Monetary Policy Statement
December 2007

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) will remain unchanged at 8.25 percent.

Economic activity has occurred largely as outlined in the September Monetary Policy Statement. Capacity pressures – particularly in the labour market – remain significant, while the housing market has clearly slowed. A substantial income boost is still expected to occur through 2008, as recent dairy price gains reach farmers.

Nevertheless, the outlook has changed somewhat due to recent developments. Oil prices, which are nearly 30 percent higher than we assumed in September, and rapidly rising global food prices are likely to result in headline inflation above 3 percent for much of next year. In the medium term, despite ongoing fiscal surpluses, the likelihood of future personal tax cuts adds to the inflation outlook.

There are considerable risks around our view. The price effects of the Government’s proposed emissions trading scheme add upside risk to inflation. Global financial markets remain unusually turbulent, posing significant downside risk for some of our key trading partner economies.

Overall, inflationary pressures have increased, and interest rates are now likely to remain around current levels for longer than previously thought. We believe that the current level of the OCR remains consistent with future inflation outcomes of 1 to 3 percent on average over the medium term, based on the information to hand at present.

Alan Bollard

Governor
Overview and key policy judgements

The 100 basis point increase in the Official Cash Rate (OCR) over the first seven months of this year appears to be having the expected dampening effect on the housing market and the household sector more generally. If sustained, this slowing in household activity is expected to spill over into the wider economy, helping to dampen currently high domestic inflation pressures.

While we expect a significant slowing in household spending growth in response to the cooling housing market and higher interest rates – some of which are still in the pipeline – a number of factors are likely to underpin economic activity. The most significant of these is the sizeable boost to New Zealand’s income (real gross domestic income is projected to increase by about 6\(^1/2\) percent over the coming year) expected as a result of the phenomenal increase in global dairy prices that occurred during 2006 and 2007. The higher prices are already affecting investment activity (dairy farm conversions). The income boost is expected to begin to be received by New Zealand dairy farmers over the coming months, which in turn will be distributed to the wider economy over time. We also expect continued solid labour income growth to underpin household spending. Furthermore, household spending is projected to be supported by personal tax cuts, which we assume will be introduced early in 2009 (see below).

Business investment is projected to remain steady as a share of GDP over the near term as businesses look to invest in labour-saving technology. Also, government spending is expected to add to GDP growth through this time.

Providing a significant offset to these domestic demand pressures, the current high level of the exchange rate is weighing heavily on net exports, and is projected to do so for the foreseeable future.

Overall, we project GDP growth to ease from the current annual average rate of about 3 percent to a sub-trend rate of 2\(^1/4\) percent for most of the remainder of the projection (figure 2.1). This is slightly lower growth through 2009 than was projected in the September Statement, reflecting the higher exchange rate assumption, higher oil prices, slightly more persistent interest rates, and marginally weaker residential investment. Partially offsetting these factors is the incorporation of future personal tax cuts.

As discussed in chapter 5, underlying this projection is an assumption that the world economy continues to grow at around trend rates, consistent with the latest Consensus forecasts. However, as in September, we see considerable downside risks surrounding the global outlook stemming from recent financial market turmoil. While we expect some slowing in the US economy, and to a lesser extent Europe and Japan, further financial market turmoil would likely lead to weaker growth in these regions than assumed. Many of these concerns centre around the view that easy access to credit has been a major driver of global growth over recent years, and therefore any tightening in credit conditions could undermine the global outlook.

However, for this weakness to affect the New Zealand economy in a particularly adverse way, it would likely require the outlook for the Australian and Asia ex-Japan economies to deteriorate, and/or a larger-than-expected decline in the prices of New Zealand’s commodity exports – which currently look well supported by fundamentals.

Domestically, despite the weaker growth outlook for 2009, we now anticipate higher CPI inflation during the next 12 months than was assumed in September, largely reflecting the direct and indirect effects of the recent increases in world oil prices and the subsequent increases in retail fuel prices (figure 2.2). We continue to expect current tight resource pressures, persistently high inflation expectations, rising global food commodity prices, and strong wage growth to underpin CPI inflation over the projection.
Policy judgements

The New Zealand and global economies have panned out largely as we had projected in the September Statement. Despite this, several things have changed that could have significant implications for medium-term inflation. Specifically: oil prices are now significantly higher than we had assumed; it now appears that the Government will announce personal tax cuts in Budget 2008; and the Government has announced some details about its planned emissions trading scheme as part of New Zealand’s Kyoto Protocol obligations.

US dollar oil prices are currently about 30 percent higher than we assumed in the September Statement. Higher oil prices clearly add to near-term inflation by increasing retail fuel prices and output prices in those sectors that have high fuel usage. Oil prices also have significant implications for our medium-term inflation projections by affecting inflation expectations. Providing some offset, higher fuel prices reduce consumers’ spending power.

In response to these persistent inflation pressures, interest rates are projected to remain around current levels for most of the projection (figure 2.3). This is slightly longer than was assumed in the September Statement, largely reflecting the effect of higher oil prices and the additional stimulus coming from the assumed personal tax cuts. It is likely that incorporating the effects of the emissions trading scheme discussed in box C would result in interest rates being held higher for even longer than assumed here.

We now project annual CPI inflation to be above the top of the 1 to 3 percent target band for the next 12 months, before tracking steadily lower from the beginning of 2009. Under normal circumstances we would expect to have inflation on average closer to the mid point of the target band over the course of an entire cycle. The fact that projected inflation remains above the mid-point in this projection reflects the disproportionately large number of inflationary factors that have hit the New Zealand economy over recent years. These factors include sharply rising oil prices, the significant terms of trade boost coming from world dairy prices, rising global food prices more generally, and a strong housing market fuelled by the combination of a sharp increase in immigration and an extended period of unusually low global interest rates.
Box A

Recent monetary policy decisions

After leaving the OCR unchanged during 2006, the Bank increased the OCR by a total of 100 basis points between March and July this year (figure A1). This was in response to evidence of a resurgence in household spending, further tightening in the labour market, and the boost to the terms of trade from rising dairy prices, and hence overall pressure on medium-term inflation.

After the OCR increase in July, the Bank indicated that recent tightening was likely to be sufficient, provided the slowing trend in household spending continued. As the Bank had done on previous occasions, it seemed appropriate to pause to assess how the economy responded to these OCR changes. Turbulence in global financial markets during August and September, and increased uncertainty over its implications for the global and domestic economies, reinforced the Bank’s decision to leave the OCR on hold at the subsequent two announcements.

Currently, our read on the degree of inflation pressure in the economy supports the decisions to increase the OCR earlier this year. Similarly, the observed slowing in the housing market and the continued uncertainty surrounding the global outlook suggest that the Bank’s decisions to leave the OCR unchanged at the September Statement and October OCR review were appropriate.

Figure A1

Official Cash Rate

(about 1 percent of GDP) per annum worth of across-the-board tax cuts being introduced from early 2009.1

Compared to the September Statement, this represents additional stimulus to the domestic economy. We had previously assumed that the Government would let the automatic stabilisers operate, with the surprise in revenue being reflected in a higher government operating balance (see box B for a broader discussion of the role of automatic stabilisers). We will be updating our projections as further details of the tax cuts become available.

Another recent Government announcement that could have significant implications for the medium-term inflation outlook is the intention to introduce an emissions trading scheme as part of New Zealand’s Kyoto Protocol obligations. As discussed in box C, it is likely that the emissions trading scheme will have very significant direct and indirect effects on CPI inflation by affecting fuel and electricity prices. It will also affect inflation expectations and supply and demand in the economy.

Reflecting the fact that this is a very new initiative, it is, as yet, unclear how these effects will net out. We have, therefore, decided not to incorporate the effects of the emissions trading scheme into the current central projection. However, we will be updating our projections for activity, inflation and interest rates in the coming quarters as further details become available.

As well as these challenges that have emerged since the September Statement, many of the previous uncertainties remain. As discussed above, considerable uncertainty remains around the global economy, with these risks firmly on the downside. Conversely, the risks surrounding the domestic economy and inflation pressure remain to the upside. Many of these relate to the labour market, with the potential that ongoing tightness in the labour market could add significantly more to inflation, both directly via increased costs for firms, and indirectly via increased household spending. Furthermore, the fact that next year is an election year will mean that the budget process is due to begin shortly.

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1 This assumption is consistent with our estimate of the increase in projected revenue since Budget 2007 and is in the middle of the range referred to by the Government.
year increases the possibility that fiscal policy could be more stimulatory than we have assumed. In addition, many of the cost pressures in the economy coming from higher food and energy prices could add further to inflation expectations and inflation pressures more generally.

 Keeping medium-term inflation expectations in check in the face of these cost pressures is essential for achieving inflation outcomes not too far from the mid-point of the target band over the medium term. In particular, individuals’ perceptions about future inflation are vital in terms of how much they are willing to borrow at a given nominal interest rate. They are also central to firms’ decisions on how much they think they can increase prices for a given level of demand. It is well recognised that reversing an increase in inflation expectations can be difficult and costly.

Some fiscal policy choices do have implications for monetary policy. One element of the overall fiscal framework that plays a valuable supportive role are the ‘automatic stabilisers’. Government revenues (and some expenditures, especially unemployment benefits) are largely proportional to the state of the economy. When the economy improves, so does government revenue, and when the economy contracts, so does government revenue.

Thus, some of the effect of economic fluctuations on the ability and willingness of firms and households to spend is buffered by the tax system. When national income falls, private sector spending power falls by only about two thirds of that amount, because tax payments also fall. Over the course of a full economic cycle, these effects should largely balance out.

The automatic stabilisers play a modest but useful role in dampening economic cycles. They help limit how much work monetary policy has to do. However, the automatic stabilisers have this effect only to the extent that discretionary fiscal policy choices do not unwind the effects. If, for example, the economy performs surprisingly well, and generates unexpectedly large amounts of revenue, that additional revenue will be factored into the Bank’s projections. The extra government revenue will be a factor limiting the extent of the build-up in inflation pressures likely to result from the economic surprise. But if discretionary fiscal policy choices are made that take advantage of the revenue surprise, by increasing spending or cutting taxes, that will undermine the role of the automatic stabilisers and will exacerbate pressures on inflation.
This has been much of the story of fiscal policy in New Zealand in recent years. Tax rates have not been changed materially for several years, but revenue has proved unexpectedly strong, leading to repeated upward revisions in forecasts of the fiscal surplus. In effect, the revenue gains have reflected the automatic stabilisers at work. Private sector firms and households have faced stable tax rates, and when incomes have been unexpectedly strong, a proportion of that, known by the taxpayers themselves well in advance, is paid across to the government in tax.

However, over the same period, there have been substantial increases in government spending (through a variety of channels, including the direct purchase of additional goods and services, employment of additional public servants, or through initiatives such as Working for Families). In an economy where labour and capital resources are already fairly fully-employed (the situation in New Zealand in recent years), discretionary choices by the government to alter its spending programmes can only be accommodated without adding to inflation if some other expenditure is held back, freeing up some resources. Interest rate adjustments are one instrument that helps to free up these resources in a way that does not increase inflation. These are largely transitional pressures. Resources need to be freed up to make room for changes in spending plans or tax rates. But once that has happened, and the new tax/spending patterns are themselves well established, interest rates do not need to be permanently higher than otherwise.

It was in this sense that the Bank observed in its October OCR review media release that “despite ongoing surpluses in the government's operating balance, fiscal policy is contributing to inflationary pressures”. Resources have been fully employed, inflation has been relatively high, and at the same time, discretionary fiscal choices have put additional pressure on resources. We do not have a view on the merits of the fiscal choices themselves. But it is important that the cyclical macroeconomic consequences of those choices are widely recognised: despite the continuing high operating balance, putting additional fiscal pressure on demand means that interest rates and the exchange rate have to be higher than they otherwise would have been; in the past couple of years, both interest rates and exchange rates have already been above long-term average levels.

In recent weeks, the Prime Minister and Minister of Finance have indicated that personal tax cuts will be announced next year, utilising much of the surprise increase in forecast revenue that has become apparent this year (much of it the result of surprisingly high dairy prices). The additional tax dairy farmers will have to pay will already have been factored into their own spending and investment plans. We had progressively factored the higher revenue into our own forecasts and OCR decisions earlier this year. The decision to lower personal income tax rates, whatever its intrinsic merits, represents a new source of expected income for households, and hence of spending, putting additional pressure on already fully-employed resources. In that sense, such discretionary fiscal choices will add further to the upside risks to medium-term inflation.
Box C

Emissions trading scheme

In September the Government announced the launch of an emissions trading scheme for New Zealand – although it still needs to be passed by Parliament. As yet, there has only been limited public research into the scheme and there remains uncertainty about its economic effects. Consequently, we have not incorporated the potential activity and inflationary effects of the scheme into our current projection. However, some illustrative estimates of the first-round price effects of the scheme are included later in this box.

The emissions trading scheme operates within the cap on greenhouse gas emissions as established by the Kyoto Protocol during its first commitment period (2008 to 2012). For New Zealand, the requirement under Kyoto is to keep annual emissions at 1990 levels between 2008 and 2012 or to purchase additional units. Prices for emission units will be linked to international emissions prices, which in turn will be influenced by the volume of emissions relative to target levels for Annex 1 countries signing the Kyoto Protocol.2

The emissions trading scheme will be phased in gradually over the next few years, with Table C1 summarising the timetable for sectors joining the scheme in New Zealand.

Table C1

Proposed timeframe for the emissions trading scheme

<table>
<thead>
<tr>
<th>Sector</th>
<th>Commencement of obligations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forestry (includes deforestation of pre-1990 forest land and afforestation post-1989)</td>
<td>1 January 2008</td>
</tr>
<tr>
<td>Liquid fossil fuels (mainly transport)</td>
<td>1 January 2009</td>
</tr>
<tr>
<td>Stationary energy (includes coal, natural gas and geothermal)</td>
<td>1 January 2010</td>
</tr>
<tr>
<td>Industrial process (non-energy) emissions</td>
<td>1 January 2010</td>
</tr>
<tr>
<td>Agriculture (includes pastoral and arable farming and horticulture)</td>
<td>1 January 2013</td>
</tr>
<tr>
<td>Waste</td>
<td>1 January 2013</td>
</tr>
</tbody>
</table>

Latest figures (2005 year) suggest that annual greenhouse gas emissions in New Zealand are about 25 percent above 1990 levels. Published projections suggest that annual national greenhouse gas emissions over the 2008/12 commitment period are likely to remain above 1990 levels, resulting in a requirement to purchase additional emission units.2 Because one of the consequences of the emissions trading scheme is to make emitters of greenhouse gases pay for the costs, there are likely to be sizeable distributional effects from net emitters to producers of emission units. However, in relation to the size of the economy, these requirements are unlikely to be particularly large.

Over the short term, these will be partly offset by the government covering most of the costs of purchasing emission units over the 2008/12 period, with assistance (varying by sector) decreasing after 2013 until it is fully phased out by 2025.

Prices for liquid fuels (from January 2009) and electricity (January 2010) are expected to rise as a consequence. Bank estimates, which assume an emissions price of NZD21 per tonne, imply that the scheme could increase retail prices of vehicle fuels by about 4 percent from January 2009 and retail electricity prices by about 7 percent from January 2010. In addition to these direct price effects, the scheme is likely to add indirectly to CPI inflation by

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2 For further information on the Kyoto Protocol see http://unfccc.int/2860.php.
affecting companies that use fuel and electricity intensively. Accounting for these indirect effects, we estimate the first-round price effects on CPI inflation from the scheme to be about 0.25 percentage points in the 2009 calendar year and 0.35 percentage points in calendar 2010.4

While the emissions trading scheme is likely to result in higher CPI inflation, there is some uncertainty over the magnitude and timing of the full inflationary effects:

- Because markets for emissions trading are still fairly new, there is considerable uncertainty over the outlook for prices of emission units.
- We are unsure about the magnitude and speed of the second-round effects on inflation. The emissions trading scheme is an administered price, similar to GST, so wage and price setters might look through the first-round price effects of the scheme. However, the emissions trading scheme will be introduced gradually, so might have a more persistent effect on inflation expectations and firms’ pricing behaviour.

The emissions trading scheme is likely to also affect economic activity. While macroeconomic effects are likely to be relatively modest, there is some uncertainty about their precise magnitude and direction:

- The net purchase of emission units from overseas reduces national income, irrespective of who foots the bill.
- It is also possible that the introduction of the emissions trading scheme could adversely affect business activity and investment by raising costs. Higher prices for fuel and electricity might also soften consumer spending as the purchasing power of incomes will be lower.
- Offsetting these negative demand side implications is the possibility of more generous government support to firms and households, and of potentially greater investment in more environmentally friendly technologies.

In addition to the demand consequences of the emissions trading scheme, there are also likely to be effects on supply. Firms might internalise the costs of emissions in the production process, possibly leading to lower levels of sustainable output than otherwise. Further, we have not allowed for any possible positive effects of Kyoto compliance on the prices of New Zealand’s exports.

The Bank will continue to closely monitor developments and will incorporate the effects of the emissions trading scheme into our central projections once we obtain sufficient information.

In the meantime, it is appropriate that we do not react to the first-round price effects of the scheme. However, to the extent that the gradual phasing in of the scheme adversely affects the medium-term path of inflation, policy will need to lean against this.

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4 A rule of thumb suggests that the indirect effects of the scheme could be about half of the total direct effects. However, confidence intervals around these estimates are wide.
3 The recent economic situation

Overview
New Zealand has enjoyed largely continuous economic growth over the past nine years. In fact, the current economic cycle is now the longest and the strongest in about 60 years. This prolonged period of economic strength has placed considerable pressure on the economy’s resources. As a result, significant and persistent inflation pressures have emerged.

Strong growth over the past few years has also seen significant imbalances develop. The buoyant housing market and tight labour market supported strong growth in domestic demand (figure 3.1), which generally outpaced the economy’s supply potential. This excess demand was met in part by a surge in imports. The high level of the New Zealand dollar assisted growth in imports while also acting as a brake on export growth. Reflecting these imbalances, the current account deficit increased rapidly.

Figure 3.1
Real GDP, domestic demand and net exports (contributions to annual average percent change)

[Graph showing Real GDP, Domestic demand (GNE), Net exports from 1992 to 2006]

Despite signs of easing through 2006, resource pressures – particularly in the household sector – have remained intense throughout the current cycle. This was particularly the case during the first half of 2007.

More recently, the household sector has begun to slow in response to the marked increases in mortgage interest rates this year. In particular, housing turnover has declined markedly, to sit close to historical lows on a per-capita basis. In concert with falls in housing market activity, some house price measures have not increased since April and retail spending growth has eased from the high rates seen earlier this year. At the margin, these developments may have brought about a slight reduction in inflationary pressures. Indeed, surveyed capacity utilisation dropped noticeably in the September quarter. While headline inflation also eased, to 1.8 percent on an annual basis, this largely reflected increased government subsidies for healthcare and childcare. Measures of inflation expectations, indicators of resource pressure, and surveyed measures of cost inflation, all continue to suggest little respite from domestic inflation pressures.

Global economic developments
Activity in our major trading partner economies remained buoyant over the first half of 2007. Recent financial market turbulence seems to have had only a limited effect on world activity to date. Nevertheless, we expect contagion from developments in global financial markets to weigh on world activity (see chapter 5).

Inflation pressures in several of our trading partner economies have intensified since the September Statement. Much of this heightened inflation concern has been related to further sharp increases in commodity prices, particularly for oil and food. However, in some economies, most notably Australia and those across Asia (ex-Japan), buoyant economic conditions have continued to contribute to strong underlying inflationary pressures.

- The Australian economy continues to grow strongly. GDP data for the June quarter revealed an acceleration in growth, to 4.3 percent in the year to June. More timely indicators suggest this strength has continued into the second half of the year. While the farming sector continues to be crippled by drought, domestic demand has remained buoyant, supported by a healthy labour market, surging terms of trade and accommodative fiscal policy. Similarly, business surveys report stronger-than-average trading conditions and record high capacity utilisation. These factors have contributed to an escalation in inflation pressures. Core inflation rose to 2.9 percent in the September quarter, close to the top of the Reserve Bank of Australia’s (RBA) 2 to 3 percent
target band. As a result, the RBA increased its policy rate at the August and November Board meetings.

- Activity in the US remained robust in the September quarter, increasing 1.2 percent (2.8 percent in annual terms). Weakness in the housing sector has continued to weigh on growth, but so far this has been offset by healthy activity in other sectors. In particular, consumption spending has remained largely resilient in the face of the housing slowdown, perhaps aided by solid income gains from the strong labour market. However, recent housing market data foreshadow a slowing in GDP growth. In an attempt to allay potential downside risks to growth from financial markets disruptions, the US Federal Reserve lowered its policy rate by a total of 75 basis points.

- Growth in the Japanese economy recovered in the September quarter. However, more recent data (such as surveys of business sector activity) have shown some softening.

- Activity in other parts of Asia has continued to surge. Chinese GDP increased 11.5 percent (in annual terms) in the September quarter, with strength in retail sales, industrial production and business investment. Stronger-than-expected September quarter GDP growth was also recorded in South Korea, Taiwan and Singapore. More generally, export activity across most of Asia ex-Japan has remained robust, with strength in demand from Europe and within Asia offsetting softer US demand.

- Eurozone activity has shown signs of moderating. In particular, business sector indicators have fallen, with rising input costs and the high level of the euro weighing on activity. Recent financial market turbulence and weaker growth in the US are likely to remain obstacles for growth.

Traded sector activity

Buoyant global activity has supported growth in New Zealand’s exports over the past few quarters, providing some offset against the adverse effects of the high New Zealand dollar. Moreover, there have been signs that growth in exports is becoming more broad-based (figure 3.2). Manufactured exports have begun to increase after two years of stagnation. Services exports have also recorded solid growth over the past few quarters, in line with recent increases in tourist arrivals. It is likely that both of these sectors have benefited from the pick-up in the Australian economy and the fall in the NZD/AUD over the past year. Primary export volumes are also receiving a clear boost at present from oil exports out of the Tui oil field.

Figure 3.2
Export volumes
(annual average percent change)

Over the past year, world prices for our key export commodities have surged to unprecedented levels (figure 3.3). Most of these gains have been concentrated in dairy prices as lower-than-expected worldwide production has fallen short of strong international demand.\(^1\) International prices for forestry and meat products have also increased somewhat.

Figure 3.3
Nominal commodity prices

The run-up in dairy prices over the past year has been extremely rapid. However, since the September Statement there have been signs of a stabilisation in global dairy prices. In particular, larger than expected increases in US milk powder production have helped to limit dairy price gains.

The high level of the exchange rate has dampened the effect of commodity price gains in New Zealand dollar terms. Nevertheless, New Zealand dollar commodity prices are currently close to record highs in nominal terms. In real terms, NZD prices are still about 15 percent below their 2001 peaks.

Import growth accelerated over the first part of 2007, supported by strong domestic demand and the high level of the New Zealand dollar (figure 3.4). Recent data suggest a softening in the September quarter.

**Figure 3.4**
Import volumes

With import growth once again outpacing that of exports (in annual terms), the rate of improvement in the current account balance has slowed this year (figure 3.5).

**Figure 3.5**
Current account balance, goods and services balances (annual)

**Domestic demand**
The upswing in domestic demand that began in late 2006 continued well into 2007, with obvious turning points in consumption, investment, imports and housing market indicators. However, clear signs of slowing in the household sector have since become apparent following interest rate increases earlier this year.

Residential investment activity continued to increase early in 2007, consistent with previous increases in net migration. However, the precipitous drop in house sales over the past six months suggests residential investment activity will fall in the coming quarters (figure 3.6).

**Figure 3.6**
Real residential investment and house sales per-capita

Source: Statistics New Zealand.
Following earlier moves in housing turnover and the number of days it takes to sell a house, house price inflation surged over the first half of 2007, to reach 14 percent in the year to June 2007 (as measured by Quotable Value Limited). More recent indicators portend a sharp slowing in house price inflation over the remainder of this year. Data from the Real Estate Institute of New Zealand (REINZ) show median house prices have essentially tracked sideways since April (figure 3.7) and the number of days it takes to sell a house is now similar to early 2006.

Figure 3.7
House price inflation
(percent change over six months)

Following weakness in 2006, the first half of 2007 saw strong growth in consumption. Favourable labour market conditions, the high New Zealand dollar, surging house prices, and fiscal measures such as Working for Families all lent strong support.

More recently, consumer confidence and retail sales have begun to wane as households’ cash positions have come under increasing pressure from higher interest rates and increasing debt levels (figure 3.8). Recent increases in petrol prices might also have some negative effects on consumer confidence going forward.

Business investment dipped in the June 2007 quarter. However, more timely data suggest momentum in business investment has been maintained. Imports of capital equipment have been trending up over the past few quarters and firms’ investment intentions have remained around average levels (figure 3.9)

Figure 3.8
Annual real retail sales growth and consumer confidence

Following weakness in 2006, the first half of 2007 saw strong growth in consumption. Favourable labour market conditions, the high New Zealand dollar, surging house prices, and fiscal measures such as Working for Families all lent strong support.

More recently, consumer confidence and retail sales have begun to wane as households’ cash positions have come under increasing pressure from higher interest rates and increasing debt levels (figure 3.8). Recent increases in petrol prices might also have some negative effects on consumer confidence going forward.

Business investment dipped in the June 2007 quarter. However, more timely data suggest momentum in business investment has been maintained. Imports of capital equipment have been trending up over the past few quarters and firms’ investment intentions have remained around average levels (figure 3.9)

Figure 3.9
Real plant and machinery investment
(ex-computers) and investment intentions

Productive capacity and the labour market
Spare capacity in the economy remains limited. Despite a generalised slowing in demand over the past two years, resource pressures have eased only gradually (figure 3.10). In particular, capacity utilisation from the Quarterly Survey of Business Opinion (QSBO) has remained at high levels
throughout the current cycle. Capacity utilisation recorded a noticeable fall in the September quarter. However, we are yet to see any material easing in other capacity indicators, such as skill shortages and the unemployment rate.

**Figure 3.10**

**Capacity measures and annual average GDP growth**

Low rates of labour productivity growth might be partly responsible for the current degree of stretch in the labour market (box D).

Ongoing tightness in the labour market has contributed to substantial growth in labour incomes in recent years as firms compete for scarce workers. Annual growth in total weekly earnings has been running close to 7 percent for approximately three years, according to the Quarterly Employment Survey (figure 3.12). And while employment growth has slowed somewhat, wage inflation remains high. The labour cost index (LCI), which attempts to exclude wage changes attributed to productivity, recently accelerated.

**Figure 3.12**

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

Labour shortages remain intense; this theme continues to be reflected in official labour market statistics and through anecdotes from our business visits. Unemployment has remained around multi-decade lows for about two years, despite significant gains in labour market participation (figure 3.11). With workers departing to Australia in increasing numbers, net immigration has slowed, further suppressing growth in the labour force. As a consequence, little spare capacity remains in the labour market.

**Figure 3.11**

**Unemployment and labour force participation**

Inflation

Underlying inflation pressure remains persistent, underpinned by intense resource pressures and rising costs. Recent falls in annual headline inflation, driven by falling petrol prices last year and an appreciation in the New Zealand dollar, have obscured the extent of domestic pricing pressure of late (figure 3.13). However, indicators of resource pressure, surveyed measures of inflation expectations and pricing intentions, and recent non-tradable inflation outturns, all continue to suggest little respite from domestic inflation pressures.
Box D

Labour productivity

Measured labour productivity growth declined sharply from 2004 to 2006, exacerbating pressure in the labour market (labour productivity data are very volatile and should be interpreted with caution). These declines were unusual in a historical context in that they came at a time of strong economic expansion and heavy capital investment. This period of low labour productivity growth goes some way towards explaining why, despite slowing activity, inflation pressures persisted through 2006.

However, in recent times, signs of a sustained pick-up in measured labour productivity growth have emerged (figure D1). Just what is behind these recent increases remains unclear, but it might be that recent capital spending has simply taken longer than usual to be integrated into firms' production processes. In addition, upward revisions to historical GDP estimates in the June quarter national accounts have resulted in a slightly stronger productivity picture over history. The projection outlined in chapter 5 assumes further improvement in labour productivity growth, largely reflecting previous capital investment.

Figure D1
Labour productivity
(hours basis, annual average percent change)

CPI inflation continued to fall in the September quarter, to 1.8 percent from 2.0 percent in June. However, this fall can largely be attributed to increased government subsidies for healthcare and childcare. Together, these subtracted an estimated 0.3 percentage points from annual inflation. As such, headline inflation considerably understates the degree of inflation pressure in the economy at present.

Abstracting from the volatility in headline inflation, domestic inflation pressures remain pervasive, reflected in persistently high non-tradable inflation (figure 3.14). Ongoing pressure on the economy's resources has seen non-tradable inflation linger at rates close to 4 percent for the past three years (excluding the one-off effects from government subsidies mentioned earlier). In contrast to the gradual easing seen over 2004 and 2005, non-tradable inflation showed signs of acceleration over the first part of this year. This acceleration coincided with indications that domestic inflation pressures were becoming more broad-based. We have also started to see rising oil and food prices showing up in retail prices.
Rising costs are also adding to inflation pressures. Businesses continue to report strong underlying cost pressures, in spite of the recent period of exchange rate strength. Indications from our business contacts and from business surveys suggest firms are facing cost increases on several fronts: strong wage costs stemming from the tight labour market, increased non-wage labour costs such as Kiwisaver and the four weeks annual leave policy, rising commodity prices (particularly oil and food), and rising commercial rents. These cost pressures have eaten into margins and squeezed profitability to the extent that significant price increases are anticipated (figure 3.15). Upside pressure on inflation is likely to remain as a result.

**Figure 3.14**
**Capacity utilisation and non-tradable inflation**

*Source: Statistics New Zealand.*

**Inflation expectations**

Measures of inflation expectations have been trending up in recent years, to sit within the top quarter of the 1 to 3 percent target range (figure 3.16, table 3.1). This upward creep in expectations is particularly disconcerting given the current environment of low headline inflation and relative strength in the New Zealand dollar.

**Figure 3.16**
**Longer-term inflation expectations**

*Source: Statistics New Zealand, RBNZ, Alexander Consulting.*
### Measures of inflation and inflation expectations

**Table 3.1**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CPI</td>
<td>3.3</td>
<td>4.0</td>
<td>3.5</td>
<td>2.6</td>
<td>2.5</td>
<td>2.0</td>
<td>1.8</td>
</tr>
<tr>
<td><strong>CPI components</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CPI non-tradables</td>
<td>4.1</td>
<td>4.1</td>
<td>4.0</td>
<td>3.8</td>
<td>4.1</td>
<td>4.1</td>
<td>3.7</td>
</tr>
<tr>
<td>Non-tradables housing components</td>
<td>5.3</td>
<td>4.6</td>
<td>4.5</td>
<td>4.2</td>
<td>4.7</td>
<td>4.7</td>
<td>4.9</td>
</tr>
<tr>
<td>Non-tradables ex housing, cigarettes and tobacco components</td>
<td>3.7</td>
<td>3.9</td>
<td>3.9</td>
<td>3.7</td>
<td>3.8</td>
<td>3.9</td>
<td>3.1</td>
</tr>
<tr>
<td>CPI tradables</td>
<td>2.1</td>
<td>3.8</td>
<td>3.0</td>
<td>1.2</td>
<td>0.9</td>
<td>-0.5</td>
<td>-0.3</td>
</tr>
<tr>
<td>Petrol</td>
<td>23.5</td>
<td>32.2</td>
<td>15.9</td>
<td>1.3</td>
<td>-2.8</td>
<td>-8.4</td>
<td>-5.9</td>
</tr>
<tr>
<td><strong>Other inflation measures</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Factor model estimate of core CPI inflation</td>
<td>2.9</td>
<td>3.0</td>
<td>2.9</td>
<td>2.6</td>
<td>2.6</td>
<td>2.4</td>
<td>2.3</td>
</tr>
<tr>
<td>CPI trimmed mean (of annual price change)(^1)</td>
<td>n/a</td>
<td>n/a</td>
<td>3.0</td>
<td>2.6</td>
<td>2.4</td>
<td>2.0</td>
<td>2.3</td>
</tr>
<tr>
<td>Exponentially smoothed core inflation</td>
<td>2.7</td>
<td>2.9</td>
<td>3.1</td>
<td>3.0</td>
<td>2.9</td>
<td>2.8</td>
<td>2.6</td>
</tr>
<tr>
<td>CPI weighted median (of annual price change)(^1)</td>
<td>n/a</td>
<td>n/a</td>
<td>2.9</td>
<td>2.6</td>
<td>2.9</td>
<td>2.4</td>
<td>2.7</td>
</tr>
<tr>
<td>CPI ex food, petrol and government charges</td>
<td>2.4</td>
<td>2.8</td>
<td>2.7</td>
<td>2.5</td>
<td>2.7</td>
<td>2.1</td>
<td>1.9</td>
</tr>
<tr>
<td>CPI ex energy and fuel</td>
<td>2.4</td>
<td>2.8</td>
<td>2.8</td>
<td>2.7</td>
<td>2.8</td>
<td>2.5</td>
<td>2.2</td>
</tr>
<tr>
<td>GDP deflator (derived from expenditure data)</td>
<td>2.0</td>
<td>1.9</td>
<td>2.6</td>
<td>2.9</td>
<td>3.2</td>
<td>3.8</td>
<td>n/a</td>
</tr>
</tbody>
</table>

**Inflation expectations measures**

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>RBNZ Survey of Expectations – inflation one-year-ahead</td>
<td>2.9</td>
<td>3.2</td>
<td>3.5</td>
<td>3.0</td>
<td>2.7</td>
<td>2.7</td>
<td>2.7</td>
</tr>
<tr>
<td>RBNZ Survey of Expectations – inflation two-years-ahead</td>
<td>2.6</td>
<td>2.7</td>
<td>2.9</td>
<td>2.7</td>
<td>2.6</td>
<td>2.6</td>
<td>2.6</td>
</tr>
<tr>
<td>AON Economist survey – inflation one-year-ahead</td>
<td>3.0</td>
<td>3.0</td>
<td>3.2</td>
<td>2.7</td>
<td>2.4</td>
<td>2.7</td>
<td>2.5</td>
</tr>
<tr>
<td>AON Economist survey – inflation four-years-ahead</td>
<td>2.3</td>
<td>2.3</td>
<td>2.4</td>
<td>2.3</td>
<td>2.4</td>
<td>2.5</td>
<td>2.5</td>
</tr>
<tr>
<td>NBBO – inflation one-year-ahead (quarterly average)</td>
<td>3.1</td>
<td>3.2</td>
<td>3.4</td>
<td>3.3</td>
<td>3.1</td>
<td>3.2</td>
<td>3.2</td>
</tr>
</tbody>
</table>

\(^1\) Due to a reweighting of the Consumers Price Index, these series are only available on a consistent basis from September 2006 onwards.
4 Financial market developments

International markets
The situation in global financial markets remains tenuous. Since the September Statement, the US Federal Reserve cut its policy rate (the Fed funds target rate) by a total of 75 basis points to forestall the effects of market turmoil on the US economic outlook. This initially generated some recovery in global markets, with equity markets rebounding and market interest rates generally falling during September and October.

This recovery has proved short-lived. Revelations of significant losses and write-downs at many of the world’s largest banks have re-awakened fears regarding the extent of credit market problems. This has seen a resurgence in risk aversion, which has undermined the recovery in markets. While there had been some tentative signs of an easing in global money market pressures, US dollar interbank (Libor) and commercial paper rates have started to rise again. At the same time, investors have returned to the safe-haven of government securities, resulting in government bond yields and Treasury bill rates falling (figure 4.1). Spreads between US dollar Libor and Treasury bill rates – an indication of the extent of credit fears – have widened back to the historically high levels seen in August, as have spreads on longer term rates against US Treasury bonds.

Figure 4.1
US short-term interest rates

<table>
<thead>
<tr>
<th>Date</th>
<th>3-month Libor rate</th>
<th>Fed funds target rate</th>
<th>Fed funds effective rate</th>
<th>3-month Treasury bill rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan 07</td>
<td>5.00</td>
<td>5.25</td>
<td>5.00</td>
<td>3.00</td>
</tr>
<tr>
<td>Mar 07</td>
<td>4.75</td>
<td>4.75</td>
<td>4.75</td>
<td>2.75</td>
</tr>
<tr>
<td>May 07</td>
<td>4.50</td>
<td>4.50</td>
<td>4.50</td>
<td>2.50</td>
</tr>
<tr>
<td>Jul 07</td>
<td>4.25</td>
<td>4.25</td>
<td>4.25</td>
<td>2.25</td>
</tr>
<tr>
<td>Sep 07</td>
<td>4.00</td>
<td>4.00</td>
<td>4.00</td>
<td>2.00</td>
</tr>
<tr>
<td>Nov 07</td>
<td>3.75</td>
<td>3.75</td>
<td>3.75</td>
<td>1.75</td>
</tr>
</tbody>
</table>

Source: Bloomberg, RBNZ.

Figure 4.2
Equity indices
(1 January 2007 = 100)

Against this backdrop, the market is pricing in further easing by the US Federal Reserve over the months ahead. While markets also expect easing from the Bank of England, the European Central Bank and the Bank of Japan are expected to leave their policy rates on hold. Furthermore, some central banks have continued to tighten policy. These include the central banks of China, Sweden, Norway, Iceland and Australia. The Australian market is pricing a substantial probability of further tightening over the year ahead.

Global commodity prices have generally remained strong, partly reflecting ongoing weakness in the US dollar (the currency in which most commodities are denominated in global markets). Of particular note, oil prices have posted new record highs near USD100 per barrel during the period since the September Statement. While US dollar weakness has played a role, this strength in oil prices also reflects continued supply fears and demand pressures. While not an unbiased forecast, futures prices have moved higher relative to those prevailing at the time of the September Statement, and are pricing in oil prices remaining relatively high over the next few years (figure 4.3).

The recovery in global equity markets during September and October took some indices to new highs. However, the renewed round of weakness, led by US financial stocks in particular, resulted in many equity markets returning to the lows seen in August (figure 4.2).
US dollar weakness has also put upward pressure on the New Zealand dollar. However, increased risk aversion and ongoing volatility have limited the gains. Increased risk aversion has seen market participants reduce positions in currencies on the periphery of global markets. Moreover, high general market volatility has reawakened fears that currency gyrations could wipe out the gains from the interest rate differential between high and low yielding currencies.

This helps explain why the TWI has not appreciated to the extent implied by the widening of relative interest rate expectations over the past two months (figure 4.5). It appears a ‘risk premium’ is being applied to the New Zealand dollar in the current environment. The current situation appears to have some similarities to the experience during 2002. In a similar environment of elevated risk aversion and market volatility at that time, the New Zealand dollar rose by less than might have been expected on the basis of the level of relative interest rate expectations.

An indication of the more limited appetite for New Zealand dollar investments is lower levels of net issuance of Eurokiwi and Uridashi bonds. Issuance of these bonds has fallen short of the substantial maturities that have occurred in recent months, so that the amount of these bonds outstanding has fallen (figure 4.6).
Domestic markets

Local policy rate expectations have risen since the September Statement. Within an environment of unfolding global market turmoil around that time, the market had been pricing in a decrease in the OCR by about March next year and some risk of a further rate cut thereafter. However, some stabilisation in global markets has seen the market refocus on domestic activity and inflation pressures. This has seen the market move back to pricing in little probability of a change in the OCR over the coming year.

In line with the increase in OCR expectations, wholesale interest rates have generally risen since the September Statement (figure 4.7). The rise in longer-term wholesale rates has generally paralleled the increase in equivalent Australian interest rates, but has occurred despite lower longer-term US interest rates.

Figure 4.7

The wholesale interest rate curve

Source: Bloomberg, RBNZ.

The rise in wholesale interest rates has prompted banks to increase the fixed mortgage rates being offered to new borrowers and those facing re-pricing of existing mortgage debt. Of particular note, two-year fixed rates have risen to their highest level since mid 1998.

Against this background, the effective mortgage rate – the average rate being paid on outstanding mortgage debt – has continued to rise. The effective mortgage rate has now increased by almost 150 basis points from its lows in late 2003 and has reached its highest level since October 1998 (figure 4.8). Almost 30 percent of the existing mortgage debt on fixed rates (representing close to a quarter of all mortgage debt) will re-price over the next 12 months, from an average rate of about 8 percent. On the basis of currently available mortgage rates, these borrowers will face interest rates that are 70 to 150 basis points higher than they are currently paying. This prospect suggests the effective mortgage rate will continue to rise over the next 12 to 18 months.

Figure 4.8

OCR and effective mortgage rate

Source: RBNZ.
relative to government bond yields. However, the extent to which these spreads have widened appears to have been restrained by strong retail demand for quality fixed income investments after recent finance company failures.

Figure 4.9
Spreads between commercial paper and bank bill rates

![Graph showing spreads between commercial paper and bank bill rates.](source: Reuters, RBNZ)
5 The macroeconomic outlook

Overview

Over the coming 12 months, the New Zealand economy will receive a substantial income boost from a sizable increase in the terms of trade. The lagged effect of international dairy price increases that occurred through late 2006 and 2007 is likely to see real gross domestic income (terms-of-trade-adjusted real GDP) increase by more in 2008 than it has in any of the past 15 years. Householders and corporates will both benefit from these gains, as will the government through substantially higher tax revenue.

While a higher terms of trade is clearly positive for New Zealand, the resultant stimulus will add to inflation pressure, exacerbating the strain on already stretched productive resources. Also adding to inflation pressure, food and fuel prices have risen sharply.

To offset these high medium-term inflation pressures, interest rates are projected to remain around current levels throughout most of the projection. These high interest rates are expected to help lower inflation gradually during the second half of the projection.

Offsetting these inflation concerns to some extent is the fact that there remain considerable downside risks around the global outlook. Furthermore, prospects in the housing market continue to deteriorate.

World outlook

Our outlook for world growth is based on the November Consensus forecasts. World growth is expected to continue near its trend rate (figure 5.1, table 5.1).

Figure 5.1
Trading partner GDP
(annual average percent change)

Source: Consensus Economics Inc., RBNZ estimates.

Underlying this reasonably benign aggregate forecast are some pockets of softness and notable downside risks.

So far, the slowdown in the US housing market and recent financial market turbulence have had relatively isolated and modest effects on measured US activity. However, more recent indicators point to future weakness

Table 5.1
Forecasts of export partner GDP*
(calendar year, annual average percent change)

<table>
<thead>
<tr>
<th>Country</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007f</th>
<th>2008f</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>4.1</td>
<td>3.1</td>
<td>3.7</td>
<td>2.8</td>
<td>2.7</td>
<td>4.3</td>
<td>3.7</td>
</tr>
<tr>
<td>Asia ex-Japan***</td>
<td>5.8</td>
<td>5.3</td>
<td>7.6</td>
<td>6.7</td>
<td>7.4</td>
<td>7.4</td>
<td>7.0</td>
</tr>
<tr>
<td>United States</td>
<td>1.6</td>
<td>2.5</td>
<td>3.6</td>
<td>3.1</td>
<td>2.9</td>
<td>2.1</td>
<td>2.3</td>
</tr>
<tr>
<td>Japan</td>
<td>0.3</td>
<td>1.5</td>
<td>2.7</td>
<td>1.9</td>
<td>2.2</td>
<td>2.0</td>
<td>1.8</td>
</tr>
<tr>
<td>Eurozone**</td>
<td>0.9</td>
<td>0.8</td>
<td>1.8</td>
<td>1.6</td>
<td>2.9</td>
<td>2.6</td>
<td>2.0</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>2.1</td>
<td>2.8</td>
<td>3.3</td>
<td>1.8</td>
<td>2.8</td>
<td>3.1</td>
<td>2.1</td>
</tr>
<tr>
<td>Canada</td>
<td>2.9</td>
<td>1.9</td>
<td>3.1</td>
<td>3.1</td>
<td>2.8</td>
<td>2.5</td>
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<td>12 Country Index</td>
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<td>2.9</td>
<td>4.1</td>
<td>3.3</td>
<td>3.6</td>
<td>3.9</td>
<td>3.6</td>
</tr>
</tbody>
</table>

Source: Consensus Economics Inc.

* Includes Austria, Belgium, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal and Spain.

** Includes China, Hong Kong, Malaysia, Singapore, South Korea and Taiwan.

1 ‘World growth’ is an export-weighted average of the growth in New Zealand’s 12 major trading partners.
in US activity. There remains the risk that financial market
turbulence and weakness in the US housing market will
have a more widespread and detrimental effect on the US
economy than incorporated in our projection.

There is also the risk that financial market turbulence
could adversely affect economic prospects in other
economies, with some signs of weakness emerging in Europe
and Japan. As yet, we have made only modest allowance for
further spillover.

Prospects in other parts of the world remain favourable,
although they could be vulnerable to a protracted downturn
in the world’s major economies. The strong pace of
momentum in the Chinese economy shows little sign of
abating, with generally favourable economic conditions in
other countries in the region. Demand conditions in the
Australian economy remain strong.

Although the risks to trading partner demand are to the
downside, our projections do not assume that these external
developments will have a particularly large impact on New
Zealand’s export commodity prices.

More obvious contagion from any weakness in the US,
especially towards export commodity prices, would be quite
detrimental to the New Zealand economy.

The terms of trade

After increasing markedly in the year prior to the publication of
the September Statement, New Zealand’s export commodity
prices have since tracked largely sideways. International dairy
prices have held firm at levels well above their historic norms
and we expect prices will persist at current levels through to
the middle of 2008, before moderating gradually.

International oil prices have continued to increase over
the past three months, recently reaching a peak of USD90
per barrel (Dubai). While weakness in the US dollar has been
responsible for some of this increase, underlying oil prices
have also risen.

As has been our standard practice, we assume oil prices
move in line with the latest Consensus forecasts over the
next few months, such that prices stabilise near USD86,
before trending lower from the second quarter of 2008
(figure 5.2). By basing our oil price projections on Consensus
forecasts, we are ensuring consistency between our outlooks
for global growth and oil prices.

Figure 5.2
Dubai oil price

![Dubai oil price](image)

Source: Datastream, RBNZ estimates.

Typically we have assumed that oil prices return to a level
consistent with the assumed long-run costs of accessing
new oil reserves. However, we have extended the time that it
takes for oil prices to return to their assumed long-run level,
reflecting the significant increases seen in the spot price
and evidence of increased extraction costs. Clearly, there
are large risks around this assumption. A higher or more
persistent oil price is likely to lead to higher CPI inflation and
weaker growth than assumed in these projections.

Despite higher oil prices, gains in international dairy
prices over the past year have been such that we expect
New Zealand’s terms of trade to remain much higher over
the projection horizon than at any time in the past 35 years
(figure 5.3).

Figure 5.3
OTI terms of trade

![OTI terms of trade](image)

Source: Statistics New Zealand, RBNZ estimates.
Exchange rate

As discussed in chapter 4, substantial weakness in the US dollar over the past few months has seen the New Zealand dollar TWI increase from its early September lows.

Our projections assume the New Zealand dollar TWI will track largely sideways through calendar year 2008. Strong terms of trade and high interest rate differentials are expected to continue to support the currency, such that only gradual depreciation occurs from there (figure 5.4).

Figure 5.4
Nominal TWI assumption

Source: RBNZ estimates.

Export volumes

The high value of the New Zealand dollar has hindered export growth in recent years, with the export volume share of GDP trending lower from the beginning of 2004. Given the assumed path for the New Zealand dollar TWI, export volume growth is expected to remain below trend throughout the projection (figure 5.5).

That said, for those exporters exposed to currencies other than the US dollar or the Japanese yen, there has been some relief in recent months. In particular, a strong Australian economy and a lower New Zealand dollar against the Australian dollar will be benefiting many parts of the tourism and manufacturing sectors.

Figure 5.5
Total export volumes
(percent of trend output and annual average percent change)

Source: Statistics New Zealand, RBNZ estimates.

Import volumes

In line with sustained shortages of productive resources, and a high exchange rate, the import volume share of GDP has increased sharply over the past few years (figure 5.6). This increase has helped meet demand pressures in the wider economy to some extent. Import volumes are expected to grow at about trend rates through 2008. From around 2009, growth in imports is projected to ease as spare capacity in the economy is opened up and household spending growth slows.

Figure 5.6
Total import volumes
(percent of output and annual average percent change)

Source: Statistics New Zealand, RBNZ estimates.
Current account

The current account balance is forecast to continue its recent recovery (figure 5.7). Primarily as a result of significantly higher export prices, improved export earnings are expected to push the trade balance into surplus by the end of this year before again moving into negative territory later in the projection as export prices moderate. The investment income balance is expected to improve later in the projection as declining long-term interest rates and a weaker New Zealand economy result in lower investment income being paid to foreigners.

Figure 5.7
Current account balance (annual)

Source: Statistics New Zealand, RBNZ estimates.

Business investment

Headwinds posed by a slowing domestic economy, rising interest rates, and financial market turmoil are likely to weigh on business investment over the projection period. For firms in the export sector, the high exchange rate is also likely to have undermined expected profitability of new investment projects.

Although easing demand conditions will contribute to a slowing in business investment growth, several factors are supporting business investment over the projection horizon. New Zealand's labour market is expected to remain tight, providing an incentive for firms to rely on capital equipment where possible. Firms will also benefit from the upcoming reduction in the corporate tax rate, cheaper prices for imported capital due to the high exchange rate, and construction spending ahead of the 2011 Rugby World Cup.

On balance, we expect business investment to grow roughly in line with total GDP growth through 2008 (figure 5.8). Further out, business investment growth is expected to slow as an easing in aggregate capacity pressures reduces the need for firms to expand their capital.

Figure 5.8
Business investment (excluding computers and intangible assets, percent of trend output and annual average percent change)

Source: Statistics New Zealand, RBNZ estimates.

Government

Our projection for fiscal policy is based on Budget 2007, but also allows for recent Government announcements on personal tax. Fiscal policy is expected to become relatively more expansionary over the projection period, with government spending as a proportion of total output forecast to continue rising (figure 5.9). Furthermore, in addition to the reduction in the headline corporate tax rate already announced, we have assumed $1.5 billion in personal tax cuts from early 2009 (see chapter 2). These assumed tax cuts are similar in magnitude to the upward revisions we made to our government revenue projections earlier this year, which in turn reflected a combination of upward revisions to the terms of trade and a stronger nominal economy.
Net immigration

After increasing noticeably from the beginning of 2007, the number of people emigrating permanently to Australia has flattened off at a high level. This has seen headline and long-term immigration also level off. Net immigration is assumed to increase slightly over the projection horizon to reach a net inflow of 12,500 people in early 2010 (figure 5.10).

Labour market

Robust labour demand, combined with low net immigration, has seen labour market pressures persist over recent years. Despite moderating employment growth, the unemployment rate has held below 4 percent for more than three years.

Pressures on capacity are such that we expect the unemployment rate to remain below 4 percent over the early part of the projection horizon despite projected low employment growth. Beyond this, the unemployment rate is projected to move higher, in line with our view that the economy will slow and aggregate capacity pressures will ease (figure 5.11).

Residential investment

Over the past year, residential investment has increased as a proportion of GDP (figure 5.12). However, it seems this buoyancy will soon pass, with prospects in the housing market recently deteriorating markedly. In particular, housing turnover has fallen further since the finalisation of the September projection, despite still positive net immigration. In line with these developments, we now project residential investment to decline through to the middle of 2008 and recover only modestly from there.
House prices

House price inflation is expected to slow markedly over the coming months. Current stretched valuations and high mortgage interest rates are likely to see housing turnover remain sluggish. We expect house prices to remain broadly unchanged from the beginning of 2008 (figure 5.13).

Figure 5.12
Residential investment
(percent of trend output and annual average percent change)

Source: Statistics New Zealand, RBNZ estimates.

That said, many of the factors currently supporting consumption spending are likely to persist for some time. Most importantly, the significant run-up in the terms of trade discussed earlier in this chapter will eventually deliver a significant boost to household sector incomes. A still tight labour market and personal tax cuts are also expected to help support household spending.

In line with recent developments in the Australian and US economies, our view is that household spending growth will slow in response to the housing market, but remain positive. In both these countries, a slowing housing market weighed heavily on the household sector, but tight labour markets and fiscal stimulus helped to underpin household spending.

Gross domestic product

After slowing through 2005, economic growth has been relatively robust over the past 12 months. Despite the significantly higher terms of trade, below-trend growth is expected throughout the projection, reflecting tight monetary conditions. Strong government spending growth is expected to be more than offset by slowing household spending growth and weak net exports.

Income growth is expected to far outstrip GDP growth (figure 5.15). The forthcoming terms of trade-induced jump in farm incomes is likely to see real gross domestic income increase by almost 6 1/2 percent through 2008 in annual average terms.

Household consumption

The cooling housing market is expected to provide considerably less support to household spending over the projection horizon. As such, household consumption is expected to fall as a share of GDP, from its current peak (figure 5.14).

Figure 5.13
House price inflation
(annual)

Source: Quotable Value Limited, RBNZ estimates.
Inflation

Annual CPI inflation has fallen over the past year or so (figure 5.16), largely reflecting temporary factors (see chapter 3). Annual CPI inflation is expected to rebound to 3.1 percent in the December quarter this year as higher fuel and food prices push tradable inflation higher.

Non-tradable inflation is expected to ease only gradually as capacity pressures slowly unwind.

Reflecting these developments, the headline rate of CPI inflation is expected to remain high through the projection. Our projection for relatively high rates of CPI inflation in the near term, combined with high inflation outcomes over the past few years, results in elevated forecasts for inflation expectations.

Beyond the published projection period, we forecast inflation to eventually return to near the centre of the 1 to 3 percent target band.

Tradable inflation is expected to then remain high for some time, reflecting continued food price gains and the assumed stabilisation in the exchange rate after an extended period of appreciation. In 2009 and 2010, tradable inflation will be boosted by the introduction of regional fuel taxes and the assumed gradual exchange rate depreciation.
Appendix A

Summary tables

Table A

Projections of CPI inflation and monetary conditions

*(CPI and GDP are percent changes)*

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<th>CPI Annual</th>
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Quarterly projections

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1 Notes for these tables follow on pages 32 and 33.
### Table B
Composition of real GDP growth

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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>World GDP (annual average % change)</td>
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<td>1.6</td>
<td>3.0</td>
<td>3.3</td>
<td>3.6</td>
<td>3.6</td>
<td>3.6</td>
<td>3.9</td>
<td>3.6</td>
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<tr>
<td>World CPI inflation</td>
<td>2.7</td>
<td>1.4</td>
<td>2.2</td>
<td>1.5</td>
<td>2.1</td>
<td>2.5</td>
<td>2.0</td>
<td>2.4</td>
<td>2.0</td>
<td>2.1</td>
</tr>
</tbody>
</table>
Notes to the tables

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

TWI
RBNZ. 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 eurozone.

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. Projections based on Consensus Forecasts. Seasonally adjusted.

World CPI inflation
RBNZ definition and estimate. TWI trading partners’ CPI inflation, weighted by TWI weights. Projections based on Consensus Forecasts.

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

Business investment
RBNZ definition. Total investment less the sum of non-market investment and residential investment. System of National Accounts.

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

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

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

Gross 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

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 Accounts.
Government operating balance  
Historical source: The Treasury. Adjusted by the RBNZ over the projection period.

Labour productivity  
The series shown is the annual percentage change in a trend measure of labour productivity. Labour productivity is defined as GDP (production) divided by Household Labour Force Survey hours worked.

Labour cost  
Private sector all salary and wage rates. Labour Cost Index.

Real gross domestic income  
The real purchasing power of domestic income, taking into account changes in the terms of trade. System of National Accounts.

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

Aliarch Industries Ltd
Anton's Seafoods Ltd
Aotearoa Fisheries Ltd
Auckland Chamber of Commerce
Auckland International Airport Ltd
Auckland Regional Transport Authority
Ballantyne & Co Ltd
Business New Zealand
Clelands Construction Ltd
Click-Clack Industries Ltd
DHL Express (New Zealand) Ltd
Dominion Finance Holdings Limited
Dorchester Pacific Limited
Farmers Mutual Ltd
Fonterra Co-operative Group Ltd
GDM Group Ltd
GFG Group Ltd
Goodmanfielder New Zealand Ltd
Hanover Group Limited
Iplex Pipelines NZ Ltd
Jade Software Corporation
Kirkcaldie & Stains Ltd
Kiwibank Ltd
KPMG
Lichfield International Ltd
Lion Nathan New Zealand
Lyttelton Engineering Limited
Lyttelton Port of Christchurch Ltd
Mace Engineering Ltd
Maunsell Ltd
Meco Engineering Company Ltd
Morning Star Trading Ltd
NZ Association of Bakers Inc.
NZ Bloom Ltd
NZ Council of Trade Union
Palmerston North City Council
Paperplus New Zealand Ltd
PGG Wrightson Limited
Price Waterhouse Coopers
Prime Finance Ltd
Salt Recruitment Agency
Sanford Ltd
Smith City Group Ltd
Speirs Group Ltd
Staples Rodway Limited
Suzuki New Zealand Ltd
Talbot Plastic Ltd
Taranaki Sawmills Ltd
Toyota New Zealand Ltd
Transfield Worley Ltd
TSB Bank Ltd
Tyco Safety Products Ltd
Villa Maria Estates Ltd
Vodafone New Zealand Ltd
Wanganui District Council
Wanganui Gas Ltd
Wellington Chamber of Commerce
Wight Aluminium Ltd
Windsor Engineering Group Ltd
Appendix C
Reserve Bank statements on monetary policy

OCR unchanged at 8.25 percent
13 September 2007

The Official Cash Rate (OCR) will remain unchanged at 8.25 percent.

Reserve Bank Governor Alan Bollard said: “The outlook for economic activity and inflation has become more uncertain since we reviewed the OCR in July. Credit concerns and heightened risk aversion have led to significant turbulence in global financial markets. This development increases the likelihood of a weaker economic outlook for the United States and New Zealand’s other key trading partners than in recent forecasts.

“The consequences of this financial market turmoil for New Zealand remain unclear at this stage. However, we continue to expect a significant boost to the economy over the next two years from the sharp rise in world prices for dairy products and some other commodities that has occurred over the past year. A sharp decline in the New Zealand dollar since July, if sustained, will act to reinforce the effects of higher world prices on export sector revenues.

“Recent inflation outcomes have highlighted widespread inflation pressures but indicators in recent weeks suggest that previous increases in the OCR are starting to dampen domestic spending, which will help to reduce those pressures. In particular, household borrowing growth is beginning to slow and turnover in the housing market continues to fall.

“We expect the effects of stronger export revenues on activity and inflation to be broadly offset by a further braking effect from the interest rate increases undertaken earlier this year. However, in the short term, CPI inflation is likely to rise due to the effects of a lower exchange rate and higher food prices. It is important that this temporary increase in inflation does not affect price- or wage-setting behaviour in the medium term.

“The recent collapse of a number of finance companies and reduced liquidity within the non-bank lending institution sector generally could further act to dampen activity in some areas of the economy, such as property development or consumer financing. However, we currently expect those negative effects to be relatively contained.

“At this point, we believe that the current level of the OCR is consistent with future inflation outcomes of 1 to 3 percent on average over the medium term. However, given greater than usual uncertainty at present, we will be watching to see how the upside and downside risks to the outlook are developing.”

OCR unchanged at 8.25 percent
25 October 2007

The Official Cash Rate (OCR) will remain unchanged at 8.25 percent.

Reserve Bank Governor Alan Bollard said: “The outlook for the New Zealand economy and interest rates remains broadly consistent with the view outlined in the September Monetary Policy Statement. The labour market remains tight, domestic income growth continues to expand on the back of strong commodity prices, and core inflationary pressures persist. On the other hand, there are signs the housing market is moderating.

“Despite ongoing surpluses in the government’s operating balance, fiscal policy is contributing to inflationary pressure. Any further easing in fiscal policy beyond that already announced will add further upside risks to medium-term inflation.

“There are a number of other upside risks to inflation, including the direct effects of the proposed greenhouse emissions trading scheme and rising global food prices.

“While the turbulence in global financial markets has eased somewhat, considerable uncertainty remains. This poses a downside risk for our key trading partner economies. In addition, the New Zealand dollar remains relatively high, restraining the externally-focused sectors of the economy.

“We believe that the current level of the OCR remains consistent with future inflation outcomes of 1 to 3 percent on average over the medium term.”
## Appendix D

### The Official Cash Rate chronology

<table>
<thead>
<tr>
<th>Date</th>
<th>OCR (percent)</th>
<th>Date</th>
<th>OCR (percent)</th>
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<td>17 March 1999</td>
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<td>24 July 2003</td>
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<tr>
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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 2008:

<table>
<thead>
<tr>
<th>Date</th>
<th>Type</th>
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<tbody>
<tr>
<td>24 January 2008</td>
<td>OCR announcement</td>
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<tr>
<td>6 March 2008</td>
<td>Monetary Policy Statement</td>
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<td>24 April 2008</td>
<td>OCR announcement</td>
</tr>
<tr>
<td>5 June 2008</td>
<td>Monetary Policy Statement</td>
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<td>OCR announcement</td>
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<td>Monetary Policy Statement</td>
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<td>23 October 2008</td>
<td>OCR announcement</td>
</tr>
<tr>
<td>4 December 2008</td>
<td>Monetary Policy Statement</td>
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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
Reserve Bank of New Zealand:
Monetary Policy Statement, December 2007