Monetary Policy Statement
June 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 increase by 25 basis points to 8.00 percent.

Domestic demand has grown strongly since late 2006, particularly in the household sector. Housing market activity has been buoyant, consumer confidence has remained relatively robust and a range of business sector indicators, including employment and investment intentions, have been strong. As we have noted recently, government spending continues to increase, which is contributing to domestic demand.

Following several years of strong growth, firms have indicated that capacity remains stretched and that finding both skilled and unskilled staff has become increasingly difficult. These pressures continue to underpin inflation.

A sustained period of slower growth in domestic activity will be required to alleviate inflation pressures. Lending rates have risen significantly in recent months, partly due to previous increases in the OCR. Given the usual lags, we have not yet seen the effect of these increases on domestic demand and inflation pressures. There are some early indications from recent opinion surveys and other data that growth may be starting to soften, but these are by no means conclusive. Indeed, at present the risks to domestic activity appear to remain on the upside.

A significant development in the past six months has been a marked increase in dairy prices. While there are uncertainties about the future path of these prices, the increases will assist in narrowing New Zealand’s trade deficit. The rise in dairy sector incomes will provide a substantial boost to economic activity over the next few years, but will also add to inflation pressures.

Parts of the export sector outside the dairy industry will continue to face challenging conditions due partly to the New Zealand dollar. As we noted in April, the exchange rate is at levels that are both exceptionally high and unjustified on the basis of New Zealand’s medium-term fundamentals.

Had we not increased the OCR this year, it is likely that the inflation outlook would now be looking uncomfortably high. This further increase in the OCR is to ensure that inflation outcomes remain consistent with achieving the target of 1 to 3 percent inflation on average over the medium term.

Alan Bollard
Governor
2 Overview and key policy judgements

GDP growth picked up towards the end of 2006 after having steadily slowed over the previous two years. The lift in growth has placed renewed pressure on productive resources, which have been stretched in recent years following a sustained expansion in activity. Indicators suggest that the pick-up in growth continued at least into the first quarter of 2007. This momentum has been reflected in the housing market and the household sector more generally, but other indicators, such as employment and investment intentions, have also been strong. If the Bank had not already increased interest rates this year, demand pressures over the coming quarters would be more severe than we are currently projecting.

In contrast, the high level of the exchange rate is hindering growth in net exports. Consequently, the rebalancing of growth away from the domestic sector and towards the external sector, which was evident over 2005 and 2006, appears to have stalled.

Looking ahead, domestic demand growth is expected to wane later in the year as recent increases in wholesale and retail interest rates act to slow household spending and the housing market. We have already seen some tentative evidence that this tightening in financial conditions might be beginning to temper household and business sentiment. With net exports under pressure, this would otherwise lead to a marked slowing in overall growth in activity.

However, a significant offset to these growth headwinds is the large increase in world dairy prices observed over the past six months. Considerable uncertainty exists around the extent to which this will boost domestic demand, and hence inflation pressures. While we expect a lot of the resulting increase in dairy farm incomes to be used to repay debt, we also expect some of it to be used to boost investment and consumption over the next few years. This is one of the main reasons we expect GDP growth over 2008 to be higher than previously projected (figure 2.1). The global economy remains on a steady growth path, as evidenced by the risks to policy rates in most countries (other than in the US) being to the upside. Fiscal policy, in the form of the business tax package and infrastructure investment, is also expected to continue to support GDP growth over the next few years.

Figure 2.1
GDP
(annual average percent change)

Source: Statistics New Zealand, RBNZ estimates.

The stronger growth outlook means that we now expect resources to remain stretched for longer, putting additional upward pressure on medium-term inflation. Consequently, we are now projecting interest rates to be higher for longer than we assumed in the March Statement (figure 2.2) so as to slow the economy sufficiently to unwind the additional medium-term inflation pressures.

Figure 2.2
90-day interest rate

Source: RBNZ.

While interest rates are projected to be higher than assumed previously, they are not expected to fully offset the increased inflation pressures relative to March; we are therefore projecting higher medium-term inflation than in the March Statement (figure 2.3). Furthermore, petrol price increases since the March Statement mean that we are
also expecting higher near-term inflation than projected previously.

Non-tradables inflation is projected to trend gradually lower throughout the projection from its current high level, while tradables inflation is projected to increase to more average levels as the exchange rate begins to correct lower.

**Box 1**

**Recent monetary policy decisions**

After having increased the OCR by 225 basis points over 2004 and 2005, the Bank left the OCR unchanged at 7.25 percent through 2006 (figure 2.4). The Bank felt it appropriate to suspend the tightening cycle at that stage and allow the full impact of the previous interest rate increases to work their way through the pipeline. Furthermore, domestic demand was slowing and there were signs of some easing in capacity pressures.

**Figure 2.4**

**Official Cash Rate**

One of the reasons for the slowing in demand through 2006 was a sharp increase in petrol prices, which saw annual inflation peak at 4 percent in mid-2006. As petrol prices eased through the second half of 2006, and the Government’s Working for Families package provided its greatest impetus to household income growth, domestic demand picked up, and resource pressures did not ease as fast as we had projected.

Through the first few months of 2007, economic indicators were suggesting that this was more than just a temporary recovery resulting from lower petrol prices. In particular, the housing market appeared to be experiencing a third wind, and business confidence was improving. Furthermore, world dairy prices had increased sharply. Financial market participants increasingly concluded that stronger inflation pressures meant that a higher OCR was likely to be required, raising longer-term interest rates and the exchange rate. The Bank increased the OCR by 25 basis points at both the March Statement and the April OCR review.

The Finance Minister announced on 29 May that Dr Bollard had been reappointed Reserve Bank Governor, and that he and the Governor had signed an unchanged Policy Targets Agreement (PTA).
Policy judgements

As has been discussed in previous Statements, nine years of economic growth have resulted in resources becoming particularly stretched. While the slowing in economic activity since 2004 should have helped to ease capacity pressures, firms continue to report high levels of capacity utilisation, difficulty finding suitable staff, and rising cost expectations and pricing intentions.

Taken at face value, these indicators suggest that the economy is currently very stretched, and imply low productivity growth over recent years. However, all of these indicators provide imperfect guides to the extent of excess demand, either because they omit some sectors of the economy or because structural changes in the economy mean that historical averages may no longer be appropriate benchmarks for ‘neutral’ resource pressures.

Despite these imperfections, the fact that non-tradables inflation persists around 4 percent implies that economic resources remain stretched, but not as stretched as the above indicators suggest. The projections in chapter 5, therefore, assume that there remains a modest level of excess demand, which is adding to inflation. However, the above indicators suggest that we may once again be surprised about the persistence of domestic inflation, even if our forecasts for GDP are realised.

We have also had to make a judgement about the likely effect of recent monetary policy tightening. In particular, advertised fixed mortgage rates are currently between 40 and 60 basis points higher than they were about the time of the March Statement. There are a number of indicators suggesting that employment, business investment, house price inflation and household spending could all post strong growth over the next six months. For example, house sales have remained high and the number of days it takes to sell a house has been trending lower to well below historical averages.

It is too soon to expect these indicators to have yet started to reflect the impact of the tightening in financial conditions. The small number of indicators that we do have that might be useful in this regard provide tentative evidence that momentum will wane later in the year. Our projections assume that these indicators will turn down further and translate into a marked slowing in actual activity over the coming quarters. Without such a slowing, inflation pressures will intensify further.

We are conscious of the risks of over-tightening late in the economic cycle. However, we are also very conscious that we have been surprised about the resilience of inflation pressures in response to interest rate increases earlier in this cycle and that the risks to our projection appear skewed to the upside.

Another significant change to the outlook for the New Zealand economy has been the remarkable increase in world dairy prices over the past six months. This boost to earnings clearly supports national income and is beneficial for the medium-term prospects for the New Zealand economy. But, as discussed in box 2, it also creates some challenges for other parts of the tradables sector and for monetary policy, particularly when inflation pressures are already persistent. This is because, while higher dairy prices will boost disposable incomes, they are unlikely to increase the productive capacity of the economy significantly, and will therefore put upward pressure on medium-term inflation. The extent to which inflation pressures do increase depends on several unknown factors, in particular, where dairy prices go from here, the offset provided by a higher exchange rate, and the degree to which the increase in dairy farm incomes is spent.

As discussed in box 3 (chapter 3), there is no single factor driving the recent increase in dairy prices. Our on-balance view is that dairy prices are likely to remain around current levels for at least the next year or so. The outlook beyond that is less clear. Many of the large increases in other commodity prices this decade have proven surprisingly persistent – oil the most obvious example. Given the speed with which dairy prices have increased, we are uncomfortable assuming at this stage that current levels will be maintained indefinitely; we have therefore assumed world dairy prices start trending lower in about 18 months. In real terms, the projected decline is much sharper.

We do not know exactly how a given increase in dairy prices will affect domestic demand. The strong increase in dairy farm incomes expected over the forthcoming season follows a time when dairy farmers have experienced sizeable increases in debt and operating expenses. We are therefore assuming that many farmers will use their income gains
partly to repay debt. However, there is likely to be some pressure on domestic resources coming from farmers who spend some of the increased income. For example, some farmers will invest into their farms, while others will increase their drawings for consumption. The larger the domestic content of those purchases, the greater the impact on domestic inflation pressures. It is important to note that exporters that have not benefited from increased world prices for their products will have experienced declines in their income because of the higher exchange rate, and will therefore be looking to reduce expenditure.

If dairy farmers and other investors expect the increase in dairy farm incomes to persist, rural land prices could rise appreciably. As discussed in the March 2007 Statement, this would encourage some existing farmers to withdraw equity from their farms, either by borrowing against the value of their farm or by selling it, with the purchaser probably borrowing to fund their purchase. This farm equity withdrawal will provide additional funds for spending. The relative role of each of these factors will have implications for the medium-term inflation consequences of the increase in dairy farm incomes.

Overall, we see the balance of risks to the medium-term inflation outlook as being to the upside. To illustrate these risks, we consider a scenario where the economy is currently more stretched and world dairy prices prove to be higher for longer than we have assumed in the central projection. The red lines in figures 2.5 and 2.6 show the potential impact of these alternative assumptions on interest rates and inflation respectively. This scenario suggests that interest rates would be higher than assumed in the central projection, and inflation would near 3 percent in early 2009 before easing.

In April, we noted that the trade-weighted exchange rate was at a level that was both exceptional and unjustified on the basis of New Zealand’s medium-term fundamentals. Since then, the exchange rate has risen further. As always, it is impossible to predict the exchange rate with any certainty. It is quite conceivable that the exchange rate, once it does eventually start to fall, does so quicker than we have assumed, implying greater inflation pressure than captured in our central projections. However, any sustained future depreciation in the exchange rate is likely to depend on our ability to combat domestic inflation pressures.
Box 2
Dairy prices and monetary policy

World dairy prices have risen by about 60 percent over the past six months, reflecting a global shortage of dairy products. Box 3 explores in more detail several factors that may have played a role in the run-up in global dairy prices.

The extraordinary gains in dairy prices are clearly a favourable development for New Zealand. Higher dairy export prices will lift national income and assist in a much-needed rebalancing towards the external sector. However, a terms of trade shock of this magnitude poses some challenges for monetary policy.

Dairy prices will affect inflation through a variety of channels.

- **Direct price effect.** Changes to world dairy prices may be passed through to domestic dairy product prices. Milk and milk-based products are part of the CPI, so increases in domestic dairy prices are likely to have a fairly prompt effect on CPI inflation. However, we expect this effect to be relatively small because we do not expect retail dairy prices to fully reflect the changes in the wholesale price, and these items have low weights in the CPI.

- **Income effect.** The sharp run-up in dairy prices will provide a substantial boost to rural incomes. To the extent that we are assuming some of this extra income will be spent, it will add to domestic demand pressures at a time when resources are already stretched. Extra pressure on domestic resources would in turn imply greater pressure on medium-term inflation. The exact demand and inflation consequences of higher dairy prices depend on the degree to which the extra income is saved or used to repay debt, and this is a key area of uncertainty.

- **Asset price effect.** There is also a risk that higher rural incomes become reflected in higher rural land prices. A re-acceleration in land prices risks adding to domestic demand pressures through wealth effects and equity withdrawal.

- **Exchange rate effect.** Higher world prices for New Zealand’s commodity exports are typically associated with a higher exchange rate. This in turn has a dampening effect on medium-term inflation pressures by adversely affecting the competitiveness of firms in other portions of the tradables sector and boosting imports. The high exchange rate also redistributes some of the gains from higher dairy prices by boosting New Zealanders’ purchasing power through cheaper imports.

Monetary policy is focused on medium-term inflation pressures. Because the first (direct) impact on CPI inflation is likely to be small and short-lived, and monetary policy acts with relatively long lags, it is most sensible for monetary policy to look through such an impact rather than respond. However, monetary policy should consider aspects of higher commodity prices that will have a more enduring effect on inflation. Overall, the medium-term effects described above contribute significantly to the intensification of medium-term inflation pressures that has occurred since the March Statement.
3 The recent economic situation

Overview

The New Zealand economy has experienced nine years of economic growth since 1998 (figure 3.1). Over this time, demand has outpaced productive capacity such that economic resources have been stretched to varying degrees for at least the past five years. As a result, significant inflation pressures have prevailed.

Figure 3.1
Real GDP cycles
(first quarter of cycle = 100)

Source: Statistics New Zealand.

Over the latter part of 2005 and early 2006, domestic demand growth began to slow, and resource pressures showed signs of easing. The associated fall in import volumes contributed to an improvement in net exports, and provided tentative signs that the rebalancing of the New Zealand economy was occurring.

However, the weakness in domestic demand looks to have been temporary, largely a response to high petrol prices over the first half of 2006. Subsequent declines in petrol prices, along with an expansion in government spending and continued strong labour market conditions, have contributed to a resurgence in domestic demand over the past six months. Business and consumer confidence measures improved at the end of 2006 and the housing market has gained a third wind. Consumption grew strongly at the end of 2006, and looks to have gained momentum in the March quarter.

With domestic demand re-accelerating, the rebalancing of the economy has stalled, and now looks to have gone into reverse. Furthermore, measures of resource pressures intensified in the March quarter.

However, there is tentative evidence that recent OCR increases might be affecting some leading indicators. House sales fell slightly in April, and there is anecdotal evidence of a slowing in bank lending. Further, there are tentative signs that business and consumer sentiment has eased recently.

Strength in domestic demand has seen non-tradables inflation lingering around 4 percent since 2004. In addition, rising oil prices and a weaker New Zealand dollar pushed headline inflation higher during 2006, to a peak of 4 percent in the year to June 2006. Since then, declines in oil prices, along with a strengthening of the New Zealand dollar, have allowed headline inflation to ease back to 2.5 percent in the year to March 2007.

Global economic developments

Activity in our major trading partners remained upbeat in 2006. Despite growth in the US slowing, growth in most of our other trading partners has remained robust. In particular, the pace of expansion in Europe has been continuously revised upwards over the past year.
Inflation pressures have remained elevated in a number of economies, most notably in the US and the UK. However, there has been some easing of inflation in Australia, and inflation has turned negative in Japan in recent months.

- Australian GDP picked up strongly in the December quarter, led by strong growth in consumption. Strength in domestic demand looks to have continued in the March quarter. Drought conditions have held agriculture production down, but non-farm activity remains robust, with activity in the mining sector particularly strong.
- US GDP growth slowed in the March quarter, with residential investment and net exports dragging growth down. The housing market continues to weaken, with most indicators tracking lower over recent months. Core inflation moderated slightly in April, but remains at an elevated level.
- Growth in the Eurozone has been strong, although it dipped slightly in the March quarter. Growth in Germany has held up, despite an increase in the Value Added Tax rate slowing consumption, while Italian growth slowed. UK GDP growth remained robust in the March quarter.
- Following broad-based strength in activity in late 2006, GDP growth slowed in Japan in the March quarter, dragged down by weak housing investment and capital expenditure. Inflation remains low in Japan, with core CPI inflation becoming negative in February and March.
- Growth remains robust across the rest of Asia, with China showing particularly rapid growth in the March quarter. GDP growth was upbeat across most of the rest of Asia at the end of 2006.

**Tradables sector activity**

New Zealand’s external position has deteriorated significantly since 2001, with the current account deficit reaching 9.7 percent of GDP in the year to June 2006. The deterioration was driven by strong import growth, fuelled by buoyant domestic demand, weakened export receipts due to the high level of the New Zealand dollar, and a wider investment income deficit.

An improvement in net exports in the second half of 2006 saw the current account deficit narrow slightly to 9.0 percent of GDP in the year to December (figure 3.3).

**Figure 3.3**

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

Source: Statistics New Zealand.

Export volumes increased strongly through the middle of 2006, largely due to a recovery in dairy and meat exports (figure 3.4). However, both of these components contracted slightly in the December quarter.

**Figure 3.4**

*Export volumes (annual average percent change)*

Source: Statistics New Zealand.

In contrast to the growth seen in primary exports, manufactured and services exports have remained much more subdued. Manufactured exports fell sharply in the first half of 2006, with the high level of the New Zealand dollar contributing to difficult trading conditions. While they showed some recovery in the second half of 2006, manufactured exports have largely tracked sideways over the past two years. Despite continued moderate growth in visitor arrivals, the high exchange rate has dampened tourist
spending. As a result, exports of services have also largely tracked sideways.

Along with a recovery in primary export volumes, world prices for some of our key commodities have surged recently. These gains have been concentrated on dairy prices, which have increased by 60 percent since last September (figure 3.5, see box 3). Weekly data show that commodity prices increased further in May.

**Figure 3.5**
Commodity prices

Other commodity prices have remained relatively subdued in world terms over recent months, with forestry prices showing some increase, while meat prices declined. The high New Zealand dollar has meant that, excluding dairy, New Zealand dollar commodity prices have declined.

**Figure 3.6**
Import volumes

Residential investment spending expanded for the second consecutive quarter in December, partly offsetting declines over the previous two years (figure 3.8). Strength in this sector looks to have persisted into 2007, with both dwelling consent issuance and house sales remaining at high levels (figure 3.9). However, in the past few months, there have been some small declines in house sales, and net immigration has shown a modest slowing due to increased departures to Australia. (See box 4 for a discussion of the effects of overseas ownership on the residential property market in New Zealand.)

**Domestic demand**

Growth in domestic demand slowed sharply over the first half of 2006, with both consumption and investment weakening (figure 3.7). However, in the December and March quarters, there have been signs of a re-acceleration in both of these components of domestic demand.

**Figure 3.7**
Real GDP, domestic demand and net exports (contributions to annual average percent change)
Following declines over the early part of 2006, house price inflation showed clear signs of increasing from around the middle of 2006. Prices increased by 9.7 percent in the year to December 2006 (as measured by Quotable Value Limited, figure 3.10). Data from the Real Estate Institute of New Zealand (REINZ) suggest that strength has remained in the housing market in the first half of 2007, with the average number of days taken to sell a house falling to very low levels.

Consumer spending growth slowed sharply through most of 2006, with annual growth falling to just above 1 percent in the September quarter. This fall in consumption growth is likely to have been exacerbated by a sharp increase in petrol prices over the first half of 2006.

However, strong household income growth – due in part to the Working for Families package – lower petrol prices, a strong labour market, and a re-accelerating housing market, have provided strong support for consumer spending. Largely reflecting these factors, consumer confidence has improved markedly over the past six months (figure 3.11).

Consumer spending increased strongly in the December quarter. Furthermore, retail sales in March showed the strongest quarterly growth in 20 years. Part of this strength in the March quarter is likely to reflect one-off promotions and discounting. Nevertheless, consumer spending looks to have remained strong in the first half of 2007. However, there is tentative evidence that consumer sentiment is starting to wane in response to recent interest rate increases.

(continued on p. 15)
Box 3
Recent commodity price movements
Since September last year, the world prices for New Zealand’s commodity exports have risen dramatically. Most of these gains can be attributed to higher world dairy prices, which have increased by 60 percent over this time. We see few signs that these price increases will unwind in nominal terms in the near future, although we do project some decline in real terms. While world prices for New Zealand’s other commodity exports also sit at their highest nominal levels in more than ten years, they are relatively subdued in real terms.

The recent appreciation in the exchange rate has acted as a buffer against the rise in dairy prices, moderating the income gains to dairy farmers, and distributing some of the gains towards consumers via lower import prices. However, as the increase in commodity prices has mostly been in dairy, the higher exchange rate has reduced New Zealand dollar prices for most other commodity exports.

Looking specifically at the dairy price gains, milk powder prices have risen almost twice as much as have other product prices (figure 3.12, milk powders account for half of New Zealand dairy exports and 10 percent of all goods exports). Furthermore, sustained shortages of dairy products internationally suggest prices are likely to remain at least at these levels for a sustained period of time. Fonterra shares this optimism, and has revised its payout for the current production year to $4.35 per kg of milk solids (from $4.15). In addition, it has announced a $5.53 payout for the coming (2007/08) season. Assuming unchanged production levels, these upward payout revisions add nearly $2 billion to dairy incomes over the next two years.

Underpinning the increase in dairy prices is an environment of strong growth in global demand for dairy. This has been coupled with a sluggish response in supply due to weak global production growth and relatively low global stocks.

1 By value in the December quarter 2006.

Figure 3.12
World prices for dairy products
Source: ASB.

Global demand for protein has been on a structural rise for some time. Demand for protein is very income-sensitive (figure 3.13) and rising incomes in emerging markets have led to an improved diet, incorporating more meat, eggs and milk. In recent years, the strongest growth in consumption of dairy products has come from emerging Asian markets, particularly China. While strong growth in underlying demand for protein is likely to continue over the long term, there is the potential for demand to slow temporarily in response to higher prices.

Figure 3.13
Asian incomes and consumption of agricultural products2
(annual observations, 1990 to 2004)

2 Includes China, India, Indonesia, South Korea, Malaysia, Philippines, Thailand and Vietnam.
The subsequent supply response from major exporting regions, such as New Zealand, Australia and the European Union (EU), has been relatively weak. Indeed, the largest growth in dairy production has come from China, Argentina, Brazil and India. However, in China for example, the pace of production growth has only kept pace with increased local demand, and a substantial portion of local consumption demand continues to be met by imports.

Production from the major regions has been lacklustre, hampering the ability of global dairy supply to meet the growth in demand.

- The EU is a significant dairy exporter. Poor weather resulted in weak production over 2006, which was compounded by a significant decline in exports of milk powders. The EU Common Agricultural Policy removed export subsidies for milk powders. Removing those incentives meant European dairy farmers were encouraged to shift from exporting milk powder to supplying higher value added products (such as cheese) to their own domestic markets. This has also led to a run-down in dairy stocks, with stocks of milk powder, in particular, practically exhausted. Combined with low dairy stocks in the US, global stocks are at relatively low levels.

- Production growth in the US (the world’s largest dairy-producing country) over the past year fell short of expectations due to dry conditions. Potential future growth appears limited, partly due to developments in corn prices. Cattle in the US (and much of the rest of the world) are primarily corn-fed. Over late 2006, grain (including corn) prices rose sharply, partly in response to the increasing use of grain to produce bio-fuels (figure 3.14). This increased cost of dairy production has reduced the extent to which higher dairy prices encourage farmers to expand production materially. Scope for expansion of dairy production may be further limited as land may be converted to crops to satisfy rising bio-fuel demand. As a result, provided grain prices remain high, it will be hard for a supply response to significantly lower dairy prices.

- Australian dairy production has fallen by about 4 percent this season, but has held up remarkably well given the severity of the country’s drought. Indeed, Australian dairy export volumes remain comparable to last season, suggesting that inventories have been run down. However, scope for future production growth may be limited because Australian production may struggle to recover fully after the drought.

The future path of world dairy prices depends on the ability of supply to respond to higher prices, as well as the willingness of consumers to accept higher prices. In this regard, note that supply responses in the dairy sector tend to be quite sluggish. It can take two to three years from when the decision is made to convert land to dairy before any milk is produced. Traditional exporters, such as New Zealand, the EU and Australia, have relatively limited scope to increase production. As a result, an increase in global dairy supply depends on the prospects for emerging exporters, such as Argentina and the Ukraine, along with the ability of China to increase production to meet its own demand.

![Figure 3.14]

Dairy and corn futures prices (one year)

Source: Chicago Board of Trade, Bloomberg.

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3 Year to date, Dairy Australia.
Box 4

Overseas ownership of New Zealand residential property

Aside from local economic conditions and migration, one of the factors frequently mentioned as contributing to the buoyancy of the New Zealand residential property market has been demand from overseas buyers, that is, buyers not currently residing within New Zealand.

The influence of overseas demand is of interest for the Bank’s analysis of the economy for the following reasons:
1) Its overall effect on residential property market activity and prices, and rates of home ownership in New Zealand;
2) The extent to which overseas demand for residential property is procyclical or countercyclical; and
3) The degree to which domestic monetary policy settings can influence overseas demand for New Zealand residential property.

The proposition that overseas demand has directly influenced residential property market activity and rates of home ownership in New Zealand is hard to verify as there is a lack of comprehensive data on overseas ownership. The Bank has investigated several data sources including:
• IRD data on non-resident individuals claiming rental income or losses on New Zealand property; and
• Quotable Value Limited data on the addresses of property owners, as recorded in the certificate of title.

Other information also suggests that overseas ownership has been on a rising trend, and indicate the above data are likely to significantly undercount the portion of overseas ownership. However, even after accounting for this, the level of overseas ownership is still likely to be quite low (considerably less than 5 percent of all New Zealand residential property).

Business contacts suggest a number of motives for overseas ownership of New Zealand residential property, including planned migration to New Zealand and for investment purposes. The strength of these motives over time is likely to depend on tastes, legal and institutional factors, and a range of economic factors, including overseas incomes, domestic and overseas interest rate levels, cyclical positions and exchange rate levels.

Rates of overseas ownership also appear to vary across regions, with higher rates of overseas ownership likely for traditional tourist destinations (e.g., Queenstown) and areas offering higher prospective rental yields for investors (e.g., South Waikato). Evidence also suggests higher rates of overseas ownership for apartments and residential sections.

The various data sources differ on whether overseas demand for New Zealand residential property has moved with or against the overall New Zealand residential property market cycle, and thus on whether overseas demand could stimulate or dampen the cycle. The available data imply fewer overseas purchases recently, possibly reflecting the high level of domestic property prices, rising domestic and overseas interest rates, and the high New Zealand dollar (figure 3.15).

Figure 3.15

Number of non-resident individuals declaring rental income/losses from property

Overall, it seems that, in certain regions and for particular property types, overseas demand is likely to have been quite influential. However, on the limited evidence we have, it appears that any national effect is likely to be small.

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4 Property owners are not required to list their country of residence for Quotable Value Limited records, and certificates of title may record the addresses of local agents for overseas owners. While the IRD data is for all property types (residential and non-residential), it only records individuals (and not property numbers), is only likely to capture rental properties, and excludes properties owned in company/partnership structures.
Business investment recorded a second consecutive increase in the December quarter (figure 3.16). The increase was led by gains in plant and machinery investment and non-residential construction.

**Figure 3.16**
Real business investment

Both non-residential consent issuance and imports of capital equipment have remained strong in the first quarter of 2007, suggesting the momentum in business investment has been maintained. Further, firms’ reported investment intentions have increased markedly since reaching a trough at the end of 2005, providing ongoing support for investment over the remainder of this year. However, more recent data show easing business confidence and investment intentions.

**Productive capacity and the labour market**

Despite GDP growth slowing over the past 18 months, a number of indicators suggest that resource pressures remain intense. In particular, capacity utilisation from the Quarterly Survey of Business Opinion (QSBO) increased in the March quarter to very high levels, although we feel this is overstating the degree of stretch currently (figure 3.17).

In addition, the labour market remains very tight. Despite large increases in labour force participation, the unemployment rate remains very low, and has remained below 4 percent since the middle of 2004 (figure 3.18). Consequently, little spare capacity remains in the labour market, and firms report increased difficulty in finding both skilled and unskilled staff (figure 3.19). However, manufacturing sector employment has declined over the past few years.
Ongoing tightness in the labour market has contributed to strong growth in labour incomes, as evidenced by annual growth in total labour earnings from the Quarterly Employment Survey remaining around 7 percent. The Labour Cost Index, which adjusts for changes in productivity, shows annual growth in private sector wages remaining above 3 percent in the year to March 2007 – close to historic highs (figure 3.20). There have also been sizable increases in public sector incomes.

Figure 3.20
Labour costs and wages – private sector (annual percent change)

Components of non-tradables inflation also increased in the March quarter, and remain very high.

Figure 3.21
CPI, tradables and non-tradables inflation (annual)

While there has been some easing in measures of core inflation recently, these remain close to the top of the 1 to 3 percent inflation band (figure 3.22).

Figure 3.22
CPI inflation and core inflation measures (annual)

Inflation expectations drifted higher over 2006, largely in line with high headline inflation at the time. Encouragingly, longer-term inflation expectations subsequently eased towards the end of 2006 and start of 2007, but remained largely unchanged in the June quarter. As a result, measures of inflation expectations remain at the upper end of the 1 to 3 percent target range (figure 3.23).
Elevated inflation expectations cause concern to the extent that they feed into actual price and wage setting behaviour. With firms reporting margins and profitability being squeezed, there have been strengthened indications that firms are intending to increase selling prices (figure 3.24).
### Table 3.1

**Measures of inflation and inflation expectations**

*(annual)*

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<td>2.6</td>
<td>2.5</td>
</tr>
<tr>
<td><strong>CPI Components</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>CPI non-tradables</td>
<td>4.4</td>
<td>4.3</td>
<td>4.1</td>
<td>4.1</td>
<td>4.0</td>
<td>3.8</td>
<td>4.1</td>
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<tr>
<td>Non-tradables housing components</td>
<td>5.8</td>
<td>5.7</td>
<td>5.3</td>
<td>4.6</td>
<td>4.5</td>
<td>4.2</td>
<td>4.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-tradables ex housing, cigarettes and tobacco components</td>
<td>3.8</td>
<td>3.7</td>
<td>3.7</td>
<td>3.9</td>
<td>3.9</td>
<td>3.7</td>
<td>3.8</td>
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<tr>
<td>CPI tradables</td>
<td>1.9</td>
<td>1.7</td>
<td>2.1</td>
<td>3.8</td>
<td>3.0</td>
<td>1.2</td>
<td>0.9</td>
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<tr>
<td>Petrol</td>
<td>20.3</td>
<td>17.4</td>
<td>23.5</td>
<td>32.2</td>
<td>15.9</td>
<td>1.3</td>
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<td><strong>Other inflation measures</strong></td>
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<tr>
<td>Factor model estimate of core CPI inflation</td>
<td>3.0</td>
<td>2.9</td>
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<td>3.0</td>
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<tr>
<td>CPI trimmed mean (of annual price change)</td>
<td>3.2</td>
<td>3.0</td>
<td>2.9</td>
<td>3.2</td>
<td>3.4</td>
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<td>Exponentially smoothed core inflation</td>
<td>2.5</td>
<td>2.6</td>
<td>2.7</td>
<td>2.7</td>
<td>3.1</td>
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<td>2.9</td>
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<tr>
<td>CPI weighted median (of annual price change)</td>
<td>3.2</td>
<td>3.2</td>
<td>3.1</td>
<td>3.2</td>
<td>3.6</td>
<td>3.3</td>
<td>3.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CPI ex food, petrol and government charges</td>
<td>2.8</td>
<td>2.6</td>
<td>2.4</td>
<td>2.8</td>
<td>2.7</td>
<td>2.5</td>
<td>2.7</td>
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</tr>
<tr>
<td>CPI ex energy and fuel</td>
<td>2.6</td>
<td>2.6</td>
<td>2.4</td>
<td>2.8</td>
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<td>2.8</td>
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<td>GDP deflator (derived from expenditure data)</td>
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<td>1.7</td>
<td>1.9</td>
<td>2.0</td>
<td>2.6</td>
<td>2.4</td>
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<td><strong>Inflation expectations measures</strong></td>
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<td></td>
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<tr>
<td>RBNZ Survey of Expectations – inflation one-year-ahead</td>
<td>2.9</td>
<td>3.2</td>
<td>2.9</td>
<td>3.2</td>
<td>3.5</td>
<td>3.0</td>
<td>2.7</td>
<td></td>
<td></td>
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<tr>
<td>RBNZ Survey of Expectations – inflation two-years-ahead</td>
<td>2.7</td>
<td>2.8</td>
<td>2.6</td>
<td>2.7</td>
<td>2.9</td>
<td>2.7</td>
<td>2.6</td>
<td></td>
<td></td>
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<tr>
<td>AON Economist survey – inflation one-year-ahead</td>
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<td>3.2</td>
<td>3.0</td>
<td>3.2</td>
<td>3.2</td>
<td>2.7</td>
<td>2.4</td>
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<tr>
<td>AON Economist survey – inflation four-years-ahead</td>
<td>2.3</td>
<td>2.4</td>
<td>2.3</td>
<td>2.4</td>
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<td>2.4</td>
<td>2.5</td>
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<td>NBBO – inflation one-year-ahead (quarterly average)</td>
<td>3.0</td>
<td>3.3</td>
<td>3.1</td>
<td>3.2</td>
<td>3.4</td>
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</tr>
</tbody>
</table>
4 Financial market developments

International markets
Wholesale interest rates in the major economies have risen since the March Statement (figure 4.1). While only the UK, Norway and China have tightened policy over the period, market expectations about the potential for further rate rises have increased in most of the major economies. Even in the US, where growth has slowed, lingering inflation concerns have seen markets scale back long-held expectations that the next policy move will be a rate cut.

Figure 4.1
Movements in wholesale interest rates since the March Statement

Exchange rates
The New Zealand dollar has strengthened against all of the major currencies since the March Statement. In a global environment of US dollar weakness, the NZD/USD cross rate rose to a new post-float high and the TWI to 18-month highs. The New Zealand dollar has also been one of the strongest currencies against the US dollar over the period. Indeed, this partly reflects the continued prevalence of ‘carry trades’ as a dominant theme in global foreign exchange markets. The New Zealand dollar and other high-yielding currencies (including the Australian dollar, Brazilian real and South African rand) have been some of the strongest, and low-interest rate currencies (including the Japanese yen and Swiss franc) the weakest (figure 4.3).

Figure 4.3
Movements in currencies against the US dollar since the March Statement

Global commodity prices have remained relatively robust. Notably, oil prices have continued to rise from the lows seen earlier this year, with both spot and futures prices rising towards last year's highs (figure 4.2). While geopolitical fears remain an ongoing factor in oil markets, solid demand growth and tight production/refining capacity continue to be the major factors underpinning prices.

Figure 4.2
Spot and futures prices for oil (West Texas Intermediate)

The recent strength in the New Zealand dollar has been broadly in line with an ongoing rise in relative interest rate expectations (figure 4.4). This reflects the extent to which views regarding the sustainability (or otherwise) of policy interest rate differentials is as important a consideration for currency markets as the current policy rate differentials. While interest rate expectations in key offshore markets have increased since the March Statement (as discussed earlier), New Zealand interest rate expectations have increased to a greater extent.
Domestic markets

Domestic interest rates have risen since the March Statement. Short-term interest rates rose in anticipation of the OCR rise at the April review and have increased further since then. As at the time of writing, the market was pricing in some risk of the OCR rising to 8 percent during the remainder of 2007 (figure 4.6).

Figure 4.6
Financial market expectations of the Official Cash Rate

In line with these developments, interest in New Zealand dollar securities remains strong. As an indication of the extent of investment interest, there has been a resurgence in issuance of New Zealand dollar bonds in offshore markets since the beginning of 2007 (figure 4.5). Eurokiwi issuance has been particularly strong during this period, while New Zealand dollar Uridashi issuance continues to keep pace with the amount of bonds maturing. Nevertheless, there is a more significant maturity profile over coming months which, if not matched with ongoing issuance, represents a downside risk to the New Zealand dollar.

Figure 4.5
New Zealand dollar denominated offshore bond issuance

Longer-term wholesale interest rates have also increased since the March Statement. This partly reflects the upward pressure associated with higher interest rates in key offshore markets. This has been compounded by an ongoing rise in the spreads between New Zealand longer-term interest rates and those in key offshore markets. These wider spreads are in line with relative movements in policy rates and associated expectations (figure 4.7). For example, the recent OCR increases in New Zealand and pricing of some risk of another rate rise contrast with a stable US policy rate and US market expectations of the next move being a rate cut. US rate cut expectations have been scaled back (as discussed earlier), but not to the same extent as New Zealand rate hike expectations have increased.

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1 This measure of relative interest rate expectations is the spread between bank bill futures rates in New Zealand and a TWI-weighted average of futures rates in the US, Europe, Australia, Japan and the UK.
Overall, these developments have seen interest rates rise by nearly 30 basis points across the yield curve since the March Statement (figure 4.8). There has been relatively little change in the negative slope of the yield curve, with shorter-term interest rates remaining above longer-term rates.

The rise in wholesale rates has driven ongoing increases in the mortgage rates being offered to new borrowers and those facing re-pricing (figure 4.9). In line with the negatively-sloped wholesale yield curve, fixed mortgage rates remain significantly below floating rates. However, the recent increases in fixed rates have taken them to near or, in the case of two-year fixed rates, above the highs seen since the introduction of the OCR in 1999.

This has seen an ongoing increase in the weighted average time to re-pricing for mortgages – the ‘duration’ of outstanding mortgages. The average duration of all outstanding mortgages has increased to a new high of almost 20 months, and the duration of fixed rate mortgages has reached the highs of the late 1990s (figure 4.11).
This suggests that, on average, existing borrowers are continuing to become increasingly insensitive to short-term interest rate movements. However, for new borrowers and those borrowers coming to the end of their fixed rate term, the recent increases in mortgage rates will represent a significant increase in financing costs. 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 7.8 percent. On the basis of currently available mortgage rates, these borrowers will face interest rates that are about 70 to 100 basis points higher than they are currently paying.

New borrowing at these higher rates, and the direct effect of rate increases on the 15 percent of mortgage debt that remains on floating rates, suggest further interest rate pressure remains in the pipeline. To date, the effective mortgage rate – the average rate being paid on outstanding mortgage debt – has risen nearly 120 basis points from its lows in late 2003 (figure 4.12). Recent developments suggest the effective mortgage rate will rise further, and remain higher for longer, than projected at the time of the March Statement.
5 The macroeconomic outlook

Overview
In the near term, we expect the recovery in domestic demand, discussed in chapter 3, to continue. Robust demand for labour, the Government’s Working for Families package and other fiscal initiatives will support strong income growth. High house price inflation is expected to persist over the near term, which will increase household wealth and encourage further spending. At the same time, the recent surge in world prices for New Zealand’s commodity exports will raise average rural incomes.

The strong outlook for near-term demand exacerbates the strain on economic resources, and thereby raises inflationary pressures. Strong domestic demand also stimulates growth in business investment, which will be further supported by the Government’s business tax package and the high New Zealand dollar.

Since the March Statement, the New Zealand dollar has continued to appreciate and the outlook for the non-dairy external sector remains weak. In particular, manufactured and services exports are expected to experience very little growth. Despite the strong rise in world prices for New Zealand’s commodity exports, only mild volume growth is projected for agricultural exports because of biological supply constraints. In contrast, the high New Zealand dollar and the rebound in domestic demand are likely to support robust growth in import volumes.

Over the medium term, households are expected to slow their accumulation of debt as higher servicing costs become more constraining. This is likely to lead to slower growth in domestic demand, which will alleviate capacity constraints and reduce inflation pressures. In line with slower growth, the New Zealand dollar is assumed to depreciate, reducing the drag on export growth and allowing some rebalancing of the domestic and external sectors.

World outlook
Our outlook for world growth is based on the May Consensus Forecasts.1 World growth was above trend in 2006, but is expected to slow slightly over the coming year (table 5.1).

The US looks set to experience the most pronounced slowdown, driven largely by weakness in the US housing market. This weakness is expected to have limited flow-on effects to US consumption and for this reason any contagion to global growth is anticipated to be small. However, there remains downside risk to US growth. If a more severe downturn did eventuate, this would likely drag down growth in other economies, particularly those with tight trade links to the US. For now, growth expectations in Europe and much of Asia continue to edge upwards.

Australia is expected to experience accelerated activity over 2007 as the economy benefits from a large rise in commodity prices. Further out, average growth among New

Table 5.1
Forecasts of export partner GDP*
(calender 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>
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<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>3.3</td>
<td>3.5</td>
</tr>
<tr>
<td>United States</td>
<td>1.6</td>
<td>2.5</td>
<td>3.9</td>
<td>3.2</td>
<td>3.3</td>
<td>2.1</td>
<td>2.8</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>2.2</td>
<td>2.2</td>
</tr>
<tr>
<td>Canada</td>
<td>2.9</td>
<td>1.8</td>
<td>3.3</td>
<td>2.9</td>
<td>2.7</td>
<td>2.4</td>
<td>2.8</td>
</tr>
<tr>
<td>Eurozone**</td>
<td>0.9</td>
<td>0.8</td>
<td>1.8</td>
<td>1.5</td>
<td>2.8</td>
<td>2.5</td>
<td>2.2</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>2.1</td>
<td>2.7</td>
<td>3.3</td>
<td>1.9</td>
<td>2.8</td>
<td>2.7</td>
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<tr>
<td>Asia ex-Japan***</td>
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<td>7.6</td>
<td>6.7</td>
<td>7.3</td>
<td>6.6</td>
<td>6.6</td>
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<td>12 Country Index</td>
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<td>2.8</td>
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<td>3.3</td>
<td>3.7</td>
<td>3.5</td>
<td>3.6</td>
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</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.
Zealand’s trading partners is projected to stabilise at about 3.5 percent per annum.

**The terms of trade**

In recent months, world prices for New Zealand’s commodity exports have increased sharply (figure 5.2). Although this rise is primarily due to a surge in dairy prices, the average price for ex-dairy commodity exports is also elevated in nominal terms. We expect the current strength in prices to persist over the next 18 months. Past this point, we have assumed that prices will gradually decline as supply rises to meet demand. As figure 5.2 shows, this implies a large fall in real prices; there remains upside risk to this profile.

Oil prices have risen since the March Statement (figure 5.3). Supply concerns surrounding US inventories have been exacerbated by refining difficulties in the US and instability in Nigeria. Strong demand also continues to underpin oil prices. Consistent with the May Consensus forecasts, we expect oil prices to peak in the June quarter and gradually decline thereafter. World prices for New Zealand’s ex-oil imports are also expected to remain elevated.

The terms of trade are already at high levels relative to recent history, and are expected to rise further in the very near term, reflecting higher export prices (figure 5.4).
Exchange rate
Since the March Statement, the TWI has continued to appreciate and has recently reached 15-month highs (figure 5.5). In the near term, higher interest rates and recognition of the strength in the terms of trade are likely to hold the currency near these levels. While we continue to assume that the TWI will eventually return toward its long-term average, there remains a great deal of uncertainty about the timing and speed of this depreciation.

Figure 5.5
Nominal TWI assumption

Source: RBNZ estimates.

Export volumes
In recent years, the high New Zealand dollar has acted as a brake on export growth. This has created an imbalance between the performance of the domestic and external sectors. While export growth improved noticeably in mid-2006, it largely reflected a recovery in dairy export volumes after a poor season. This recovery is not expected to be sustained (figure 5.6).

The outlook for export growth has deteriorated since the March Statement, mainly because of further appreciation in the New Zealand dollar. We now expect export growth to only keep pace with GDP growth, which will delay the rebalancing of the domestic and external sectors. Despite the strong increase in average world prices for New Zealand’s commodity exports, growth in primary export volumes is supply-constrained by biological factors. We anticipate very weak export growth for services and manufactured products.

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

Source: Statistics New Zealand, RBNZ estimates.

Import volumes
After beginning to slow in late 2005, import growth has recovered and is again acting as a release valve to alleviate demand pressures (figure 5.7). The combination of a strong New Zealand dollar and the robust outlook for business investment are expected to sustain the recovery in import growth over the near term. Longer term, import growth is expected to gradually ease as the New Zealand dollar begins to depreciate and domestic demand subsides.

Figure 5.7
Total import volumes
(percent of trend output and annual average percent change)

Source: Statistics New Zealand, RBNZ estimates.
Current account
The recent recovery in the current account balance has been primarily driven by an improvement in the trade balance. Over the near term, the trade balance is expected to continue improving as the terms of trade rise further (figure 5.8). While this narrows the current account balance, it is partially offset by higher interest rates, which deteriorates the investment income balance.

Over the medium term, the recovery in the current account balance is expected to slow as declining terms of trade lower the trade balance. Offsetting this, the investment income balance is projected to narrow, reflecting falling interest rates and a weaker profit outlook for domestic firms, translating into lower payments to foreign owners.

Business investment
After slowing from mid-2004, business investment showed signs of recovery in late 2006 (figure 5.9). Since then, capacity constraints – particularly labour shortages – have intensified. This has created greater incentives for capital deepening. Further, the New Zealand dollar has been high, dampening the cost of imported investment goods.

The recent recovery in business investment growth is now expected to be sustained for longer than assumed in the March Statement. This updated view is consistent with our projections for both more persistent capacity pressures and a stronger New Zealand dollar. Longer-term, our projection includes a boost to business investment resulting from the Government’s business tax package.

Net immigration
In recent months, we have observed a slight pick-up in long-term departures to Australia, which has lowered net immigration (figure 5.10). As the figure shows, net immigration is anticipated to stabilise around 13,000 persons per annum.
Labour market

Over the current business cycle, robust economic activity has increased labour demand, resulting in record low levels of unemployment (figure 5.11). At present, firms’ employment intentions remain above average, while the supply of workers has become increasingly scarce. The labour market is expected to remain tighter for longer than projected in the March Statement, in line with the more gradual easing in economy-wide capacity pressures that we now project.

Figure 5.11
Unemployment rate

Source: Statistics New Zealand, RBNZ estimates.

Government

Our projections for fiscal policy are based on Budget 2007. Government spending is expected to increase substantially over the next few years and this is projected to add to inflationary pressures (figure 5.12).

While we had been aware of most of this spending, the Treasury has raised the projected fiscal impulse (excluding KiwiSaver) over the projection. This extra stimulus coincides with a period where resources are already stretched. Consequently, the inflationary pressures from fiscal policy over the coming year are now expected to be slightly stronger than anticipated in the March Statement.

A substantial part of the new operating initiatives announced in the Budget were related to KiwiSaver enhancements. We have adopted Treasury’s assumption that the scheme will have no significant effect on consumption. Some households may reduce their spending to contribute to the scheme. However, others will be able to achieve existing saving objectives while spending more, because of employer and government contributions.

Figure 5.12
Government consumption and investment (excluding military spending, percent of trend output)

Source: Statistics New Zealand, RBNZ estimates.

Residential investment

Over the past year, residential investment has remained buoyant (figure 5.13). In the near term, further construction is likely to be sustained by the continued rise in house prices. Longer term, investment is expected to slow as the housing market softens, driven by a slowing labour market and increased debt servicing costs. However, given the surprising resiliency of the housing market, further momentum remains an upside risk to the outlook, particularly given that there are few signs of excess supply of residential properties.

Figure 5.13
Residential investment (percent of trend output and annual average percent change)

Source: Statistics New Zealand, RBNZ estimates.
House prices

Indicators of house price inflation have remained elevated since March, and current rates of house price inflation are expected to persist over the near term (figure 5.14). Further out, house price inflation is projected to slow as stretched valuations combine with high mortgage rates to reduce buyer demand. Our projections assume house price inflation will trough around zero percent in late 2009.

Figure 5.14
House price inflation (annual)

> Recent house price indicators suggest there is considerable upside risk to our near-term profile of house price inflation. However, the further house prices rise, the greater the possibility that the eventual correction in house prices will be significantly sharper than assumed in our projections. For example, real house prices fell by almost 38 percent over six years during the 1970s, following similar increases to those of recent years.

Household consumption

Household consumption growth has recently shown signs of recovering after slowing in late 2005 (figure 5.15). In the near term, consumption is expected to rebound further. Robust wage growth in the public and private sectors, and the Government’s Working for Families package are boosting households’ disposable incomes. At the same time, house price inflation is expected to slow only gradually, with rising household wealth likely to further stimulate consumption. Additionally, recent gains in the New Zealand dollar will place downward pressure on the prices of imported goods, improving households’ purchasing power.

Figure 5.15
Real household consumption (percent of trend output and annual average percent change)

> Household consumption is still expected to slow over the medium term. The effects of past increases in interest rates are expected to cumulate and discourage further debt accumulation by households. Over time, the household saving rate should recover and is assumed to be further supported by the Government’s KiwiSaver scheme. In comparison to the March Statement, the slowdown in consumption is now expected to occur more gradually, with stronger projections for income growth offsetting the effects of higher interest rates and slightly weaker migration.

Gross Domestic Product

In the near term, the recovery in GDP growth in late 2006 is projected to continue (figure 5.16). Ongoing strength in the housing market, a substantial increase in the terms of trade, and expansionary fiscal policy, are all expected to support strong growth in domestic spending and residential investment. Offsetting this growth is a weak outlook for net exports, which is largely because of the continued strength in the New Zealand dollar.

Over the past year, the rebound in domestic demand and the shortages of labour supply have maintained pressure on resources. The strong outlook for near-term growth is likely to prolong these capacity constraints and create more inflationary pressures than were anticipated in the March Statement. In response, interest rates are projected to be higher throughout the forecast horizon.
In the medium term, the combination of higher interest rates and a stronger exchange rate is likely to lead to lower growth than projected in the March Statement.

Inflation
In the near term, continued strength in the New Zealand dollar is likely to generate slightly weaker quarterly tradables inflation than anticipated in the March Statement (figure 5.17). This is more than offset by a stronger projection for non-tradables inflation driven by more sustained pressures on resources.

Over the medium term, inflation is projected to be slightly stronger than forecast in the March Statement. Despite higher interest rates, a more gradual slowdown in domestic demand has raised the profile of non-tradables inflation. However, non-tradables inflation is still expected to fall gradually over the forecast horizon. The projection for medium-term tradables inflation is broadly similar to the March Statement. There is upside risk to food prices given the recent increases in food-related commodity prices internationally.
Box 5

Seasonal patterns in the CPI

Prices for several goods and services in the CPI display seasonal patterns, which we frequently account for when developing our quarterly projections. In recent years, the size of these patterns has been increasing. Further, since mid-2006, Statistics New Zealand has stopped removing seasonal movements in fruit and vegetable prices from the CPI.

In light of these developments, we are progressively incorporating more of this seasonal variation into our quarterly CPI projections. This is part of our continuing effort to improve the accuracy of our projections. These developments have only a minimal effect on our annual inflation projection and no effect on our projection for interest rates.

Seasonal influences tend to make a large negative contribution to the CPI in the March quarter of each year, which is offset by smaller positive contributions in other quarters (figure 5.18).

- Seasonal movements are also evident in the prices of non-tradable goods and services, such as alcohol and local authority taxes. However, the contribution of these seasonal movements to the CPI is quite small in all quarters.

Figure 5.18

Seasonal patterns in the CPI
(Contributions to the CPI)

Seasonal movements in the overall CPI are predominantly a result of movements in tradables prices such as international airfares and petrol.
Appendix A
Summary tables

Table A
Projections of CPI inflation and monetary conditions

*(CPI is in percent changes)*

<table>
<thead>
<tr>
<th>Year</th>
<th>Quarter</th>
<th>CPI quarterly</th>
<th>CPI annual</th>
<th>TWI</th>
<th>90-day bank bill rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>Mar</td>
<td>-0.2</td>
<td>3.1</td>
<td>50.5</td>
<td>6.4</td>
</tr>
<tr>
<td></td>
<td>Jun</td>
<td>0.9</td>
<td>3.2</td>
<td>49.8</td>
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<td>2009</td>
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<th>CPI annual</th>
<th>GDP quarterly</th>
<th>GDP annual average</th>
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<td>Mar</td>
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<td>2007</td>
<td>Jun</td>
<td>0.7</td>
<td>1.7</td>
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Notes for these tables follow on pages 34-35.
## Table B

**Composition of real GDP growth**  
 *(annual average percent change, unless specified otherwise)*

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<th>March year</th>
<th>Actuals</th>
<th>Projections</th>
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<td>2001</td>
<td>2002</td>
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<td>Final consumption expenditure</td>
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<td>Private</td>
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<td>Public authority</td>
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<td>Total</td>
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<td>Gross fixed capital formation</td>
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<td>Business</td>
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<td>Non-market government sector</td>
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<td>Total</td>
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<td>Final domestic expenditure</td>
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<td>Stockbuilding</td>
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<td>Gross national expenditure</td>
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<td>Exports of goods and services</td>
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<td>Imports of goods and services</td>
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<td>Expenditure on GDP</td>
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<td>GDP (production)</td>
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<td>GDP (production, March quarter to March quarter)</td>
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<td>Output gap (% of potential GDP, year average)</td>
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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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<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
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<td>90-day rate (year average)</td>
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<td>GDP (production, annual average % change)</td>
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<td>3.6</td>
<td>4.5</td>
<td>3.5</td>
<td>3.9</td>
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<td>1.7</td>
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<td>GDP (production, March quarter to March quarter)</td>
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<td>Government operating balance (% of GDP, year to June)</td>
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<td>1.9</td>
<td>1.5</td>
<td>5.2</td>
<td>4.1</td>
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<td>3.8</td>
<td>3.7</td>
<td>3.3</td>
<td>2.9</td>
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<td>-7.4</td>
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<td>-7.6</td>
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<td>(% of disposable income, year to March)</td>
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<td>2.1</td>
<td>2.0</td>
<td>2.1</td>
<td>2.1</td>
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</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 euro.

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 savings rate
Household Income and Outlay Accounts.
<table>
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<th>Indicator</th>
<th>Description</th>
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<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>Quarterly percentage change</td>
<td>((\text{Quarter}/\text{Quarter}_{-1}) - 1) \times 100</td>
</tr>
<tr>
<td>Annual percentage change</td>
<td>((\text{Quarter}/\text{Quarter}_{-4}) - 1) \times 100</td>
</tr>
<tr>
<td>Annual average percentage change</td>
<td>((\text{Year}/\text{Year}_{-1}) - 1) \times 100</td>
</tr>
</tbody>
</table>

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

A.E. Tilley Ltd
Ballance Agri-Nutrients Limited
Barfoot & Thompson
Blue Sky Meats (NZ) Limited
Budget Rent a Car Limited
Cambridge Clothing Company Ltd
Canterbury Manufacturers’ Association
Coin Cascade Ltd
Delegat’s Wine Estate Limited
Destination Queenstown
Dotmar Engineering Plastics Limited
Federated Farmers of New Zealand (Inc)
Fletcher Building Limited
Fonterra Brands, New Zealand, Limited
Fuji Xerox New Zealand
Fullers Group Limited
Gallagher Group Ltd
GE Money New Zealand
Geo.H.Scales Limited
Glenarry Hancocks Ltd
GUD (NZ) Ltd
H & J Smith Holdings Limited
HG Livingstone Ltd
Hume Pine (NZ) Limited
JJ Limited
Kiwi Discovery Ltd
La Grouw Corporation Limited
LV Martin & Son Limited
Mainfreight Limited
Marley New Zealand Limited
Meat Industry Association
Millbrook Country Club Limited
New Zealand Council of Trade Unions
New Zealand Post Limited
Noel Leeming Ltd
Orion New Zealand Limited
Pacific Tourways Ltd
Perry Group Ltd
Pod Ltd
Progressive Enterprises Limited
Rotorua District Council
Scenic Circle Hotels Limited
SKOPE Industries Limited
Sky City Entertainment Group Ltd
Skyline Enterprises Limited
Snowy Peak Ltd
Sony New Zealand Limited
Southland Building Society
Tachikawa Forest Products (NZ) Ltd
Tait Electronics Limited
Tenon Limited
The Heritage Queenstown
The Waikato Times
Toll NZ Consolidated Ltd
Waikato Chamber of Commerce
Wellington International Airport Limited
Westland Co-operative Dairy Company Limited

In addition to our formal meetings with the organisations listed above, contact was also made with other companies and organisations for feedback on business conditions and particular issues relevant to our policy deliberations.
Appendix C
Reserve Bank statements on monetary policy

Reserve Bank raises OCR

to 7.50 percent

8 March 2007
The Official Cash Rate (OCR) will increase by 25 basis points to 7.50 percent.

Reserve Bank Governor Alan Bollard said: “Recent indicators show clear evidence of a pick-up in economic activity in late 2006 and early 2007. Strengthening domestic demand is being supported by a resurgence in the housing market and an expansionary fiscal policy. The acceleration in housing reflects firming net immigration, a recovery in confidence, a continuing rapid expansion of mortgage credit at very low margins, and strong growth in household incomes. The recent lift in export commodity prices – particularly dairy – may also be a factor. All this is adding to resource pressures and increasing the risk of a re-emerging inflation problem in the medium term.

“The short-term inflation outlook continues to ease. CPI inflation is projected to be around the middle of the target band through 2007, benefiting from lower oil prices and the high exchange rate. Domestic price inflation is also expected to moderate somewhat in 2007, assisted by the effect of lower headline inflation on inflation expectations. Despite this, domestic inflation is projected to remain at high levels over the medium term and is subject to considerable upside risk.

“Our concern is that the recent pick-up in housing and domestic demand may gain momentum, giving rise to a stronger cyclical upturn at a time when resources are already very stretched. This could reverse the rebalancing of the economy that has been underway since late 2005 and present substantial risks to the medium-term inflation outlook. It would also increase the prospect of a more costly correction in the country’s external deficit.

“We are continuing to assess alternative measures that might support the OCR, working with the relevant government agencies. These include a tightening of tax rules applying to housing investment and changes to bank capital requirements to help moderate the amplifying effect of credit on the housing cycle. However, we will continue to rely on the OCR as the primary instrument of monetary policy.

“The current policy tightening is aimed at reducing the risk of an unsustainable rebound in activity. Depending on the persistence of the current upturn, further tightening may be required. A return to a moderating trend in housing and domestic demand will be essential if we are to see a reduction in medium-term inflation pressures.”

Reserve Bank raises OCR

to 7.75 percent

26 April 2007
The Official Cash Rate (OCR) will increase by 25 basis points to 7.75 percent.

Recent indicators confirm that the resurgence in economic activity that began in late 2006 has continued over recent months, with domestic demand continuing to expand strongly. As we noted in March, demand is being fuelled by a buoyant housing market, increases in government expenditure, a rising terms of trade, ongoing net immigration, and a robust labour market.

The lift in domestic demand is placing further pressure on already-stretched productive resources. Firms report that capacity is very stretched and that they are again experiencing increased difficulty in finding both skilled and unskilled staff. Consistent with these pressures, non-tradables inflation has remained persistently strong and has recently shown signs of re-acceleration.

The trade-weighted exchange rate has risen further, which will exert some downward pressure on medium-term inflation. The exchange rate is now at levels that are both exceptional by historical standards, and unjustified on the basis of medium-term fundamentals. Parts of the export sector continue to face challenging conditions, but the recent sharp lift in world dairy prices is expected to provide a boost to incomes in that sector and tourist arrivals are continuing to grow.
There has already been a recent rise in fixed mortgage interest rates. This further increase in the OCR is aimed at ensuring that inflation outcomes remain consistent with achieving the target of 1 to 3 percent inflation on average over the medium term.

Alan Bollard reappointed as Governor
29 May 2007
The Finance Minister today announced that Dr Alan Bollard has been reappointed Reserve Bank Governor and that he and the Governor had signed an unchanged Policy Targets Agreement (PTA).

Dr Bollard’s term as Governor has been extended a further five years, expiring in September 2012.

“Alan has demonstrated his integrity and outstanding general management skills in performing his duties as Governor over the past five years so I am pleased to accept the Reserve Bank Board's recommendation to reappoint him for another five year term,” said Dr Cullen.

The Minister and the Governor agreed that the current PTA continues to ensure transparency and provides an appropriate basis for accountability in the conduct of monetary policy.

“As Minister of Finance my priority is to maintain a disciplined fiscal policy approach to help the Governor achieve the inflation outcomes in the PTA.”

Dr Bollard said he was pleased to accept another term as Governor of the Reserve Bank.

Dr Cullen and Dr Bollard added that if their understanding of the appropriate targets and mechanisms changed for the operation of monetary policy, which could arise from the select committee inquiry into monetary policy, then Dr Cullen and Dr Bollard could agree to amend the Policy Targets Agreement at that time.
Appendix D

The Official Cash Rate chronology

<table>
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<tr>
<th>Date</th>
<th>OCR (percent)</th>
<th>Date</th>
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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 2007.

<table>
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<th>Date</th>
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<tr>
<td>26 July 2007</td>
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<td>13 September 2007</td>
<td>Monetary Policy Statement</td>
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<td>25 October 2007</td>
<td>OCR announcement</td>
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<tr>
<td>6 December 2007</td>
<td>Monetary Policy Statement</td>
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</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