Monetary Policy Statement
December 2008

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

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1 Policy assessment

The Official Cash Rate (OCR) has been reduced from 6.5 percent to 5.0 percent.

Ongoing financial market turmoil and the marked deterioration in the outlook for global growth have played a large role in shaping today's decision. Activity in most of our trading partners is now expected to contract or grow only very slowly over the next few quarters.

Economic activity in New Zealand will be further constrained as a result, compared with our view in October.

Inflation is abating here and overseas as a consequence of these developments. We now have more confidence that annual inflation will return comfortably inside the target band of 1 to 3 percent some time in the first half of 2009 and remain there over the medium term. However, we still have concerns that domestically generated inflation (particularly local body rates and electricity prices) is remaining stubbornly high.

Today's decision brings the cumulative reduction in the OCR since July to 3.25 percent, and takes monetary policy to an expansionary position. Given recent developments in the global economy, the balance of risks to activity and inflation are to the downside. Thus it is appropriate to deliver this reduction quickly to support the economy and keep inflation from falling below the target band.

Monetary policy is working together with the depreciation of the New Zealand dollar and the fiscal stimulus now in train, to provide substantial support to demand over the period ahead and to create the conditions for some rebound in growth as global conditions improve.

To ensure the response we are seeking, we expect financial institutions to play their part in the economic adjustment process by passing on lower wholesale interest rates to their customers.

Further movements in the OCR will be assessed against emerging developments in the global and domestic economies and the response to policy changes already in place.

Alan Bollard
2 Overview and key policy judgements

Activity in the New Zealand economy has contracted since the start of 2008, reflecting the impact of many domestic and external shocks. The economy is moving from a position where productive capacity and the labour market were very stretched after a long period of strong growth, to one where considerable slack is starting to build up. As a result, the macroeconomic imbalances we had seen are starting to unwind.

Households are cutting back their spending. Ongoing housing market weakness is resulting in a decline in house prices and significantly less new house building. For some households this is being compounded by falling financial wealth and/or reduced liquidity via falling equity markets, and developments in the finance company and mortgage trust sectors. Rising prices for necessities, such as food, electricity and petrol, along with rising effective mortgage rates – the average rate across all borrowers – have also constrained spending over the past year, especially on discretionary items, such as cars.

Firms are also being buffeted from many directions, with weaker demand, rising costs, declining margins, and the lagged effects of the previously high New Zealand dollar all taking a toll. These factors have led firms to take a more cautious approach to investment, cut back on the hours their employees work and, increasingly, reduce staff numbers. Unusually dry weather last summer also detracted from growth, via its effects on agricultural production and hydro-electricity generation, thus playing a major part in the timing of when the economy entered recession relative to other economies.

We estimate the economy contracted modestly in the September quarter and forecast little growth in activity from now through until the middle of 2009. Thereafter, we forecast growth to begin to recover, but to remain below trend until 2010. Growth is weaker over this period than we projected in September.

The main factors contributing to the weaker near-term outlook are:

• A further deterioration in the outlook for trading partner economies results in their growth being expected to fall to a multi-decade low in 2009, with only a limited recovery in 2010. Most of our developed country partners are estimated to be entering recession, while growth in Asia is also expected to slow materially. This leads to a projected marked decline in the terms of trade relative to the September Statement, with sharply lower export prices outweighing the current fall in oil prices. Lower trading partner growth is also expected to lead to weaker export volume growth.

• The increase in financial market dysfunction that occurred during September and October is reducing the amount of credit available to households and businesses and slowing the pass through of the lower Official Cash Rate (OCR) to retail interest rates. Banks’ access to term funding from overseas has been severely curtailed and the funding that is being raised is more expensive and limited than it was prior to the deepening of the crisis.

These forces have already adversely affected business confidence. With the prospect of weaker domestic activity, we expect firm profitability and investment to be cut back by more than we projected in September. At the same time, further deterioration in household financial positions as a result of falls in house and equity prices, and a weaker employment outlook, will continue to constrain household spending.

Fiscal policy is expected to provide some offset to these negative factors, reflecting a combination of ongoing growth in government consumption and investment spending, and larger and earlier personal tax cuts.

From the start of 2010 we expect the economy to pick up momentum, although given the nature and severity of the global forces operating on the economy, there is considerable uncertainty about the timing and strength of the rebound. Our projection assumes that global financial markets start to normalise during 2009 and the global economy begins to recover. The latter will support an increase in export volumes and prices, as the fundamental drivers that underpinned the rise in prices for some of our commodity exports over recent years reassert themselves. In addition, we expect the rebound to be supported by the fact that firms have entered the downturn with relatively strong balance sheets, easier monetary conditions – with the lower exchange rate in particular assisting tradable sector competitiveness – and
few signs of a medium-term excess supply of housing given the significant falls in residential investment we have seen.

Overall, we are projecting annual average GDP growth to trough at -0.2 percent around the middle of 2009, before rising to 1.3 percent in March 2010 and 4.3 percent in March 2011 (figure 2.1). This is a more protracted and marked cycle than we projected in September.

Figure 2.1
Gross domestic product
(annual average percent change)

![Graph of GDP](image)

Source: Statistics New Zealand, RBNZ estimates.

The extended period of very weak activity over 2008 and 2009 is expected to result in a sizeable build-up of excess capacity. This, along with falling petrol prices, is expected to drive a significant easing in inflationary pressures. Surveyed inflation expectations have already fallen. Annual CPI inflation is forecast to fall briefly to just above 1/2 percent in the September quarter 2009 before increasing again as recent falls in petrol prices drop out of the annual rate.

Figure 2.2
CPI inflation
(annual, ex-ETS)

![Graph of CPI inflation](image)

Source: Statistics New Zealand, RBNZ estimates.

Excluding the first-round impacts on prices of the Emissions Trading Scheme (ETS), annual inflation is expected to be around 2.3 percent by mid-2010 (figure 2.2).

With inflation pressure declining, and credit spreads continuing to widen, these projections incorporate a much lower 90-day interest rate track than in September (figure 2.3), with rates projected to move into a stimulatory position.

Figure 2.3
90-day interest rate

![Graph of interest rate](image)

Source: RBNZ.

The downward revision to the 90-day interest rate projection implies a significant reduction in interest rates for new borrowers. The effective mortgage rate is also expected to start declining, but relatively slowly. The lagged response of the latter is primarily due to the preponderance of fixed-rate mortgages in New Zealand.

In addition to inflation, other macroeconomic imbalances are also forecast to reduce over the projection period. We expect the current account deficit to reduce from around 8½ percent of GDP in June this year to just over 6 percent by the end of the projection; the household saving rate to become significantly less negative; and indicators of house price overvaluation to reduce significantly.

Monetary policy judgements

The next year or two will be very difficult for the New Zealand and global economies. Moreover, the severity of the financial crisis means there is considerable uncertainty about the future path for activity and inflation. The ongoing dysfunction in financial markets also means there is some
Recent monetary policy decisions

After being held at a cyclical high of 8.25 percent since July 2007, the Bank reduced the Official Cash Rate (OCR) by 25 basis points at the July 2008 OCR review (figure A1). Global credit conditions, which deteriorated noticeably from August last year, pushed domestic lending rates higher than would usually have been associated with an 8.25 percent OCR. The OCR was reduced by 50 basis points at the September Statement and by a further 100 basis points at the October OCR review, taking the cumulative reduction to 175 basis points.

At the time of the September decision, CPI inflation had not yet peaked. However, the outlook for activity had deteriorated further and credit pressures had intensified. This led to an expectation that inflation pressures would abate, such that inflation was expected to return comfortably inside the target band. These downward pressures on future inflation intensified further due to adverse developments in global financial markets during October. The Bank determined that monetary conditions could move to a less contractionary stance and therefore reduced the OCR at the October review. Further reductions were signalled as likely, but the pace and size of these would depend on the outlook for activity and inflation.

In global financial markets during October. The Bank determined that monetary conditions could move to a less contractionary stance and therefore reduced the OCR at the October review. Further reductions were signalled as likely, but the pace and size of these would depend on the outlook for activity and inflation.

The main question we have been facing is how far and fast monetary conditions should be eased. We have been conscious that if monetary conditions remain tighter than necessary for too long, then there is a risk that the period of weak growth in the New Zealand economy could be exaggerated and/or the inflation track pushed through the bottom of the target band. We have taken the view that the economic outlook warrants monetary conditions moving to a stimulatory stance relatively quickly, and have reduced the OCR by 175 basis points between July and October (figure 2.4). Monetary conditions have become significantly less contractionary due to the October OCR decision and subsequent interest and exchange rate declines and we expect them to move to a stimulatory position over the coming period.

Figure A1
Official Cash Rate

Source: RBNZ.

Figure 2.4
Cumulative easing in policy interest rates

Source: Datastream.
Note: Change is between 1 July and 26 November 2008.
As is discussed in chapter 3, the global financial crisis deepened in October after the failure of several large financial institutions in the United States. Credit spreads have increased and credit has become more difficult to obtain; risk aversion has increased; money and equity markets are less liquid and much more volatile; and financial institutions are much less willing to lend to each other. Policymakers have moved aggressively to try and reverse some of these developments, and there is some evidence of conditions improving in some areas. However, in aggregate, global credit conditions remain very tight and are expected to be a source of risk for the global economy for some time.

Together with consistently weak economic data, the deepening of the global financial crisis has seen the outlook for global growth deteriorate significantly since the September Statement. This has prompted central banks to cut interest rates significantly and governments to add fiscal stimulus. The trough in trading partner economic growth is projected to be deeper than previously expected, with most of New Zealand’s developed country trading partners in, or about to enter, recession, and the mild recovery pushed out until the second half of 2009. As a result, year average trading partner growth is forecast to be much lower in 2009 than in 2008, and 2010 growth about the same as 2008. Our projected outlook is in line with that implied by the latest Consensus, IMF and OECD forecasts, but we believe the risks remain weighted to the downside. These risks relate partly to a more protracted slowdown in the United States and Europe, but more significantly to the risk that the effects of slowing Western economies on Asia are more severe than we have assumed.

We are now clearer about the transmission of these developments to the New Zealand economy. In particular, prices for a number of New Zealand’s commodity exports have fallen significantly and are likely to fall further. New Zealand-based banks and large firms are also finding it difficult to access traditional overseas funding sources and/or are paying a higher margin for what they can obtain. Both of these forces will act to lower growth and inflation.

Assessing the impact of global credit pressures and the behaviour of financial institutions on the price and availability of credit is a significant policy consideration. The credit conditions faced by New Zealand households and businesses are tighter than they have been for some time. The increasing wedge between expected OCR and retail interest rates is also one of the main motivations for the size of reductions in the OCR since July. We do not expect this situation to improve significantly for some time, and there is a risk it may deteriorate further.

Households are expected to continue to be cautious with their spending. Household saving from income is expected to increase in the face of falling house and equity prices and a more uncertain employment outlook. How businesses respond to the weaker outlook in terms of employment and investment is an area of uncertainty and will be a key determinant of the depth and duration of the downturn. While we expect sizable declines in employment and investment, even sharper adjustments are possible.

Falling petrol prices are forecast to drive tradable and headline CPI inflation down sharply over the next year, notwithstanding the decline in the exchange rate. Potentially, annual inflation could fall briefly to the bottom of the target band if petrol and food prices decline further.

Non-tradable inflation is likely to be slower to fall than tradable inflation. Electricity price rises and local authority rate increases are forecast to hold inflation up over the next few quarters. Similarly, construction cost inflation is only declining slowly, despite the large fall in residential investment. There remains a risk that price inflation in parts of the economy that are subject to less competitive pressure will persist for longer than expected. It is likely to be mid-2009 before we see the extent to which slower activity is translating into lower non-tradable inflation – later than previously thought.

Balancing the various risks around the outlook, we assess some further, but significantly smaller, reductions in interest rates may be warranted beyond the current policy decision. The precise timing and magnitude of these reductions will depend on the information we receive on activity and inflation prospects over the coming months.
3 International developments and outlook

Following firm growth in 2007, economic activity in New Zealand’s trading partner economies slowed over the first half of 2008. This was in response to significant financial headwinds, corrections in many overseas housing markets, and pressure on real incomes due to high commodity prices.

The contractionary impact of high commodity prices on real incomes has now eased. However, this has been more than offset by the significant deterioration in financial conditions, which has increasingly been spilling over into weaker confidence and economic activity. Consequently, in recent months there has been a pronounced deceleration in economic activity in all regions.

In light of these developments, the outlook for growth in all of New Zealand’s trading partners is significantly weaker than assumed at the time of the September Statement. Growth is expected to slow sharply in all regions and to recover only very gradually. This is despite the extraordinary measures taken by policymakers to support growth and promote the functioning of financial markets. Growth is expected to be particularly weak in Western economies and in Japan, but is also expected to ease materially in New Zealand’s main trading partners in Asia, excluding Japan (AxJ).

The deteriorating outlook for activity in trading partner economies since the September Statement is the key factor contributing to a weaker outlook for growth and inflation in New Zealand (some of the main transmission channels are summarised in figure 3.1). As discussed in chapter 5, there are likely to be significant trade-related spillovers. These include reduced demand for New Zealand’s manufactured and tourism exports, as well as lower international prices for New Zealand’s commodity exports. It is also possible that weaker international activity and challenging financial conditions may reinforce each other and worsen already tight domestic financial conditions.

While the direct trade spillovers to New Zealand from weaker activity in some large economies may be limited, slower activity in large economies can indirectly influence New Zealand by affecting activity in other regions which are important trading partners. For instance, although exports to China account for only about 7 percent of New Zealand’s total exports, slowing growth in China is expected to contribute to weaker commodity export prices and lower growth in Australia – New Zealand’s largest trading partner.

Weaker global growth is also likely to result in some reduction in imported inflation pressures due to demand-related easing in commodity prices and increased price competition among producers. However, the precise nature of the pass-through to domestic prices will be influenced by the response of the New Zealand dollar.

International financial market developments

Financial conditions have deteriorated significantly in recent months and are likely to remain challenging for longer than previously assumed. The direct impact of these developments is expected to be centred on developed economies. Tight credit conditions, as well as losses in financial and property wealth, are now expected to exert a larger dampening impact on business and household spending. Further, increased uncertainty about the economic outlook signals additional downside risk, particularly for business investment.

In Asia, financial institutions are thought to be generally less exposed to recent events than their Western counterparts. However, the region is still facing increased financial headwinds, such as high levels of volatility in equity prices. Of greater concern is Asia’s indirect exposure to recent developments via reduced global activity and trade.
The recent intensification of financial market headwinds followed the failure of major US investment bank Lehman Brothers in mid-September. This led to a significant increase in fears about the health of the global financial system, with widespread concerns about the solvency of several major US and European financial institutions. Moreover, with the extreme uncertainty around the solvency of financial institutions, their ability to raise capital has deteriorated markedly.

These developments have caused global equity markets to fall sharply (figure 3.2), while measures of investor risk aversion – such as the VIX index (options implied volatility on the S&P 500 index) – surged to record highs. In response to the sharp fall in equity markets and more general concerns about the global financial system, policymakers have taken aggressive actions to stabilise financial markets and bolster economic activity. Despite these actions, equity markets have fallen further in recent weeks as economic data continue to highlight the possibility of a prolonged global recession.

**Figure 3.2**

*Equity indices (1 January 2007 = 100)*

Developments since mid-September have resulted in a significant increase in the cost of insuring against default for corporate borrowers in most countries – an indication of the upward pressure on term funding costs and the reduced availability of such funding (figure 3.3). The increase in funding costs has resulted in financial institutions reducing the availability and increasing the cost of credit to households and businesses. The tightening in credit conditions is evident in recent surveys of financial institutions’ lending practices in the United States and euro area.

**Figure 3.3**

*Credit default swap spread indices*

Short-term money market conditions also deteriorated significantly after mid-September. Investors became extremely cautious about lending to counterparties, preferring to invest mainly in safer US government debt. Accordingly, spreads between interbank (Libor and bank bill) rates and expected policy rates (as measured by overnight index swap – OIS – rates) widened to record levels (figure 3.4).

**Figure 3.4**

*Spreads between three-month Libor and OIS rates*

Source: Bloomberg, RBNZ estimates.
Note: Updated to 24 November 2008. Bank bill rates are used instead of Libor rates in the case of New Zealand and Australia.
In response to money market pressures, the US Federal Reserve and other central banks have continued to increase the range and size of their liquidity facilities. The additional liquidity measures and some easing in investor risk aversion have helped ease pressures in money markets, although interest rate spreads still remain wide by historical standards.

Despite the recent easing in short-term money market pressures, the ability of financial institutions to raise longer-term capital still remains extremely difficult. However, recent government actions to implement wholesale deposit guarantee schemes, particularly in the United States, United Kingdom and euro area, are expected to assist financial institutions in raising capital.

Conditions in the US dollar commercial paper (CP) market also deteriorated significantly after mid-September. Indeed, with little new issuance during October, total outstanding US dollar commercial paper declined significantly (figure 3.5). Not only were investors less willing to invest in the CP market, the cost of available funding also increased significantly. More recently, implementation of the Federal Reserve’s commercial paper funding facility has fostered some recovery in issuance.

**Figure 3.5**
Total stock of outstanding US dollar commercial paper

Since the beginning of the credit crisis in mid-2007 there have been regional disparities in the extent of credit write-downs, with US financial institutions accounting for about 70 percent of total credit write-downs worldwide (figure 3.6). This, in part, underlies the different responses policymakers have taken since mid-2007. Although governments – in the United States, United Kingdom and euro area in particular – have injected significant capital directly into financial institutions, new capital raised has still fallen short of total credit write-downs by about USD100 billion over the past year.

**Figure 3.6**
Credit write-downs and capital raised by region since Q3 2007

The marked deterioration in financial conditions and the corresponding concerns about economic activity have led to sharp falls in policy interest rates around the world. In early October, several major central banks co-ordinated to reduce interest rates by 50 basis points. Several other central banks also reduced interest rates around this time. More recently, policy interest rates have continued to fall as the outlook for global growth has deteriorated further and inflation pressures have eased significantly (figure 3.7). Interest rate markets are pricing in further aggressive near-term easing. However, increases in money market pressures have meant that wholesale and retail interest rates have fallen by less than policy rates.

Authorities in a number of countries have introduced fiscal stimulus packages to support their domestic economies. Among New Zealand’s key trading partners, such policies have been introduced in Australia, the United Kingdom, Germany, Japan, China, South Korea, Malaysia and Taiwan.

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Note: Updated to 19 November 2008.
Policymakers in the United States are also considering increasing fiscal support. For the most part, the impact of these policies is expected to be seen from 2009.

The broad-based strength in the US dollar and Japanese yen masks what has been an extremely volatile period. Notably, since mid-September measures of volatility on the Australian dollar have exceeded those on the New Zealand dollar (figure 3.9).

Figure 3.7
Financial market expectations of international policy rates

Figure 3.8
Change in currencies against the US dollar since the September Statement

The New Zealand dollar has also depreciated against the US dollar since the September Statement. This has been driven by increased investor risk aversion, combined with falling global commodity prices and expectations of greater policy rate easing from the Reserve Bank of New Zealand.

Notably, the New Zealand dollar has depreciated sharply against the Japanese yen as risk aversion and a narrowing in the relative interest rate differential has led to Japanese investors scaling back positions. In particular, retail margin traders in Japan have now reduced their net long positions in the New Zealand dollar to levels prevailing before the onset of the credit crisis in mid-2007. While total issuance of Uridashi bonds has declined sharply, issuance of New Zealand dollar denominated Uridashi bonds has remained a reasonably large portion of overall global issuance (figure 3.10).
International activity

The global economy appears to be entering a position of extreme weakness. Economic activity in New Zealand’s trading partner economies had already begun to slow in the first half of 2008. With the significant increases in financial headwinds discussed above, a further sharp deceleration in growth is projected over the remainder of 2008 and early 2009 (figure 3.11, table 3.1). Further ahead, growth is expected to recover only gradually, remaining below trend through 2010. This outlook is much weaker than we had assumed at the time of the September Statement, with global growth now expected to fall to its lowest rate since the early 1980s.

The outlook for activity is particularly weak in developed economies (figure 3.13). The September quarter saw GDP contracting in the United States, Japan, United Kingdom and the euro area. Growth in these economies is expected to remain negative through the first half of 2009 and to recover only gradually further ahead.

- The outlook for household spending in these economies has continued to weaken as a result of softening labour markets, tighter lending conditions, and very weak consumer confidence. In some economies, such as the United States and the United Kingdom, continuing corrections in housing markets are also expected to dampen household spending for some time.

- These conditions, as well as the worsening export picture, have also significantly affected business activity (figure 3.12) and are expected to result in firms cancelling or delaying investment spending.

In Asia, both financial and non-financial institutions still appear less directly exposed to the financial crisis than their counterparts in Western economies. Nevertheless, softer global demand conditions are now more clearly weighing

Table 3.1

Forecasts of trading partner GDP
(calendaryear, annual average percent change)

<table>
<thead>
<tr>
<th>Country</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008f</th>
<th>2009f</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>3.0</td>
<td>3.9</td>
<td>2.8</td>
<td>2.7</td>
<td>4.2</td>
<td>2.3</td>
<td>1.6</td>
</tr>
<tr>
<td>Asia ex-Japan*</td>
<td>5.3</td>
<td>7.6</td>
<td>6.8</td>
<td>7.5</td>
<td>7.7</td>
<td>5.7</td>
<td>4.0</td>
</tr>
<tr>
<td>United States</td>
<td>2.5</td>
<td>3.6</td>
<td>2.9</td>
<td>2.8</td>
<td>2.0</td>
<td>1.5</td>
<td>-0.7</td>
</tr>
<tr>
<td>Japan</td>
<td>1.5</td>
<td>2.7</td>
<td>1.9</td>
<td>2.4</td>
<td>2.0</td>
<td>0.5</td>
<td>-0.2</td>
</tr>
<tr>
<td>Euro area</td>
<td>0.8</td>
<td>1.9</td>
<td>1.8</td>
<td>3.0</td>
<td>3.0</td>
<td>1.3</td>
<td>-0.5</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>2.8</td>
<td>2.8</td>
<td>2.1</td>
<td>2.8</td>
<td>3.0</td>
<td>0.8</td>
<td>-1.3</td>
</tr>
<tr>
<td>12 Country Index</td>
<td>2.8</td>
<td>4.1</td>
<td>3.3</td>
<td>3.7</td>
<td>4.0</td>
<td>2.4</td>
<td>1.1</td>
</tr>
</tbody>
</table>

Source: DataStream, RBNZ estimates.
* Includes China, Hong Kong, Malaysia, Singapore, South Korea and Taiwan.
Figure 3.12
Trading partner GDP and business activity indicators

Source: DataStream, national sources, RBNZ estimates.
Note: GDP data are shown in annual percent change form. Other series are indices that have been rescaled to indicate their deviation from sample averages.

upon activity, and growth is expected to slow sharply from the strong rates seen in early 2008.

- In China, GDP growth has continued to slow from the double-digit growth rates seen in 2007, to 9 percent in the year to September. This slowing reflects earlier policy tightening and less favourable global conditions, and has been reflected in China’s exports and indicators of business activity such as industrial production. However, indicators of domestic demand such as retail sales have remained resilient. Very recently, the Chinese authorities announced new spending measures and a 108 basis-point cut in the monetary policy rate to stimulate the economy.
Consumption spending has weakened significantly in the wake of strong inflation pressures and the earlier tightening of monetary policy. With strong financial headwinds (including reduced financial wealth), combined with low levels of confidence, household spending looks likely to remain soft for some time.

Indicators of business sector activity, such as the NAB business survey, are also consistent with softening growth.

The outlook for global growth is much more uncertain than usual and the risks are, on balance, to the downside. In large part these risks relate to the persistence of financial headwinds, particularly given the potential for slowing activity and adverse financial conditions to reinforce each other. There is also a high degree of uncertainty regarding the resilience of economies in AxJ (particularly China) to recent developments. These downside risks are partially offset by the significant easing in monetary and fiscal policy discussed above.

Our projections are broadly in line with the latest forecasts published by the IMF and OECD, and with the most recent Consensus survey.

**International inflation developments and outlook**

In most of New Zealand's trading partner economies, the strong increases in inflation seen over the past year have now started to reverse (figure 3.14). This is mainly a result of recent sharp falls in commodity prices, particularly for food and energy – the same factors that contributed to high inflation earlier in the year. Measures of core inflation rates have also softened in many economies, but to a lesser extent.

Contributing to the recent declines in commodity prices have been concerns about the strength of global demand and the possible impact of the credit crisis on emerging markets. These concerns have contributed to particularly sharp falls in the price of oil, with the West Texas Intermediate oil price down by more than 60 percent from its July peak, to under USD50 per barrel – roughly where it was in early 2007 (figure 3.15).
Weaker global activity has also contributed to sharp declines in the international prices for New Zealand commodity exports. By October, ANZ commodity prices had fallen 12 percent (in SDR terms) from their July peak (figure 3.16). This is primarily due to dairy prices declining 23 percent over this period. Since then, USDA Oceania whole milk powder prices have continued to fall rapidly; by late November they had halved in US dollar terms since their peak, which was reached late last year. Prices of a number of other commodity exports have also declined, including manufactured beef, forestry products and aluminium.

Recent declines in commodity prices are expected to contribute to a sharp decline in inflation in New Zealand’s trading partner economies over the first half of 2009 (figure 3.17). Looking further ahead, global inflation is expected to be more modest than assumed at the time of the September Statement, as weaker global activity contributes to an easing in cyclical pressures. Declines in commodity prices are expected to alleviate pressures on households’ real disposable incomes in most trading partner economies.

Weaker global activity has also contributed to sharp declines in the international prices for New Zealand commodity exports. By October, ANZ commodity prices had fallen 12 percent (in SDR terms) from their July peak (figure 3.16). This is primarily due to dairy prices declining 23 percent over this period. Since then, USDA Oceania whole milk powder prices have continued to fall rapidly; by late November they had halved in US dollar terms since their peak, which was reached late last year. Prices of a number of other commodity exports have also declined, including manufactured beef, forestry products and aluminium.

Declines have also been seen in the prices of hard commodities, including those which are important exports for Australia. There have been particularly sharp declines in the spot prices for coal and iron ore, two of Australia’s largest export commodities. Prices of base metals have also continued to fall.

Recent declines in commodity prices are expected to contribute to a sharp decline in inflation in New Zealand’s trading partner economies over the first half of 2009 (figure 3.17). Looking further ahead, global inflation is expected to be more modest than assumed at the time of the September Statement, as weaker global activity contributes to an easing in cyclical pressures. Declines in commodity prices are expected to alleviate pressures on households’ real disposable incomes in most trading partner economies.
4 Recent developments in the domestic economy

Overview
Against the backdrop of a deteriorating global economy and broad-based weakness across most sectors of the domestic economy, we estimate that GDP contracted over the first three quarters of this year.

The deterioration in the household sector continues to drive the weakness in near-term domestic activity, as consumers rein in their spending in the face of continued slowing in the housing market and tightening credit conditions. In addition, increasing evidence suggests businesses are also suffering from the slowdown, with business sentiment falling to low levels recently.

In line with the increased volatility in oil prices, headline inflation has also undergone large movements in the second half of 2008. While annual headline inflation peaked at 5.1 percent in the September quarter, sharp declines in petrol prices since the peaks reached in July will drive December quarter inflation significantly lower than previously forecast.

Financial market developments
Worsening global financial market developments since mid-September have contributed to a deterioration in short-term domestic money market conditions. As has occurred internationally, this tightening in credit conditions saw the spread between bank bill rates and the expected Official Cash Rate (as measured by overnight index swap – OIS – rates) in New Zealand widen to historically high levels (figure 4.1).

Recently announced policy measures have contributed to some improvement in local money market conditions. The implementation of the retail deposit guarantee scheme, the announcement of a wholesale guarantee facility, and measures by the Reserve Bank of New Zealand to improve liquidity – in particular the term auction facility (TAF) – have helped to ease local money market pressures.

This easing in money market conditions has seen the spread between bank bill rates and the expected Official Cash Rate (OCR) fall back to around 25 basis points above normal levels. In contrast, the spreads in some major economies have remained around 150 basis points above average levels (figure 3.4, chapter 3). However, similar to other developed economies, the improvement has been largely in the overnight duration, with conditions beyond three months – where banks do the majority of their funding – still under considerable pressure.

The ongoing turmoil in global financial markets (discussed in chapter 3) and the continuing domestic economic weakness has seen domestic markets price in further significant reductions in the OCR. New Zealand’s wholesale interest rates have fallen across the curve, with shorter-term interest rates falling by a greater extent, reflecting the extensive easing expected in the near term (figure 4.2). That said, the New Zealand yield curve has steepened relatively less than in other developed economies.
Household sector

Recent falls in wholesale interest rates have resulted in markedly lower mortgage interest rates offered to new borrowers and those households facing re-pricing of existing debt (figure 4.3).

Figure 4.3
Mortgage interest rates offered to new borrowers

![Mortgage interest rates offered to new borrowers](chart)

Source: RBNZ.
Note: November data are provisional estimates.

Given the recent improvement in credit conditions and expectations of further easing in the OCR, we believe the effective mortgage rate – the average interest rate paid on outstanding mortgage debt – has now peaked. Overall, the effective mortgage rate is expected to decline by about 150 basis points over the next two years, as the mortgages that were fixed over the past two years are reset at lower rates (figure 4.4). Moreover, the relatively larger fall in short-term interest rates, and expectations among borrowers of further falls in interest rates over the months ahead, mean new borrowers and those facing re-pricing are increasingly choosing to take out short-term fixed or floating rate mortgages. If this pattern continues, it will speed up the transmission from changes in the OCR to the interest rate paid by households. But while mortgage rates have fallen, these lower rates tend to be available only for borrowers with loan-to-value ratios of less than 80 percent, with more leveraged households finding financing difficult or more expensive.

The combination of declining household wealth, rising effective mortgage rates, and significantly higher food and fuel costs over the course of 2008 contributed to weaker household spending. This has been reflected in the decline in retail sales volumes in the September quarter, particularly in the vehicle and grocery sectors.

Residential investment declined by a further 8.3 percent in the June quarter (figure 4.5). Furthermore, house sales remained at low levels throughout the September quarter, and issuance of residential building consents fell further. Low housing market activity and a large number of house listings have put downward pressure on overvalued house prices.

Figure 4.5
Real residential investment, house sales and ex-apartment consents

![Real residential investment, house sales and ex-apartment consents](chart)

Source: REINZ, Statistics New Zealand, RBNZ estimates.

Consumer confidence showed initial signs of rebounding from its mid-year lows (figure 4.6), following falls in petrol prices, the October tax cuts, and lower mortgage rates for new loans. Nonetheless, recent financial market turmoil also appears to have weighed on consumer confidence and it remains well below 2007 levels. This suggests continued weakness in household spending through to at least the end of this year.
Reflecting this weaker household spending, growth in credit to the household sector has declined sharply since 2007 (figure 4.7). Similarly, credit growth to the non-agricultural business sector has also continued to trend downwards, partly reflecting the tightening in lending standards by banks and difficulties in the finance company sector. Meanwhile, the strength in international prices for agricultural products early this year has driven strong credit growth to the agricultural sector, notably to dairy farmers.

Figure 4.7
Credit by sector
(annual percent change)

Source: RBNZ.

Business sector
While the current recession in the domestic economy stemmed from the household sector, businesses are also increasingly being affected by the slowdown. The marked deterioration in global funding and credit markets since mid-September has pushed up credit spreads faced by local corporate borrowers. This is illustrated by the local commercial paper market, where the spread between the rate paid on new corporate paper issued and bank bill yields has begun to widen again (after narrowing following the bailout of Bear Stearns in mid-March) and investor demand has weakened (figure 4.8).

Figure 4.8
Spread between commercial paper and bank bill rates

Source: Reuters, RBNZ.
Note: Updated to the end of October.

With reduced credit availability exacerbating the deterioration in domestic demand, measures of business profitability expectations, and subsequent investment and hiring intentions have continued to fall to multi-year lows. This is reflected in headline measures of businesses’ outlook for their own activity (figure 4.9).

Figure 4.9
Business outlook for own activity

Tradable sector

Beyond the direct impact of tightening credit conditions mentioned above, New Zealand is also affected indirectly by the weakening world demand discussed in chapter 3. To date, the domestic effects have mainly been concentrated in the prices of exports and imports as international commodity prices fell markedly. Since agricultural goods are a larger share of exports than oil is of imports, these commodity price movements have seen a substantial fall in the terms of trade – the ratio of export prices to import prices. This change in the terms of trade has dragged on incomes over the latter half of 2008.

The effects of the weaker global economy are likely to affect export volumes over the course of 2009, as discussed in chapter 5. But exports were also influenced in early 2008 by domestic factors. While exporters benefited from the then-high international prices, agricultural export volumes were heavily affected by dry weather over this period. Milk production fell, but meat exports rose as farmers increased slaughter in light of feed shortages. Recovery to more normal levels following the drought has boosted dairy exports through the latter half of 2008. Conversely, the need to rebuild stock numbers and the continued impact of dairy conversions is likely to depress the volume of meat exports for some time. The fall in primary exports in the June quarter was offset by increased manufacturing exports. Meanwhile, exports of services have remained relatively flat since the start of the decade, reflecting the strong New Zealand dollar over much of this period and, more recently, the weaker world economy (figure 4.10).

Although import volumes increased sharply in the June quarter, an oil rig and a floating platform purchased in April explained this temporary spike. Abstracting from irregular items, underlying import volumes appear to have fallen during the September quarter.

Nonetheless, the rise in imports in the June quarter contributed to a widening in the annual current account deficit to 8.3 percent of GDP, reversing the improvement over the previous quarters (figure 4.11). In a levels sense, a large investment income deficit continues to account for the bulk of New Zealand’s current account deficit. The fact New Zealand continues to run a large current account deficit highlights its dependence on international funding.

**Figure 4.11**
Current account balance, investment income, goods and services balances

Output

The backdrop of a deteriorating global economy and growing weakness in the household and business sectors has driven the fall in domestic output over 2008. As a result of low activity in the real estate market, service sector output contracted in the June quarter for the first time since 2001. The sharp decline in residential construction activity suggests that the domestic economy is likely to have had a third quarter of contraction for September.

The contraction in output has been reinforced by a weaker world growth outlook, which adversely affects export sector incomes by reducing export volumes and...
export commodity prices. Offsetting some of this will be the recovery in the agricultural sector from the drought.

The dry conditions also negatively affected electricity generation early this year. Since then, increased hydro-electricity generation from the substantial rainfall will also offset some of the weakness in other domestic production.

**Productive capacity and the labour market**

On balance, recent developments have led to an increase in unused productive capacity in the economy following a sustained period during which resources have been severely stretched. The QSBO measure of capacity utilisation – which has in the past been a useful indicator of capacity pressures in the economy – fell sharply in the September quarter (figure 4.12). In addition, there have been signs of emerging weakness in the labour market, with the unemployment rate edging up for the third consecutive quarter and surveyed skill shortages declining significantly from the peaks reached early this year.

**Figure 4.12**

Capacity measures and annual average GDP growth *(seasonally adjusted)*

While the labour market is beginning to show signs of weakening, this is yet to be reflected in wages, with the private sector Labour Cost Index increasing by 3.7 percent in the year to September – the highest rate of increase in the history of the series (figure 4.13). Thus, nominal household income growth is still currently very strong. Given wages are typically one of the last indicators to turn in response to softer labour market conditions, this latest outturn reflects the extremely tight labour market prevailing in recent years.

**Figure 4.13**

Labour costs and wages – private sector *(annual percent change)*

Inflation expectations

The RBNZ two-year ahead measure of inflation expectations declined from a record high of 3.0 percent in the September quarter to 2.7 percent in the December quarter (figure 4.14). This outturn was largely driven by a sharp decline in inflation expectations of respondents in the financial sector. However, it appears weak demand in the domestic economy is affecting a broader range of businesses, with pricing intentions of respondents to the QSBO survey falling to a greater extent than costs in recent months.

**Figure 4.14**

Headline CPI and inflation expectations

Source: Statistics New Zealand.
Inflation

Annual inflation increased to a record high of 5.1 percent in the September quarter, underpinned by high petrol and food price inflation. Increased energy costs also contributed to a sharp rise in producer price inflation over the past year. Intense cost pressures over the past year, combined with relatively smaller increases in output prices and consumer prices, point to margin compression over this period (figure 4.15). More recently, there have been very large declines in petrol prices from their peak in July, which will drive quarterly headline consumer price inflation negative in the December quarter.

Lower import commodity prices and the lagged indirect effects of the lower petrol prices are helping drive tradable inflation lower, despite the depreciation in the New Zealand dollar. There are also signs food price inflation is starting to moderate (albeit from very high rates). Meanwhile, weaker consumer spending has led to discounting of large ticket consumer goods, a prime example being the recent sharp decline in the price of second-hand vehicles.

Figure 4.15
Producer price inflation and headline CPI (annual)

<table>
<thead>
<tr>
<th>Year</th>
<th>Headline CPI</th>
<th>PPI inputs</th>
<th>PPI outputs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995</td>
<td>5.0%</td>
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<td>2002</td>
<td>1.5%</td>
<td>4.5%</td>
<td>6.5%</td>
</tr>
<tr>
<td>2003</td>
<td>1.0%</td>
<td>4.0%</td>
<td>6.0%</td>
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<tr>
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<td>5.5%</td>
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<tr>
<td>2005</td>
<td>0.0%</td>
<td>3.0%</td>
<td>5.0%</td>
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<tr>
<td>2006</td>
<td>-0.5%</td>
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<td>4.5%</td>
</tr>
<tr>
<td>2007</td>
<td>-1.0%</td>
<td>2.0%</td>
<td>4.0%</td>
</tr>
</tbody>
</table>

In contrast, non-tradable inflation remained high at an annual rate of 4.1 percent, reflecting the fact the domestic economy has run beyond capacity for a number of years. The easing in construction cost inflation has been limited by the continued high costs faced by producers in the industry, despite slowing demand for building work. Outside of housing, recent increases in electricity prices and the annual increase in local authority rates across the country will also underpin annual non-tradable inflation in the second half of 2008. Thus, while weaker demand in the domestic economy has started to weigh on inflation pressures, a range of cost increases are continuing to underpin price increases in some areas in the near-term.

Figure 4.16
CPI tradable and non-tradable inflation (annual)

Source: Statistics New Zealand.
### Table 4.1

**Measures of inflation and inflation expectations**

*(annual)*

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<thead>
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<th>2008</th>
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<tr>
<td></td>
<td>Mar</td>
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<tr>
<td>CPI</td>
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<td>CPI components</td>
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<td>Non-tradables housing components</td>
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<td>Other inflation measures</td>
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<td>CPI weighted median (of annual price change)</td>
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<td>CPI ex food, petrol and government charges</td>
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<td>2.1</td>
</tr>
<tr>
<td>CPI ex food and energy</td>
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<td>GDP deflator (derived from expenditure data)</td>
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<td>4.3</td>
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**Inflation expectation measures**

<table>
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<tr>
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<th>2007</th>
<th>2008</th>
</tr>
</thead>
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<td>Mar</td>
<td>Jun</td>
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<td>RBNZ Survey of Expectations – inflation one-year-ahead</td>
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<td>2.7</td>
</tr>
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<td>RBNZ Survey of Expectations – inflation two-years-ahead</td>
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<td>AON Economist survey – inflation one-year-ahead</td>
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<tr>
<td>AON Economist survey – inflation four-years-ahead</td>
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<td>2.5</td>
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<tr>
<td>NBBO – inflation one-year-ahead (quarterly average)</td>
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</tbody>
</table>
The macroeconomic outlook

The outlook for economic activity in New Zealand remains weak. Global developments of the past two months have seen the outlook for domestic activity deteriorate to an even greater extent than was projected in the September Statement. The outlook for trading partner growth has been revised significantly lower, turbulence on global financial markets has seen credit conditions tighten even further, and international dairy prices have fallen sharply.

Weak GDP growth in New Zealand is projected to continue through to the second half of 2009. Beyond this – assuming some normalisation in credit markets – the economy is expected to recover somewhat, as the impact of a weaker currency boosts net exports and easier monetary and fiscal conditions assist economic activity more generally. For now though, any sort of recovery remains some time off, with the timing and magnitude of an upturn highly dependent on global developments over coming months and quarters.

More immediately, significant spare capacity is expected to accumulate over the coming year. Surplus productive resources, along with falling petrol prices, are expected to contribute to a significant easing in inflation pressures. Indeed, excluding the impact of the Emissions Trading Scheme, annual CPI inflation is expected to be about 2.3 percent by mid-2010.

The terms of trade

As discussed in chapter 3, the outlook for global growth has deteriorated markedly over the past few months. An obvious, and quite immediate, consequence of this deterioration has been a sharp decline in global commodity prices.

International dairy prices have fallen markedly. We expect prices to continue to decline and for this to be reflected reasonably quickly in aggregate export prices. Of course, given current downward momentum in commodity prices, there is a clear risk of international dairy prices falling to an even greater extent.

The outlook for export commodity prices, more broadly, has worsened. Meat prices, after showing strong gains, have moderated. Forestry prices seem likely to continue to moderate given the weak outlook for housing construction in many of New Zealand’s export partners. Weak global growth is also expected to see world prices for manufactured exports ease over the projection.

In aggregate, we expect export prices to fall markedly through the first half of 2009. While there is a risk of even larger falls in the near-term, we believe fundamentals remain in place to see commodity prices trend higher over the medium term. We therefore project export prices to recover from the second half of 2010 (figure 5.1).

Figure 5.1
OTI world export prices (goods)
(seasonally adjusted)

![Figure 5.1](image)

Source: Statistics New Zealand, RBNZ estimates.

Oil prices have also fallen sharply. While we expected oil prices to moderate, recent declines have been much larger than was assumed in the September Statement, consistent with a further weakening in the global activity outlook. We assume that oil prices will largely track sideways from here (figure 5.2). There is clearly a risk of a more protracted cycle in oil prices than we project.

Figure 5.2
Dubai oil price

![Figure 5.2](image)

Source: Statistics New Zealand, RBNZ estimates.
Commodity products make up a much smaller proportion of New Zealand’s import basket than its exports. As such, the recent commodity price declines are expected to have a comparatively smaller impact on import prices. In fact, once oil prices are excluded, import prices are expected to trend higher, consistent with continued positive world inflation.

Overall, sharply lower export commodity prices are expected to outweigh the recent oil price decline such that the terms of trade decline sharply over the coming year. Beyond this, the terms of trade are expected to settle at a level slightly above their average of the past decade (figure 5.3).

**Figure 5.3**
OTI terms of trade (goods)

![OTI terms of trade (goods)](source: Statistics New Zealand, RBNZ estimates)

**Exchange rate**

The New Zealand dollar TWI has fallen sharply over the past few months. The TWI is assumed to depreciate further over the coming year, before recovering gradually towards the end of the projection (figure 5.4). As with export prices, there is a risk that the New Zealand dollar depreciates further in the near term. The depreciating New Zealand dollar will help offset some of the effect of falling international commodities prices on New Zealand dollar prices.

**Figure 5.4**
Nominal TWI assumption

![Nominal TWI assumption](source: RBNZ estimates)

**Trade volumes**

Weak global growth is expected to significantly depress export activity. In particular, rising unemployment and declining asset values internationally are expected to see the number of tourists travelling to New Zealand decline further over the coming year, despite the lower New Zealand dollar.

The near-term outlook for merchandise exports is less clear. Assuming the weather remains favourable, dairy export volumes are likely to continue to recover from last season’s drought-inhibited levels. However, meat export volumes are expected to decline as farmers look to rebuild depleted breeding stocks. Furthermore, forestry export volumes are likely to continue to be inhibited by weak housing construction in most countries.

Further out in the projection, export activity is expected to recover (figure 5.5). Most importantly, the lower New Zealand dollar is expected to boost exports, particularly exports of services. In addition, meat export volumes are likely to improve as breeding stock levels recover.

Import volumes are forecast to continue to decline as a share of total output throughout the projection. Recent depreciation in the New Zealand dollar is likely to see import prices increase soon. This will further exacerbate the negative impact on import volumes of projected weak household spending, especially on motor vehicles and overseas holidays. Moreover, wholesale and retail stock levels appear quite high at present, reducing the need for importing new product in the short term.
Finally, we expect businesses to significantly reduce their investment spending over the coming year. Investment spending has a large import component, with the impact on import volumes particularly noticeable.

In all, the import penetration ratio is forecast to decline by 4 percentage points in the year to the middle of 2009, and show no recovery in the foreseeable future (figure 5.6). This compares to a trend gain of 1 percentage point per annum for the past two decades.

The current account
The projected recovery in net export volumes is expected to offset the forecast moderation in the terms of trade, such that the trade balance is expected to improve modestly over the projection and drive a recovery in the current account balance (figure 5.7). Also of some assistance, the investment income deficit is expected to narrow modestly from late 2009 due to lower domestic profits being paid to foreign owners.

The labour market
Declining activity through 2008 has been matched by a sharp slowing in employment growth. Looking forward, in line with extremely weak employment intentions and our view that economic growth will remain very weak, we expect employment to decline over the coming year and show only sluggish growth thereafter (figure 5.8).

The current low level of unemployment, along with quite muted net immigration going forward, means that the peak in the unemployment rate is projected to be quite modest relative to previous cycles. We expect the rate to increase to 6 percent by the end of 2009, before declining thereafter.

Increasing unemployment is expected to see wage inflation trend lower over the projection. While annual wage inflation is likely to hold up through to early 2009, quarterly wage growth appears to have already peaked, consistent with firms reporting an easing in skill shortages.
recent and projected policy easing is likely to be more muted and protracted than in previous cycles.

**Figure 5.9**

Household spending

(percentage of trend output)

Household spending and house price inflation

Householders remain under considerable pressure. While some relief is coming from lower fuel prices, personal tax cuts, and falling mortgage rates, the cost of living remains well above year-ago levels and the effective mortgage rate remains high. Furthermore, asset prices – most obviously houses, but also equity and debt investments – have fallen markedly over the past year, reducing household wealth.

As a result, householders are trimming their expenditure – by reducing retail spending and residential construction. Indeed, we estimate that household spending, as a share of total output, has already fallen to a level broadly similar to its average of the 1990s (figure 5.9).

Consumption spending is likely to remain subdued throughout 2009. In this regard, we note that the near-term benefit to householders of recent Official Cash Rate reductions is likely to be quite muted relative to previous easing cycles. Most obviously, the proportion of mortgage borrowers on fixed rates is much higher than in previous cycles, meaning that it will take longer for the household sector to benefit from lower mortgage rates.

In addition, credit pressures have seen banks tighten their lending criteria and increase the spread between lending rates and forward expectations of the Official Cash Rate. Indeed, most borrowers now need a deposit of at least 20 percent to obtain some of the lower mortgage rates available in the market. As such, the benefit to borrowers of

Further out in the projection, supported by still-positive real income growth and further personal tax cuts, consumption spending is expected to recover somewhat. Despite this, over the projection as a whole, the outlook for consumption is very weak. Indeed, our projection implies a sizable improvement in the household saving rate from around -11 percent of disposable income currently, to about -2 percent by the end of the projection.

Turning to the housing market, indicators such as house sales and days to sell suggest that residential investment and house prices are likely to continue to fall over the coming quarters. In terms of residential investment, we project this to continue to decline from its current very low levels until mid-2009, before posting a modest recovery. This modest recovery is predicated on our view that there is not currently an oversupply of houses in New Zealand.

As for house prices, further downward adjustment from current overvalued prices is expected over the coming year or so, with next to no recovery of substance over the remainder of the projection. From their peak in 2007, nominal house prices are projected to fall 16 percent by the end of 2010, or 24 percent in real terms – slightly more than was projected in the September Statement. Such moderation would bring house prices to a level more in line with fundamentals. There is a risk of house prices falling by more than this.
Business investment

Credit availability tightened over the past year and growth in business credit has been easing gradually. While some firms have been able to draw on existing credit lines, the availability of new credit is likely to remain constrained over the coming year, particularly given financial market developments since September. This will reduce firms’ ability to invest, particularly those involved in non-residential construction. Further, weak demand and compressed profit margins mean many firms will be reluctant to undertake significant capital investment – especially as recent depreciation in the New Zealand dollar will be pushing up imported capital prices. Consistent with our own expectation that aggregate activity will remain sluggish, businesses expect significant spare capacity to develop over the coming year.

As such, we expect core investment spending as a share of trend output to decline noticeably over the coming year to a level last seen in the early 1990s recession (see box B for a discussion of past cycles in business investment). From 2010, the combination of current healthy balance sheets, monetary and fiscal stimulus, improved exporter incomes, and an assumed normalisation in credit conditions, is expected to see business investment recover, particularly in the traded sector (figure 5.10). Global developments over the coming months and quarters will be crucial in determining the extent and timing of any recovery.

Government

Fiscal policy is expected to provide significant support to economic activity over the projection. The forecasts contained in the Pre-Election Economic and Fiscal Update suggest that gains in government spending will outstrip growth in the rest of the economy through this time (figure 5.11).

Figure 5.11
Government spending
(excluding military spending, percent of trend output)

Source: Statistics New Zealand, RBNZ estimates.

Note that, in line with recent pre-election commitments, we expect personal income taxes to be reduced more quickly and to a greater extent than was assumed in the September Statement.

Gross domestic product

We believe GDP contracted further in the September quarter, the third consecutive quarterly decline. And with fallout from the housing market downturn, low corporate profitability, and the lagged effects of tight monetary conditions continuing, near-term aggregate activity is likely to remain sluggish.

Global developments of the past two months have seen the outlook for domestic activity deteriorate to an even greater extent than was projected in the September Statement. Offsetting these negative impulses to some extent, oil prices have more than halved over the past few months, the New Zealand dollar has moved significantly lower, and personal income taxes are to be reduced further.

In aggregate, sub-trend GDP growth is projected to continue through to the second half of 2009. Indeed,
Box B

Business investment contractions

We project a very sharp decline in business investment during 2009, with only a modest recovery thereafter. This box tries to put the projected contraction into an historical context, by lining up the assumed peak in business investment (June quarter 2008) with the peaks that preceded the downturns in business investment during the 1990s.

The decline in aggregate business investment over this cycle is expected to be deeper than that experienced in the late-1990s recession (figure B1). This is because the fall in output in the late-1990s recession was concentrated in the generally less investment-intensive primary sector, while the current downturn is expected to be more broadly based. The magnitude and duration of the current downturn in business investment is closer to that experienced during the early-1990s recession, although the trough is not expected to be quite as deep.

Figure B1

Business investment
(excluding computers and intangible assets, cyclical peak = 100)

Reflecting its large share (typically around 40 percent) of the total, lower plant and machinery (ex-computers) investment is projected to drive the decline in aggregate business investment. This forecasted decline, excluding the impact of a large oil-related investment in the June quarter, is of a similar magnitude and duration to the decline in this component that occurred during the early-1990s recession (figure B2). Plant and machinery investment is projected to be particularly hard-hit, given that it has been buoyed in recent years by the high New Zealand dollar, which has reduced the price of investment goods, and by firms needing to build capacity in the face of very strong demand. Both of these drivers have now turned around significantly. Transport equipment spending is also expected to decline to a similar degree over the coming quarters.

Figure B2

Plant and machinery investment
(excluding computers, quarter zero = 100)

However, in contrast to the early-1990s recession, we do not expect this cycle to be driven by a very sharp fall in non-residential investment (figure B3). Unlike in the lead-up to the early 1990s commercial property slump, there is much less evidence of a significant over-supply of commercial buildings, which should lend some support to non-residential investment. Conversely, tight credit conditions – particularly in the finance company sector – are likely to continue to provide a significant drag on this component.

Figure B3

Non-residential investment
(quarter zero = 100)
further quarters of negative growth in early 2009 are quite possible.

Beyond this – assuming some normalisation in credit markets – the economy is expected to recover, as the impact of the weaker currency boosts net exports and easier monetary and fiscal conditions assist economic activity more generally.

**Inflation**

From its current peak of 5.1 percent, we expect annual CPI inflation to decline markedly. Recent petrol price declines are expected to drive tradable inflation sharply lower such that annual headline inflation is forecast to briefly fall to 1.6 percent in the September quarter of next year.

We expect non-tradable inflation to remain elevated in the near term as recent retail electricity price increases show up in the CPI. Beyond this, the build-up of significant spare capacity through the second half of 2008 and the first half of 2009 is expected to drive non-tradable inflation lower (figure 5.12).

**Figure 5.12**

Tradable and non-tradable inflation
(ex-ETS, annual)

Annual headline inflation is forecast to move higher in the final quarter of 2009 – as recent petrol price declines drop out of the annual figure – but is expected to trend down towards the centre of the target band by the end of the projection. Indeed, excluding the first-round impacts of the Emissions Trading Scheme, annual CPI inflation is expected to be about 2.3 percent by the end of the projection (figure 5.13).

**Figure 5.13**

CPI inflation (annual)

Source: Statistics New Zealand, RBNZ estimates.
## Appendix A¹

### Summary tables

**Table A**

Projections of CPI inflation and monetary conditions

*(CPI and GDP are percent changes)*

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<thead>
<tr>
<th>Year</th>
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<th>CPI³</th>
<th>TWI</th>
<th>90-day bank bill rate</th>
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### Quarterly projections

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¹ Notes for these tables follow on pages 32 and 33.
² Excludes the first-round impacts of the Emissions Trading Scheme.
## Table B

### Composition of real GDP growth

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

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1. Percentage point contribution to the growth rate of GDP.
### Table C

**Summary of economic projections**

*annual percent change, unless specified otherwise*

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<td>3.3</td>
<td>3.7</td>
<td>3.6</td>
<td>3.6</td>
<td>3.9</td>
<td>1.7</td>
<td>1.4</td>
<td>2.9</td>
</tr>
<tr>
<td>Trading partner CPI (TWI-weighted, annual % change)</td>
<td>1.3</td>
<td>2.2</td>
<td>1.4</td>
<td>2.1</td>
<td>2.4</td>
<td>1.9</td>
<td>3.3</td>
<td>3.2</td>
<td>1.9</td>
<td>2.0</td>
</tr>
</tbody>
</table>

¹ Excludes the first-round impacts of the Emissions Trading Scheme.
Notes to the tables

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

TWI
RBNZ. Nominal Trade Weighted Index of the exchange rate. Defined as a
g eo met r ically-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
RBNZ. Defined as the interest yield on 90-day bank bills.

World GDP
Reserve Bank definition. 12-country index, export weighted. Seasonally adjusted.

World CPI inflation
Reserve Bank definition. 5-country index, TWI weighted.

Import prices
Domestic currency import prices. Overseas Trade Indexes.

Export prices
Domestic currency export prices. Overseas Trade Indexes.

Terms of trade
Constructed using domestic currency export and import prices. Overseas Trade Indexes.

Private consumption
System of National Accounts.

Public authority consumption
System of National Accounts.

Residential investment
RBNZ definition. Private sector and government market sector residential

Business investment
RBNZ definition. Total investment less the sum of non-market investment and

Non-market investment
RBNZ definition. The System of National Accounts annual nominal government
non-market/market investment ratio is interpolated into quarterly data. This ratio
is used to split quarterly expenditure GDP government investment into market and
non-market components.

Final domestic expenditure
RBNZ definition. The sum of total consumption and total investment.
System of National Accounts.

Stockbuilding
Percentage point contribution to the growth of GDP by stocks.
System of National Accounts.

Gross national expenditure

Exports of goods and services
System of National Accounts.

Imports of goods and services
System of National Accounts.

GDP (production)
System of National Accounts.

Potential output
RBNZ definition and estimate. Refer to Conway, P and B Hunt (1997),

Output gap
RBNZ definition and estimate. The percentage difference between real GDP
(production, seasonally adjusted) and potential output GDP.

Current account balance
Balance of Payments.

Total employment
Household Labour Force Survey.

Unemployment rate
Household Labour Force Survey.

Household saving rate
Household Income and Outlay Account.
<table>
<thead>
<tr>
<th>Economic Indicator</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government operating balance</td>
<td>Historical source: The Treasury. Adjusted by the RBNZ over the projection period.</td>
</tr>
<tr>
<td>Labour productivity</td>
<td>The series shown is the annual percentage change in a trend measure of labour productivity. Labour productivity is defined as GDP (production) divided by Household Labour Force Survey hours worked.</td>
</tr>
<tr>
<td>Labour cost</td>
<td>Private sector all salary and wage rates. Labour Cost Index.</td>
</tr>
<tr>
<td>Real gross domestic income</td>
<td>The real purchasing power of domestic income, taking into account changes in the terms of trade. System of National Accounts.</td>
</tr>
</tbody>
</table>

**Quarterly percent change**

\[(\text{Quarter}/\text{Quarter}_{-1} - 1)\times 100\]

**Annual percent change**

\[(\text{Quarter}/\text{Quarter}_{-4} - 1)\times 100\]

**Annual average percent change**

\[(\text{Year}/\text{Year}_{-1} - 1)\times 100\]

Source: Unless otherwise specified, all data conform to Statistics New Zealand definitions, and are not seasonally adjusted. Rounding: All projections data are rounded to one decimal place.
Appendix B
Companies and organisations contacted by RBNZ staff during the projection round

3 Architecture Ltd
ABB Limited
Ali Ach Industries
Auckland International Airport Ltd
Auckland Regional Transport Authority
Blue Sky Meats Ltd
Budget Rent A Car Ltd
Destination Queenstown
Electronic Services Ltd
Energy Direct NZ Ltd
Eurotech Design Limited
Federated Farmers of NZ Inc.
Fresh Vegetables Product Group Ltd
Fullers Group Ltd
GDM Group Ltd
H & J Smith Ltd
Harrison Grierson Consultants Ltd
Healtheries of New Zealand Ltd
Heritage Queenstown
J Ballantyne & Co Ltd
Jade Software Corporation Ltd
JJ Limited
Kiwi Discovery Shop Ltd
Kiwibank Limited
Kordia Solutions Ltd
Lichfield International Ltd
Life Pharmacy Ltd
Lion Nathan New Zealand Ltd
Lyttelton Engineering Ltd
Lyttelton Port Christchurch Ltd
Mace Engineering Ltd
M-Co Marketplace Company Limited
Meat Industry Association
Meco Engineering Co Ltd
Millbrook Resort Ltd
Morning Star Trading Ltd
Motor Trade Association
National Aluminium Ltd

NZ Seafood Industry Council
Port Taranaki Ltd
PricewaterhouseCoopers
Property Council New Zealand
Registered Master Builders Federation
Skyline Enterprises Ltd
Smith & Caughey Ltd
Southland Building Society Ltd
Subaru of New Zealand Ltd
Suzuki New Zealand Ltd
Tait Electronics Ltd
Talbot Plastics Ltd
Taranaki Sawmills Ltd
Telstraclear Ltd
Todd Energy Limited
Transfield Worley Ltd
TSB Bank Ltd
Veda Advantage Ltd
Vodafone New Zealand Ltd
Wight Aluminium Ltd
Yunca Group Ltd
OCR reduced to 7.5 percent

11 September 2008

The Reserve Bank today reduced the Official Cash Rate (OCR) by 50 basis points from 8.0 percent to 7.5 percent.

Reserve Bank Governor Alan Bollard said: “The New Zealand economy is experiencing a marked slowdown, led primarily by the household sector. The outlook for the global economy has deteriorated further in the wake of continued financial market turmoil. In addition, the New Zealand business sector is coming under pressure from both rising costs and falling demand. While domestic activity is likely to pick up late this year as a result of personal tax cuts, increased government spending and rising rural incomes, we expect a prolonged period of household sector adjustment and below-average growth.

“The weakness in economic activity is expected to translate into lower inflation pressures in the medium term. Headline inflation is expected to peak around 5 percent in the current September quarter before trending down thereafter. However, food price inflation, exchange rate depreciation and higher wage costs will tend to keep headline inflation at elevated levels through 2009.

“With medium-term inflation pressures expected to ease, it is appropriate to move towards a less restrictive monetary policy stance. Compared to the June Monetary Policy Statement, we have brought forward some of the projected interest rate reduction, but have not altered the expected overall decline. We believe this response is warranted in light of the tightness of current credit conditions and the time it will take to affect the actual interest rates faced by households and businesses.

“Looking ahead, the scale and timing of further official cash rate reductions will depend on signs of declining inflation pressures and on exchange rate adjustments.”

OCR reduced to 6.5 percent

23 October 2008

The Reserve Bank today reduced the Official Cash Rate (OCR) from 7.5 percent to 6.5 percent.

Reserve Bank Governor Alan Bollard commented that “ongoing financial market turmoil and a deteriorating outlook for global growth have played a large role in shaping today’s decision.

“Economic activity in New Zealand will be further constrained, relative to the outlook presented in our September Monetary Policy Statement, by these international developments. New Zealand can expect to face lower demand for exports and credit is likely to be less readily available. In this environment consumers and businesses are likely to be more cautious and curtail spending.

“The reduction in domestic spending will be partly offset by the depreciation of the New Zealand dollar over the past few months, falling oil prices and the recent loosening of fiscal policy.

“With weaker short-term growth and sharply lower oil prices we now expect that annual CPI inflation will return to the target band of 1 to 3 percent around the middle of 2009. However, we still have concerns that domestically generated inflation (particularly in labour costs, local body rates, electricity prices and construction costs) is remaining stubbornly high.

“Consistent with the Policy Targets Agreement, the Bank’s focus will remain on medium-term inflation. Should the outlook for inflation evolve as projected we would expect to lower the OCR further. However, the timing and extent of OCR reductions over the coming months will depend on evidence of actual reductions in domestic cost pressures as well as how the global financial developments play out.”

Appendix C

Reserve Bank statements on monetary policy
# Appendix D

## The Official Cash Rate chronology

<table>
<thead>
<tr>
<th>Date</th>
<th>OCR (percent)</th>
<th>Date</th>
<th>OCR (percent)</th>
<th>Date</th>
<th>OCR (percent)</th>
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</thead>
<tbody>
<tr>
<td>17 March 1999</td>
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<td>4 September 2003</td>
<td>5.00</td>
<td>24 April 2008</td>
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<tr>
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</table>
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 2009:

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>29 January</td>
<td>OCR announcement</td>
</tr>
<tr>
<td>12 March</td>
<td><em>Monetary Policy Statement</em></td>
</tr>
<tr>
<td>30 April</td>
<td>OCR announcement</td>
</tr>
<tr>
<td>11 June</td>
<td><em>Monetary Policy Statement</em></td>
</tr>
<tr>
<td>30 July</td>
<td>OCR announcement</td>
</tr>
<tr>
<td>10 September</td>
<td><em>Monetary Policy Statement</em></td>
</tr>
<tr>
<td>29 October</td>
<td>OCR announcement</td>
</tr>
<tr>
<td>10 December</td>
<td><em>Monetary Policy Statement</em></td>
</tr>
</tbody>
</table>

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.
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 objective of the Government’s economic policy is to promote sustainable and balanced economic development in order to create full employment, higher real incomes and a more equitable distribution of incomes. Price stability plays an important part in supporting the achievement of wider economic and social objectives.

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 percent and 3 percent 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.
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 Dr Michael Cullen
Minister of Finance

Dr Alan E Bollard
Governor
Reserve Bank of New Zealand

Dated at Wellington this 24th day of May 2007