and annual gross investment of \$37 billion.

While Canterbury's productive capital stock has been damaged, this does not appear large enough to have a sustained material impact on the supply potential of the national economy. Retail and business services along with infrastructure provision (water and waste) have been the hardest hit. At this stage, there are few signs of significant losses of production capacity in the export sector, with agriculture and manufacturing activity continuing. This assessment might change if the damage to irrigation infrastructure on farms were to materially reduce agricultural production over the summer.

Household and business spending has been curtailed as a result of the earthquake. A number of shops and other workplaces remain closed and continued uncertainty about future earnings will dampen spending in the weeks ahead. Real estate activity will also likely be significantly reduced given uncertainty about the condition of buildings, market values and insurance coverage. As economic activity heads back to normal levels, there will be a boost to growth.

Activity will be further lifted as households and firms replace damaged household contents and stocks.

The strongest boost to activity is likely to occur in the construction sector as repairs and reconstruction of residential and non-residential buildings and infrastructure take place. Rebuilding will likely be spread over a number of years given the likelihood of some delays in getting consents and time needed to ensure finance is in place. Moreover, some property owners may choose not to rebuild given the cost of higher building standards and in the case of commercial owners, uncertainty over finding tenants. Some previously planned work may also be delayed.

Goods exports are likely to be little changed, although there could be some negative impact on tourism if the earthquake discourages visitors. Imports of construction materials and consumer durables will be higher, meaning that the boost to GDP growth is likely to be less than the overall lift in domestic spending that takes place.

The impact on the current account of higher imports is likely to be partly or fully offset by payments received from foreign re-insurance companies. The financial account will also see increased inflows as EQC liquidates some of its foreign asset holdings. The net international asset position of New Zealand will deteriorate slightly as a result of the fall in assets and any extra borrowing the Government has to undertake.

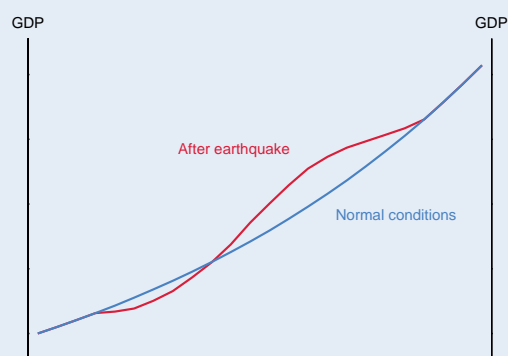
The financial cost of the earthquake will be spread across households, businesses, local and central government, and local and foreign insurance companies. Households will be largely covered by EQC and private insurance although there will be some under- and non-insurance (particularly of contents). Similarly, most, but not all, businesses will be insured for both business disruption and physical damage. To the extent some households and businesses come under financial stress there may be some modest impact on banks and other financial institutions. In contrast, domestic insurance companies should be relatively well insulated given most of their payouts will be covered by re-insurance. The majority of the financial and wealth loss of the earthquake will be borne by central government and foreign re-insurance companies. Local government is also likely to bear a substantial cost.

Taking all of the above into account, the Bank has made a preliminary assessment of the possible impact on GDP over the short and medium term. There is considerable uncertainty around these estimates, including the possibility that economic statistics will not be able to fully measure actual developments.

Economy-wide September quarter GDP growth could be about 0.3 percent lower than otherwise would have been the case. This estimate is based on assumptions about lost production in the main affected industries, particularly retail and wholesale services, and real estate and business services, with some small offset coming from construction and government sector activity.

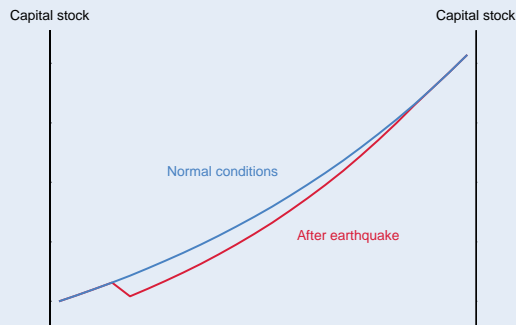
Growth in the December quarter will be higher as economic activity recovers and rebuilding gets underway. A further lift is likely in the March quarter. As reconstruction takes place the level of GDP will likely move above what would have prevailed in the absence of the earthquake. Assuming around two-thirds of the rebuilding takes place, over the next year and the remainder in the following year, the level of GDP could be  $\frac{1}{2}$  to 1 percent higher in March 2012, depending on how much activity is displaced and how much of the extra activity is met out of imports. Figures A2 and A3 show a stylised representation of how the earthquake will change the level of GDP and the capital stock. It is important to note that while GDP is higher as a result of the earthquake, this extra activity reflects repairs to the capital stock, not a net improvement in the wealth of New Zealanders.

**Figure A2**  
**Stylised impact of earthquake on real GDP**



Source: RBNZ estimates.

**Figure A3**  
**Stylised impact of the earthquake on the capital stock**



Source: RBNZ estimates.

Some temporary increase in prices can be expected to follow on from the earthquake. Two of the most obvious areas are construction costs and private rents.

Construction sector activity has been relatively weak and there appears to be significant excess capacity in the industry. The additional demand resulting from rebuilding activity in Canterbury will absorb a significant proportion of that excess capacity over the next 12-18 months. Pressures will be most concentrated in Canterbury itself, but some additional pressure is likely to occur across the whole country. While this could drive up construction costs, these should moderate once the rebuilding phase passes. Building costs make up 5.5 percent of the CPI.

**Table A1**  
**Illustrative scenarios of possible CPI effects**

CPI components	Change in Component	Effect on CPI
Construction Costs (5.5 percent of CPI)	Canterbury: every 5 percentage points increase gives	+0.04%
	Rest of NZ: every 5 percentage points increase gives	+0.24%
Private rents (7.9 percent of CPI)	Canterbury: every 2.5 percentage points increase gives	+0.06%

Source: Statistics New Zealand, RBNZ estimates.

It is also likely that through the rebuilding period, private residential rents in Canterbury will be a little higher than otherwise. Private rents account for 7.9 percent of the CPI. Again, the effects should not be permanent.

Table A1 sets out some illustrative scenarios of how sensitive the CPI is to various possible combinations of price increases.

In addition, if the cost of international reinsurance increases, the cost of house and contents insurance policies in Canterbury – and potentially elsewhere in New Zealand – could increase. House and contents insurance accounts for about 0.4 percent of the CPI.

Successive Policy Targets Agreements have recognised that natural disasters can temporarily affect headline CPI inflation. A sharp temporary boost (or cut) to inflation influences monetary policy only to the extent that the medium-term trend in inflation is affected. At present, there is little reason to expect that the medium-term outlook for inflation will change as a result of the earthquake.

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## 2 Overview and key policy judgements

The earthquake that struck Canterbury on the morning of 4 September has caused significant damage and trauma. It will also impact economic activity in Canterbury, and potentially elsewhere in New Zealand. Today's policy decision allows for the Bank's initial assessment of the earthquake's economic impact – notwithstanding that the projections underlying this *Statement* were finalised on 3 September.

The earthquake has significantly disrupted economic activity over the past 12 days. While most businesses are now operational, negative impacts are likely to persist for some weeks yet. Offsetting this, eventual rebuilding of homes and businesses will provide a sizeable future boost to Canterbury's construction industry. Furthermore, restocking by businesses and the replacement of household items is likely to boost spending more generally. Much of this expenditure will be financed by insurance payouts.

It is possible that this reconstruction and restocking will cause inflation to be higher over the coming year than is forecast in this *Statement*. If this were to occur, monetary policy would remain focused on the medium-term trend in inflation. Indeed, the Policy Targets Agreement instructs the Bank to ignore any direct movement in inflation generated by a natural disaster. A more detailed assessment of the qualitative impact of the earthquake is made in box A.

More generally, the outlook for economic growth, both here and abroad, has softened since the publication of the June *Statement*. However, growth in exports is expected to support GDP growth over the coming year, with stronger business investment and an eventual recovery in household spending underpinning expansion beyond this. Gradual removal of monetary policy support is expected to offset the resultant modest pick up in inflationary pressure, such that underlying annual CPI inflation tracks close to the midpoint of the target band over the latter part of the projection.

Global activity continued to recover through to the middle of the year, with most of New Zealand's trading partners showing robust growth in the June quarter. However, the pace of expansion appears to have slowed since then, with private sector demand in many Western economies struggling to replace the impact of previous fiscal stimulus. Most obviously, forward indicators of US growth have deteriorated noticeably over the past few months.

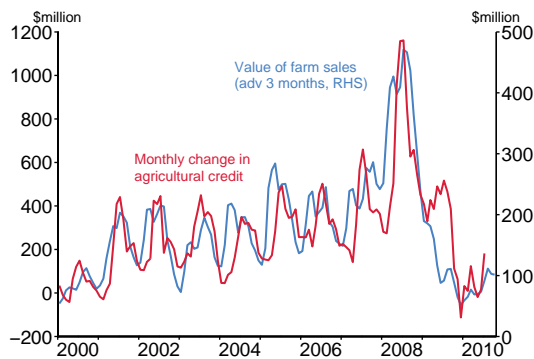
It was expected that global growth would slow as the impact of previous fiscal stimulus faded. Nonetheless, this recent softening appears more marked than was forecast in the June *Statement*. The Bank is mindful that the outlook could deteriorate further, but for now it seems that trading partner GDP growth will be robust over the medium term. This outlook reflects an expectation of continued strong growth in Australia and China, as well as an assumption that New Zealand exporters will continue to shift their focus towards the Asia Pacific region.

Despite signs of a weakened global outlook, New Zealand's export commodity prices remain very strong. These high prices are starting to show through in export earnings with merchandise trade in surplus for much of 2010. Export earnings are likely to remain elevated as high spot commodity prices are more fully reflected in export contracts.

Farm incomes will soon benefit substantially from these higher earnings, with Fonterra's current season milk price well up on that for 2009/10. For now though, cash flow remains tight, with the agricultural sector highly indebted and many areas still recovering from poor climatic conditions over the past two seasons. Furthermore, due to a likely global supply response and slowing global growth, it is expected that export commodity prices will moderate over the projection horizon. Given the implied temporary nature of current high prices, along with an assumption that the New Zealand dollar will depreciate slowly, it seems likely that farmers will continue to attempt to pay off debt rather than increase spending. Such caution is clearly apparent in farm real estate, with few farm sales and agricultural credit growing only modestly (figure 2.1).

Other businesses also remain cautious, with the limited capital expenditure aimed at maintaining rather than expanding productive capacity. Those firms that have expanded output appear to have done so largely by hiring more staff and increasing their use of existing capital. Indeed, a broad look at labour market data shows that employment has tracked higher since the start of the year (see box D). Unemployment is likely to continue to decline modestly over the projection, albeit from a higher starting point than was assumed in the June *Statement*. While reconstruction activity in Canterbury could boost non-residential investment over

**Figure 2.1**  
**Agricultural credit and farm sales**  
*(three-month moving average)*



Source: REINZ, RBNZ.

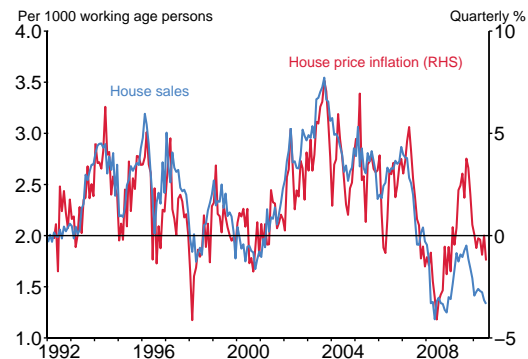
the coming year, a strong pick up in business investment more generally seems unlikely over this time.

The outlook for household spending has deteriorated since June. While retail spending and household credit have continued to grow modestly, persistent housing market weakness suggests private consumption will not improve to the extent previously projected. The current disruption to economic activity in Canterbury is likely to have a significant short-term impact on retail spending in the region.

House sales remain very low and house prices appear to be falling. While prices are expected to decline only modestly from here, there is a risk of a more noticeable decrease. Over the past two years, house price inflation has held up relative to house sales (figure 2.2). However, the recent moderation in net immigration and increase in residential building activity suggests house price inflation could decline to a rate more consistent with the current level of housing turnover. Such deterioration could have a noticeable negative impact on household spending.

Growth in government spending and investment is also expected to be relatively weak over the projection. Substantial fiscal stimulus helped cushion the economy over the past few years. However, the unwinding of the large structural fiscal deficit that this support generated is likely to subtract from growth for some years.

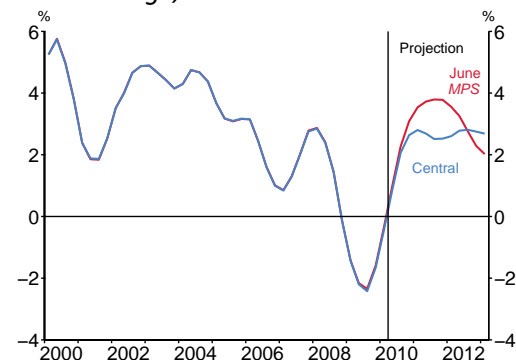
**Figure 2.2**  
**House sales and house price inflation**  
*(seasonally adjusted)*



Source: REINZ, Statistics New Zealand.

In aggregate, due to recent declines in house prices and continued sluggishness in household spending within New Zealand, along with the deteriorated international outlook, the outlook for GDP growth has softened since the June *Statement* (figure 2.3). Despite this weakened outlook, it still seems likely that GDP growth will be sufficient to progressively eliminate current surplus productive capacity. Growth in exports is expected to support growth over the coming year. Beyond this, business investment is likely to recover more rapidly, and household spending is forecast to increase.

**Figure 2.3**  
**GDP growth**  
*(annual average)*



Source: Statistics New Zealand, RBNZ estimates.

## Box B

### Recent monetary policy decisions

The OCR was held at a record low 2.5 percent from the April 2009 OCR review through to the June 2010 *Statement*.

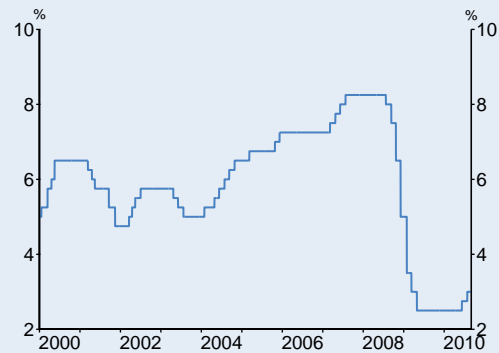
This extraordinarily low OCR was appropriate given the extent to which the New Zealand economy contracted and inflationary pressures abated during the 2008/09 recession. Indeed, policy stimulus appears to have helped prevent inflation falling excessively, with annual CPI inflation estimated to have remained near the centre of the target band for the past year and a half.

Economic activity has increased steadily over the past year, both domestically and abroad. While future growth is likely to be modest, underlying inflationary pressure is expected to pick up from its current muted level as the

economy moves into its second year of expansion. Because of this, the OCR was increased by 25 basis points at each of the June *Statement* and July OCR review (figure B1). The level of the OCR remains supportive of economic activity.

Figure B1

#### Official Cash Rate



Source: RBNZ.

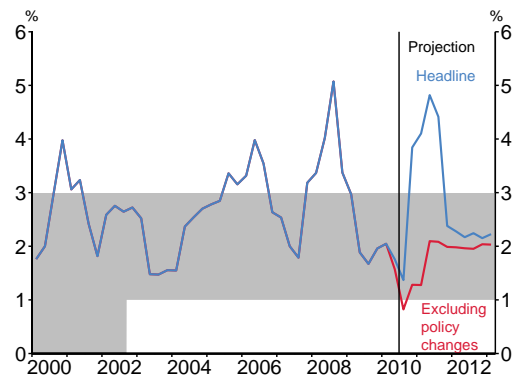
The pace of economic expansion is expected to be subdued over the projection horizon relative to that of the past decade, reflecting tighter credit conditions and attempts to reduce debt. The composition of growth is also likely to feel quite different to recent history, with export growth relatively good and retail spending very weak.

Continued GDP growth will see current spare resources gradually brought into productive use. This increase in resource utilisation is expected to be quite drawn out, with the unemployment rate holding above 5 percent for the foreseeable future. Nonetheless, inflationary pressures are likely to increase from current muted levels as spare capacity is eliminated.

Changes to indirect taxes will cause headline CPI inflation to increase over the coming year (figure 2.4). This inflation spike is expected to have little impact on wage and price setting behaviour or medium-term inflation expectations. However, underlying inflationary pressure is still likely to increase over the projection. Gradual removal of monetary policy support is expected to offset this pick-up such that annual CPI inflation, excluding the direct effects of recent government policy changes, tracks close to the midpoint of the target band over the latter part of the projection.

Figure 2.4

#### CPI inflation (annual)



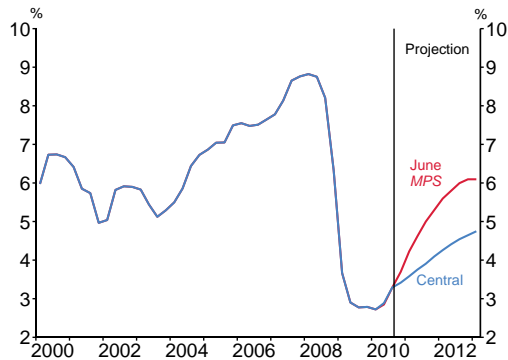
Source: Statistics New Zealand, RBNZ estimates. 'Excluding policy changes' is the Bank's CPI inflation projection excluding the direct impact of the increase in the rate of GST, the incorporation of the stationary energy and liquid fuel sectors to the amended Emissions Trading Scheme, and increases in the excise tax on tobacco from the June quarter 2010.



## Monetary policy judgements

The Bank continues to expect to gradually remove monetary policy stimulus over the projection. However, the pace and extent of further OCR increases is likely to be much more moderate than was projected in the June *Statement*. The 90-day interest rate is projected to increase by about 150 basis points over the coming two and a half years (figure 2.5). Given that the OCR is only moved in discrete multiples of 25 basis points, several on-hold decisions are implied by this forecast.

**Figure 2.5**  
90-day interest rate



Source: RBNZ estimates.

While the pace and extent of further OCR increases is likely to be moderate, the Bank does see a need to gradually remove policy stimulus over time. As the economy grows it will be necessary to offset the likely modest pick-up in inflationary pressure. Failing to do so would require a more aggressive response in the future, which would have an eventual negative impact on activity, employment and the general living standards of New Zealanders.

The central projection, which underpins this policy outlook, relies on three key assumptions. These are that:

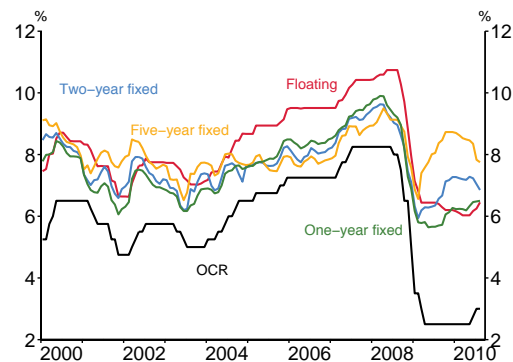
- households, firms and banks will continue to be cautious in their borrowing and lending, meaning that projected low interest rates will provide less support than has historically been the case;
- trading partner growth continues to be robust; and,
- the coming inflation spike has little impact on medium-term inflation expectations.

Over the past year, despite high and rising export commodity prices, increased employment and economic recovery more generally, household and corporate spending

has risen only modestly. As a result, credit growth has been very weak, with household and agricultural credit increasing only slightly, and business credit actually contracting. While borrowers have been quite cautious through this time, lenders have also been quite risk averse.

A key implication of this caution is that the interest rates faced by households and firms have been providing less support than history would suggest. Furthermore, elevated bank funding costs have caused these interest rates to be quite high relative to the OCR (figure 2.6). This all suggests that the current level of the OCR is providing much less support than has historically been the case.

**Figure 2.6**  
Mortgage rates offered to new borrowers and the OCR

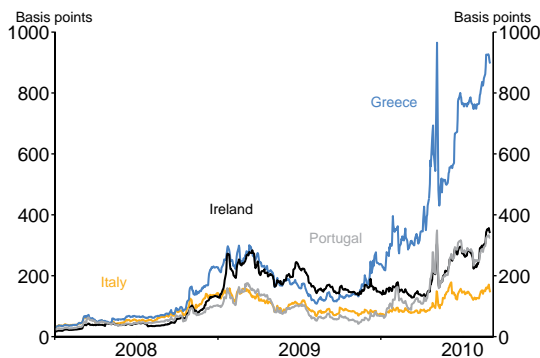


Source: RBNZ.

It is difficult to assess how long lasting such caution will be. Recent behaviour could simply be a typical cyclical response to a period of economic weakness, or the early stages of a more structural change in New Zealanders' attitude to debt. A key risk over the projection is that previous spending and borrowing behaviour returns. Such a pick-up, as well as boosting inflation pressures, would cause the Bank to reassess its current judgement of the level of support provided by interest rates.

The June *Statement* discussed extensively the downside risk to global growth stemming from problems associated with high European sovereign debt. This risk has not yet materialised to any significant extent, with European activity actually turning out stronger than forecast. However, despite some consolidation, sovereign debt continues to be very high in many European countries. Concerningly, some sovereign bond spreads have recently widened to near record levels (figure 2.7).

**Figure 2.7**  
**Selected 10-year government bond spreads**  
*(to the 10-year German government bond yield)*



Source: Bloomberg.

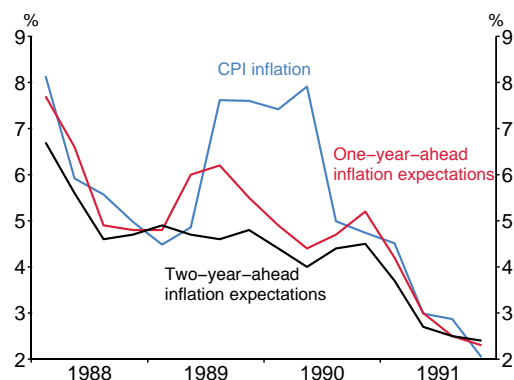
Financial market attention has recently focused on the risk that US GDP growth might slow sharply. These concerns appear to have some validity, with US activity indicators deteriorating noticeably over the past few months. In particular, housing market activity has fallen markedly, with private demand struggling to replace the impact of previous fiscal stimulus.

More generally, it is likely that high debt levels across the Western world will inhibit economic activity over the coming decade and beyond. Without substantial fiscal consolidation, population aging is likely to cause sovereign debt to increase markedly in many advanced economies. As well as pushing up the cost of credit, this would have a negative impact on global growth.

Over the coming year, changes to indirect taxes will cause headline CPI inflation to spike higher. The Policy Targets Agreement, while defining inflation in terms of the Consumers Price Index, also instructs monetary policy to focus on the medium-term trend in inflation. In this regard, it lists changes in indirect taxes as a specific reason why inflation might vary around its medium-term trend. As such, provided inflation expectations remain well anchored, the Bank does not expect to have to adjust the OCR in response to the coming increase in inflation.

It seems likely that the inflation spike will prove short lived. Our industry information suggests wage claims will not seek full GST compensation, with the reduction in personal income taxes offsetting the impact of the GST increase on household disposable incomes. Furthermore, previous indirect tax changes, both in New Zealand – such as when the rate of GST was last increased in 1989 (figure 2.8) – and abroad, have had little lasting impact on inflation.

**Figure 2.8**  
**CPI inflation and inflation expectations**  
*(annual)*



Source: Statistics New Zealand, RBNZ

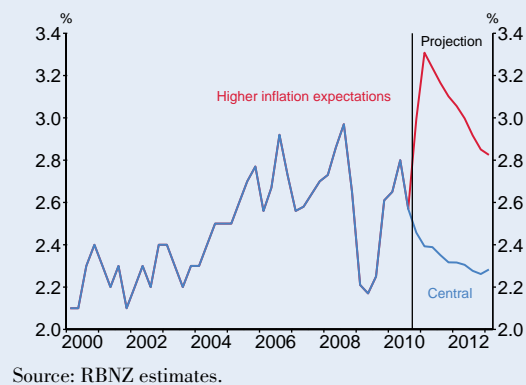
Nonetheless, there is a risk that inflation expectations do react to the coming inflation spike. As noted in the recent speech “Keeping inflation anchored during economic recovery” (<http://rbnz.govt.nz/speeches/4149233.html>), such an increase would harm the recovery and limit the scope for monetary policy to absorb any additional upside inflation surprises. The quantitative implications of this are illustrated in box C.

## Box C

### Inflation expectations to remain anchored

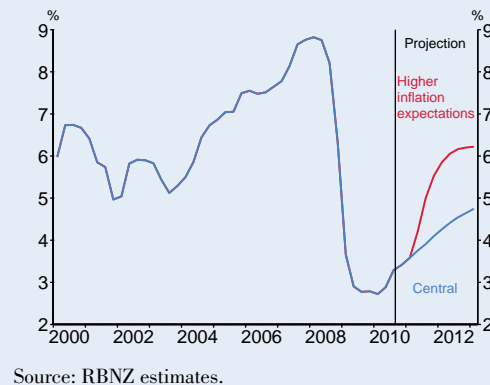
If the coming inflation spike had a noticeable positive impact on inflation expectations (figure C1), inflationary pressures would be much higher than forecast in the central projection. Higher non-tradable and wage inflation would push up production costs in the tradable sector.

**Figure C1**  
Inflation expectations  
(annual rate, two years ahead)



In such an environment, monetary policy would need to lean more heavily against economic activity to ensure that medium-term inflation remained well contained (figure C2). The degree of tightening in monetary policy would be significantly more than is incorporated in the central projection given the need to offset strong domestic inflation pressures and ensure inflation expectations return to levels consistent with medium-term price stability. This would result in a more sluggish recovery in consumption and business spending, with the economy operating at below trend level for an extended period and the unemployment rate remaining high.

**Figure C2**  
90-day interest rate



### 3 Financial market developments

#### Overview

Financial market sentiment has been volatile in recent months as participants reassess the outlook for global activity. Markets have viewed recent economic developments, particularly in the United States, as generally disappointing. Yields on government bonds in countries such as the United States, the United Kingdom and Germany have fallen in response to the weaker global growth and inflation outlook, and increasing safe-haven demand for government assets. However, equity markets have remained relatively robust, with improved corporate earnings supporting prices.

The US dollar has depreciated through this time, with the weaker US outlook more than offsetting safe-haven currency demand. Increased risk aversion has caused the Japanese yen to appreciate. The New Zealand dollar is little changed on a trade-weighted basis since the June *Statement*.

Domestic interest rates have fallen in response to softer international and local economic data, with substantial falls in offshore interest rates adding to this downward pressure. This has seen longer-dated mortgage interest rates decline, while floating rate mortgages have risen in line with the recent increases in the OCR. Despite lower wholesale interest rates, bank funding costs remain elevated.

The Canterbury earthquake has had minimal impact on financial markets in New Zealand. Rating agencies have affirmed New Zealand's sovereign credit ratings following the earthquake, suggesting the financial impact on the country is seen as manageable.

#### International financial market developments

International markets have experienced a period of increasing uncertainty and this has led market movements to remain volatile over recent months. Equity indices are currently at levels similar to those seen a few months ago (figure 3.1), with improved corporate earnings offsetting the negative influence of the deteriorated global outlook. The majority of US corporate earnings turned out better than analysts had predicted, although many firms warned of an increasingly uncertain outlook for the second half of 2010. Signs of increasing merger and acquisition activity have also provided some support for stock markets.

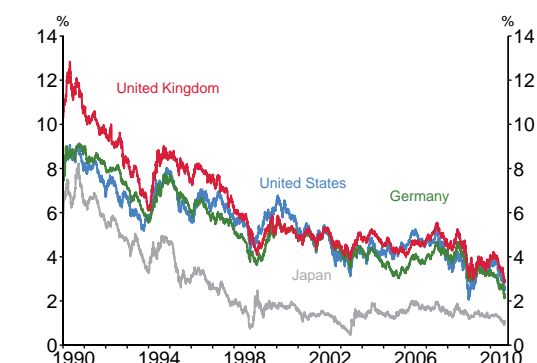
Figure 3.1  
S&P 500 and the US 10-year Treasury bond yield



Source: Bloomberg.

Bond markets reacted more strongly to weaker-than-expected economic data, with demand for government assets increasing since the June *Statement*. Bond yields reached all-time lows in some countries (figure 3.2).

Figure 3.2  
Government 10-year bond yields for major developed economies

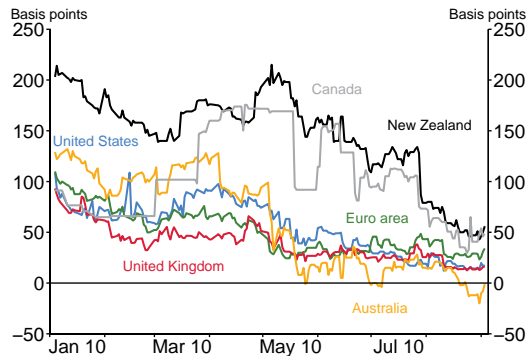


Source: Bloomberg.

In response to the weaker global outlook, some central banks have extended liquidity support facilities, and markets have pared back pricing of future central bank policy rate increases (figure 3.3). In the US, the Federal Reserve has signalled it will maintain the size of its balance sheet by using the proceeds from maturing mortgage backed securities to purchase US government securities. The European Central Bank has left its policy rate on hold at 1.0 percent and has extended its facility to lend unlimited one-week and one-month funds to banks until at least January next year. The Reserve Bank of Australia has held its policy rate constant at

4.5 percent, with markets expecting this to be held steady for the rest of 2010.

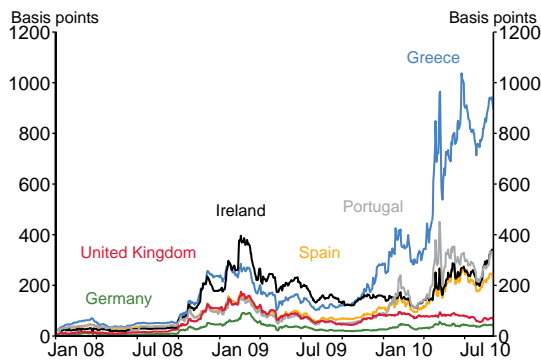
**Figure 3.3**  
Market pricing for central bank rate moves over the next 12 months



Source: Bloomberg.

At the time of the June *Statement*, financial markets were focused on the risk of European sovereign debt default. These fears have subsided somewhat following the announcement of a European Union/International Monetary Fund joint support package, and benign results from European bank stress tests. However, there are concerns about the ability of European governments to rein in fiscal deficits while at the same time appropriately supporting economic growth. In line with the increase in European government bond spreads (figure 2.7), measures of the cost of insuring against default have also increased to near the levels seen prior to the announcement of the EU/IMF support package (figure 3.4).

**Figure 3.4**  
Sovereign Credit Default Swap spreads (5-year)



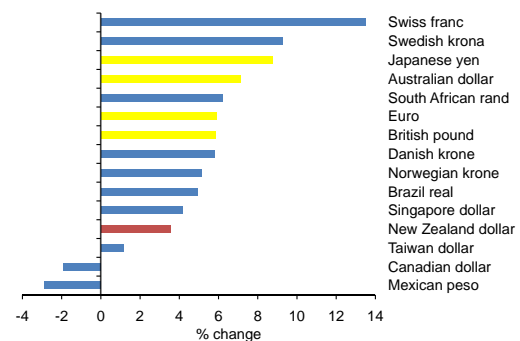
Source: Bloomberg.

Money market pressures in the US have eased following the Federal Reserve's pledge to maintain the size of its balance sheet. As fears about European sovereign default have eased, corporate access to funding markets has improved – although the cost of funds remains elevated relative to pre-crisis levels. More generally though, the deterioration in the economic outlook has seen investors continue to act cautiously. Banks and large firms are tending to hoard cash rather than increase lending, so the availability of business credit remains constrained. There has also been a marked lack of demand for loans as businesses face ongoing economic uncertainty.

### Foreign exchange market

Currency market developments have been mixed over recent months. The US dollar has depreciated through this time, with the weaker US outlook more than offsetting safe-haven currency demand. The Japanese yen and the Swiss franc have both appreciated strongly in response to this increased risk aversion (figure 3.5).

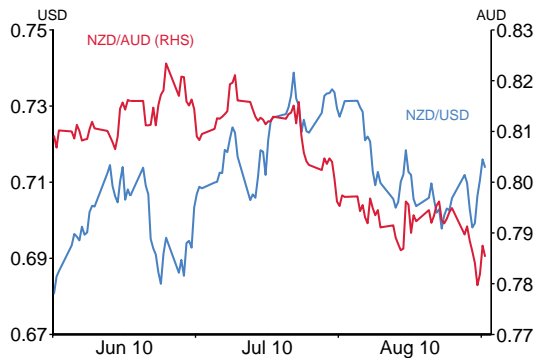
**Figure 3.5**  
Movements in currencies against the US dollar  
(percent change since the June Statement)



Source: Bloomberg.

The New Zealand dollar is slightly higher overall on a TWI basis since the June *Statement*, mainly driven by weakness in the US dollar. The New Zealand dollar has fallen against the Australian dollar, however, reflecting stronger data and higher interest rates in Australia (figure 3.6).

Figure 3.6  
NZD/USD and NZD/AUD

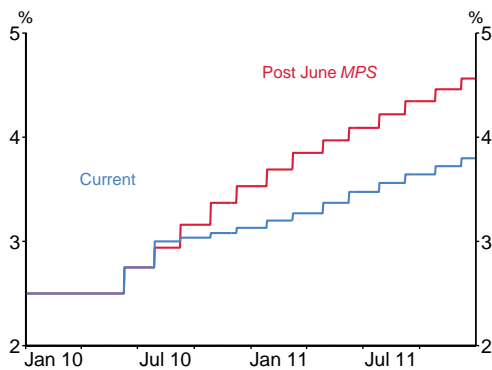


Source: Bloomberg.

## Domestic financial market developments

Local interest rates have fallen over recent months in response to disappointing local and international data. Overnight Index Swap (OIS) pricing is currently for the OCR to increase by around 50-60 basis points over the next 12 months, compared to about 140 basis points shortly after the release of the June *Statement* (figure 3.7).

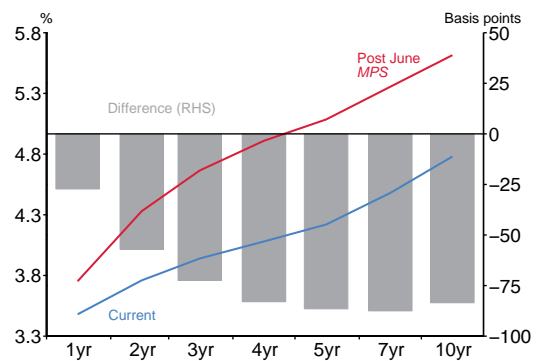
Figure 3.7  
Market pricing for OCR moves



Source: Bloomberg.

The falls in OIS market pricing for OCR increases have also been reflected in a considerable decline in wholesale interest rates, with the yield curve also flattening. While the general pattern of falling yields and a flattening yield curve has occurred in many countries, the decline and flattening in New Zealand has been particularly pronounced (figure 3.8).

Figure 3.8  
Wholesale interest rate curve

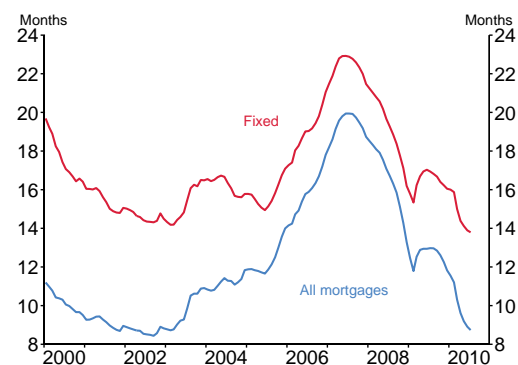


Source: Bloomberg.

## Financing and credit

As wholesale yields have declined, longer term mortgage rates have moved lower in recent months. Floating mortgage rates have risen in line with recent increases in the OCR, causing the mortgage curve to flatten considerably. Despite this, borrowers have continued prefer floating or shorter dated fixed rate mortgages, with the proportion of mortgage debt on floating rates increasing to more than 35 percent. Accordingly, the average mortgage duration has declined to less than nine months, down from highs of around 20 months in the middle of 2007 (figure 3.9).

Figure 3.9  
Average mortgage duration

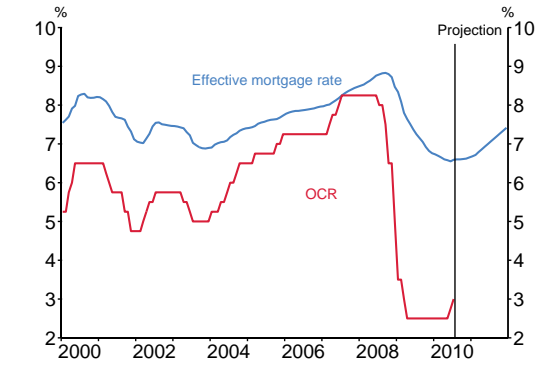


Source: RBNZ.

The average interest rate paid on outstanding mortgage debt has declined steadily over the past two years as relatively expensive fixed rate mortgages have matured. In recent months, however, the effective mortgage rate has risen in line with increased floating mortgage rates. It is expected that while the mortgage curve remains upward sloping,

borrowers will continue to favour shorter-dated borrowing. This is likely to see the effective mortgage rate continue to rise over the coming year (figure 3.10).

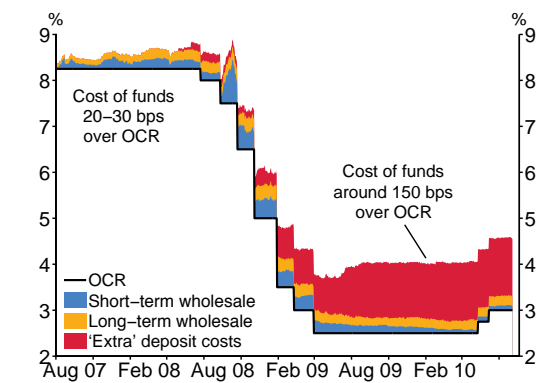
**Figure 3.10**  
Effective mortgage rate and the OCR



Source: RBNZ.

Bank funding costs remain elevated, despite recent falls in wholesale interest rates (figure 3.11). Banks are continuing to pay term deposit rates to attract funds. With increasing turbulence in international markets, the cost of issuing wholesale term debt has remained high relative to earlier this year.

**Figure 3.11**  
Indicative marginal funding costs relative to the OCR



Source: RBNZ estimates.

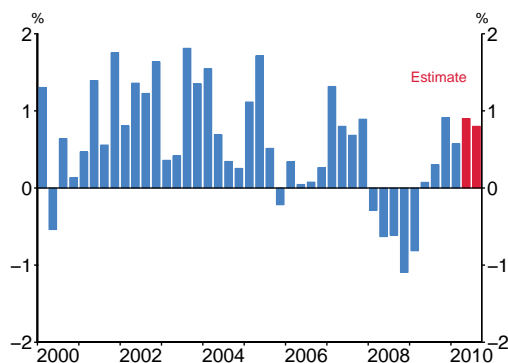
## 4 Current economic conditions

### Overview

The economy continues to recover. Spare capacity is being absorbed slowly, reducing the downward pressure on inflation. Overall activity continues to grow and inflation remains around the middle of the target band.

To the end of September, the Bank estimates that the economy will have grown for six consecutive quarters (figure 4.1). However, there are signs that growth is losing momentum.

**Figure 4.1**  
GDP growth  
(quarterly, seasonally adjusted)



Source: Statistics New Zealand, RBNZ estimates.

Retail sales have been less robust than expected, and the housing market is showing signs of further retrenchment. Retail sales will be further hampered in the near term markedly by the Christchurch earthquake, while re-building of the housing stock will mask overall weakness in residential investment.

Monetary and fiscal policy stimuli remain, though their gradual reduction is contributing to the slowing in the pace of recovery. Further, recent surveys have shown significant falls in optimism.

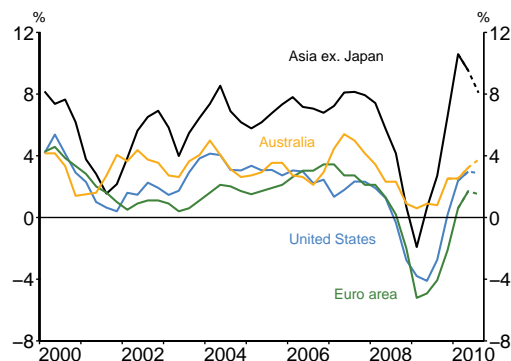
The world economic recovery continues, though there is significant disparity between regions. Asia and Australia have shown ongoing strength, supporting manufactured exports to some extent, while the United States and Europe have slowed with recent data indicating further weakness.

### International economic conditions

Economic activity in New Zealand's trading partners continues to grow at a solid pace (figure 4.2) and on a trade-

weighted basis is now 3 percent above the pre-recession peak. However, in recent months indicators of growth have softened. Previous support from fiscal policy and the global inventory cycle is starting to fade, and private demand remains fragile in some regions.

**Figure 4.2**  
GDP growth by region  
(annual, dashed lines represent estimates)



Source: RBNZ estimates.

Note: Asia ex. Japan comprises: China, Hong Kong, Indonesia, Malaysia, The Philippines, Singapore, South Korea, Taiwan, Thailand, and Vietnam.

Growth is likely to remain strong in China and Australia. Chinese investment appears to be slowing to more sustainable rates in response to a reduction of policy stimulus and restrictions aimed at an overheating real estate market, while retail activity has remained robust. The Australian mining boom continues, with spot prices for bulk commodities at high levels even after recent falls. Australian consumption grew strongly in the June quarter, suggesting that private demand may offset fading public investment sooner than previously expected.

Other Asian economies have seen a sharper slowdown in trade and production. However, labour market recoveries and high confidence have supported domestic demand in developing Asia. By contrast, growth in industrialised Asia, particularly Japan, appears to be flagging, with little scope for further easing in monetary policy.

In Western economies, while growth continued through the first half of 2010, recent activity indicators have also softened. In the US, conditions in labour, housing and credit markets remain very weak. Risks also remain around the pace of recovery in Europe. Uncertainty around the financial health of European governments and financial corporations



is still elevated, and area-wide indicators of domestic demand remain very soft. In the UK, domestic activity is likely to be dampened by aggressive fiscal consolidation.

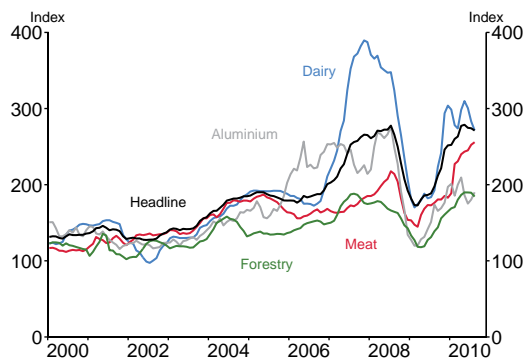
Trading partner inflation remains subdued in Western economies and around average rates in Asia Pacific economies. Headline inflation fell in the June quarter, consistent with falls in food and fuel prices. On a quarterly basis, inflation measures excluding food and energy have eased in most trading partners, and remain below pre-crisis levels in China.

## Domestic economic conditions

### External sector

The recovery in world growth contributed to a rapid rebound in commodity prices late last year. Price rises were exacerbated by global restocking and one-off supply disruptions in key source countries, such as February's damaging earthquake in Chile. These factors helped maintain New Zealand's export commodity prices at elevated levels (figure 4.3).

**Figure 4.3**  
Export commodity prices  
(SDR terms)



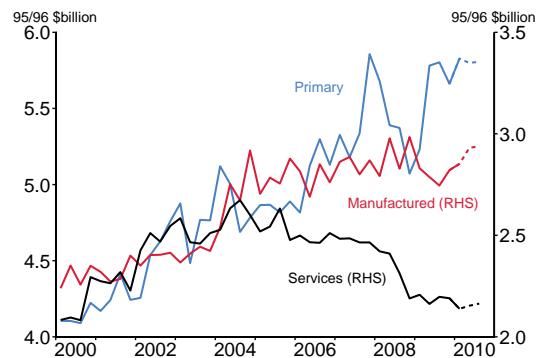
Source: ANZ National Bank Group Ltd.

Prices have eased more recently, reflecting a softening in the global outlook. In addition, Chile has recently returned to full capacity, and consequently world supply of Chile's main exports – which include logs, kiwifruit and industrial metals – has increased. UK dairy exports have increased in response to ongoing high prices, while forestry product inventories are high in many Asian economies.

Primary exports exhibited strong growth at the end of 2009 and maintained this higher level throughout this

year. Ongoing strength in meat volumes appears driven by exporter reaction to the current elevated level of meat prices and increased slaughter following dry conditions earlier this year. Similarly, firm dairy prices are expected to encourage a rapid recovery in dairy export volumes (figure 4.4).

**Figure 4.4**  
Export volumes  
(seasonally adjusted, dashed lines represent estimates)



Source: Statistics New Zealand, RBNZ estimates.

Manufactured exports have shown considerable growth, leveraging off the strength of activity in Australia and Asia. Since the trough in manufacturing production in the middle of 2009, exports have rebounded, though are only now reaching their 2008 level.

Services exports remain very weak. Exports of travel services were flat in the June quarter, driven by a fall in the number of visitors from Europe, a historically high-spending category of visitors. There could be some offset to this weakness from stronger exports of transport services as trade volumes continue to grow.

Import values have been relatively strong over recent months. It seems likely that import volumes have picked up after a weak start to the year.

The current account deficit has narrowed significantly over the past year. Aside from an artificial boost to investment income flows from provisions for one-off tax liabilities by the Australian-owned banks, the reduced deficit was driven in equal parts by improvements in the trade and investment income balances.

## Household sector

Through the June and September quarters of this year consumption growth is expected to have been relatively robust, despite the negative impact on spending of the Canterbury earthquake. The lagged impact of 2009 gains in house prices and improved household incomes, along with pent-up demand for spending on durable goods, has seen nominal retail spending increase steadily for the past five quarters. Sales volumes have trended higher through this time, aided by discounting.

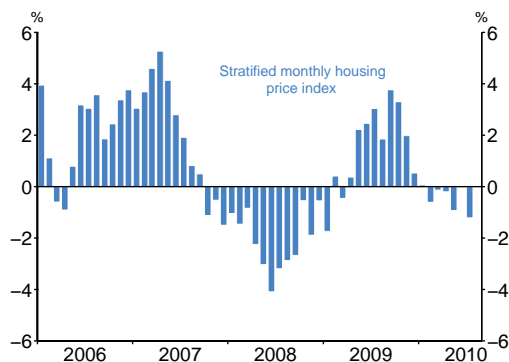
In addition, while there has been little evidence of any obvious pick-up to date, durable retailing is likely to have benefited from pre-GST spending in the September quarter. Previous and international experience of sales tax increases suggests there will be some front loading of durable purchases, but current caution from householders and the availability of discounts mean this effect is unlikely to be large.

The housing market has weakened considerably over the past few months, further reducing the likelihood of any large pre-GST spending and placing doubt over the potential recovery in consumption expenditure. Housing turnover has remained at a low level, and house prices have declined (figure 4.5).

Figure 4.5

### House price inflation

(quarterly, seasonally adjusted)



Source: REINZ.

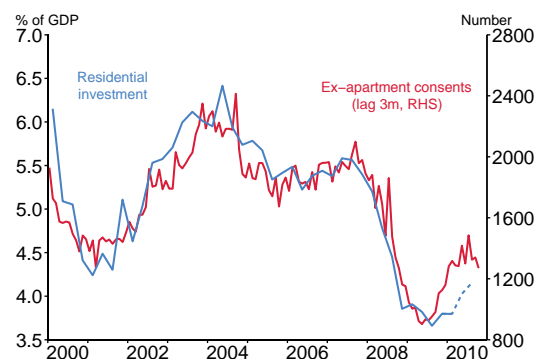
The weak housing market is being reflected by reductions in consumer confidence, demand for housing assets and consumer lending. Overall retail sales are yet to reflect this increased cautiousness, but larger spending decisions, which are often debt-financed, seem to be being delayed. Motor vehicle registrations, house sales and residential consent

issuance have all declined. Although consent issuance has increased over the past year, absolute numbers of dwellings consented remain very low. Consequently, the Bank expects an imminent rise in the level of residential investment, albeit to only just above last year's 25-year low (figure 4.6). Replacement of housing stock in Christchurch will likely see a short-term boost to consents in coming months.

Figure 4.6

### Consents and residential investment

(seasonally adjusted)



Source: REINZ, Statistics New Zealand, RBNZ estimates.

## Labour market

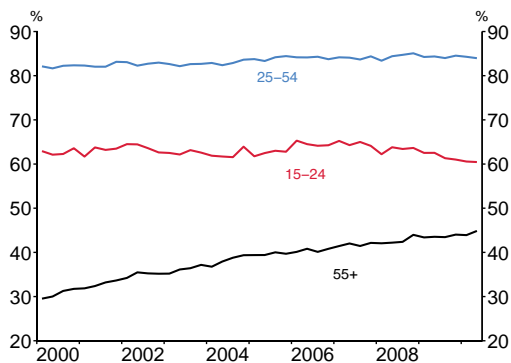
Household optimism and spending have been boosted by the turnaround in the labour market. Following significant falls during 2009, employment and hours worked increased in recent quarters.

As well as employers taking on new workers, more people have been looking for work. Net immigration contributed to strong population growth early in the year, increasing the working age population. However, net immigration has generally slowed in recent months.

Further, the make-up of the labour force is changing. In recent years the participation rate has been rising, mainly in older cohorts of workers. People aged over 55 have been staying in the labour market longer, while the proportion of people under 55 making themselves available for work is fairly constant. Hence, as the population ages, the number of people in the labour force is rising (figure 4.7).

Nevertheless, annual growth in employment remains subdued, likely contributing to the reduced consumer optimism of late. The unemployment rate has continued to be volatile, rising to 6.8 percent in the June quarter.

**Figure 4.7**  
**Participation rate by age group**  
*(percent of labour force)*



Source: Statistics New Zealand.

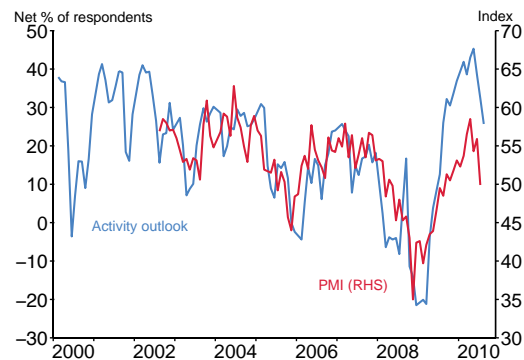
**Business sector**

Firms continue to be cautious in their investment and borrowing decisions. Firms remain focused on using additional workers to increase production rather than undertaking capital investment. Furthermore, corporate demand for credit remains low, suggesting that any

investment will be financed from retained earnings. Overall business caution suggests that balance sheet consolidation remains a priority.

Underpinning the low demand for credit and investment has been a tapering off in business sentiment in most recent surveys (figure 4.8). Previously, optimism was very strong in the business surveys, but sentiment has now weakened.

**Figure 4.8**  
**Business sentiment**



Source: National Bank of New Zealand, Business New Zealand.

**Box D**

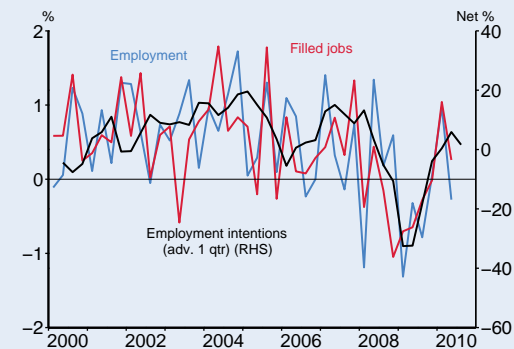
**Labour market developments**

New Zealand has a variety of labour market surveys and statistics. Due to volatility in much of the data, it is appropriate to consider a broad range of indicators when assessing labour market conditions. As a whole these suggest a general improvement in conditions since late 2009.

New Zealand has two official quarterly labour market surveys, allowing a valuable cross check of any single outturn. These are the Household Labour Force Survey (HLFS), which is a survey of about 16,000 households, and the Quarterly Employment Survey (QES), which is a survey of 18,000 business units.

The HLFS and QES both reported strong employment growth in the March quarter 2010. In the June quarter, seasonally adjusted employment measured by the HLFS fell, while the number of filled jobs as measured by the QES continued to increase (figure D1). Nevertheless, employment has increased over the first half of 2010 in both surveys.

**Figure D1**  
**Quarterly employment growth and employment intentions**

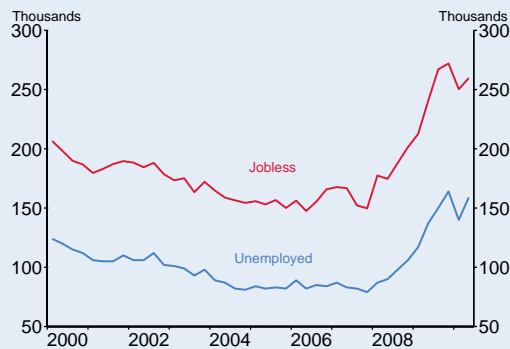


Source: Statistics New Zealand, NZIER.

In addition, a range of business surveys provide an indication of corporate demand for labour, such as the National Bank Business Outlook or NZIER's Quarterly Survey of Business Opinion. Across these surveys hiring intentions have picked up significantly. Furthermore, the Department of Labour's Jobs Online measure has seen steady growth in the number of internet job advertisements.

There are also a variety of measures of unemployment. Within the HLF5, the official measure of unemployment encompasses those without a paid job, who are both actively seeking and available to work. The survey's jobless statistic is an alternative and broader measure of unemployment. As well as those officially unemployed, the jobless measure also encompasses those available but not actively seeking work, as well as those actively seeking but not available for work. Movements in the numbers of jobless have been less volatile than the official unemployment measure over recent quarters, and show a reduction from late 2009 (figure D2). Consistent with this, firms have generally reported an increase in the relative degree of difficulty finding both skilled and unskilled staff.

**Figure D2**  
HLF5 unemployment and jobless

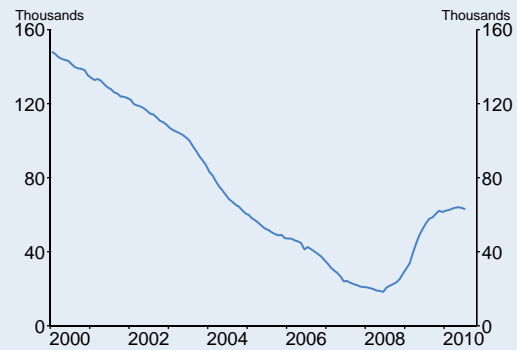


Source: Statistics New Zealand.

Ministry of Social Development statistics on the number of people receiving the unemployment benefit provide a further gauge on unemployment trends. After rising through the recession, the number of unemployment beneficiaries now appears to have stabilised (figure D3).

In summary, looking across the range of labour market measures available, a broad assessment suggests ongoing labour market recovery.

**Figure D3**  
Unemployment benefit recipients  
(seasonally adjusted)

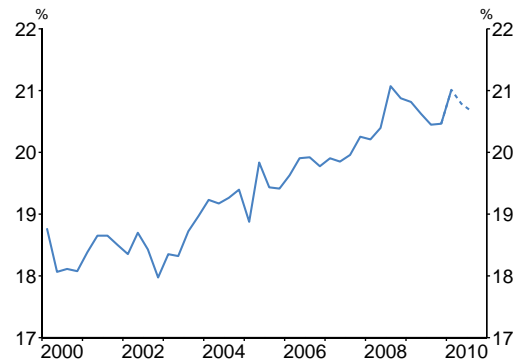


Source: Ministry of Social Development, RBNZ calculations.

## Government

Following several years of increasing faster than the overall economy, government expenditure has slowed to a growth rate comparable to that of the wider economy (figure 4.9). Previous tax cuts allied with higher spending have provided the New Zealand economy with a significant fiscal impulse over the past two years. Government spending and planned tax cuts will still be expansionary over the course of this financial year, despite some fiscal consolidation.

**Figure 4.9**  
Government expenditure  
(percent of trend GDP, seasonally adjusted)



Source: Statistics New Zealand, RBNZ estimates.

## Prices

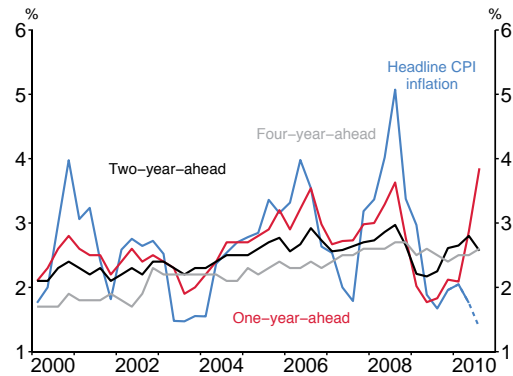
Over the past year and a half, CPI inflation has been well contained, with consumer prices increasing about 2.0 percent per annum for the past five quarters. Widespread spare capacity, a weak housing market and strong competitive pressures have seen non tradable inflation decline considerably over this period.

Tradable inflation has been surprisingly high, fuelled by unseasonably high food inflation at the end of last year. The lagged effect of the appreciation of the New Zealand dollar toward the end of 2009, together with low import prices, has contributed to a lowering of tradable inflation over 2010.

However, with the rate of GST soon to be increased and further increases in excise taxes, it is likely that CPI inflation will spike higher in the final quarter of this year. While near-term inflation expectations have risen sharply as a result of this, longer-dated expectations remain well contained (figure 4.10).

Figure 4.10

Headline CPI inflation and inflation expectations  
(*annual*)



Source: Statistics New Zealand, RBNZ estimates, AON.

**Table 4.1**  
**Measures of inflation and inflation expectations**  
*(annual)*

	2008 Dec	2009 Mar	2009 Jun	2009 Sep	2010 Mar	2010 Jun
<b>CPI</b>	3.4	3.0	1.9	1.7	2.0	1.8
<b>CPI components</b>						
CPI non-tradable	4.3	3.8	3.3	3.0	2.1	2.2
Non-tradable housing component	2.4	1.5	1.0	0.6	1.2	1.4
Non-tradable ex housing, cigarettes and tobacco component	5.1	4.8	4.3	4.2	2.6	2.2
CPI tradable	2.3	1.7	0.2	-0.1	2.0	1.1
Petrol	-4.8	-9.3	-17.0	-19.0	11.5	9.5
<b>Other inflation measures</b>						
Factor model estimate of core CPI inflation	3.1	2.8	2.3	2.0	1.9	1.9
CPI trimmed mean (of annual price change)	3.1	2.9	2.2	2.0	2.3	1.9
CPI weighted median (of annual price change)	3.0	2.9	2.9	2.8	1.7	1.3
CPI ex food, petrol and government charges	2.0	1.9	1.6	1.9	1.3	1.6
CPI ex food and energy	2.2	2.3	2.1	2.5	1.7	1.9
GDP deflator (derived from expenditure data)	2.6	2.5	3.3	2.5	1.0	n/a
	2008 Dec	2009 Mar	2009 Jun	2009 Sep	2010 Mar	2010 Jun
<b>Inflation expectation measures</b>						
RBNZ Survey of Expectations - inflation one-year-ahead	2.8	2.0	1.8	1.8	2.1	2.9
RBNZ Survey of Expectations - inflation two-years-ahead	2.7	2.2	2.2	2.3	2.7	2.8
AON Economist survey - inflation one-year-ahead	3.0	2.1	2.2	1.7	2.2	3.4
AON Economist survey - inflation four-years-ahead	2.7	2.5	2.6	2.5	2.5	2.6
NBBO - inflation one-year-ahead (quarterly average)	3.5	2.7	2.6	2.6	2.6	2.8
						Sep
						3.9
						2.6
						5.0
						2.6
						n/a

## 5 The macroeconomic outlook

### Overview

As discussed in Chapter 4, recent data point to a slowing in the pace of growth toward the end of 2010. The disruption to economic activity following the Canterbury earthquake is likely to accentuate this. Further ahead, modest GDP growth is expected to resume. Export volumes are forecast to continue to rise as global activity continues to increase and commodity prices remain elevated. In addition, business investment is expected to pick up from current low levels, as spare capacity in the economy is gradually eliminated.

Households are expected to remain cautious. This, along with weakness in house prices over the early part of the projection, is expected to cause household consumption growth to be subdued.

Nonetheless, inflationary pressures are expected to increase over the forecast horizon from current muted levels, reflecting increased pressure on domestic resources. In addition, changes to indirect taxes are likely to cause headline inflation to increase markedly over the next year or so. However, medium-term inflation expectations are expected to remain well anchored. As a result, inflation is expected to track close to the middle of the target band over the medium term.

### Trading partner activity

Trading partner growth is likely to slow through the second half of 2010 as temporary support from fiscal stimulus and

the inventory cycle fades. Nevertheless, the outlook for global activity remains robust beyond this, supported by ongoing strong growth in Australia and developing Asia (table 5.1). In Western economies, limited room for additional policy stimulus and ongoing weakness in private demand suggest that growth is fragile and will be more gradual over the forecast horizon. Trading partner inflation is expected to be around average rates. This reflects significant excess capacity in Western economies offset by stronger inflation pressures in the Asia Pacific region.

Growth in China is expected to moderate toward a more sustainable rate as policy stimulus is unwound. The recent boost from net exports is likely to fade as growth in Western economies slows. Nevertheless, ongoing strength in consumption expenditure in China supports a favourable outlook, and rapid wage growth suggests that strength in retail spending will persist for some time.

Given the strong medium-term growth outlook in China, world commodity prices are expected to remain at historically high levels. As such, Australia is likely to continue to benefit from a favourable terms-of-trade and associated investment-led growth. Although the boost from public investment is expected to fade through the second half of 2010, recent strength in retail spending suggests that household caution has diminished and consumption expenditure may contribute more substantially to growth.

Table 5.1

Forecasts of trading partner GDP growth  
(calendar year, annual average)

Country	2003	2004	2005	2006	2007	2008	2009	2010f	2011f	2012f
Australia	3.3	3.7	3.2	2.6	4.8	2.2	1.2	3.3	3.5	3.7
Asia ex. Japan*	5.4	7.2	6.5	7.2	7.9	4.5	2.0	8.8	5.6	6.9
United States	2.5	3.6	3.1	2.7	1.9	0.0	-2.6	2.6	2.1	2.9
Japan	1.5	2.7	1.9	2.0	2.3	-1.2	-5.2	2.5	1.2	2.0
Euro area	0.8	1.9	1.8	3.0	2.7	0.4	-4.1	1.3	1.2	1.7
United Kingdom	2.8	3.0	2.2	2.8	2.7	-0.1	-4.9	1.6	2.0	2.0
16 Country Index	3.1	4.1	3.6	3.7	4.4	1.7	-0.8	4.5	3.5	4.3

Source: Haver Analytics, RBNZ estimates

\* Includes China, Hong Kong, Indonesia, Malaysia, The Philippines, Singapore, South Korea, Taiwan, Thailand and Vietnam.

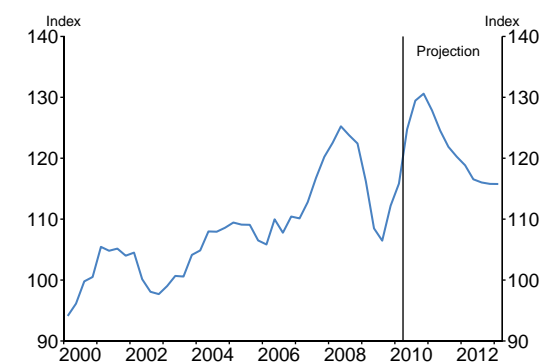
In the rest of Asia, growth is projected to ease as the contribution from exports fades. With the notable exception of Japan, momentum in domestic demand should help to cushion growth, particularly in emerging Asia. Relatively sound government debt positions in many Asian economies provide additional room for policy stimulus if external demand remains subdued.

The US recovery is expected to continue over the forecast horizon, but at a very modest rate. Consumption growth is likely to be very modest given the only gradual improvement in labour market conditions and very poor housing market outlook. The outlook for other Western economies also remains for subdued growth. A slowing in the world's major economies, the need for fiscal consolidation, and ongoing financial and economic uncertainty, are all likely to dampen the recovery, which remains fragile.

## Terms of trade

New Zealand's export prices are expected to ease over the forecast horizon. In the near term, recent disruptions to global supply are expected to unwind, driving a fall in prices. These falls are expected to continue, as global growth slows and demand conditions moderate. Despite this, export prices are expected to remain historically high. As the global economy continues to recover, import prices are expected to rise in line with world consumer price inflation. Overall, the terms of trade is expected to moderate, but remain historically elevated (figure 5.1).

**Figure 5.1**  
OTI terms of trade (goods)  
(seasonally adjusted)

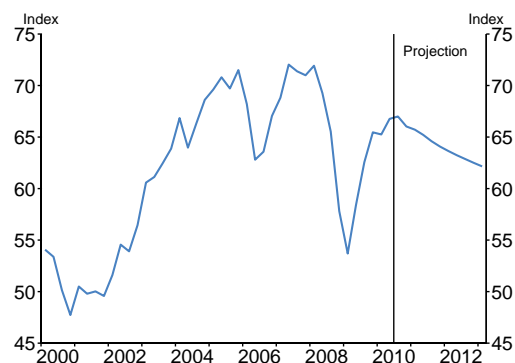


Source: Statistics New Zealand, RBNZ estimates.

## Exchange rate

The New Zealand dollar TWI is assumed to remain around current levels throughout 2010 (figure 5.2), before gradually depreciating thereafter, reflecting a fall in the terms of trade along with a rise in global interest rates. Despite this, the level of the TWI remains above its long-term average at the end of the projection.

**Figure 5.2**  
New Zealand dollar TWI

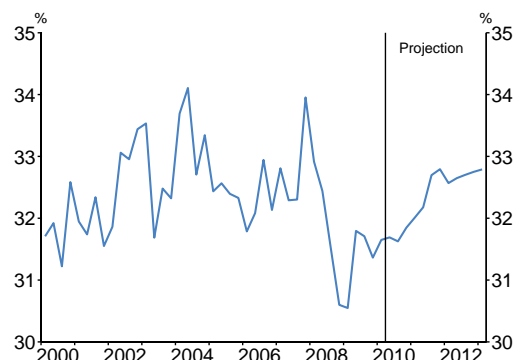


Source: RBNZ estimates.

## Trade volumes

An ongoing increase in trading partner activity will support New Zealand's exports. Manufactured export growth is expected to remain robust as world demand strengthens, and primary exports are expected to increase in response to the elevated levels of export commodity prices. In addition, the improvement in world activity will also encourage some modest recovery in tourist spending within New Zealand. As a result, steady growth in export volumes is expected over the projection (figure 5.3).

**Figure 5.3**  
Export volumes  
(share of potential GDP, seasonally adjusted)



Source: Statistics New Zealand, RBNZ estimates.



Import volumes are expected to increase further as the economy recovers, which, along with the elevated level of the New Zealand dollar TWI, will support a rise in the import penetration ratio in coming quarters. In the medium term, the import penetration ratio is expected to settle around levels seen before the strong increase in imports during 2007 and 2008.

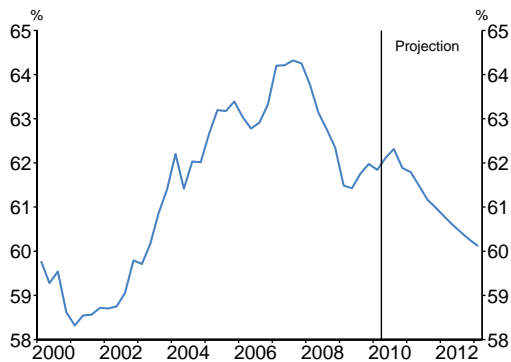
## House price inflation and household spending

Households are expected to continue to be cautious, with consumer spending growth forecast to be subdued over the projection. Spending is expected to fall as a proportion of total output (figure 5.4) and the household saving rate is expected to improve.

Figure 5.4

### Household consumption

(share of potential GDP, seasonally adjusted)



Source: Statistics New Zealand, RBNZ estimates.

Consistent with this, housing market activity is expected to remain subdued. In the near term, weakness in housing turnover suggests house prices will decline. Furthermore, houses remain expensive relative to household incomes. This, along with increases in interest rates, is likely to limit demand over the medium term such that real house prices decline over the projection.

Strong net permanent and long-term immigration over 2009, along with recent weakness in residential building activity, is expected to support a near-term increase in residential investment. Residential investment is then expected to slow and remain weak relative to aggregate activity, reflecting slowing population growth and weakness

in the housing market. However, repairs from the Canterbury earthquake are likely to provide some offset over the next year or so.

## Government

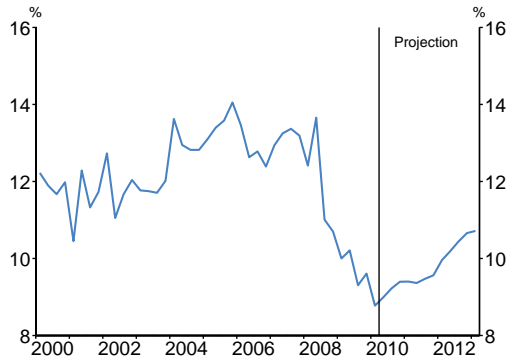
The government budget deficit has continued to widen recently, with the impulse from fiscal policy remaining positive. Over the medium term, the large structural budget deficit is expected to decline, in line with *Budget 2010* forecasts, undermining GDP growth for some years. However, this is not expected to reverse the large increase in government consumption and investment seen over the past few years, with their total share of output remaining roughly constant throughout the projection. Support programmes and the rebuilding of infrastructure following the Canterbury earthquake are likely to boost government spending over the coming year.

## Business sector

The replacement of depreciated capital stock is likely to underpin a rise in business investment in the near term. In addition, the domestic recovery and associated improvement in the labour market will lead to increased pressure on New Zealand's capital stock, increasing the need for new investment. An improvement in corporate profitability is likely to facilitate this higher investment, as businesses fund expansion through retained earnings. In addition, the replacement of damaged capital associated with the Canterbury earthquake is likely to support growth in business investment, particularly non-residential investment as damaged buildings are repaired or replaced.

Business investment is consequently expected to increase from its current low share of trend output (figure 5.5). Despite this, the pace of expansion is expected to be moderate, reflecting the modest pace of expansion in domestic demand. A tighter credit environment and elevated risk aversion are also likely to constrain growth in business investment.

**Figure 5.5**  
**Business investment**  
*(excluding computer and intangible assets, share of potential GDP, seasonally adjusted)*



Source: Statistics New Zealand, RBNZ estimates.

## Gross Domestic Product

Modest GDP growth is expected over the projection. An increase in export volumes is expected to drive this continued expansion, supported by increases in world activity and elevated commodity prices. Further out in the projection, business investment is forecast to increase more noticeably as pressure on domestic resources builds. Household spending growth is forecast to remain subdued, as households continue attempts to reduce debt. Overall, the pace of expansion in economic activity is expected to be subdued over the projection horizon relative to that seen over the past decade, reflecting tighter credit conditions and attempts to reduce debt.

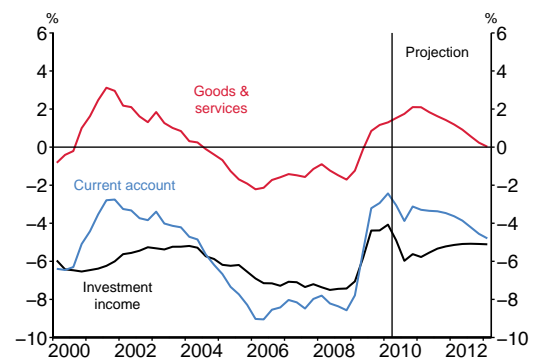
## Balance of payments

The higher terms of trade are expected to support a positive trade balance throughout the projection. However, this surplus is expected to steadily narrow (figure 5.6) as export commodity prices fall and import values to rise.

Primary exporters are expected to use the proceeds from the current elevated level of export prices to pay down debt. The investment income deficit consequently remains relatively stable over the projection, despite likely increases in domestic profitability and the interest rate paid on foreign debt. The overall current account deficit is expected to widen, reaching close to 5 percent of nominal GDP by the end of the projection. It is unclear how the Canterbury

earthquake will impact the balance of payments. Reinsurance payments from offshore will increase inflows of transfer payments. However, payments for imports associated with reconstruction are likely to provide some offset to this.

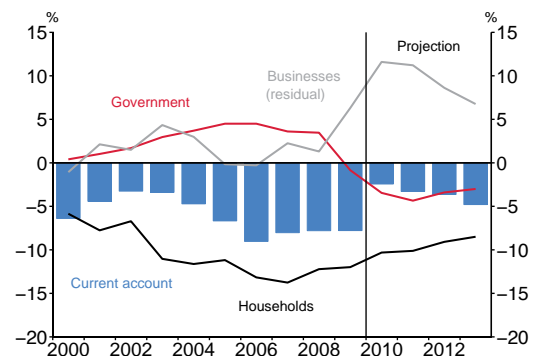
**Figure 5.6**  
**Current account, trade and investment income balances**  
*(annual, share of nominal GDP)*



Source: Statistics New Zealand, RBNZ estimates.

On a sectoral basis, the projected widening in the current account deficit reflects a fall in the net saving of the business sector, driven by an increase in investment (figure 5.7). The household sector is expected to reduce its rate of dissaving over the projection. In addition, the government deficit is expected to moderate over the latter part of the projection, in line with *Budget 2010* forecasts.

**Figure 5.7**  
**Estimated sectoral net lending**  
*(annual, share of nominal GDP)*



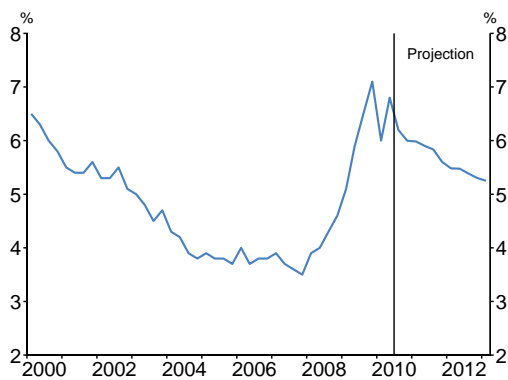
Source: RBNZ estimates.

## Labour market

As economic activity increases, more workers will be encouraged to enter the labour force. In addition, the trend for increased participation among older workers is expected to continue. As a result, labour force participation is forecast to trend higher over the projection.

The recovery in activity has seen an improvement in the labour market (see box D) and this is expected to continue over the projection. Employment is expected to increase as firms faced with improving demand take on more workers to boost production. Consequently, the unemployment rate is forecast to trend lower, falling to 5.3 percent by the end of the projection (figure 5.8).

**Figure 5.8**  
Unemployment rate  
(seasonally adjusted)



Source: Statistics New Zealand, RBNZ estimates.

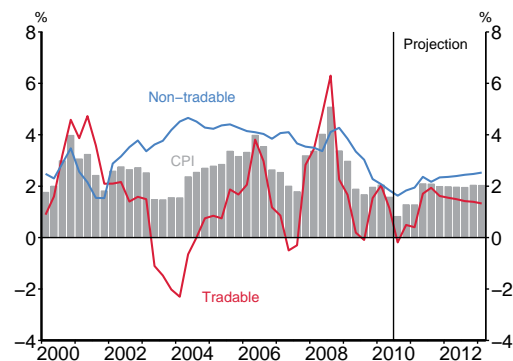
## Inflation

Changes to indirect taxes will cause headline CPI inflation to increase markedly over the coming year. Because the upcoming increase in the rate of GST will be more than offset by a reduction in personal tax rates, it seems likely that this inflation spike will have little impact on wage and price setting behaviour or medium-term inflation expectations. However, underlying inflationary pressure is still likely to increase over the projection. Gradual removal of policy support is expected to offset this pick up in inflationary pressure such that annual CPI inflation, excluding the direct effects of recent government policy changes, tracks close to the midpoint of the target band over the latter part of the projection (figure 5.9).

As discussed above, the recovery in domestic activity is expected to drive an improvement in the labour market, and also increase corporate profitability. This is expected to see wage inflation increase from its current subdued level. Annual LCI wage inflation is forecast to increase to 2.4 percent in early 2012.

Underlying tradable inflation is expected to average around 1.5 percent over the medium term, driven by modest, but still positive, global inflation and assumed depreciation in the New Zealand dollar. The domestic recovery will see the gradual elimination of spare capacity over the projection horizon. This increased pressure on domestic resources will result in higher non-tradable inflation. Underlying non-tradable inflation is expected to increase to 2.5 percent by the end of the projection.

**Figure 5.9**  
CPI, tradable and non-tradable inflation  
(annual, excluding policy changes)



Source: Statistics New Zealand, RBNZ estimates. 'Excluding policy changes' is the Bank's CPI inflation projection excluding the direct impact of the increase in the rate of GST, the incorporation of the stationary energy and liquid fuel sectors to the amended Emissions Trading Scheme, and increases in the excise tax on tobacco from the June quarter 2010.

# Appendix A<sup>1</sup>

## Summary tables

Table A

### Projections of GDP growth, CPI inflation and monetary conditions

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

		GDP	CPI	CPI	TWI	90-day
		Quarterly	Quarterly	Annual		bank bill rate
2002	Mar	0.8	0.6	2.6	51.6	5.0
	Jun	1.4	1.0	2.8	54.6	5.8
	Sep	1.2	0.5	2.6	53.9	5.9
	Dec	1.6	0.6	2.7	56.4	5.9
2003	Mar	0.4	0.4	2.5	60.6	5.8
	Jun	0.4	0.0	1.5	61.1	5.4
	Sep	1.8	0.5	1.5	62.4	5.1
	Dec	1.4	0.7	1.6	63.9	5.3
2004	Mar	1.5	0.4	1.5	66.8	5.5
	Jun	0.7	0.8	2.4	64.0	5.9
	Sep	0.3	0.6	2.5	66.3	6.4
	Dec	0.3	0.9	2.7	68.6	6.7
2005	Mar	1.1	0.4	2.8	69.6	6.9
	Jun	1.7	0.9	2.8	70.8	7.0
	Sep	0.5	1.1	3.4	69.7	7.0
	Dec	-0.2	0.7	3.2	71.5	7.5
2006	Mar	0.3	0.6	3.3	68.2	7.5
	Jun	0.0	1.5	4.0	62.8	7.5
	Sep	0.1	0.7	3.5	63.6	7.5
	Dec	0.3	-0.2	2.6	67.0	7.6
2007	Mar	1.3	0.5	2.5	68.8	7.8
	Jun	0.8	1.0	2.0	72.0	8.1
	Sep	0.7	0.5	1.8	71.4	8.7
	Dec	0.9	1.2	3.2	71.0	8.8
2008	Mar	-0.3	0.7	3.4	71.9	8.8
	Jun	-0.6	1.6	4.0	69.3	8.8
	Sep	-0.6	1.5	5.1	65.5	8.2
	Dec	-1.1	-0.5	3.4	57.8	6.3
2009	Mar	-0.8	0.3	3.0	53.7	3.7
	Jun	0.1	0.6	1.9	58.4	2.9
	Sep	0.3	1.3	1.7	62.6	2.8
	Dec	0.9	-0.2	2.0	65.5	2.8
2010	Mar	0.6	0.4	2.0	65.3	2.7
	Jun	0.9	0.3	1.8	66.8	2.9
	Sep	0.8	0.9	1.4	67.0	3.3
	Dec	0.4	2.3	3.8	66.0	3.4
2011	Mar	0.4	0.6	4.1	65.7	3.6
	Jun	0.6	1.0	4.8	65.2	3.8
	Sep	1.0	0.5	4.4	64.6	3.9
	Dec	0.7	0.3	2.4	64.1	4.1
2012	Mar	0.5	0.5	2.3	63.6	4.3
	Jun	0.7	0.9	2.2	63.2	4.4
	Sep	0.7	0.6	2.2	62.9	4.5
	Dec	0.6	0.2	2.2	62.5	4.6
2013	Mar	0.5	0.6	2.2	62.1	4.7

<sup>1</sup> Notes for these tables follow on pages 31 and 32.

**Table B**  
**Composition of real GDP growth**

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

March year	Actuals										Projections		
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013		
Final consumption expenditure													
Private	4.6	6.5	4.5	4.5	2.4	3.2	-1.1	0.5	2.3	0.5	1.0		
Public authority	1.3	5.0	4.0	5.0	4.8	4.6	4.2	1.5	2.1	1.9	1.2		
Total	3.9	6.1	4.4	4.6	2.9	3.5	0.1	0.7	2.2	0.9	1.0		
Gross fixed capital formation													
Market sector:													
Residential	23.7	14.9	2.8	-5.3	-1.4	4.4	-22.9	-11.8	14.0	0.7	8.1		
Business	2.8	12.0	10.7	10.0	-1.7	8.4	-4.8	-10.3	5.6	6.8	9.0		
Non-market government sector	14.4	14.3	13.7	3.1	-4.9	-14.4	17.8	-5.1	4.9	5.6	4.1		
Total	7.8	12.8	9.0	6.0	-1.9	6.0	-7.1	-10.1	6.9	5.6	8.5		
Final domestic expenditure	4.8	7.7	5.5	5.0	1.7	4.1	-1.7	-1.8	3.3	2.0	2.8		
Stockbuilding <sup>1</sup>	-0.1	0.2	0.2	-0.5	-0.7	0.8	-0.2	-1.9	1.7	0.2	0.0		
Gross national expenditure	4.7	7.8	6.0	4.7	0.8	5.2	-1.9	-3.6	4.9	2.1	2.8		
Exports of goods and services	7.8	1.1	4.9	-0.1	2.9	3.0	-3.3	2.8	2.4	4.5	2.7		
Imports of goods and services	7.0	12.9	12.4	4.2	-1.4	9.9	-4.6	-9.6	11.2	3.9	3.5		
Expenditure on GDP	5.0	4.0	3.5	3.3	2.3	2.8	-1.3	0.5	2.1	2.2	2.5		
GDP (production)	4.9	4.3	3.7	3.2	0.8	2.8	-1.4	-0.4	2.8	2.6	2.7		
GDP (production, March qtr to March qtr)	4.7	5.2	2.4	2.4	1.7	2.1	-3.1	1.9	2.5	2.9	2.6		

<sup>1</sup> Percentage point contribution to the growth rate of GDP.

Table C

## Summary of economic projections

*(annual percent change, unless specified otherwise)*

March year	Actuals						Projections					
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	
<b>Price measures</b>												
CPI	2.5	1.5	2.8	3.3	2.5	3.4	3.0	2.0	4.1	2.3	2.2	
Labour costs	2.2	2.1	2.5	3.0	3.0	3.5	3.1	1.3	1.9	2.4	2.2	
Import prices (in New Zealand dollars)	-10.7	-10.3	0.6	6.9	0.3	0.6	12.5	-8.2	0.0	8.1	4.8	
Export prices (in New Zealand dollars)	-15.4	-5.0	5.0	3.4	4.3	11.9	6.7	-8.5	10.4	0.5	2.1	
<b>Monetary conditions</b>												
90-day rate (year average)	5.9	5.3	6.5	7.3	7.6	8.6	6.7	2.8	3.3	4.0	4.6	
TWJ (year average)	56.4	63.6	67.1	70.1	65.6	71.6	61.6	62.9	66.4	64.4	62.7	
<b>Output</b>												
GDP (production, annual average % change)	4.9	4.3	3.7	3.2	0.8	2.8	-1.4	-0.4	2.8	2.6	2.7	
Potential output (annual average % change)	3.4	3.3	3.0	2.6	2.2	1.9	1.6	1.6	1.8	2.1	2.2	
Output gap (% of potential GDP, year average)	1.0	2.0	2.6	3.1	1.8	2.8	-0.3	-2.3	-1.4	-0.9	-0.4	
<b>Labour market</b>												
Total employment (seasonally adjusted)	1.8	3.4	3.6	2.8	2.0	-0.3	0.8	-0.1	1.4	2.3	2.2	
Unemployment rate (March qtr, seasonally adjusted)	5.0	4.3	3.9	4.0	3.9	3.9	5.1	6.0	6.0	5.5	5.3	
Trend labour productivity	1.2	1.0	0.9	0.8	0.7	0.7	0.7	0.7	0.7	0.8	0.9	
<b>Key balances</b>												
Government operating balance (% of GDP, year to June)	3.3	3.9	4.7	4.4	3.5	3.1	-2.1	-3.7	-4.4	-3.2	-3.1	
Current account balance (% of GDP)	-3.4	-4.7	-6.7	-9.0	-8.0	-7.8	-7.8	-2.4	-3.3	-3.6	-4.8	
Terms of trade (OTI measure, annual average % change)	-5.6	3.9	5.8	-0.8	1.8	7.8	3.2	-9.2	15.7	-5.3	-4.4	
Household saving rate (% of disposable income)	-10.3	-9.7	-8.2	-12.8	-14.2	-11.0	-13.7	-11.3	-10.1	-8.2	-6.4	
<b>World economy</b>												
Trading partner GDP (annual average % change)	3.2	3.5	3.7	3.8	3.8	4.2	0.1	1.1	4.1	3.8	4.4	
Trading partner CPI (TWI weighted, annual % change)	2.2	1.4	2.1	2.5	1.9	3.3	0.9	1.7	1.2	2.0	2.0	

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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	Domestic currency import prices. <i>Overseas Trade Indexes</i> .
Export prices	Domestic currency export prices. <i>Overseas Trade Indexes</i> .
Terms of trade	Constructed using domestic currency export and import prices. <i>Overseas Trade Indexes</i> .
Private consumption	<i>System of National Accounts</i> .
Public authority consumption	<i>System of National Accounts</i> .
Residential investment	RBNZ definition. Private sector and government market sector residential investment. <i>System of National Accounts</i> .
Business investment	RBNZ definition. Total investment less the sum of non-market investment and residential investment. <i>System of National Accounts</i> .
Non-market investment	RBNZ definition. The <i>System of National Accounts</i> 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. <i>System of National Accounts</i> .
Stockbuilding	Percentage point contribution to the growth of GDP by stocks. <i>System of National Accounts</i> .
Gross national expenditure	Final domestic expenditure plus stocks. <i>System of National Accounts</i> .
Exports of goods and services	<i>System of National Accounts</i> .
Imports of goods and services	<i>System of National Accounts</i> .
GDP (production)	<i>System of National Accounts</i> .
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	<i>Balance of Payments</i> .
Total employment	<i>Household Labour Force Survey</i> .
Unemployment rate	<i>Household Labour Force Survey</i> .
Household saving rate	<i>Household Income and Outlay Account</i> .

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<b>Government operating balance</b>	Operating balance before gains and losses. Historical source: The Treasury. Adjusted by the Reserve Bank over the projection period.
<b>Labour productivity</b>	The series shown is the annual percentage change in a trend measure of labour productivity. Labour productivity is defined as GDP (production) divided by <i>Household Labour Force Survey</i> hours worked.
<b>Labour cost</b>	Private sector all salary and wage rates. <i>Labour Cost Index</i> .
<b>Real gross domestic income</b>	The real purchasing power of domestic income, taking into account changes in the terms of trade. <i>System of National Accounts</i> .
<b>Quarterly percent change</b>	$(\text{Quarter}/\text{Quarter}_{-1} - 1) * 100$
<b>Annual percent change</b>	$(\text{Quarter}/\text{Quarter}_{-4} - 1) * 100$
<b>Annual average percent change</b>	$(\text{Year}/\text{Year}_{-1} - 1) * 100$

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.



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## Appendix B

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

ABB New Zealand Ltd	NZ Manufacturers and Exporters Association
Air New Zealand Ltd	Pan Pac Forest Products Ltd
Alexander Construction Ltd	Paymark Ltd
Andar Holdings Ltd	PGG Wrightson Ltd
Aoraki Development Trust	Port of Napier Ltd
APN New Zealand Ltd	Ports of Auckland Ltd
Ashburton District Council	PricewaterhouseCoopers
Auckland Chamber of Commerce	Primeport Timaru Ltd
Augusta Funds Management	Rata Industries Ltd
Bayleys Realty Group Ltd	Ray White Real Estate Ltd
Carr Agricultural Group Ltd	Salt Recruitment
Colliers International NZ Ltd	Smith City Group Ltd
Cookson Boats Ltd	Southern Cross Building Society
Croys Ltd	The Warehouse Group Ltd
Dan Cosgrove Ltd	Tooline Ltd
Duncan Ag Ltd	Veda Advantage (NZ) Ltd
Electricity Ashburton	W H Collins & Co Ltd (Mitre 10)
Employers & Manufacturers Assoc. (Northern) Inc	Weldwell New Zealand
Export New Zealand	Whitcoulls Group Ltd
Fairfax New Zealand Ltd	WHK Hawke's Bay Ltd
Farmlands Trading Society Ltd	Xero Ltd
Finsec	
Foodstuffs South Island Ltd	
Global Culture Group Ltd	
Gough Group & Hamer Investments Ltd	
Harcourts Group Ltd	
Hawke's Bay Chamber of Commerce	
Hawke's Bay Fruitgrowers Association Inc	
Hudson Global Resources NZ Ltd	
J. Ballantyne & Co. Ltd	
Jade Software Corporation Ltd	
Kirkcaldie & Stains Ltd	
Meat Industry Association of New Zealand Inc	
Morgan Furniture Ltd	
Motim Technologies Ltd	
New Zealand Automobile Association Inc	
New Zealand Sock Company Ltd	
New Zealand Sugar Company Limited	
Noel Leeming Group Ltd	

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## Appendix C

### Reserve Bank statements on monetary policy

#### Reserve Bank raises OCR to 2.75 percent

10 June 2010

The Reserve Bank today increased the Official Cash Rate (OCR) by 25 basis points to 2.75 percent.

Reserve Bank Governor Alan Bollard said: “The economy has entered its second year of recovery with growth becoming more broad-based.

“The recovery in trading partner activity is continuing, with growth in Asia particularly strong. Along with ongoing growth in Australia and recovery in the United States, this has so far offset weak growth in some other export markets. Against this backdrop, New Zealand’s export commodity prices have increased sharply over the past few months, boosting export incomes.

“In contrast to signs of global economic recovery there has been renewed turmoil in financial markets. Currently, we expect the main impact on New Zealand to come through continuing upward pressure on the cost of funds to the banking system.

“In New Zealand, growth of around 3½ percent is expected this year and next. The main drivers of this outlook are higher export prices and volume growth, an improving labour market and a pick-up in residential and business investment. However, we expect households to remain relatively cautious, with the housing market and credit growth staying subdued. This moderate household spending contributes to some rebalancing in the economy.

“Underlying CPI inflation is expected to track within the target range even as the economy expands further. That said, headline CPI inflation will be boosted temporarily by the announced increase in GST and other government-related price changes. Provided households and firms do not reflect this price spike in their wage and price-setting behaviours we do not expect a lasting impact on inflation.

“Given this outlook and as previously signalled, we have decided to begin removing some of the monetary policy stimulus that is currently in place. The further removal of stimulus will be reviewed in light of economic and financial market developments.

“The fact that bank funding costs are higher, long-term interest rates are higher than short-term interest rates, and a greater proportion of borrowers use floating rate mortgages should all reduce the extent to which the OCR will need to be increased relative to previous cycles.”

#### Reserve Bank raises OCR to 3.0 percent

29 July 2010

The Reserve Bank today increased the Official Cash Rate (OCR) by 25 basis points to 3.0 percent.

Reserve Bank Governor Alan Bollard said: “While the outlook for economic growth has softened somewhat, it is still appropriate to continue to reduce the extraordinary level of support implemented during the 2008/09 recession.

“The world economy continues its fragile recovery. Trading partner growth has turned out stronger than we predicted, however, future prospects for growth have deteriorated. While still at high levels, our commodity prices have moderated.

“In New Zealand, domestic demand is subdued. Households are cautious, with retail spending growing only modestly, housing turnover in decline and household credit growth weak. While this caution has been evident for some time, the recent slowing in net immigration will act to further dampen consumer spending. Business investment remains very low, with corporate lending continuing to be subdued.

“The New Zealand dollar has appreciated in recent weeks. This appreciation is inconsistent with the softening in New Zealand’s economic outlook and moderation in our export commodity prices.

“Overall, we continue to predict respectable near-term GDP growth, with manufacturing confidence remaining elevated and forestry exports continuing to expand. An eventual recovery in business investment will assist growth over the medium term.

“Annual CPI inflation has been near 2 percent for the past five quarters. As the economy grows, inflationary pressures are expected to pick up.

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“Given this, some further removal of monetary policy stimulus is appropriate at this stage. Even after today’s move, the level of the OCR is still very supportive of economic activity. The pace and extent of further OCR increases is likely to be more moderate than was projected in the June Statement. Our policy assessment will be continually reviewed in light of economic and financial market developments.

“The coming increase in the rate of GST and other government-related price changes are likely to temporarily push annual CPI inflation above 3 percent. The Bank does not expect this price spike to have a lasting impact on inflation. However, the price and wage setting behaviour of firms and households will be monitored for evidence of any increase in inflation expectations.”

## Appendix D

### The Official Cash Rate chronology

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

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## Appendix E

# 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 announcements for 2010:

### 2010

Thursday 28 October 2010	OCR announcement
Thursday 9 December 2010	<i>Monetary Policy Statement</i>

### 2011

Thursday 27 January 2011	OCR announcement
Thursday 10 March 2011	<i>Monetary Policy Statement</i>
Thursday 28 April 2011	OCR announcement
Thursday 9 June 2011	<i>Monetary Policy Statement</i>
Thursday 28 July 2011	OCR announcement
Thursday 15 September 2011	<i>Monetary Policy Statement</i>
Thursday 27 October 2011	OCR announcement
Thursday 8 December 2011	<i>Monetary Policy Statement</i>

### 2012

Thursday 26 January 2012	OCR announcement
Thursday 8 March 2012	<i>Monetary Policy Statement</i>
Thursday 26 April 2012	OCR announcement
Thursday 14 June 2012	<i>Monetary Policy Statement</i>

Dates for 2012 are provisional, subject to confirmation in August 2011.

The Reserve Bank reserves the right to make changes to this schedule, if required, due to unexpected developments. In that unlikely event, the markets and the media will be given as much warning as possible.

The announcement will be made at 9:00 am on the day concerned. 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.

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# Appendix F

## 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 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.

### 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.

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## 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 and shall 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.



**Hon Bill English**

Minister of Finance



**Dr Alan E Bollard**

Governor

Reserve Bank of New Zealand

Dated at Wellington this 18th day of December 2008

