Monetary Policy Statement

December 2006[1]

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

Contents

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[1] Projections finalised on 30 November 2006. Policy assessment finalised on 6 December 2006.

1 Policy assessment

The Official Cash Rate (OCR) will remain unchanged at 7.25 percent.

Medium-term inflation pressures remain persistent. While the short-term inflation outlook has improved, we are less optimistic about medium-term prospects. Economic activity has been stronger than expected, given the resilience in domestic demand, and medium-term inflation risks appear weighted to the upside.

A welcome decline in oil prices has improved the near-term inflation outlook. As foreshadowed in our October OCR Review, we expect to see a very low December quarter CPI figure. Annual inflation could be as low as 2 percent next year, which should help to restrain inflation expectations and therefore give some assistance in containing medium-term inflation pressures.

But household spending continues to show surprising resilience. The labour market remains very firm, with continued strong growth in incomes despite some easing in employment in the third quarter. There has been some improvement in business and consumer confidence. The housing market appears to have developed new momentum after slowing in the first half of the year. Houses are now selling as fast as at any time this year.

Many exporters are feeling pressure from the high exchange rate which, if sustained, could threaten the ongoing rebalancing of the economy. However, primary exporters are getting significant relief from favourable world commodity prices, which are now expected to continue for longer as a result of global supply shortages.

While overall medium-term inflation pressures have increased, the balance of risks also appears to be on the upside. The housing market could continue to defy predictions of a downturn, and domestic demand could be further boosted by a fiscal expansion over and above the stimulus that is already allowed for in our projections (based on the Government's 2006 Budget).

Looking ahead, our projections and risk assessment suggest that a firmer monetary policy stance could still be required to maintain downward pressure on inflation in the medium term. Further tightening cannot therefore be ruled out. This will depend on economic outcomes and in particular the emerging trends in housing and domestic demand indicators. Any easing of policy must remain some considerable way off.

Alan Bollard

Governor

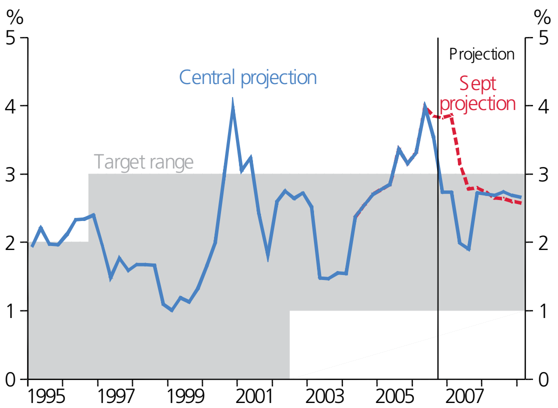
2 Overview and key policy judgements

Medium-term inflation pressures continue to prove more resilient than expected. Economic growth has recovered from its lows over late 2005, and the outlook for growth over the remainder of 2006 has improved since our September *Statement*. Economic activity has been rebalancing and this is projected to continue, but domestic demand is now expected to adjust more gradually given the ongoing strength in the labour and housing markets.

The near-term outlook for CPI inflation has improved significantly, reflecting recent declines in fuel prices, the rebound in the New Zealand dollar and the effect of Statistics New Zealand's reweighting of the CPI. While these effects on inflation are only temporary, lower headline inflation reduces the previous upside risk to medium-term inflation expectations and price and wage setting behaviour.

There are significant risks to the economic outlook. In particular, stronger housing activity and the potential for additional fiscal expansion could sustain domestic demand at higher levels than projected. However, the prospect of a more widespread slowdown in global activity and adverse effects from the high New Zealand dollar also present some downside risk to economic growth. In our policy deliberations, we have assessed the state of the economic cycle in the context of these risks and the medium-term focus of the Bank's Policy Targets Agreement (PTA).

Figure 2.1
CPI inflation
(annual percent change)



Source: Statistics New Zealand, RBNZ estimates.

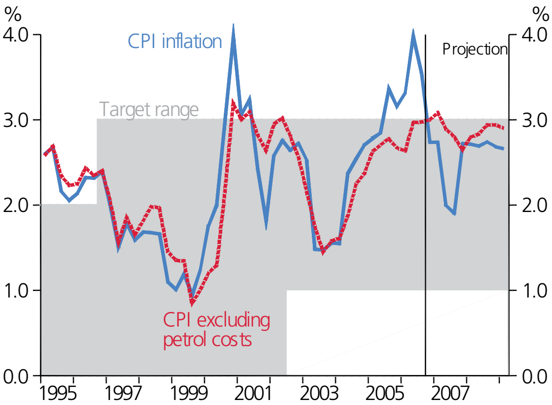
Recent developments

Economic growth has rebounded from the weakness in late 2005 and medium-term inflation pressures have not abated as much as expected. We have nevertheless seen the initial stages of a rebalancing in economic activity, from domestic demand to net exports.

Through the year to the September quarter, there was a sharp rise in headline inflation, reflecting the effects of rising oil prices and the large decline in the New Zealand dollar over the first half of 2006. While the spike in headline inflation was deemed to be temporary, it presented a material risk to medium-term inflation expectations. Consequently, in our September *Statement*, our policy message noted that we were less confident that no further policy tightening would be required.

Since September, there have been two significant developments affecting the medium-term inflation outlook: a lower outlook for short-term inflation, and a stronger outlook for economic activity. In recent months, oil prices have fallen back significantly and the New Zealand dollar has appreciated. These factors, combined with Statistics New Zealand's reweighting of the CPI, are expected to give an unusually low December quarter CPI (see box 2, chapter 3). As a result of these one-off effects, annual CPI inflation is now forecast to fall below 3 percent by the end of 2006, and reach a low of around 2 percent by the middle of 2007. This improvement to the inflation outlook is a welcome development and helps to reduce inflation expectations on a medium-term basis. However, it understates the degree of persistent inflation pressure in the economy in the same way that the oil-induced spike in headline inflation overstated the degree of persistent inflation pressure. The latest readings of core inflation measures remain around 3 percent and these measures are likely to remain elevated while headline CPI inflation declines next year.

Figure 2.2
Headline inflation and CPI excluding petrol costs
(annual percent change)



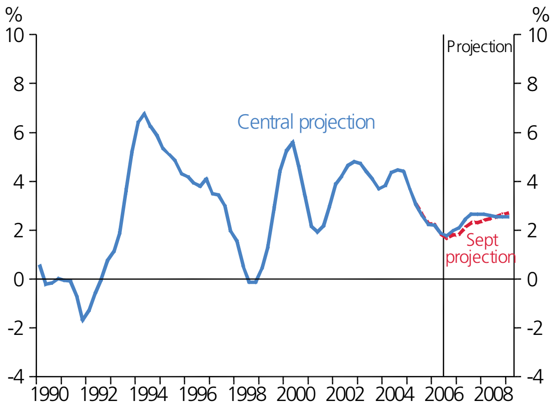
Source: Statistics New Zealand, RBNZ estimates.

The outlook for economic activity and domestic demand remains the dominant influence on medium-term inflation pressures. In this regard, economic indicators over recent months have generally proven more resilient than expected – a continuation of the trend that has been apparent throughout 2006.

- Housing market activity continues to exceed our projections. Worryingly, there are tentative signs that housing market activity could be regaining momentum, with an underlying trend increase across indicators such as days-to-sell newly listed properties, median house prices, new dwelling consents and net immigration flows.
- The labour market remains very tight, despite a small pullback in employment in the September quarter. Wages growth and increases in total labour incomes remain strong. Combined with the recent decline in fuel prices, these factors have underpinned an improvement in consumer confidence.
- The overall fiscal position has strengthened further, creating a risk of new initiatives over the projection period at a time when there is less headroom to accommodate additional fiscal expansion.
- Corporate earnings and the export sector remain under pressure, and the recent appreciation in the exchange rate could have further adverse consequences. However, indicators of business sentiment have been improving steadily, most likely reflecting stronger-than-expected demand conditions and lower fuel prices. In addition, world prices for New Zealand dollar commodities have been steadily rising in recent months.

Taken together, these developments have resulted in a somewhat stronger growth and domestic demand outlook relative to our September assessment.

Figure 2.3
GDP growth
(annual average percent change)



Source: Statistics New Zealand, RBNZ estimates.

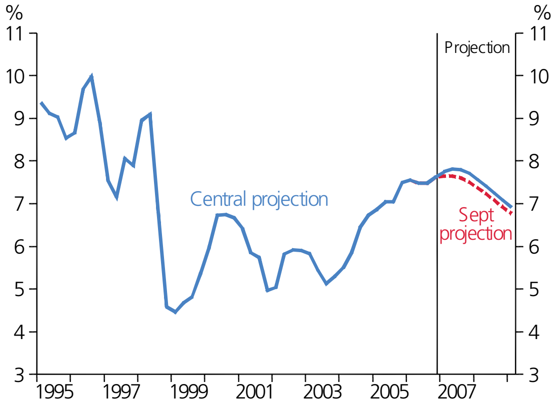
Policy judgements

The policy outlook discussed in recent *Statements* has been based on a view that growth in economic activity, which initially slowed in 2005, would be sustained at a slower pace over the next few years. Continued, moderate rates of growth would help unwind inflation pressures that have built up over a number of years of strong growth. Underlying this outlook has been the assumption that monetary policy will need to continue to lean against the wind, with interest rates required to remain around current levels for an extended period in order to constrain domestic demand.

Our updated view incorporates a somewhat stronger growth and domestic demand outlook relative to our September assessment. Although the short-term inflation outlook and inflation expectations are now lower, overall medium-term inflation pressures are greater. Accordingly, there is an increased chance that some further increase in interest rates may be required to ensure that medium-term inflation pressures abate.

In making our policy judgements, we have to distinguish carefully between the short- and medium-term paths for inflation. Under the PTA we are required to keep future inflation outcomes between 1 and 3 percent on average

Figure 2.4
90-day interest rates



Source: RBNZ.

over the medium term, a period we interpret to be roughly 3 years. If the inflation outlook over this 3 year period is inconsistent with the target range, monetary policy is adjusted to ensure that, in the absence of unforeseen events, inflation will be back within the target range in the latter half of that 3 year period. The PTA recognises that monetary policy can do little to affect inflation outcomes in the short term. However, short-term inflation developments do matter for our policy assessment to the extent that they can affect the medium-term path of inflation expectations.

With CPI inflation now projected to fall to around 2 percent by late 2007, we are considerably more comfortable with the outlook for inflation expectations. However, we are less comfortable with the prospects for the continued expansion of activity and consequent inflation pressures beyond 2007. When the short-term effects of lower oil prices 'drop-out' of the annual CPI inflation results late next year, annual CPI inflation is expected to settle at around 2.7 percent. Consequently, monetary policy continues to face little or no headroom from a medium-term perspective.

At present, we judge the risks to the inflation outlook to be stronger on the upside than on the downside. On the upside, recent indicators suggest that housing has strengthened again after easing in the first half of 2006. A range of factors, including a strong labour market, ongoing immigration, a levelling out of world interest rates and intense competition in the market for home loans, are sustaining household spending and housing activity. A key issue is whether the latest indicators are signalling a turning point in the economy and a return to stronger growth. At this point, while our revised projections do reflect some of this recent up-tick in activity, we are continuing to take the view that growth in domestic demand – particularly household consumption and residential investment – returns to a moderating path during 2007.

Fiscal policy poses a particular risk for the medium-term outlook. There is the possibility that the fiscal position over the next few years could prove more expansionary than current official estimates suggest, which would add further stimulus to domestic demand. Although our projections do not currently assume additional stimulus over and above Treasury's 2006 *Budget* estimates, any additional initiatives would need to be factored into the outlook and could imply additional monetary policy response.

In contemplating future policy moves, the Bank must remain conscious of section 4b of the PTA, which obliges us to avoid unnecessary instability in interest rates, the exchange rate and output.

There are a number of ways in which section 4b is of relevance to our decisions on the OCR. The first concerns the risk that the economy is at a turning point and is returning to stronger rates of growth. An aggressive monetary policy response made on the assumption that growth is accelerating could amplify the following downturn in the event that the current pick-up is just temporary. Conversely, if a more sustained acceleration is occurring, inflation pressures could gain momentum if monetary policy does not respond in a timely manner. In that instance, monetary policy might need to play catch-up, leading to a sharper contraction in the economy at a later date. These uncertainties highlight the need for careful judgements around the extent to which any resurgence of demand is likely to be sustained.

Another consideration under 4b surrounds the exchange rate, which appears unjustified on the basis of New Zealand's large current account deficit. Although further policy tightening would assist in dampening domestic demand via its effect on interest rates, it would potentially also add further upward pressure to the exchange rate, thereby damaging the export sector. This does not mean that monetary policy is hamstrung, but the costs and benefits of future policy actions – and their impact on various sectors of the economy – need to be weighed carefully.

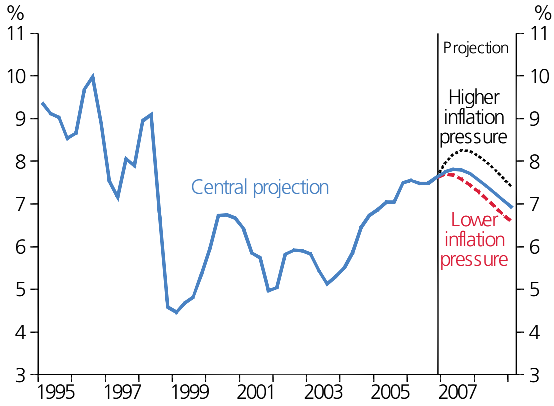
Figures 2.5 and 2.6 illustrate a scenario in which a combination of a stronger housing market and a looser fiscal policy relative to our central projection provide a further boost to economic growth and inflation pressures over the next few years. In this scenario, additional monetary policy tightening is required to help dampen the stronger domestic demand and ensure that medium-term inflation outcomes remain within the target range.

The outlook for activity and inflation is also subject to downside risks, although we currently judge these to be less likely than the upside risks. In our downside scenario, the effects of a weaker world economy and weaker domestic corporate profitability lead to a greater softening in domestic activity. There is the possibility that the current downturn in the US housing market will have a more pronounced effect on the wider US economy than many forecasters are currently assuming. This in turn could have negative repercussions for activity in the rest of the world, although there is considerable debate among international commentators on the extent to which various regions, such as Asia, would be affected. Another possible source of weakness could stem from a decline in corporate profitability, which is relatively constrained at present, reflecting the high exchange rate, ongoing cost pressures and slower activity in some sectors over the past year. While recent improvements in corporate sentiment do not highlight this risk, a drop off in profitability, due say to a weaker external sector, could cause employment and investment activity to soften more rapidly than we are projecting.

As shown in figure 2.5, with inflation currently projected to settle in the upper part of the target band during 2008, a weaker activity outlook would not necessarily open up significant scope for easier monetary policy. Rather, it could simply increase the likelihood that future inflation would fall more comfortably within the target band. Scope for a significant easing in policy would obviously become larger in the event of a significant negative surprise.

Figure 2.5

Alternative scenarios: 90-day interest rates

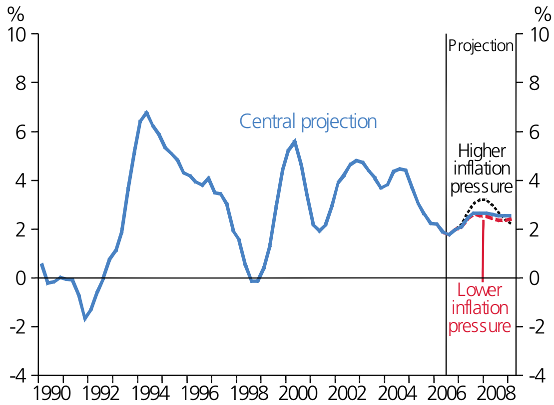


Source: RBNZ.

Figure 2.6

Alternative scenarios: GDP growth

(annual average percent change)



Source: Statistics New Zealand, RBNZ estimates.

Box 1

Recent monetary policy decisions

Since early 2004, the Bank has increased the OCR by a total of 225 basis points. The extent of policy tightening required has exceeded the expectations of the Bank, its observers and financial markets generally. Initial increases in the OCR reflected the reversal of the precautionary policy easing that occurred around the middle of 2003. While in retrospect these early reductions in the OCR may have been unnecessary, at the time the Bank's actions were seen as appropriate given the uncertainty around SARS, the outlook for the global economy and domestic business confidence.

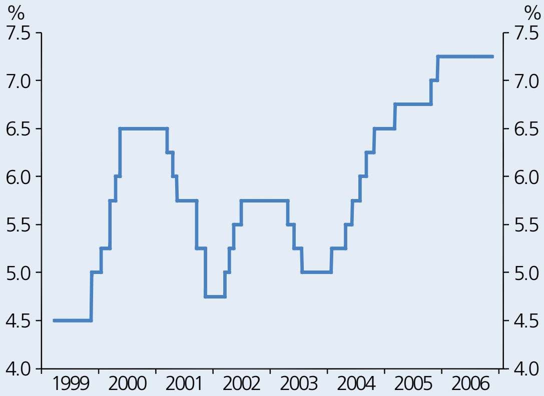
The domestic economy continued to expand at above trend levels through 2004 and 2005, stretching the economy's productive resources and placing considerable pressure on non-tradables inflation. Strong growth in domestic spending in particular continued for longer than expected, drawing support from steady growth in labour incomes, historically low unemployment, and the wealth effects associated with the housing boom. The Bank responded by tightening policy in a series of measured steps.

Around the end of 2005, subsequent statistical releases suggested activity had slowed much more abruptly than expected, potentially bringing into question the appropriateness of the most recent OCR increases in October and December 2005. Our policy stance was subsequently softened in the March *Statement* and financial markets brought forward their expectations for the commencement of the easing cycle, contributing to the significant depreciation in the exchange rate through March/April 2006.

Economic indicators subsequent to the March *Statement* have pointed to slightly stronger underlying activity in 2006. At the same time, the sharp increase in oil prices introduced the risk of higher headline inflation feeding into inflation expectations and price and wage setting behaviour. Reflecting these developments, the OCR was maintained at 7.25 percent in June and July with policy comments tending to defer the time at which OCR reductions might be expected.

At the time of the September *Statement* the OCR was left on hold at 7.25 percent, but the Bank noted its concerns around the persistence in medium-term inflation pressures. The slowing in domestic demand was occurring only gradually, and we assessed that pressure on overall productive capacity was abating more slowly than we had hoped. Coupled with the ongoing risk to inflation expectations from high oil prices and headline inflation, this left us less certain that no further policy tightening would be required in the current policy cycle.

Figure 2.7
Official Cash Rate



Source: RBNZ.

3 The recent economic situation

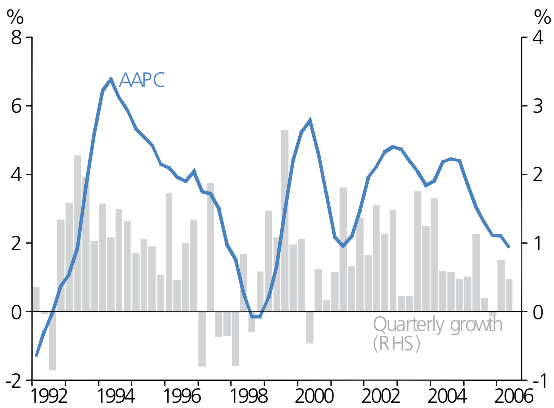
Overview

The New Zealand economy grew strongly between 2000 and early 2005. Over this period, growth in domestic demand exceeded growth in the economy's productive capacity. Consequently, much of the increase in domestic demand was met by imports. Contributing to this process was the strengthening of the New Zealand dollar, which also contributed to a marked deterioration in New Zealand's export position.

Since that time a rebalancing in activity has been occurring. GDP growth slowed sharply in the second half of 2005 as domestic demand softened. At the same time, there was some recovery in the net export sector as import volumes fell. However, the weakness in GDP growth last year appears to have overstated the degree of underlying weakness in the economy, as evidenced by the recovery in GDP growth in early 2006. And while the rebalancing of the economy has continued, it now appears to be occurring at a more gradual pace.

Strength in domestic demand and the resulting pressure on domestic resources has seen non-tradables inflation lingering above 4 percent since 2004. Over much of 2006 there has also been strength in tradables inflation due to high petrol prices. Combined, these conditions resulted in headline CPI inflation rising to 4 percent in the year to June 2006.

Figure 3.1
Real GDP growth



Source: Statistics New Zealand.

Global economic developments

Activity in our trading partners' economies has remained positive. While growth in the US and Australia has softened, activity in the Eurozone remains robust and activity in Asia has generally remained resilient.

In recent months, falling oil prices have led to declines in headline inflation across our trading partners' economies. However, strength in domestic demand coupled with capacity constraints has meant that strong underlying inflation pressures are still evident. Consequently, a number of central banks have raised official rates since the September *Statement* (See table 3.1). Over 2006 official rates have risen in all of our main trading partners' economies.

- Australian GDP growth slowed in the June quarter and, following considerable strength earlier in the year, employment growth eased in October. Additionally, drought has resulted in difficult agricultural conditions. Nevertheless, activity remains upbeat in resource rich states, and limited spare capacity has led to strong inflation pressures. Consequently, the Reserve Bank of Australia increased its policy rate at its November meeting.
- There has also been a slowing in US activity owing to softness in residential investment and net exports in the September quarter. In light of this moderation in activity, the Federal Open Markets Committee left rates on hold in October, noting that inflation pressures are expected to moderate.
- At its November meeting, the Bank of England raised rates, citing capacity constraints and concerns over possible wage pressures.
- Official rates have also risen in the Eurozone, with the European Central Bank acting to limit inflation pressures in light of relatively robust activity.
- Japanese GDP increased by 0.5 percent in the September quarter with growth stemming mainly from strength in the external sector. However, domestic demand has fallen due to lower consumption spending. Inflation in Japan has remained subdued and the Bank of Japan has left rates on hold since July.
- In China there has been some moderation in investment in response to policy tightening measures by the People's

Table 3.1

Official interest rates

Central Bank	Net change in policy rate since January 2006 [Last move]	Current level of policy rate
Reserve Bank of Australia	+75 [+25 in November 2006]	6.25%
US Federal Reserve	+75 [+ 25 in July 2006]	5.25%
Bank of England	+25 [+25 in November 2006]	4.75%
European Central Bank	+75 [+25 in October 2006]	3.25%
Bank of Japan	+25 [+25 in July 2006]	0.25%
Reserve Bank of New Zealand	0 [+25 in December 2005]	7.25%

Bank of China. Nevertheless, Chinese consumption spending and net exports have remained resilient. Activity in other parts of Asia has softened after robust growth earlier in the year due to easing exports and manufacturing activity.

Tradables sector activity

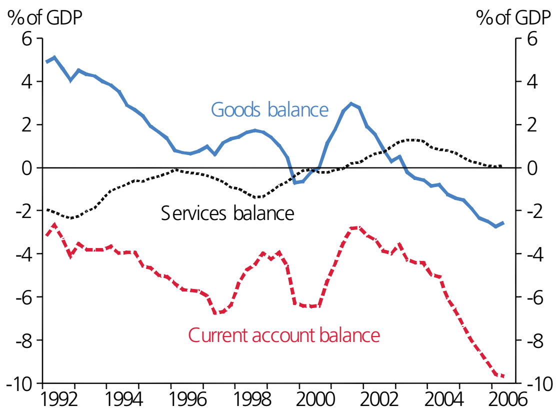
New Zealand's trade position has deteriorated significantly since 2001, with the annual current account deficit expanding to 9.7 percent of GDP in the June quarter of 2006. This deterioration has largely been a result of strong domestic demand and dissaving on the part of households, and the crowding out of exports due to the high New Zealand dollar.

However, in recent quarters signs of a recovery in net exports have emerged, with export volumes increasing and import demand slowing. Recent growth in exports has been concentrated in primary products. In contrast, export activity in the manufacturing sector remains subdued (figure 3.3, overleaf):

- Primary export volumes rose strongly in the June quarter. Dairy exports increased following an improvement in growing conditions, and meat exports rose as slaughter levels recovered from a slow start to the year. There has also been an increase in forestry exports in response to improved international returns.
- The high New Zealand dollar, strong international competition and rising input costs have resulted in difficult trading conditions in the non-commodity manufacturing sector. As a result, growth in this sector slowed sharply over the first half of 2006. However, there has been some recovery in this sector in recent months.

Figure 3.2

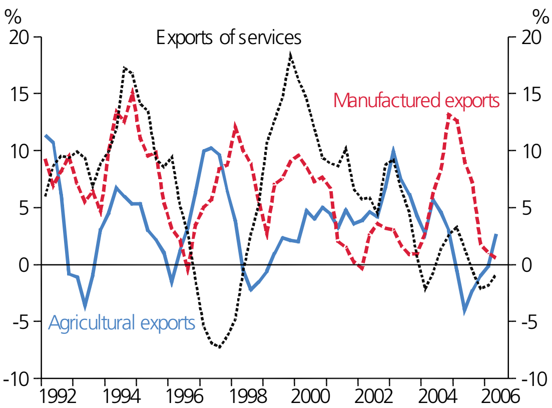
Annual current account balance, goods and services balances



Source: Statistics New Zealand.

- Visitor arrivals and exports of services have shown solid growth in 2006 to date. However, this still leaves the real level of services exports largely unchanged since 2002. Services exports have struggled in recent years under the high New Zealand dollar.

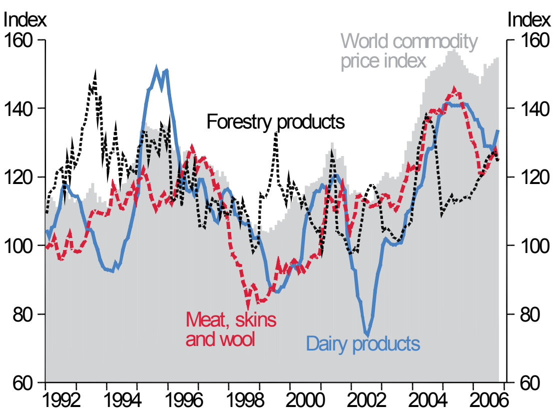
Figure 3.3
Export volume growth
(annual average percent change)



Source: Statistics New Zealand.

In addition to some recovery in export volumes, prices for our key agricultural exports have remained close to historically high levels (figure 3.4). Ongoing strength in export prices has largely been a result of tight international supply conditions. This has helped to maintain returns to producers, despite the effects of the high level of the New Zealand dollar.

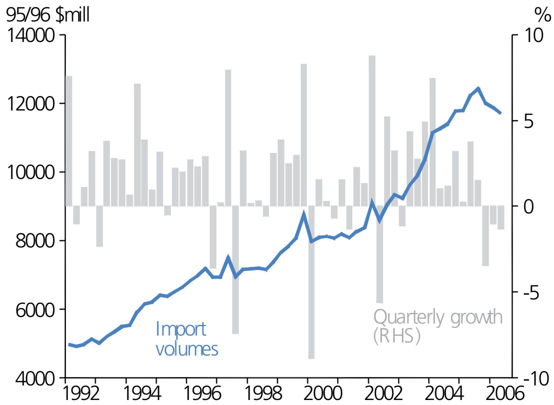
Figure 3.4
ANZ commodity prices



Source: ANZ National Bank Group Ltd.

The slowing in domestic demand has seen falling import volumes since late 2005. These declines have mainly occurred in imports of capital equipment and intermediate goods, with a fall also seen in imports of services. Imports of consumer goods have proven to be more robust, although these have also exhibited slowing growth.

Figure 3.5
Import volumes

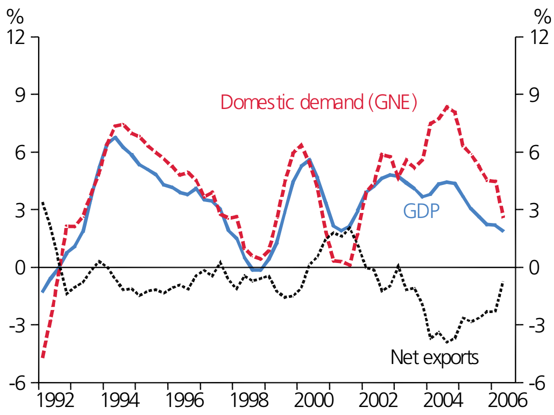


Source: Statistics New Zealand.

Domestic demand

Recent quarters have seen a rebalancing in activity. In addition to the improvement in net exports, domestic demand has slowed (figure 3.6), with a fall in Gross National Expenditure (GNE) in the June quarter. The slowing in domestic demand has been spread across both the business and household sectors. However, signs of underlying strength are still evident in the household sector, underpinned by strength in the housing and labour markets. These factors indicate continued support for domestic demand going forward.

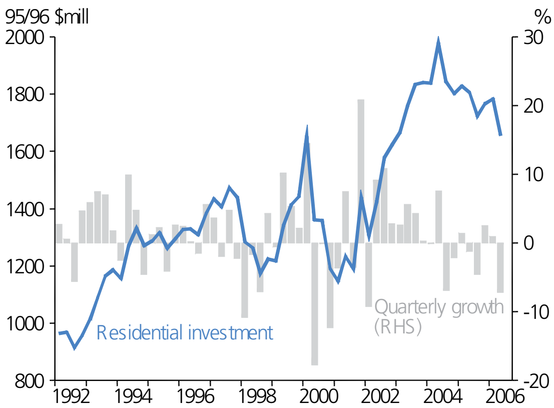
Figure 3.6
Real gross domestic product, domestic demand and net exports
(annual average percent change)



Source: Statistics New Zealand.

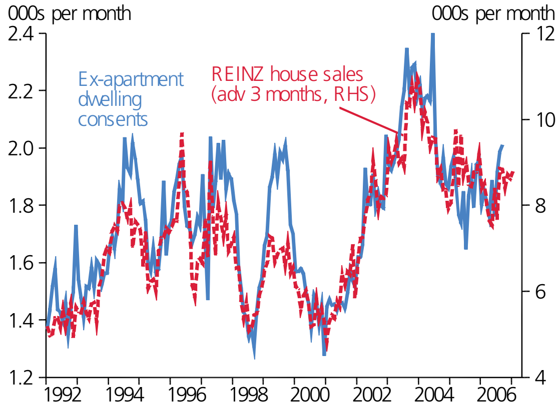
The past year has seen a slowing in residential investment spending (figure 3.7). But despite this, activity in the housing market remains relatively robust, with recent data showing signs of renewed strength: house sales and residential building consents have increased (figure 3.8), and the median number of days to sell a house has fallen (figure 3.9). Net immigration has remained solid, indicating ongoing support for housing demand.

Figure 3.7
Real residential investment



Source: Statistics New Zealand.

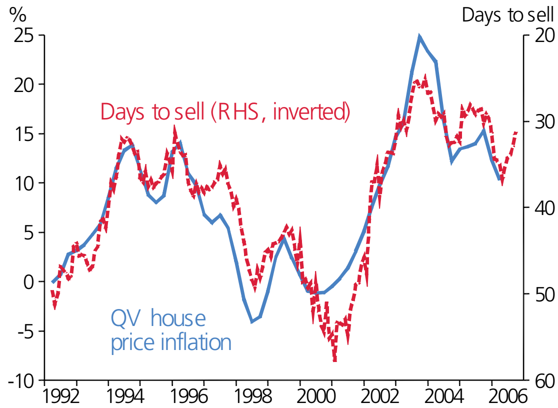
Figure 3.8
REINZ house sales and ex-apartment building consents



Source: Statistics New Zealand, REINZ.

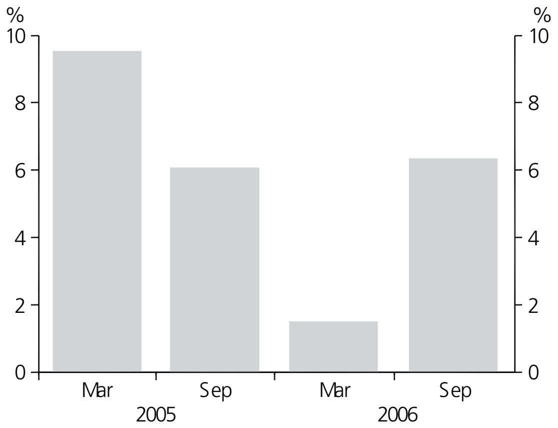
While house price inflation has eased, it remains strong. Prices increased by 10.3 percent in the year to June (as measured by Quotable Value Ltd – figure 3.9) and data from the REINZ have shown continued solid gains in the latter half of 2006 (figure 3.10, overleaf). The resulting increases in housing-related wealth have provided ongoing support for household balance sheets.

Figure 3.9
Annual house price inflation and days to sell



Source: Quotable Value Ltd, REINZ.

Figure 3.10
Six-monthly house price inflation
(percent change over six months)

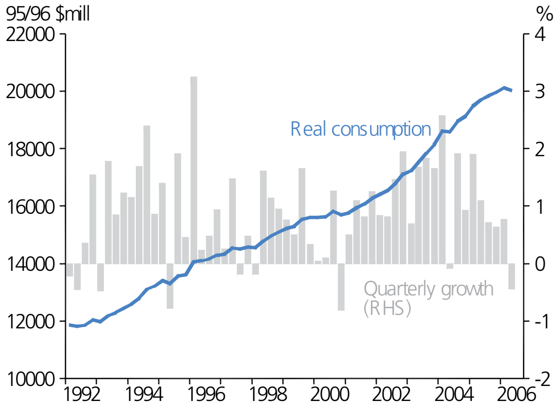


Source: REINZ.

After slowing in recent quarters, household consumption spending fell in June (figure 3.11). Contributing to this fall were rising petrol prices in the first half of 2006 and high debt servicing costs, both of which have stretched households' disposable incomes. This strain on household incomes has seen lower spending on durables, with a particularly large decline in spending on motor vehicles (figure 3.12).

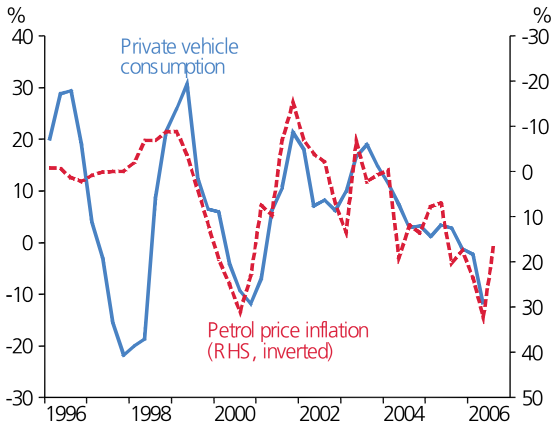
But while household spending has slowed, household balance sheets have continued to receive support from robust labour income growth and housing-related gains in wealth. In recent months there has been an additional boost to household balance sheets in the form of lower petrol prices. Consistent with this continued support for household spending, the September quarter saw increases in both consumer confidence and retail spending.

Figure 3.11
Real consumption spending



Source: Statistics New Zealand.

Figure 3.12
Real consumption spending on vehicles and petrol price inflation
(annual average percent changes)



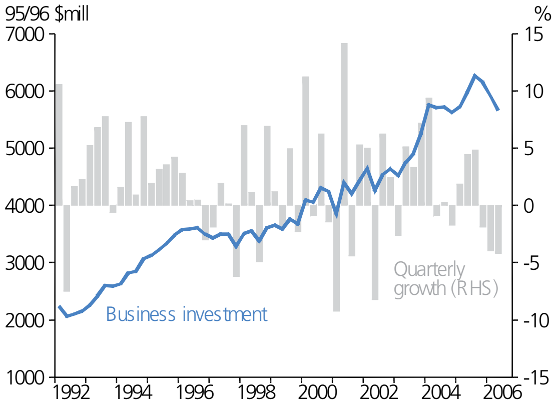
Source: Statistics New Zealand.

Business investment spending fell for a third consecutive quarter in June (figure 3.13). Recent falls have been centred on plant and machinery investment and spending on transport equipment. However, the extent of recent falls has been exaggerated by the irregular nature of some large imported transport items such as aircraft.

But while total business investment has fallen, non-residential construction has remained at high levels. Additionally, issuance of non-residential building consents, which tends to lead construction activity, has remained strong in recent months.

Figure 3.13

Real business investment



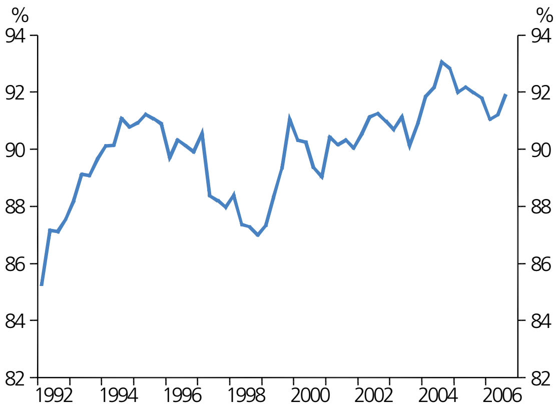
Source: Statistics New Zealand.

Productive capacity and the labour market

Slowing domestic demand in recent quarters has seen an easing in resource pressures. However, the abatement of these pressures is occurring only gradually. This is because much of the slowdown in domestic demand has occurred through lower imports, rather than through reduced demand for domestically produced goods and services. And while resource pressures have been easing in general, pockets of pressure do remain. This has been reflected in the Quarterly Survey of Business Opinion (QSBO) which shows that capacity utilisation remained at high levels in the September quarter (figure 3.14).

Figure 3.14

QSBO economy wide capacity utilisation

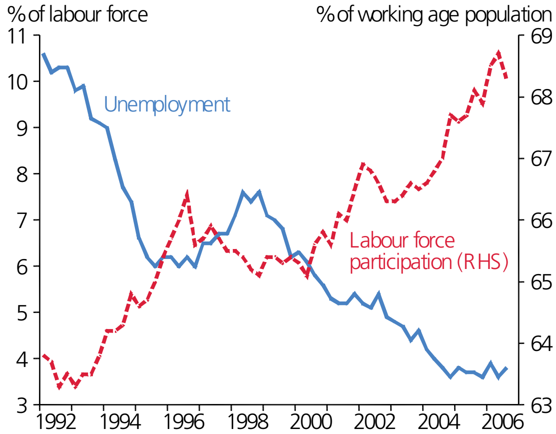


Source: NZIER.

While still tight, there has been some softening in the labour market. Annual employment growth has slowed over the past year and unemployment edged upwards in the September quarter. But with the unemployment rate at 3.8 percent, there remains little spare capacity in the labour market and acute shortages of skilled labour are still evident in some sectors.

Figure 3.15

Unemployment and labour force participation rates

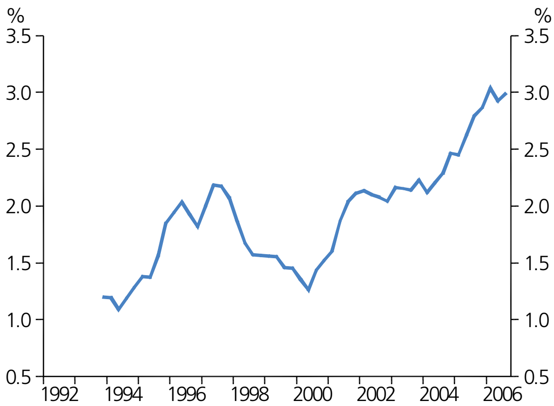


Source: Statistics New Zealand.

Private sector labour costs (adjusted for the effects of promotions and bonuses) have been rising by 3 percent annually – a rate which leaves wage growth at historically high levels (figure 3.16). Combined with solid growth in hours paid, this has seen continued strong growth in labour incomes.

Figure 3.16

Labour cost index wage inflation - Private sector *(annual percent change)*



Source: Statistics New Zealand.

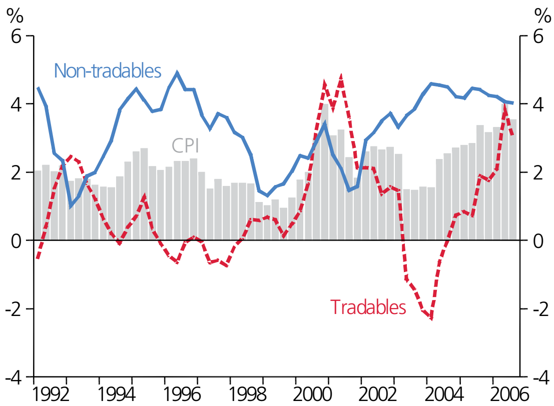
Inflation

The CPI rose by 0.7 percent in the September quarter, and increased by 3.5 percent in the year to September.

Strong and persistent inflationary pressures remain widespread in the non-tradables sector. Over the past two quarters there has been a re-acceleration in the costs related to the purchase of housing (these prices have been the main contributor to non-tradables inflation in recent years). At the same time, there has been ongoing strength in the non-housing components of non-tradables inflation.

In the tradables sector, there was only modest growth in prices over the September quarter. Strength in the New Zealand dollar has contributed to lower prices for imported goods such as used cars. There have also been declines in international oil prices, which have led to lower domestic petrol prices (though most of the recent decline in petrol prices was not measured in the September quarter).

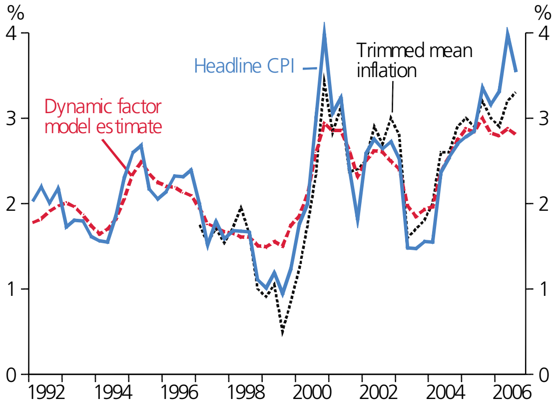
Figure 3.17
Annual CPI, tradables and non-tradables inflation



Source: Statistics New Zealand.

Recent high levels of inflation, particularly in the non-tradables sector, have been a result of widespread inflation pressures. This has been reflected in measures of core inflation, which continue to linger at high levels (figure 3.18). Core inflation measures look through the quarterly volatility in prices, and instead look at the persistent trend in inflation. Hence the strength in these measures suggests that recent high levels of inflation are not solely the result of price increases in volatile items such as petrol. The two measures of core inflation shown in figure 3.18 were introduced in box 1 of the September *Statement*. The December quarter Reserve Bank *Bulletin* provides a discussion on these and other core inflation measures.

Figure 3.18
Annual CPI inflation and core inflation measures

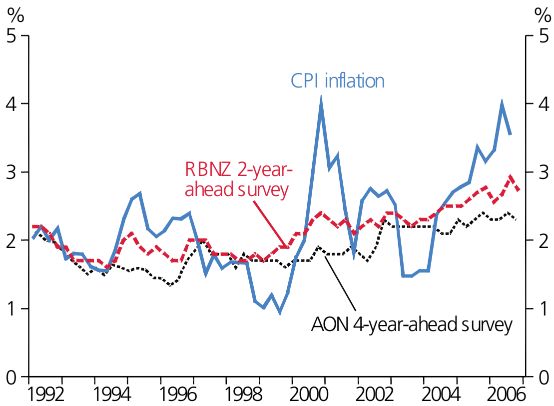


Sources: Statistics New Zealand, RBNZ.

Inflation expectations

Longer-term inflation expectations are of concern for monetary policy because of their impact on economic decision making, particularly wage and price setting behaviour. Longer-term inflation expectations have eased in the December quarter. And despite recent high levels of headline CPI inflation, inflation expectations remain within the target band for inflation, albeit at the upper end of the range.

Figure 3.19
Longer-term inflation expectations



Source: Statistics New Zealand, RBNZ, Alexander Consulting.

Table 3.2

Measures of inflation and inflation expectations

(annual percent change)

	2005				2006		
	Mar	Jun	Sep	Dec	Mar	Jun	Sep
CPI	**2.8**	**2.8**	**3.4**	**3.2**	**3.3**	**4.0**	**3.5**
CPI Components							
CPI non-tradables	4.2	4.5	4.4	4.3	4.2	4.1	4.0
Non-tradables housing components	5.7	6.1	5.8	5.7	5.3	4.6	4.5
Non-tradables ex-housing, cigarettes and tobacco components	3.6	3.6	3.8	3.7	3.7	3.9	3.9
CPI tradables	0.8	0.7	1.9	1.8	2.1	3.8	3.0
Petrol	7.7	7.0	20.3	17.4	23.5	32.2	15.9
Other inflation measures							
Factor model estimate of core CPI inflation	2.9	2.8	3.0	2.8	2.8	2.9	2.8
CPI trimmed mean (of annual price change)	3.0	2.9	3.2	3.0	2.9	3.2	3.3
CPI weighted median (of annual price change)	3.3	3.1	3.2	3.2	3.1	3.2	3.6
CPI ex-food, petrol and government charges	2.6	3.0	2.8	2.6	2.4	2.8	2.7
CPI ex-energy and fuel	2.3	2.4	2.6	2.6	2.4	2.8	2.8
GDP deflator (derived from expenditure data)	2.7	2.8	2.5	1.9	2.0	1.5	n/a

	2005				2006			
	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec
Inflation expectation measures								
RBNZ Survey of Expectations - inflation one-year-ahead	2.7	2.8	2.9	3.2	2.9	3.2	3.5	3.0
RBNZ Survey of Expectations - inflation two-years-ahead	2.5	2.6	2.7	2.8	2.6	2.7	2.9	2.7
AON Economist survey- inflation one-year-ahead	2.4	2.7	2.7	3.2	3.0	3.0	3.2	2.7
AON Economist survey- inflation four-years-ahead	2.3	2.2	2.3	2.4	2.3	2.3	2.4	2.3
NBBO - inflation one-year-ahead (quarterly average)	2.9	3.0	3.0	3.3	3.1	3.2	3.4	n/a

Erratum: CPI figure for September 2006, ex-food, petrol and government charges, originally published in error as 2.9

Box 2
Rebasing of the Consumers Price Index

Statistics New Zealand periodically updates the basket of goods and services used to calculate the Consumers Price Index (CPI). This ensures that the CPI continues to be an up-to-date measure of prices faced by households in their day-to-day expenditure.

The most recent update of the CPI basket occurred in the September quarter of 2006. Following this update, the CPI is now split into 11 groups, up from nine under the previous (2002) regime. The current and previous groups, along with their weights in the CPI are detailed in table 3.3.

- There are now separate groups for communication goods and services (formerly part of the household operation group) and education (formerly part of the recreation and education group).
- A 'miscellaneous goods and services' group has been added to the CPI. This group includes credit services, personal goods and services, insurance, real estate services and other professional services.

The weightings of goods and services in the CPI have also changed. In particular, large changes have occurred in the weights assigned to components of the housing group and petrol:

- Housing purchase costs have been down-weighted from 8.5 percent of the CPI under the 2002 regime, to 4.7 percent under the 2006 regime. This component measures the costs of construction of new dwellings by owner occupiers, and the costs of alterations and additions to established owner-occupied dwellings. It has been the main contributor to non-tradables inflation in recent years. This change in weighting is due to falling rates of home ownership and updated estimates for expenditure on housing alterations and additions.
- The reduced weight on housing purchase costs has been partially offset by an increased weight on housing rentals (up from 5.5 percent of the CPI to 6.9 percent).
- Price increases in recent years mean that petrol now forms a greater proportion of household expenditure. Consequently, the weight of petrol in the CPI has increased from 3.1 percent to 5.4 percent.[1]

As a result of these changes, headline inflation will now be less responsive to changes in housing purchase costs. At the same time, the increased weight on petrol may mean that inflation is more volatile in the future.

The re-weighting of the CPI also means that non-tradables prices now have less weight in the CPI. However, they still account for more than half of the index:

- The weight on non-tradable goods and services has fallen to 53.7 percent. (2002 weight: 55.6 percent). This is mostly due to the reduced weight on housing purchase costs.
- The weight on tradable goods and services has risen to 46.3 percent. (2002 weight: 44.4 percent). This is mostly due to the higher weight on petrol.

The re-weighting of the CPI affects our projected inflation outlook, implying a one-off reduction in near-term inflation. For the most part, this is due to the increased weight on petrol. On their own, recent falls in petrol prices imply lower inflation in the December quarter than we saw in our September projections. However, the increased weight on petrol has magnified the effect of these declines. Combined with the changes in weights for other goods and services, the reweighting takes an additional 0.3 percentage points off our inflation outlook in the December quarter.

[1] Increases in petrol prices in recent years mean that the 'effective weight' on petrol in the CPI had already risen above 3.1 percent. ('Effective weights' are used to calculate the CPI and account for how expenditure on items in the CPI has changed given the change in their prices).

Table 3.3

CPI group and weights

Current regime (September 2006) CPI component	Weight (%)	Previous regime (June 2002) CPI component	Weight (%)
Housing and household utilities group	20.0	Housing	19.6
Food group	17.4	Food	17.2
Transport group	17.2	Transport	16.9
Recreation and culture group	10.2	Household operations	15.4
Alcoholic beverages and tobacco group	7.2	Tobacco and alcohol	8.7
Miscellaneous goods and services group	7.1	Recreation and education	8.6
Household contents and services group	5.5	Personal and healthcare	8.4
Health group	5.2	Apparel	4.7
Clothing and footwear group	4.8	Credit services	0.6
Communication group	3.3		
Education group	2.1		
Total	100.0	Total	100.0

Note: Due to rounding, figures may not match the printed totals exactly.

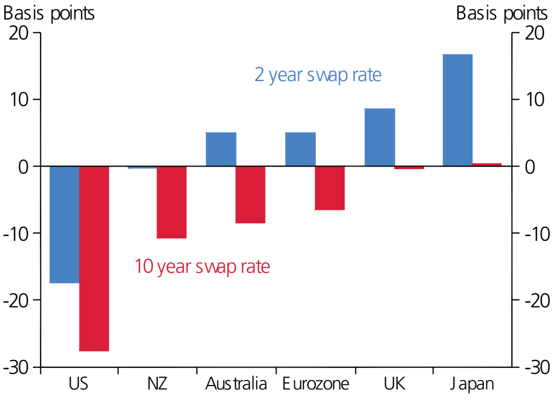
4 Financial market developments

International markets

As discussed in chapter 3, policy rates have been raised in a number of economies since the September *Statement*, including Europe, the UK and Australia. These policy rate rises and, especially in the case of Europe and the UK, market expectations of the potential for further rises, have put upward pressure on shorter-term wholesale interest rates in those economies (figure 4.1). The Bank of Japan has left its policy rate on hold since July, when it announced its first rate rise in six years. The rise in Japanese shorter-term interest rates reflects increased market confidence that further rate rises are likely over the coming year.

In contrast, US market interest rates have fallen since the September *Statement*. The US Federal Reserve has left its policy rate on hold since last raising it in June, and the market has become increasingly convinced that the next move will be a rate cut in 2007. The fall in US longer-term interest rates has had a significant impact on longer-term interest rates in other economies, offsetting the impact of higher local policy rates and associated market expectations. Accordingly, yield curves in these economies have become flatter or more negatively-sloped.

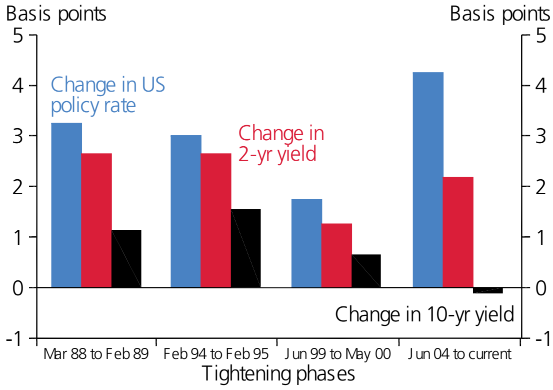
Figure 4.1
Movements in wholesale interest rates since the September *Statement*



Source: Bloomberg.

The US policy rate has been raised further than in recent tightening cycles, but this has put limited upward pressure on US longer-term interest rates. While partly influenced by the market now contemplating the beginning of an easing cycle in 2007, the US 10-year bond yield is now lower than where it was at the beginning of the current tightening cycle (figure 4.2). It appears that term and inflation risk premiums in longer-term interest rates have fallen significantly in recent years. A range of reasons have been advanced to explain this phenomenon, including the impact of abundant global savings and liquidity; a shift in asset allocation preferences amongst pension funds towards longer-term fixed interest securities; and improved monetary policy credibility given the maintenance of low and stable inflation in recent years.

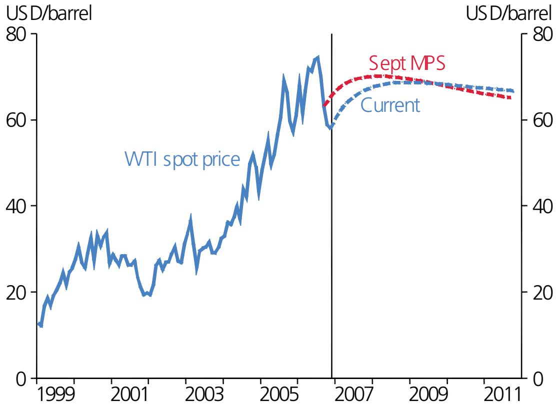
Figure 4.2
Changes in US interest rates in recent tightening cycles



Source: Bloomberg.

Spot and short-term futures prices for oil have fallen sharply since the last *Statement*, in line with rising inventories and an expectation that slowing world economic growth will restrain oil demand growth over the coming year. However, longer-term oil futures prices have remained elevated, suggesting the market expects higher oil prices to persist in the medium term (figure 4.3).

Figure 4.3
Spot and future prices for West Texas Intermediate oil



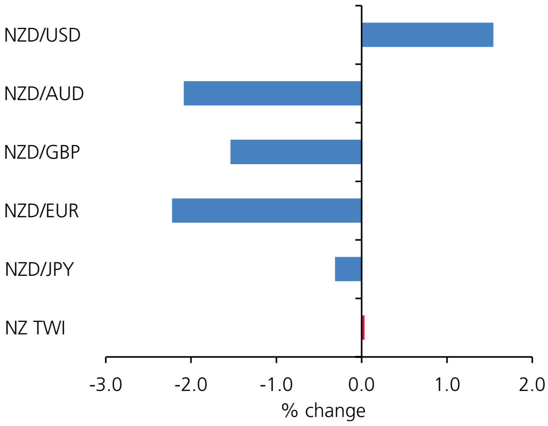
Source: Bloomberg.

Exchange rates

The US dollar has weakened since the last *Statement*, with the contrasting interest rate outlooks between the major economies putting upward pressure on the euro and the Japanese yen relative to the US dollar. Indeed, this US dollar weakness has been relatively broad-based, with a range of currencies – including the New Zealand dollar – appreciating relative to the US dollar over the period. However, the New Zealand dollar has not appreciated against the US dollar as much as many other currencies, and has weakened against the other four currencies that make up the TWI (figure 4.4). These offsetting movements have meant that the TWI is currently at similar level, but slightly higher than at the time of the last *Statement*.

Figure 4.4

Change in the TWI and its components since the September *Statement*

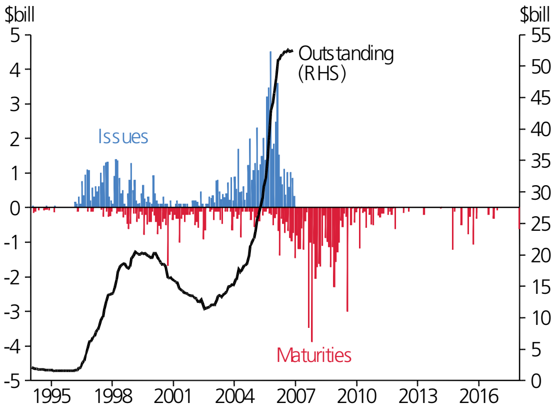


Source: Bloomberg.

There has been ongoing interest in New Zealand dollar securities, albeit reduced from the levels experienced during late 2005 and early 2006. Issuance of Eurokiwi and Uridashi bonds has continued in recent months, with issuance volumes broadly in line with maturities – tending to stabilise the total amount of these bonds outstanding (figure 4.5). Nevertheless, there is a more significant maturity profile over 2007 and 2008, and this represents an ongoing downside risk to the New Zealand dollar if relatively strong levels of issuance are not maintained.

Figure 4.5

New Zealand dollar denominated offshore bond issuance



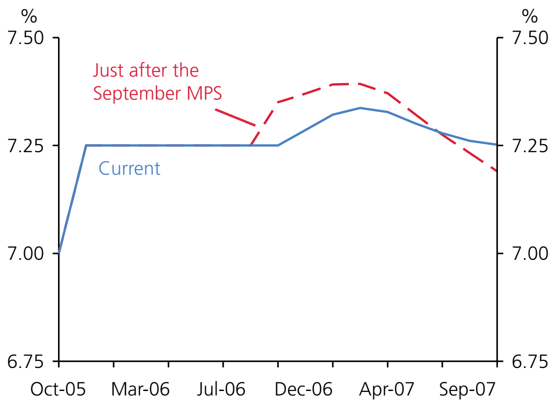
Source: Bloomberg, Reuters, RBNZ.

Domestic markets

Domestic interest rate markets continue to price in the risk of a further OCR rise, but this has been reduced relative to the levels prevailing at the time of the September *Statement*. The market is now also pricing in a reduced chance of a rate cut in 2007 (figure 4.6).

Figure 4.6

Financial market expectations of the Official Cash Rate

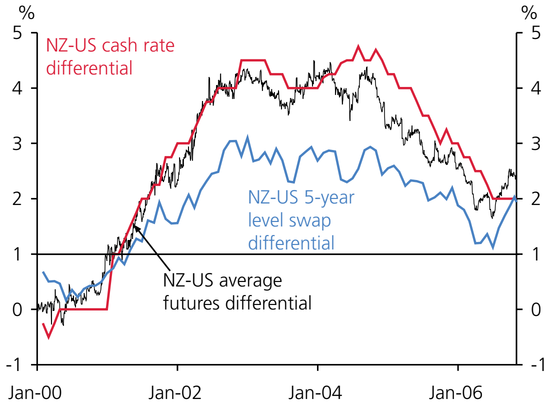


Source: RBNZ estimates from overnight indexed swap rates.

Meanwhile, lower longer-term interest rates in key offshore markets have put downward pressure on longer-term interest rates in New Zealand. This has been offset by an ongoing rise in the spreads between New Zealand longer-term interest rates and those in key offshore markets from the lows seen earlier this year (figure 4.7, overleaf). These wider spreads are in line with changes in relative monetary policy expectations, with New Zealand markets now expecting the OCR to remain on hold for longer and US markets becoming more convinced that the US policy rate will be cut over the year ahead.

Figure 4.7

NZ-US cash rate and swap rate differentials

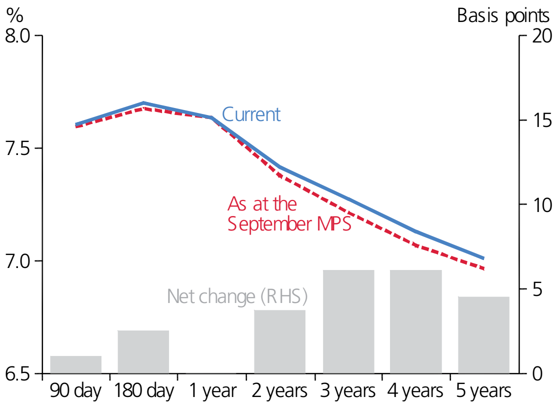


Source: Bloomberg, RBNZ.

Overall, these shorter-term and longer-term interest rate developments have left the yield curve at a similar level to that prevailing around the time of the September *Statement* (figure 4.8). The negative slope of the curve continues to see both new and existing borrowers favour fixed-rate funding over floating or short-term rates.

Figure 4.8

Wholesale interest rates since the September *Statement*

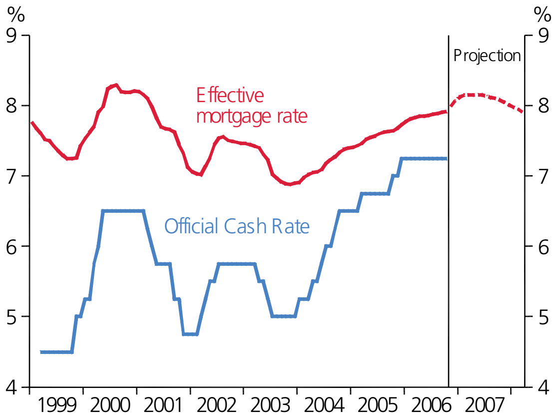


Source: Bloomberg, RBNZ.

Borrowers have faced slightly lower mortgage rates over recent months than we assumed would be the case at the time of the September *Statement*, largely as a consequence of some further narrowing in mortgage margins. However, the re-pricing of outstanding mortgage debt – particularly those two year fixed mortgages set at relatively low rates in late 2004 – is still expected to deliver some further interest rate pressure over late 2006/early 2007 (figure 4.9).

Figure 4.9

The OCR and the effective mortgage rate



Source: RBNZ.

5 The macroeconomic outlook

Overview

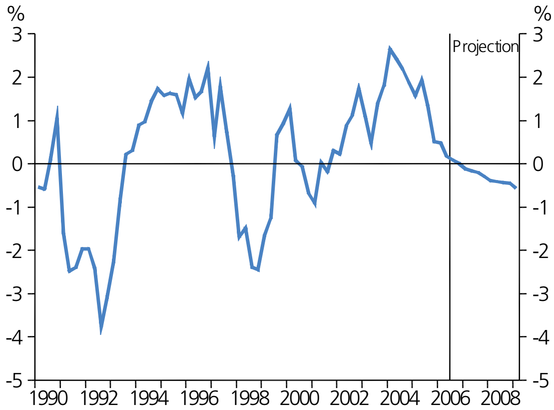
It appears that economic growth troughed in late 2005, and we expect the economy to maintain a moderate rate of expansion over the projection period. Growth is projected to remain below the economy's potential rate for some time, thereby slowly unwinding the inflation pressures that persist in the economy. However, with a stronger near-term outlook than in the September *Statement*, our projections suggest that further monetary policy restraint may be needed to achieve this unwinding.

We expect this gradual process of adjustment to be accompanied by an ongoing rebalancing between the domestic and external sectors of the economy. Further declines in the exchange rate from its 2005 highs are projected to underpin a continued recovery in net exports. Domestic demand is expected to weaken further, as rising effective mortgage rates and declining rental yields slow the housing market. The continued moderation in domestic demand remains crucial for the unwinding of domestic inflation pressure.

Since the September *Statement*, the exchange rate has persisted at a high level and oil prices have come off sharply. These developments mean that headline inflation is likely to be significantly lower over the next few quarters. While this reduces the risks around the medium-term inflation expectations outlook, the robust outlook for growth means our medium-term forecasts for inflation are actually higher than in the September *Statement*.

Figure 5.1

The output gap



Source: Statistics New Zealand, RBNZ estimates.

World outlook

The outlook for New Zealand's main trading partners is largely based on the November 2006 *Consensus Forecasts*, a survey of forecasters in our main trading partner economies. World economic growth is projected to weaken over 2007, particularly in the US, before recovering in 2008. Nevertheless, global demand for New Zealand's exports is expected to remain robust.

Table 5.1

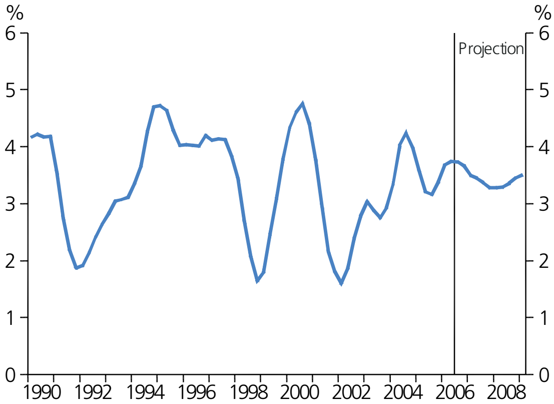
Forecasts of export partner GDP growth*

(calendar year, annual average percent change)

Country	2002	2003	2004	2005	2006f	2007f	2008f
Australia	4.1	3.1	3.6	2.7	2.7	3.2	3.2
United States	1.6	2.5	3.9	3.2	3.3	2.5	3.1
Japan	0.1	2.0	2.1	2.7	2.7	2.0	2.0
Canada	2.9	1.8	3.3	2.9	2.8	2.6	2.9
Eurozone**	0.9	0.8	1.7	1.5	2.6	1.9	2.0
United Kingdom	2.1	2.7	3.3	1.9	2.6	2.4	2.3
Asia ex-Japan***	5.6	5.2	7.6	6.6	7.0	6.1	6.4
12 country Index	2.8	2.9	4.0	3.4	3.7	3.3	3.5

* 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.

Figure 5.2
Trading partner GDP
(annual average percent change)



Source: Consensus Economics Inc., RBNZ estimates.

The terms of trade

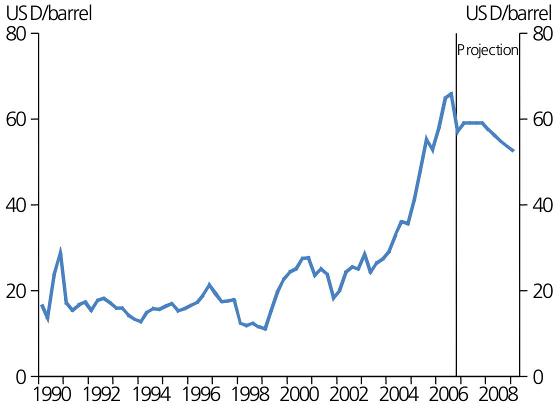
After reaching high levels in 2005, New Zealand's export prices fell back earlier this year. However, world prices for agricultural commodities have recovered some ground in recent months, as renewed supply constraints on agricultural production in other parts of the world have emerged, particularly due to drought conditions in Australia and the US. At the same time, demand for agricultural products, particularly from Asia, is expected to remain robust. Accordingly, we now expect that export prices are likely to persist at higher levels than projected in the September *Statement*.

Since the September *Statement*, oil prices have fallen sharply from their peak, and are currently back at levels seen in late 2005. Oil prices have been a significant source of uncertainty over recent times, mainly due to ongoing geopolitical tensions and supply concerns. Our projections are consistent with the November *Consensus* forecast for oil prices.

The prices of most non-oil industrial commodities have shown strong increases this year. For a number of years the emergence of China as a low-cost manufacturing exporter has dampened prices for manufactured goods. However, as the Chinese economy continues to grow very strongly and rising commodity prices compress producer margins, we do not expect similar declines in manufactured goods prices to continue into the future.

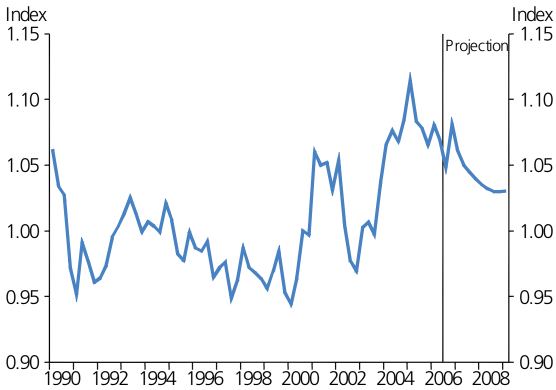
Overall, the improved outlook for world export prices, together with lower oil prices in the near term, implies significantly stronger terms of trade over the coming year. Thereafter, the terms of trade are expected to ease gradually as international agricultural supply constraints ease.

Figure 5.3
Dubai oil price
(US dollars per barrel)



Source: Datastream, RBNZ estimates.

Figure 5.4
OTI terms of trade (goods)

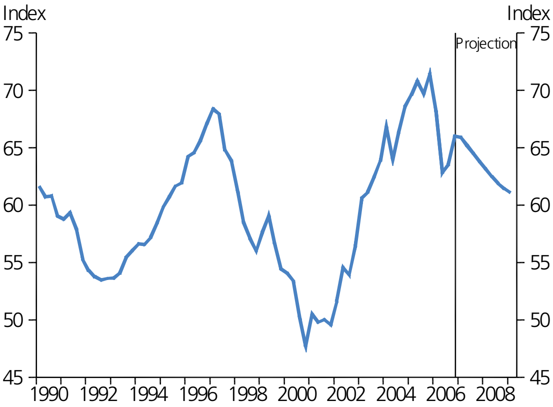


Source: Statistics New Zealand, RBNZ estimates.

Exchange rate

After falling sharply over the first half of 2006, the New Zealand dollar has rebounded. Our assumption going forward is that the TWI will depreciate gradually towards its long term average level. However, relative to our September *Statement*, the TWI track is persistently higher, consistent with the improved terms of trade outlook.

Figure 5.5
Nominal TWI assumption

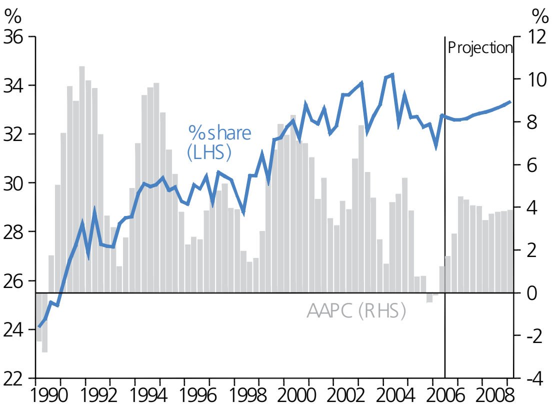


Source: RBNZ estimates.

Export volumes

Exports improved considerably in the June quarter on the back of strong primary goods production, and recent data point to stronger near-term growth in export volumes than we expected in the September *Statement*. Further ahead we continue to expect a gradual recovery in exports of non-commodity manufactured goods and services as the New Zealand dollar is projected to ease. However, because the exchange rate profile is higher than in the September *Statement*, this process of recovery is now expected to be somewhat slower. The outlook for primary export volumes remains robust given generally favourable climatic conditions and high world prices.

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



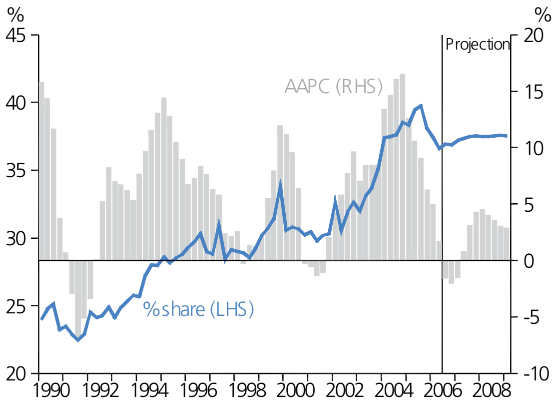
Source: Statistics New Zealand, RBNZ estimates.

Import volumes

From 2003 to 2005, imports increased at a faster pace than GDP, leading to a rise in the import penetration ratio. Increasing capacity constraints in the domestic economy, the lower relative price of imports due to the rising exchange rate, and the fact that many durable consumption and investment goods are produced offshore, all contributed to the disproportionate increase in imports.

As domestic demand has eased from late 2005 onwards, there has been a corresponding slowing in imports relative to domestic production and a fall in the penetration ratio. We expect import penetration to flatten out near current levels over the projection period. This weaker import profile will assist the improvement of the current account deficit. However, in view of the stronger outlook for the TWI, we expect the import penetration ratio to stabilise at a somewhat higher level than in the September *Statement*.

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

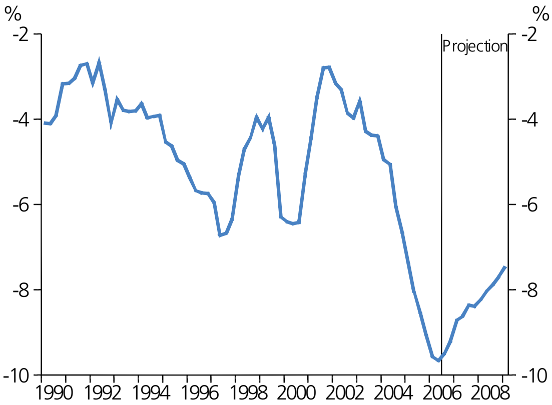


Source: Statistics New Zealand, RBNZ estimates.

Current account

The current account deficit is expected to narrow over the coming year as a result of the improved outlook for the terms of trade. Further out in the projection, we expect the current account deficit to diminish at a slightly slower pace than in the September *Statement*, reflecting the stronger average level of the New Zealand dollar and stronger domestic demand pressures over the forecast period.

Figure 5.8
Current account balance
(percent of nominal GDP)

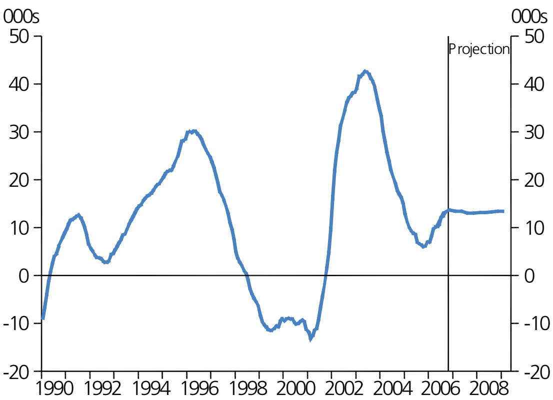


Source: Statistics New Zealand, RBNZ estimates.

Net immigration

After declining sharply over 2005, net immigration flows have stabilised over 2006 and remain consistent with our assumption that net permanent and long-term immigration flows will settle around 13,000 per annum. This level of net immigration is expected to support a flat residential investment profile over the projection period.

Figure 5.9
Net permanent and long-term immigration
(annual total)

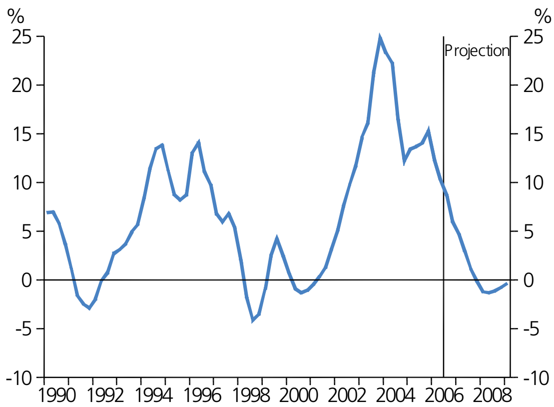


Source: Statistics New Zealand, RBNZ estimates.

House prices

Although house price inflation has slowed considerably from the rates recorded in 2004, the housing market has remained more robust than we expected in the September *Statement*, as discussed in chapter 3. We have revised upwards our projection for house prices over 2007/2008, although we still expect a declining rate of growth followed by a long period of weakness in house prices, especially in real (inflation adjusted) terms.

Figure 5.10
House price inflation
(annual percent change)



Source: Quotable Value Ltd., RBNZ estimates.

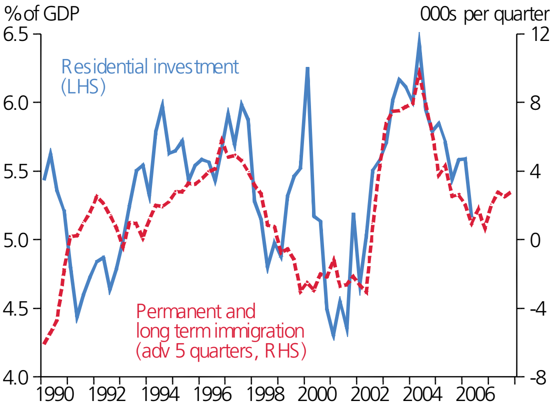
Residential investment

The projection incorporates a flat profile for residential investment, which we now expect to be somewhat higher than in the September *Statement*. While we expect labour supply in the construction sector to remain tight given the strong non-residential construction outlook, the high level of house prices and positive net immigration provide a continuing incentive to build new houses.

Figure 5.11

Residential investment and net immigration

(percent of trend output and thousands per quarter)

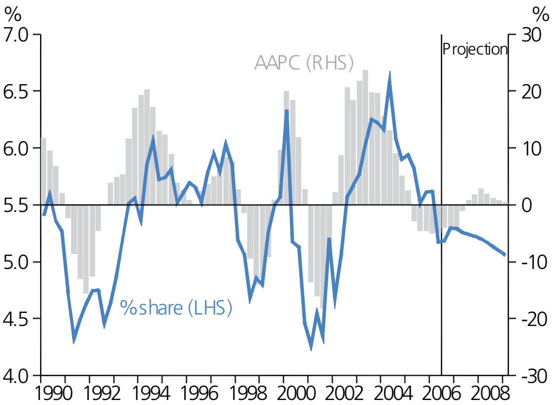


Source: Statistics New Zealand.

Figure 5.12

Residential investment

(percent of trend output and annual average percent change)



Source: Statistics New Zealand, RBNZ estimates.

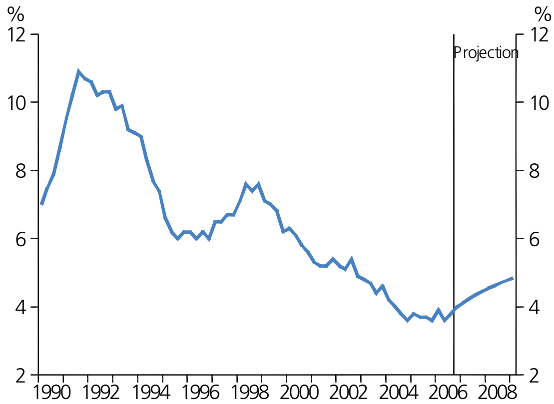
Labour market

The labour market has been very strong. While recent data show a decline in numbers employed, unemployment remains near historical lows, and hours worked remain strong. We expect employment growth to slow further in the projection period, leading to a modest rise in unemployment.

Wage inflation has been strong but consistent with the ongoing tightness in the labour market. As a result of lower oil prices, the short-term outlook for headline CPI inflation is now much weaker than in the September *Statement*. This provides confidence that wage inflation will remain contained. Wage inflation is projected to remain close to current levels until the middle of 2007 when it begins to slow.

Figure 5.13

Unemployment rate



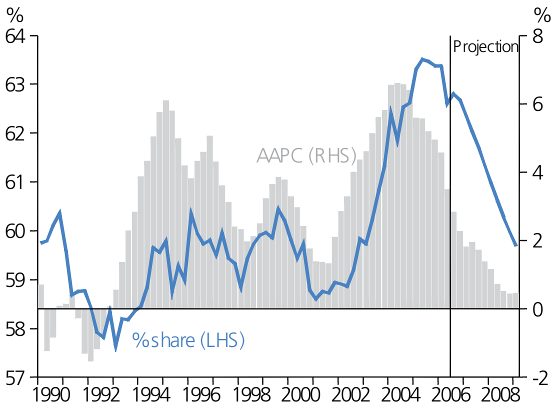
Source: Statistics New Zealand, RBNZ estimates.

Household consumption

Consumption remains at elevated levels as a share of GDP, supported by rising asset prices and a strong labour market. We continue to expect consumption to slow fairly rapidly as consumers become more aware of their debt levels in the context of a softening housing market. However, consistent with our view that the housing market will now slow more gradually, we have revised up the projected consumption track somewhat. The more robust outlook for the terms of trade also supports this change.

The value of New Zealand's housing stock, relative to household income, has risen dramatically in recent years. As prices have risen, existing homeowners have tended to spend a portion of the resulting gain in their wealth. However, rising house prices have also meant that new home owners have had to borrow more. We expect these rising debt service burdens to increasingly dampen consumption growth over the medium term.

Figure 5.14
Real household consumption
(percent of trend output and annual average percent change)

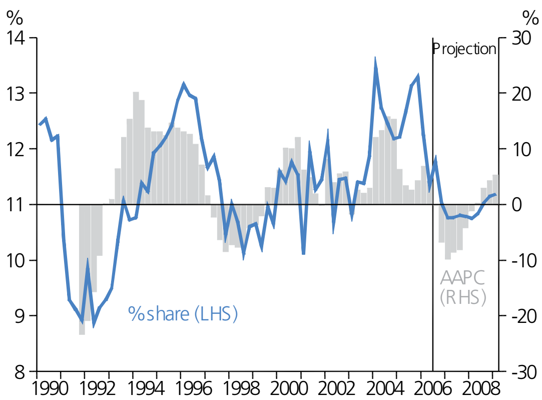


Source: Statistics New Zealand, RBNZ estimates.

Business investment

Business investment has been falling fairly sharply in recent quarters, and more abruptly than we thought at the time of the September *Statement*. However, with the economy expected to remain more robust over 2007, and recent investment and profitability indicators also improving, we think that investment is now near a cyclical trough. Although the recent rises in the currency may constrain investment by export oriented firms, investment will be supported by recent increases in business sentiment and the strong outlook for non-residential construction.

Figure 5.15
Business investment (excluding computers and intangible assets)
(percent of trend output and annual average percent change)

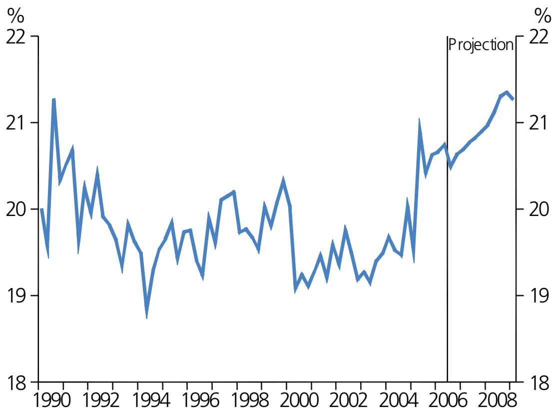


Source: Statistics New Zealand, RBNZ estimates.

Government

Our projections for fiscal policy are based on The Treasury's *Budget Economic and Fiscal Update 2006*. On that basis, fiscal policy is projected to become quite expansionary over the projection period, offsetting to some degree the moderation in private domestic demand. This expansion can be seen in national account measures of government spending, but also involves substantial boosts to transfer payments to households. The effect of such a shift to an expansionary fiscal policy is significant at a time when the available pool of resources remains stretched. The *Half Year Economic and Fiscal Update 2006* will provide more details about the future impact of fiscal policy.

Figure 5.16
Government consumption and investment (excluding military spending)
(percent of trend output)



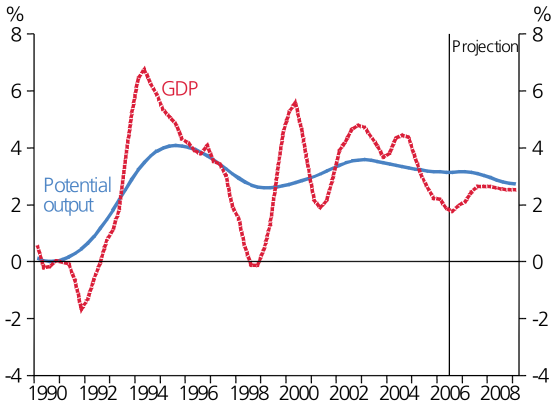
Source: Statistics New Zealand, RBNZ estimates.

Gross domestic product

In recent years economic activity has been boosted by strong net immigration, an increase in labour force participation, and strong business investment. These factors have also raised the rate of potential output growth (growth in the economy's capacity to supply goods and services without creating inflation). However, net immigration is now well below its peak, and we are also projecting a decline in labour force participation and lower business investment than in recent years. These projections imply a lower rate of potential output growth over the next three years.

Growth in GDP fell sharply in the second half of 2005, but has since recovered. Given our view for the components of GDP as outlined above, we expect GDP growth to be fairly robust over the projection period, but below the economy's potential growth rate. This will gradually lead to a situation of excess supply developing, alleviating the resource pressures accumulated in recent years and putting downward pressure on inflation.

Figure 5.17
Potential output and GDP growth
(annual average percent change)



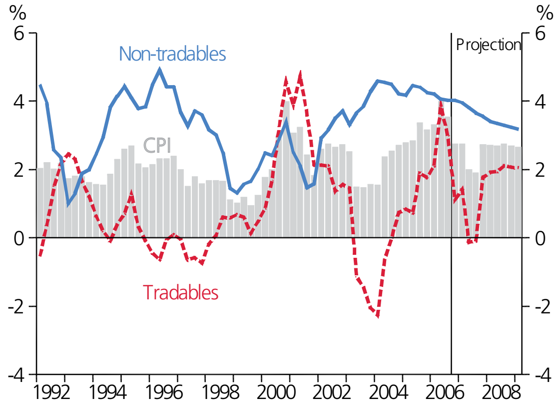
Source: Statistics New Zealand, RBNZ estimates.

Inflation

The sharp fall in oil prices since September is projected to reduce CPI inflation to around 2 percent by June 2007. However, the one-off fall in CPI inflation from petrol prices (together with the Statistics New Zealand's re-weighting of the CPI) will not have a prolonged impact, and we expect inflation to return to close to 3 percent in 2008. This view reflects a more gradual unwinding of underlying resource pressures than we projected in the September *Statement*. The reduction in medium-term inflation expectations resulting from lower headline inflation over the short term is more than offset by the stronger outlook for economic activity. The net result is some increase in the medium-term inflation outlook, despite assumed further restraint from monetary policy.

The reduction in inflation expectations since the September *Statement* implies a higher profile for real interest rates, other things being equal. Box 3 explains the real interest rate measure used in these projections, and shows how this real interest rate has moved over time relative to the nominal 90-day interest rate.

Figure 5.18
CPI, tradables and non-tradables inflation
(annual rate)



Source: Statistics New Zealand, RBNZ estimates.

Box 3

Nominal and real interest rates

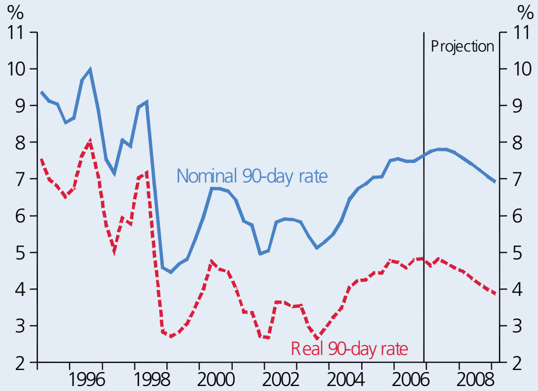
Economic theory says that economic behaviour is strongly influenced by real interest rates – the rate of return on savings over and above expected inflation. In making savings and investment decisions, households and firms are thought to compare the cost of expenditure today with the expected additional costs and benefits of waiting till tomorrow, including any increment in price. In some cases, however, such as when households are credit-constrained, movements in nominal interest rates may matter more for household borrowing.

The distinction between real and nominal interest rates, and how the real interest rate is calculated, can be very important. A real interest rate calculated in reference to actual CPI inflation outturns would suggest that real interest rates have fallen over the last two years, as inflation has increased more than nominal interest rates. This would imply that, despite a number of increases in the OCR, interest rates have become less contractionary over the last two years, but will become quite contractionary over 2007 as CPI inflation is projected to fall.

Our view is that inflation expectations do affect many financial decisions, but in a more medium-term context. In our macroeconomic model, we proxy inflation expectations using the RBNZ 2-year-ahead survey measure. A real interest rate calculated using this measure of inflation expectations is relatively steady, and suggests that real interest rates have risen over the last two years (see figure 5.19). By deciding to use a smoother measure of expected inflation to calculate real interest rates, we are implicitly assuming that households and firms do not factor short-term (and difficult to predict) inflation variations into their financial decisions.

Of course, for many financial decisions, the CPI may not be the most appropriate price index to consider. For the decision to borrow to purchase a house, for example, expected house price inflation is probably more relevant. A real interest rate calculated using actual house price growth (in the absence of data on expected house prices) would have been significantly negative over 2004 and 2005, but could become much more contractionary over 2007 and 2008 as house price inflation slows. We believe that this effect will tend to reinforce the slowing in the housing market over the forecast period.

Figure 5.19
Nominal and real 90-day interest rates



Source: RBNZ. The real interest rate measure incorporates the RBNZ 2-year-ahead survey measure of inflation expectations.

Appendix A[1]

Summary tables

Table A

CPI inflation projections and monetary conditions

(CPI is in percent changes)

		CPI Quarterly	CPI Annual	TWI	90-day bank bill rate
	Dec	1.2	4.0	47.7	6.7
2001	Mar	-0.2	3.1	50.5	6.4
	Jun	0.9	3.2	49.8	5.9
	Sep	0.6	2.4	50.0	5.7
	Dec	0.6	1.8	49.6	5.0
2002	Mar	0.6	2.6	51.6	5.0
	Jun	1.0	2.8	54.6	5.8
	Sep	0.5	2.6	53.9	5.9
	Dec	0.6	2.7	56.4	5.9
2003	Mar	0.4	2.5	60.6	5.8
	Jun	0.0	1.5	61.1	5.4
	Sep	0.5	1.5	62.4	5.1
	Dec	0.7	1.6	63.9	5.3
2004	Mar	0.4	1.5	66.9	5.5
	Jun	0.8	2.4	64.0	5.9
	Sep	0.6	2.5	66.3	6.4
	Dec	0.9	2.7	68.6	6.7
2005	Mar	0.4	2.8	69.6	6.9
	Jun	0.9	2.8	70.8	7.0
	Sep	1.1	3.4	69.7	7.0
	Dec	0.7	3.2	71.5	7.5
2006	Mar	0.6	3.3	68.2	7.5
	Jun	1.5	4.0	62.8	7.5
	Sep	0.7	3.5	63.6	7.5
	Second half average	0.3	3.1	64.8	7.6
2007	First half average	0.7	2.4	65.6	7.8
	Second half average	0.7	2.3	64.2	7.8
2008	First half average	0.7	2.7	62.8	7.5
	Second half average	0.7	2.7	61.7	7.2

Quarterly projections

		CPI Quarterly	CPI Annual	GDP Quarterly	GDP Annual average
2006	Mar	0.6	3.3	0.8	2.2
	Jun	1.5	4.0	0.5	1.9
	Sep	0.7	3.5	0.7	1.8
	Dec	-0.1	2.7	0.7	2.0
2007	Mar	0.6	2.7		

[1] Notes for these tables follow on pages 32-33.

Table B
Composition of real GDP growth

(Annual average percent change, unless specified otherwise)

	Actuals							Projections		
March year	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Final consumption expenditure										
Private	3.3	1.4	2.9	4.8	6.4	5.7	4.5	1.8	1.1	0.4
Public authority	5.7	-2.0	4.0	1.8	3.7	4.5	5.4	5.5	3.7	4.0
Total	3.9	0.6	3.1	4.1	5.8	5.4	4.7	2.6	1.7	1.2
Gross fixed capital formation										
Market sector:										
Residential	19.5	-13.3	1.9	21.7	15.6	2.3	-4.7	-4.1	2.9	0.5
Business	6.4	9.2	7.1	1.8	14.8	10.4	6.6	-6.2	3.3	6.2
Non-market government sector	18.5	-18.1	16.7	13.9	7.1	6.0	22.6	-3.9	5.7	5.1
Total	10.6	0.7	6.8	7.0	14.2	8.1	5.6	-5.5	3.5	4.9
Final domestic expenditure	5.3	0.6	3.9	4.8	7.8	6.1	4.9	0.5	2.1	2.1
Stockbuilding[(1)]	1.2	-0.4	0.1	-0.1	-0.1	0.3	-0.4	-0.6	0.9	0.1
Gross national expenditure	6.5	0.3	4.0	4.7	7.7	6.3	4.5	0.0	3.0	2.2
Exports of goods and services	7.4	6.3	3.0	7.8	1.4	3.8	-0.1	4.5	3.4	3.9
Imports of goods and services	11.3	-0.7	4.0	7.2	13.2	12.8	5.0	-1.0	4.7	2.9
Expenditure on GDP	5.2	2.5	3.6	5.0	3.4	3.5	2.2	1.9	2.6	2.5
GDP (production)	5.3	2.1	3.9	4.7	3.8	3.7	2.2	2.1	2.7	2.5
GDP (production, March qtr to March qtr)	5.8	0.9	4.7	4.4	5.0	2.2	2.1	2.5	2.6	2.6
Potential output	2.7	3.0	3.4	3.6	3.4	3.3	3.2	3.2	3.0	2.7
Output gap (% of potential GDP, year average)	0.4	-0.4	0.1	1.2	1.6	2.0	1.1	0.0	-0.3	-0.5

(1) Percentage point contribution to the growth rate of GDP.

Table C

Summary of economic projections

(Annual percent change, unless specified otherwise)

	Actuals							Projections		
March year	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Price measures										
CPI	1.7	3.1	2.6	2.5	1.5	2.8	3.3	2.7	2.7	2.7
Labour costs	1.4	1.6	2.1	2.2	2.1	2.5	3.0	2.9	2.6	2.4
Import prices (in New Zealand dollars)	11.2	7.4	-2.9	-11.1	-10.5	0.5	6.9	5.9	3.5	3.3
Export prices (in New Zealand dollars)	9.9	20.6	-3.5	-15.5	-5.1	4.9	3.6	4.1	0.9	2.8
Monetary conditions										
90-day rate (year average)	5.2	6.6	5.4	5.9	5.3	6.5	7.3	7.6	7.7	7.2
TWI (year average)	56.1	50.4	50.3	56.4	63.6	67.1	70.0	64.6	64.2	61.7
Output										
GDP (production, annual average % change)	5.3	2.1	3.9	4.7	3.8	3.7	2.2	2.1	2.7	2.5
GDP (production, March qtr to March qtr)	5.8	0.9	4.7	4.4	5.0	2.2	2.1	2.5	2.6	2.6
Output gap (% of potential GDP, year average)	0.4	-0.4	0.1	1.2	1.6	2.0	1.1	0.0	-0.3	-0.5
Labour market										
Total employment	1.5	2.3	3.5	1.5	3.1	3.4	2.6	0.9	0.3	0.6
Unemployment rate (March qtr, s.a.)	6.3	5.3	5.2	4.8	4.2	3.8	3.9	4.1	4.5	4.8
Trend labour productivity (annual % change)	1.5	1.6	1.5	1.2	1.0	0.8	0.9	1.1	1.5	1.8
Key balances										
Government operating balance (% of GDP, year to June)	1.4	1.2	1.9	1.5	5.2	4.2	7.3	4.0	2.8	2.0
Current account balance (% of GDP, year to March)	-6.4	-4.4	-3.2	-3.6	-5.0	-7.3	-9.6	-8.7	-8.2	-7.5
Terms of trade (OTI measure, annual average % change)	-0.2	4.4	4.2	-5.7	3.9	5.8	-0.8	-1.1	-2.2	-1.1
Household savings rate (% of disposable income, year to March)	-1.3	-5.7	-5.6	-12.9	-12.7	-15.0	-17.5	-15.6	-13.4	-11.2
World economy										
World GDP (annual average % change)	4.3	3.8	1.6	3.0	3.3	3.6	3.7	3.5	3.3	3.5
World CPI inflation	2.3	2.7	1.4	2.2	1.5	2.1	2.4	2.3	2.1	2.0

s.a. = seasonally adjusted

Notes to the tables

CPI	Consumers Price Index. Quarterly projections rounded to 1 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 e9iuro.
90-day bank bill rate	RBNZ. Defined as the interest yield on 90-day bank bills. Forecasts rounded to the nearest quarter percent.
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	RBNZ definition. Private sector and government market sector residential investment. *System of National Accounts*.
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	Final domestic expenditure plus stocks. *System of National Accounts*.
Exports of goods and services	*System of National Accounts*.
Imports of goods and services	*System of National Accounts*.
GDP (production)	*System of National Accounts*.
Potential output	RBNZ definition and estimate. Refer to Conway, P and B Hunt (1997), 'Estimating Potential Output: a semi-structural approach', *Reserve Bank of New Zealand Discussion Paper*, G97/9.
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*.

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 HLFS hours worked.
Labour cost	Private sector all salary and wage rates. Labour Cost Index.
Quarterly percentage change	$(\text{Quarter}/\text{Quarter}_{-1} - 1)*100$
Annual percentage change	$(\text{Quarter}/\text{Quarter}_{-4} - 1)*100$
Annual average percentage change	$(\text{Year}/\text{Year}_{-1} - 1)*100$

Source: Unless otherwise specified, all data conform to Statistics New Zealand definitions, and are not seasonally adjusted.
Rounding: All projections data are rounded to one decimal place.

Appendix B
Companies and organisations contacted by RBNZ staff during the projection round

Axiom Group Ltd
Business New Zealand Ltd
Click-Clack Ltd
Columbine Industries Ltd
Comalco New Zealand Ltd
Farmers Mutual Ltd
Federated Farmers (Bay of Plenty)
Federated Farmers (Canterbury)
Fonterra Co-operative Group Limited
Gisborne District Council
Godfrey Hirst New Zealand Ltd
Golden Bay Cement Ltd
Iplex Pipelines New Zealand Ltd
Jade Software Corporation
Kirkcaldies & Stains Ltd
KPMG
Master Plumbers, Gasfitters & Drainlayers New Zealand Inc
McCullochs Ltd
Multiplex Construction New Zealand Ltd
Nuplex Industries Ltd
Palmerston North City Council
Prepared Foods Ltd
Prime Finance Ltd
Ryan Group Ltd
Smith City Group
Southern Cross Engineering
Southern Finance Limited
Suzuki New Zealand Ltd
Talbot Plastics Ltd
Tauranga Mitre 10 Mega Ltd
The Gisborne Herald Ltd
Toll Owens Group Limited (Head Office)
Toyota New Zealand Ltd
Tradestaff Ltd
Tyco Safety Products
Vision Aluminium Ltd
Vodafone New Zealand Ltd
Wanganui District Council
Wanganui Gas Ltd
Wanganui Newspapers Ltd
Western Bay of Plenty District Council
Windsor Engineering Group Ltd
Zespri International Ltd

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

14 September 2006

OCR unchanged at 7.25 percent

The Official Cash Rate (OCR) will remain unchanged at 7.25 percent.

Reserve Bank Governor Alan Bollard said: "The New Zealand economy continues to show resilience. As reported in earlier statements, we have seen clear signs of easing activity and a rebalancing of demand from the domestic to the external sector since late last year. However, economic activity appears to have been stronger than expected through the first half of 2006, with the expansion of employment particularly surprising. Net exports and Government spending have contributed to the buoyancy in activity, while the easing in household consumption has been more moderate than projected. Similarly, while the housing market has slowed, it continues to exhibit momentum. We expect further dampening effects on demand from high oil prices and higher effective mortgage rates over the period ahead. But, even allowing for these effects, we see more inflation pressure than in earlier reviews.

"With overall resource pressures easing more gradually than forecast, annual inflation is not expected to fall below 3 percent until late 2007. Oil price increases and the depreciation of the exchange rate earlier in the year have pushed headline annual inflation to 4 percent in the June quarter. Inflation expectations have continued to drift upwards, influenced by the rising headline inflation numbers. While second-round flow-on effects have so far been limited, this remains a risk given the persistence of demand and labour market pressures. We assume that wages and prices are not unduly influenced by the short-term peak in headline inflation.

"Given the continued strength of medium-term inflation pressures, the outlook for monetary policy has become more finely balanced. With inflation now taking longer to move comfortably within the target band of the Policy Targets Agreement (PTA), there is little leeway to withstand further surprises to medium-term inflation pressures. In these circumstances, we are less confident that no further policy tightening will be required in this cycle. In this regard, we will want to be clearer about the economic situation and outlook. However, there is clearly no prospect of an OCR cut for some considerable time."

26 October 2006

OCR unchanged at 7.25 percent

The Official Cash Rate (OCR) will remain unchanged at 7.25 percent.

Since our September *Monetary Policy Statement*, there has been a significant improvement to the near-term inflation outlook, mainly as a result of the recent decline in oil prices. We expect lower fuel prices, together with the recent rebound in the exchange rate and Statistics New Zealand's reweighting of the CPI, to give an unusually low December quarter CPI increase. These are temporary factors, however, and, apart from the likely favourable impact on inflation expectations, they are not expected to impact materially on medium-term inflation.

Indicators of medium-term inflation pressures remain significant. Overall GDP growth in the second quarter was consistent with our September projections and the continued rebalancing of demand away from domestic spending towards exports. Continued strength in most of New Zealand's international markets and a return to a downward trending NZ dollar exchange rate should support this rebalancing. On the domestic side, however, the housing market remains resilient, supported by net inward migration and ongoing mortgage credit expansion at low interest margins. Further, we could see a pickup in household consumption in the third quarter as a result of the drop in petrol prices. On balance, inflation pressures appear to be abating gradually. But some indicators of resource pressures, such as high capacity utilisation and a tight labour market, continue to signal caution.

Taking all of this into account, monetary policy pressure will need to be maintained for some time to bring inflation back sustainably within the 1-3 percent target band. In this regard, the policy outlook is little changed from our September statement. The balance of inflation risks remains skewed to the upside. Further monetary policy tightening cannot be ruled out, and any easing of policy remains a considerable way off.

Appendix D
The Official Cash Rate chronology

Date	OCR (percent)	Date	OCR (percent)
17 March 1999	4.50	6 March 2003	5.75
21 April 1999	4.50	24 April 2003	5.50
19 May 1999	4.50	5 June 2003	5.25
30 June 1999	4.50	24 July 2003	5.00
18 August 1999	4.50	4 September 2003	5.00
29 September 1999	4.50	23 October 2003	5.00
17 November 1999	5.00	4 December 2003	5.00
19 January 2000	5.25	29 January 2004	5.25
15 March 2000	5.75	11 March 2004	5.25
19 April 2000	6.00	29 April 2004	5.50
17 May 2000	6.50	10 June 2004	5.75
5 July 2000	6.50	29 July 2004	6.00
16 August 2000	6.50	9 September 2004	6.25
4 October 2000	6.50	28 October 2004	6.50
6 December 2000	6.50	9 December 2004	6.50
24 January 2001	6.50	27 January 2005	6.50
14 March 2001	6.25	10 March 2005	6.75
19 April 2001	6.00	28 April 2005	6.75
16 May 2001	5.75	9 June 2005	6.75
4 July 2001	5.75	28 July 2005	6.75
15 August 2001	5.75	15 September 2005	6.75
19 September 2001	5.25	27 October 2005	7.00
3 October 2001	5.25	8 December 2005	7.25
14 November 2001	4.75	26 January 2006	7.25
23 January 2002	4.75	9 March 2006	7.25
20 March 2002	5.00	27 April 2006	7.25
17 April 2002	5.25	8 June 2006	7.25
15 May 2002	5.50	27 July 2006	7.25
3 July 2002	5.75	14 September 2006	7.25
14 August 2002	5.75	26 October 2006	7.25
2 October 2002	5.75		
20 November 2002	5.75		
23 January 2003	5.75		

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 2006-07.

25 January 2007	OCR announcement
8 March 2007	*Monetary Policy Statement*
26 April 2007	OCR announcement
7 June 2007	*Monetary Policy Statement*
26 July 2007	OCR announcement
13 September 2007	*Monetary Policy Statement*
25 October 2007	OCR announcement
6 December 2007	*Monetary Policy Statement*

The announcement will be made at 9:00am 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.

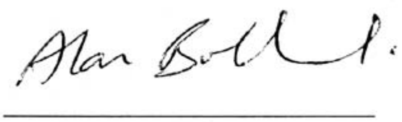
b) When disturbances of the kind described in clause 3(a) arise, the Bank will respond consistent with meeting its medium-term target.

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 Designate
Reserve Bank of New Zealand

Dated at Wellington this 17th day of September 2002