
Monetary Policy Statement¹

August 2002

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

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This document is available on the Reserve Bank's website (<http://www.rbnz.govt.nz>).

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¹ Projections finalised on 26 July 2002. Policy assessment finalised on 13 August 2002.

1 Policy assessment

The Reserve Bank has decided to leave the Official Cash Rate unchanged at 5.75 per cent

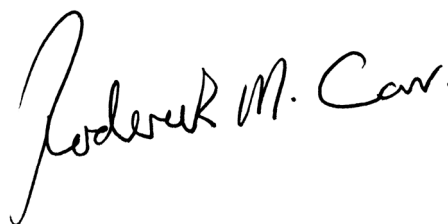
Since our May *Statement*, prospects for the international economy have become increasingly clouded, with sharp falls in equity markets and heightened investor nervousness in the US and elsewhere. Although the New Zealand economy has performed well over the past year, the odds of an international slowdown have increased, which would have adverse consequences for the performance of the New Zealand economy.

This renewed global uncertainty occurs at a time when the outlook for inflation has been of concern. Indicators of core inflation have edged up to around 3 per cent following a sustained period of higher-than-average pressure on the country's productive resources.

Gauging the extent to which the path for inflation will be affected by recent global developments is no easy task. Quite plausibly, the impact of recent global developments will remove much of the existing upwards pressure on inflation. But, conversely, the economy may continue to grow at a pace that maintains pressure on resources. Indeed, some of the recent drivers of strong domestic economic activity, including the sharp turnaround in net immigration, may not dissipate rapidly even in the event of softer international conditions.

Monetary policy involves carefully weighing the competing risks. On balance, we feel that current global developments, recent falls in export prices, an exchange rate higher than on average last year, and the lagged effects of the interest rate increases earlier this year are likely to dampen inflation pressures sufficiently going forward. In May it looked likely that further increases in interest rates would be required over the coming year to keep inflation within the target band, but that prospect now looks less likely. That was also the judgement we were coming to at our last OCR review in July, albeit for somewhat different reasons.

*We will continue to monitor global markets and the local economy, and assess the inflation outlook. For now, the prudent response is to pause, and to watch and wait.

A handwritten signature in black ink that reads "Rod Carr". The signature is written in a cursive, flowing style.

Rod Carr
Acting Governor

2 Overview and key policy judgements

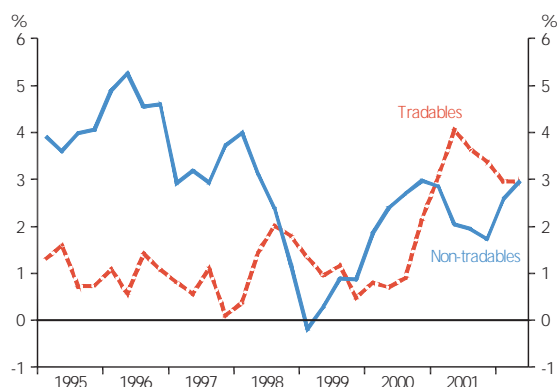
Over the last few years, the New Zealand economy has performed relatively well, with a higher average growth rate than usual. At least, that is what the statistics say: average annual growth of around 3½ per cent over three years, with the slowest year around 1 per cent. It has not always felt like that. At various points through this period dark clouds have gathered on the horizon, storm warnings have been issued, and we have proceeded with additional caution. As it happens, the impact of the bad conditions has been milder than expected, and we have made much better progress than anticipated.

We are now in receipt of one of the more serious of the storm warnings issued since the late 1990s: when the Asian financial crisis combined with two drought seasons. Around the world, equity market weakness has deepened, with very large wealth losses being recorded. The scale of the fall since March 2000 is one of the larger declines observed over the last century. The cost of equity finance has accordingly risen sharply, and already-growing risk aversion has escalated to the point where debt financing is also becoming a problem for some North American corporates in particular. These capital market developments further undermine the prospect of a near-term lift in investment spending in the world's major economies. And, especially given the degree of uncertainty that currently prevails, business and consumer confidence is at increased risk of fracturing, with potentially significant consequences for the continuity of the global economic recovery.

The difficulty is knowing how much account to take of these warnings. Although the New Zealand economy has recently been able to ride through a poor external growth phase relatively well, there seems little doubt that a faltering of the recovery underway abroad would make life difficult here. But earlier, more pessimistic forecasts have not come to fruition, and we ought not take for granted that this one will.

To presume that this pessimistic forecast will eventuate is by no means a riskless strategy. A succession of monetary policy decisions based on the expectation that growing inflation pressures would soon subside have led to policy being a little more stimulatory than expected over the last couple of years. The net outcome is that all the main indicators of core inflation¹ are now pointing at 3 per cent, confirming that inflation has not yet subsided, as we previously expected

Figure 1
Weighted-median inflation
(annual percentage change)



Source: RBNZ

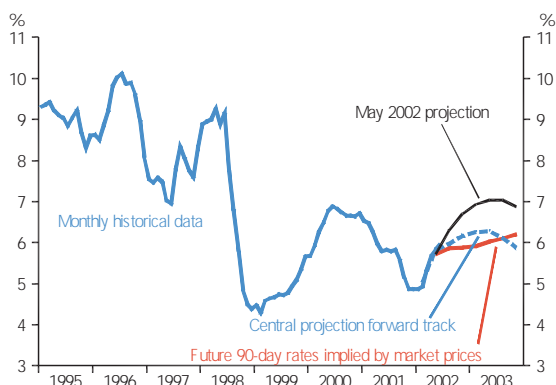
would have happened by now. Figure 1, which provides a trend measure of inflation in the tradables and non-tradables sectors, shows that underlying inflation may have edged up recently in those areas of the economy less directly affected by international market conditions or the exchange rate. Indicators of the utilisation rate of the nation's productive resources collectively show higher-than-average pressure, suggesting an upwards momentum for future inflation potentially beyond the target range.

On the other hand, of all the threatening economic developments of the last few years, the current capital market dislocation has the potential to be the most serious. It seems only prudent to allow for at least some of the negative backwash that could eventuate. We have done so in the policy choice made today. We have also done so in the projections described in Chapter 4 of this *Statement*, in part by presuming that the pace of economic recovery in the US and Europe will slacken noticeably in coming months, with flow-on effects into Asia.

Our policy judgements also take into account a number of indicators, noted in Chapter 3, that suggest momentum in the economy is slowing at present, including the very latest readings on actual activity and surveyed expectations of the future. These indicators help to shape our view about the

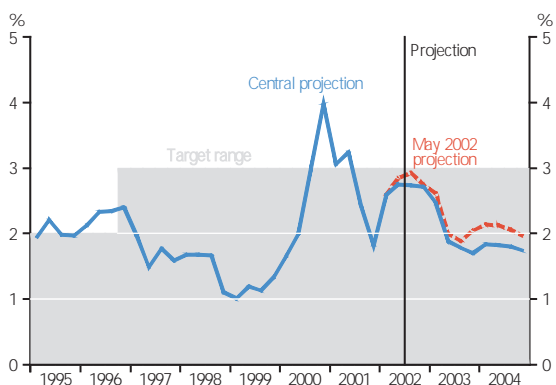
¹ By which we mean the general trend in inflation after allowing for one-off or unusual price movements and/or particular price movements that monetary policy ought not to respond to (such as fluctuations in fruit and vegetable prices). Core inflation reflects the more persistent elements of the inflation process.

Figure 2
90-day interest rates



Source: RBNZ

Figure 3
Consumer price inflation²
(annual percentage change)



Source: Statistics New Zealand, RBNZ

Figure 4
TWI



Source: RBNZ

² The measure shown is annual underlying inflation until the September quarter 1997, annual CPIX inflation from the December 1997 quarter until the June 1999 quarter, and annual CPI inflation thereafter (adjusted to exclude interest and section prices from the September 1999 quarter to the June 2000 quarter).

Projections for inflation assume the interest rate profile shown in Figure 2.

pace and extent to which activity is likely to slow over the coming months.

Allowing for these factors alters the outlook for interest rates that we suggested was possible back in May (figure 2). Interest rates may not need to rise by as much from here on to obtain some assurance that inflation will stop edging upwards and will instead move onto a declining path (figure 3). Moreover, the picture has become distinctly murkier. As a result, we are not treating the potential need for a further rise in interest rates as urgent, or at all certain. In part, the ability to await further developments is a dividend derived from recent actions to position interest rates consistent with an economy that is mid-cycle, neither too hot nor too cold.

Exchange rate developments (figure 4) are one of the significant uncertainties that we have had to confront in forming our policy view. Following the May *Monetary Policy Statement*, the exchange rate appreciated especially quickly, to reach a level by mid-June that was some 5 per cent higher than we had assumed for the second half of this year. Much of that appreciation was ascribed by various commentators to the 25 basis point increase in the OCR announced in May, to a level substantially higher than elsewhere in the developed world. Following a further 25 basis point increase in the OCR in early July, the exchange rate fell almost as quickly as it had risen. At the time of writing, it was some 2 per cent lower than we had assumed for the second half of the year. In the statement accompanying the July decision we indicated that the exchange rate appreciation would, if sustained, reduce the need for interest rates to be adjusted. We now find ourselves being every bit as cautious about the extent of further interest rate increases as we were in July, but for a quite different reason.

Recent experience brings the connection between relative interest rates and the exchange rate into focus. While relative interest rates do matter for exchange rates, the events just described illustrates that sometimes other things matter more. The recent experience also illustrates that it is difficult to predict very far ahead what factors will come into play. This issue is explored further in a box in Chapter 3.

The sharp rise in the exchange rate witnessed in May and early June raised for some the spectre of another exchange rate cycle of similar magnitude to that experienced during the middle years of the 1990s. Although the exchange

rate has since retraced, valid concern about the outlook remains, for a number of reasons.

For one thing, large exchange rate cycles are a fact of life for small, relatively open economies with floating exchange rates. Other countries, including many much larger and wealthier than us, experience exchange rate cycles of similar magnitude.

Secondly, it is likely that the scale of the mid-1990s appreciation was amplified by delays in nipping emerging inflation pressures in the bud. Once it became obvious that monetary policy settings were in catch-up mode and would need to be tight for a sustained period, speculative positions in New Zealand assets became more attractive. To the extent that risks are again being taken with monetary policy settings — this time on account of an external threat that may or may not impact heavily — there is the potential for a repeat episode.

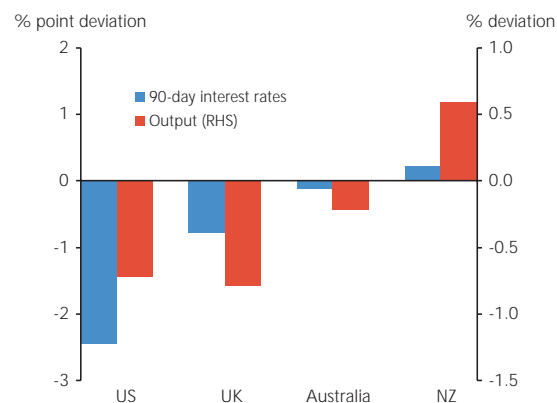
And thirdly, renewed exchange rate weakness takes the TWI back to levels well below most calculations of the exchange rate's trend, or equilibrium. That may be appropriate when viewed through the lens of key commodity prices (such as dairy prices, which have fallen sharply to historically low levels) or New Zealand's indebtedness (which remains at all time highs). But it is less appropriate when viewed through the lens of relative growth rates (New Zealand has been outpacing most of its trading partners recently, and looks less exposed than some other economies to a further downturn in US economic activity) or the current account deficit (which has recently dropped to comparative low of 2¼ per cent of GDP).

If it turns out that the exchange rate is at unsustainably low levels, the prospect of exchange rate-sensitive decisions being misread and the prospect of a snap back both create concern. For monetary policy settings, the issue of uncertain sustainability makes the current situation especially awkward. Taking too much account of equity market fallout risks being caught having to play catch-up with inflation pressures. And to the extent that we find ourselves playing catch-up, an increase in the exchange rate is all the more likely. These considerations are amongst those that discourage us from placing too much emphasis on the downside risks to inflation into account right now.

Of course, it is quite possible that the exchange rate will return to an upward path without the additional impetus of

monetary policy being seen as “behind the curve” (so to speak). Because New Zealand's cyclical position is well ahead of those of most of our trading partners — even Australia is behind us in terms of pressure on resources — our interest rate settings are comparatively tight. This can be seen in figure 5, which shows that our interest rates are closer to their historical average than is the case in other countries. All other things equal and after allowance for risk, this interest rate differential should attract financial flows to New Zealand and appreciate the exchange rate. Very often, and for much of the past couple of years, other things haven't been “equal” and the exchange rate has been historically weak despite the existence of a positive risk-adjusted interest rate differential.

Figure 5
Comparative cyclic positions
(deviations from trend)



Source: Reuters, RBNZ calculations

As already noted, we cannot readily predict if and when other things — such as risk aversion and associated attitudes towards peripheral markets — will change, and hence how the exchange rate will evolve. Yet its evolution may have material consequences for interest rate settings. Inevitably, with the exchange rate, we are obliged to respond to developments as they occur.

For some readers, perhaps the element of the picture that we are painting that will be of most surprise is the idea that inflation has been on an upward path, and would continue on that upward path were it not for higher interest rates, lower demand from abroad, and such exchange rate appreciation as might occur. Notwithstanding a noticeably less inflationary dynamic in business these days — businesses are less willing or able to use price increases to attempt to

maintain margins, and aggregate wage measures show little sign of acceleration — it is still the case that inflation is now at around 3 per cent on most measures.

Moreover, it seems to be the case that the inflation we are observing is sourced in the domestic economy, and is no longer a direct result of exchange rate depreciation, which finished over 18 months ago. Looking into the individual components of the CPI, it becomes evident that prices charged for services, and indeed domestically produced goods also, have been rising across a broad front. On average, around 70 per cent of individual items in the CPI (by expenditure weight) registered price increases each quarter over the past year. That percentage has not fallen over the past 18 months, despite the diminishing influence on prices from the lower New Zealand dollar.

This observed inflation is almost certainly related to the fact that the New Zealand economy has been growing above trend for about three years, and indicators of the intensity of use of resources have been giving above-average signals for over two years. These are the conditions normally associated with upward pressure on inflation.

The issue is less whether the upward pressure *exists* than whether it *persists* (and whether higher interest rates are needed to ensure that it does not). This is the reason why we put together forecasts to help inform our judgement on the appropriate level of interest rates. Looking forward, we are anticipating the combination of the effects of weaker world demand conditions, a higher exchange rate, lower dairy prices, and earlier interest rate increases will likely remove a considerable amount, and perhaps even all, of the upward pressure that exists. As noted in Chapter 3, there are already some early signs that the recent pace of economic activity may be slowing.

As always, there is considerable uncertainty around how things will evolve. We will certainly be very closely watching the global economic environment, and indicators of how developments abroad are affecting the New Zealand economy. And we will be ready to adjust our view as new information becomes available.

Chapter 3

The current economic situation

Overview

Economic activity lifted sharply in the March quarter, driven by buoyant consumer spending and a marked lift in export volumes. For the year to March 2002 as a whole, GDP was up by a creditable 3.2 per cent, with the impact of a weak international climate counterbalanced by a low exchange rate, rising world prices for some commodity exports and surging population growth. The strong growth conditions have seen the economy continue to draw on its surplus productive resources, with capacity utilisation remaining at above average levels and ongoing evidence of labour shortages in many regions.

We moved to increase the Official Cash Rate by a further 25 points at our interim review in July in light of continued momentum in the domestic economy. However, we also noted that further increases — as foreshadowed in the *May Statement* — were becoming less likely, reflecting the sharp rise in the New Zealand dollar that had occurred over June and emerging uncertainty in global markets.

Some indicators of domestic demand have softened a little since the June quarter. On the external side, since May, prospects for global economic activity have been clouded by the sharp declines in US and other major equity markets. In anticipation of weaker prospects for the New Zealand economy, financial markets no longer expect further increases in the Official Cash Rate over the months ahead.

Against this background, inflation for the June quarter was broadly in line with that projected in the *May Statement*, although buoyant trading conditions look to have produced stronger price rises for some areas of the CPI. Current indicators of core inflation are around 3 per cent, with evidence of a reasonably widespread pick-up in price pressures within the non-tradables sector of the economy.

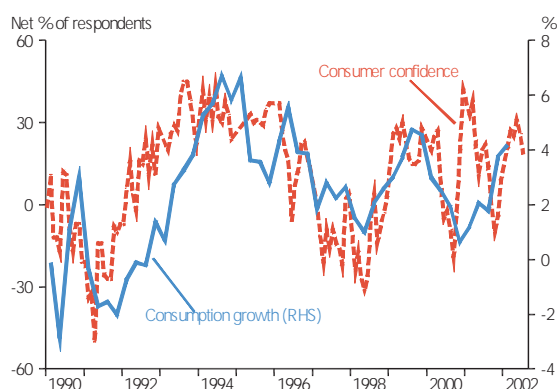
Domestic demand

After gathering momentum in late 2001, domestic economic activity has continued to show strength in 2002 — more so than we anticipated when preparing our *May Statement*. Retail sales have expanded at rates similar to those seen during the high-growth periods of the 1990s. Demand has been

strong across a wide range of goods and services, with particular strength evident for ‘large-ticket’ items such as motor vehicles, furniture and appliances, and the strength in sales has been spread across urban and rural regions of the country. However, very recently, signs have emerged that consumer spending may be beginning to wane. The rate of trend growth in nominal retail sales slowed during the June quarter, and surveyed consumer confidence has eased slightly (figure 6).

Housing sector indicators also contain a lot of useful information about consumer confidence, activity and,

Figure 6
Consumer confidence and annual consumption growth



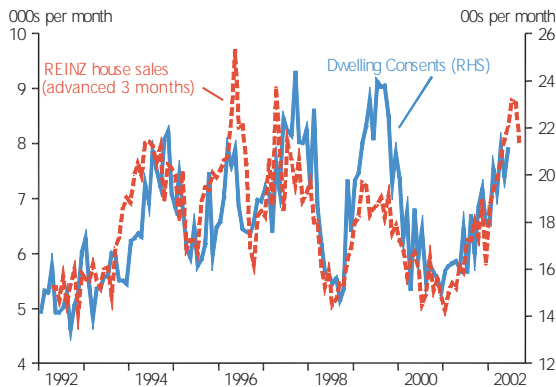
Source: One News/Colmar Brunton Poll, Statistics New Zealand

potentially, inflationary pressures. House sales over the three months to June were almost 35 per cent higher than in the same period a year earlier and were at levels last seen in 1997 (figure 7, overleaf). Market conditions appear to have tightened, with house prices lifting in many regions. New housing construction has also been on the rise, as reflected in the latest GDP statistics, which show housing construction activity in the six months to March 2002 well above year-ago levels.

Although house prices have risen, the increases to date have been relatively constrained, both in comparison to history and relative to other countries against which we often compare ourselves, many of which have seen significant

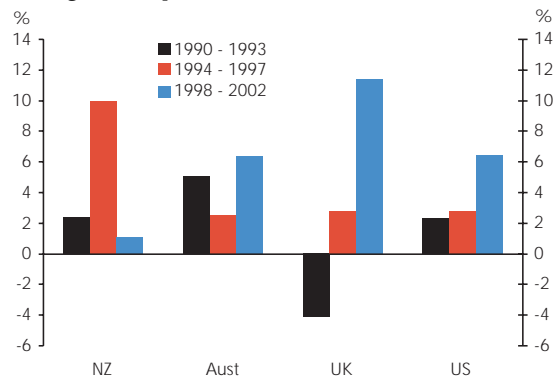
increases in house prices over the past year (figure 8). Homebuyers appear not to have become overly bullish on the prospects for capital gain, a view borne out by growth in housing credit, which has been more moderate in comparison to previous housing market cycles.

Figure 7
Dwelling consents and house sales
(*seasonally adjusted*)



Source: REINZ, Statistics New Zealand

Figure 8
Annual House Price Inflation
(*average for the period*)



Source: Quotable Value New Zealand, Datastream

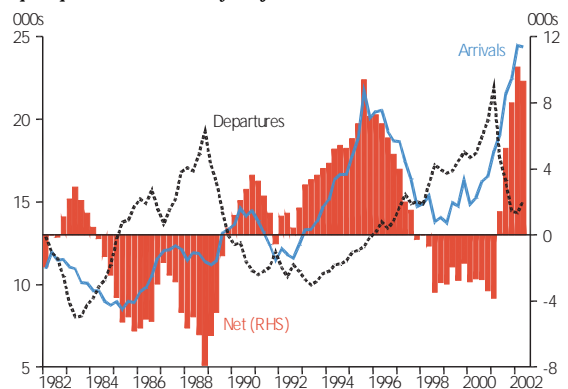
Very recently, monthly house sales data have dipped quite sharply, especially in the Auckland region. This could possibly be the first signs of a weakening in the housing market, although it has been suggested that a lack of supply may be constraining sales. The latest residential building consent data point to a levelling off in building intentions, though there is little sign yet of a decline.

Although the outlook over the year ahead is less bright, the very sharp rise in rural incomes over the past couple of seasons has acted as a catalyst for higher spending, reviving

rural economies. Despite the inevitable lags, higher spending in rural economies has provided a boost to activity in the economy more widely via its linkages through sectors such as retailing, manufacturing and construction and via a sharp lift in rural employment.

Over the past year, the economy has faced a sharp turnaround in migration flows at a much faster pace than in previous cycles (figure 9). Net annual losses of around 10,000 persons over 1998-2000 have given way to an annual gain of around 35,000 persons in the past 12 months as departures have fallen and arrivals continued to increase. While the economy will ultimately adjust to the higher inflows — which will boost both demand and productive capacity — in the interim, the short run effect has been to provide a substantial boost to consumer and housing demand. Although estimates of migrant transfers point to a more moderate inflow of capital than during the mid-1990s (when net immigration was also strong), they point to a substantial injection nonetheless. That, in turn, will have helped to fuel demand (figure 10).

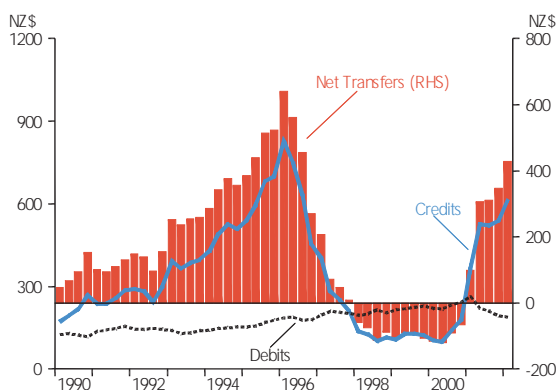
Figure 9
Net migration
(*per quarter, seasonally adjusted*)



Source: Statistics New Zealand

Over the six months to March as a whole, total business investment spending was around the same level seen a year earlier. At a sectoral level, the picture has been mixed: some sectors such as farming have clearly had a bumper year in terms of investment spending, reflecting very high earnings. Of note, non-residential construction consents have been picking up quite strongly over 2002. As a share of GDP, investment spending has been at historic highs over the past few years, consistent with a world-wide trend in the 1990s. Nevertheless, given high rates of capacity utilisation in the

Figure 10
Migrants' transfers
(seasonally adjusted)



Source: Statistics New Zealand

economy, it is somewhat surprising that we have not seen stronger investment spending over the past year or so, although this may partly reflect the difficult international environment. Investment intentions have eased a little in some recent business surveys, consistent with recent heightened uncertainty about prospects for the world economy following equity market falls, a higher exchange rate and the likelihood of some softening in rural incomes.

External developments

A key development in global markets since May has been heightened uncertainty about the prospects for a sustained recovery in the United States over the coming year. US and world equity markets have fallen very sharply over this period (see Box 1). Uncertainty has been increased by the recent high profile cases of accounting fraud among several major US corporates as well as further poor earnings reports from various companies. The US dollar has also come under sustained pressure with the euro climbing substantially against the dollar over July.

Market expectations held earlier in the year that monetary policy in the major economies was likely to tighten quite markedly in 2002 have now evaporated. That, along with the more uncertain international climate, has led financial markets to no longer expect further increases in the Official Cash Rate in New Zealand over the coming months.

Despite little change in *Consensus Forecasts* for US activity over recent months, economic indicators for the US economy

highlight the uncertain outlook. Growth in the US economy over the second quarter of 2002 was considerably weaker than expected (with estimates for earlier quarters revised down). Other economic indicators have been mixed: relatively strong retail sales contrast with signs of weakening consumer confidence.

Economic conditions in the Euro-zone have proved weaker in recent months than anticipated earlier in the year. Industrial production has weakened in several countries and employment growth has been soft. Consumer spending in many Eurozone economies has been relatively weak over the past year and sluggish employment growth reduces the impetus for a recovery in Eurozone activity. The weakness in US equity markets has also been mirrored in Eurozone markets, which could further undermine growth prospects.

Within Asia, there has been evidence of a strong cyclical recovery in Japan's export sector, despite the recent rise in the Yen. Key machinery orders have strengthened, which bodes well for industrial production. However, consumer spending remains weak, with high unemployment limiting the prospects for a decisive turnaround in household spending. Other non-Japan Asian economies are also experiencing a recovery in their respective export sectors and generally relatively buoyant domestic economies. However, the sustainability of the turnaround hinges partly on the fortunes of the US economy, given the share of exports to the US (especially IT products) from many of these economies.

The Australian economy continues to perform robustly, despite some emerging concerns about the effect of current drought conditions on rural sector prospects and the potential flow-on effects to activity from the US's current woes. Both business and consumer confidence remain at relatively high levels, retail spending continues to post solid gains and the housing market remains strong, albeit with some tailing off in the recent vigorous activity. The outlook for capital expenditures also remains reasonably solid. Although recent employment data were a little weaker than expected, the labour market also appears to be in a relatively solid position, albeit with an unemployment rate a little higher than New Zealand's.

(continued on p12)

Box 1

Equity market developments

Marked falls in share prices (figures 11-13) have been a major focus in world financial markets since the *May Statement*. In the three months to the end of July alone US share prices fell by around 15 per cent, with similar falls seen in many other countries.

The recent sharp falls in equity markets appear to be part of a longer-term substantial fall in global equity prices. In the US, the boom of 1982 to 2000 was probably the most sustained and dramatic rise in share prices in history. Likewise, the subsequent falls now constitute one of the most pronounced periods of equity market weakness.

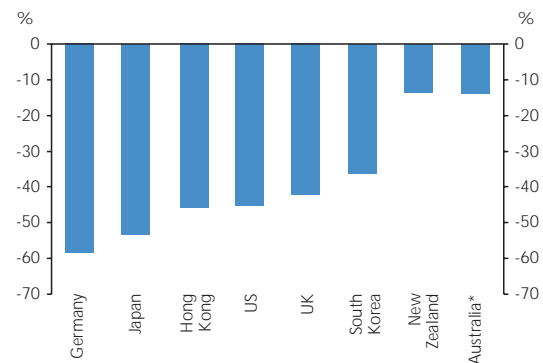
Since May, continued disappointing earnings results have led investors to worry that a recovery in corporate earnings may be some time away. Recent high profile accounting scandals in the US have also undermined investor confidence. More recently, there have also been increasing signs that global economic activity might be recovering more slowly than previously expected, reinforcing the mood of pessimism.

However, for all of the media focus on the US, it is worth noting that equity markets in most other major economies have fallen by as much, if not more, than those in the US. Largely reflecting the fact that they did not share in the unusually large run up in share prices in the 1990s, Australasian equity markets have fallen only relatively modestly.

The large falls in equity markets in recent months have gone hand in hand with historically high levels of uncertainty among investors (figure 14). Some measures of investor uncertainty have recently been around the highs reached at the time of the Russian debt default and the collapse of major US hedge fund Long Term Capital Management (LTCM) in 1998 and after the 11 September attacks.

Adjustments on this scale have implications both for financial stability and for the economic outlook. There are a number of channels through which this equity market weakness could impact on real economic activity abroad and — though less directly — in New Zealand. Households

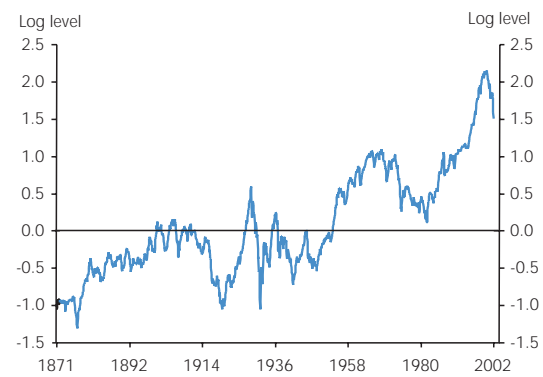
Figure 11
Change in selected equity indices
(from 1999-2000 peaks)



Source: Bloomberg

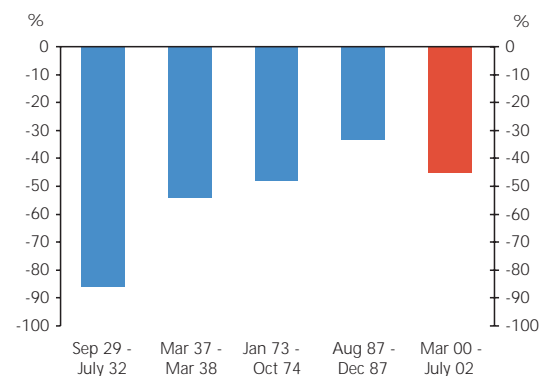
*Peak was March 2002

Figure 12
US equity prices in real terms
(log level of the real S&P500 index)



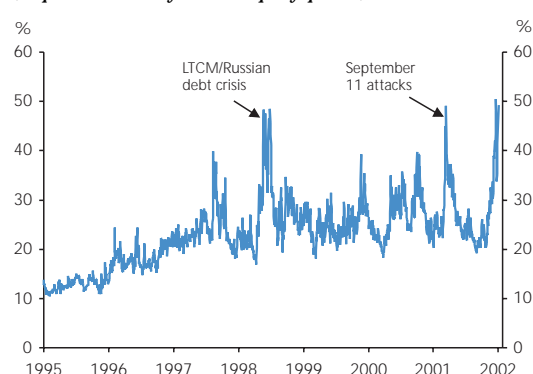
Source: Bloomberg, Robert Shiller

Figure 13
Major US equity market falls since 1928
(percentage change from peak to trough)



Source: Bloomberg

Figure 14
Equity market uncertainty
(implied volatility of US equity prices)



Source: Bloomberg

may cut back their spending in reaction to the reduction in their wealth, although the connection is uncertain.³ Should households cut back their current spending as measured wealth falls, savings rates would be boosted, reversing some of the large fall in savings observed in many countries during the 1990s. Likewise, businesses may

³ There is some evidence to suggest that households in many countries are more sensitive to variations in wealth held in the form of housing than equities, and in most countries house prices have not fallen to the extent that equity prices have.

reduce investment spending as a much weaker equity market increases their costs of capital (at a time when debt finance is also becoming difficult and costly to raise for many firms). And the increased uncertainty that has arisen from this period of weakness may cause both households and firms to defer major purchases until more certain times.

It is impossible to anticipate just how long or how deep the correction will be. As many commentators have noted, extended periods of share price overvaluation are often followed, not by a smooth return to some stable equilibrium, but by a period of significant undervaluation. It is equally impossible to know in advance exactly how households and firms will react. As share markets have been falling for some time, economic forecasts will already have incorporated some of the expected impact. But, in view of the size and nature of the recent falls, it seems reasonable to assume that there will be some further spillover into consumption and investment behaviour internationally. We have done so in the projections contained elsewhere in this document. We will be watching closely to see whether, and to what extent, this impact occurs.

Tradables sector activity

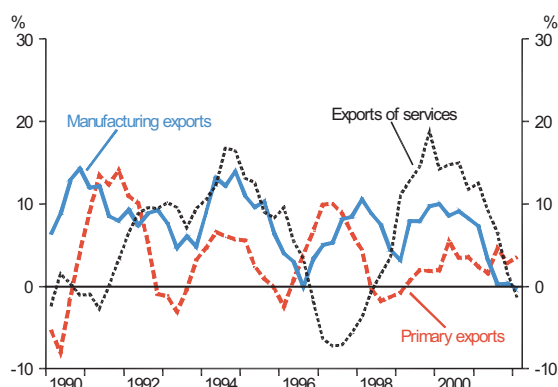
Export volumes performed relatively poorly over the second half of 2001 (figure 15), reflecting the weak international economic scene, livestock — building in the agricultural sector following recent dry conditions, and other climate related factors impinging on the seasonal pattern of export production. Manufactured export volumes, which initially showed strong growth following the exchange rate depreciation in 1998 and 1999, also struggled, although some categories continued to post modest growth. Exports of services performed well over the first half of 2001 as visitor arrivals soared, but stalled after the September 11 terrorist attacks.

Following this relatively weak performance over the past year, export volumes rose sharply in the March quarter, with a substantial increase in volumes of both goods and services. The rise in exports contributed to a marked improvement in the current account of the balance of payments during the quarter (along with a better than expected performance from the net investment income balance). Primary exports, which had been weak in late 2001 as stocks of some products were accumulated in the face of poor international prices, lifted during the quarter with a particularly strong performance from both dairy products and seafood. There was also a further lift in non-commodity manufactured export volumes. Meanwhile, the ongoing recovery in inbound tourism following 11 September was reflected in a sharp increase in tourism sector exports during the quarter (figure 16).

Preliminary export data for the June quarter suggest that export volumes are likely to have registered further moderate growth. Agricultural production has been relatively strong, with dairy production up, while livestock has been late to slaughter this season due to climatic conditions (which is likely to have boosted June quarter volumes). However, visitor arrivals have flattened in recent months — suggesting only a modest further increase in services exports — and indicators of manufactured exports have been weaker.

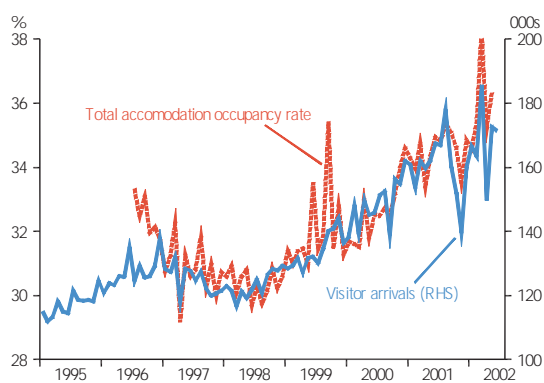
Despite higher volumes, there has been significant downward pressure on domestic currency returns to exporters over recent months (figure 17). The recent sharp rise in the exchange rate (see box 2) — despite having reversed to some degree — will lower prices received by a range of exporters, although the timing of its impact will vary according to such factors as the degree of hedging and forward cover those exporters have in place.

Figure 15
Export volume growth by sector
(annual average percentage change)



Source: Statistics New Zealand

Figure 16
Tourism activity
(seasonally adjusted)



Source: Statistics New Zealand

Figure 17
Export earnings
(annual percentage change)



Source: Statistics New Zealand

(continued on p15)

Box 2

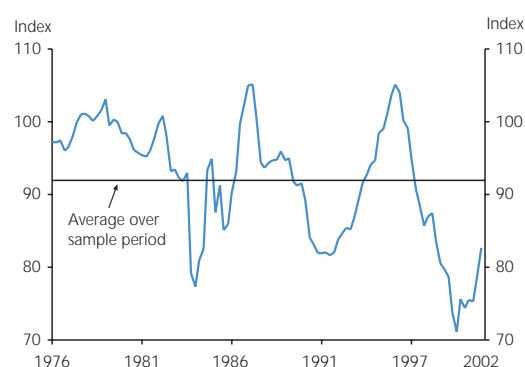
The exchange rate

Movements in the exchange rate have attracted considerable attention this year. After eighteen months or so at around record low levels, from around the beginning of the year the New Zealand dollar exchange rate — measured both against the US dollar and in trade-weighted terms — began to rise quite strongly. Indeed, the quarterly rises in the TWI in the March and June quarters, each of around 5 per cent, were among the largest quarterly changes in the exchange rate since it was floated in 1985. During the last few weeks, the exchange rate depreciated quite noticeably, reversing all of the appreciation seen in May and June.

Over the longer-term one of the most striking features of New Zealand's exchange rate is its apparent tendency to settle back to a fairly stable long-term average (figure 18). This is a little surprising, in view of everything else that has gone on in our economy and the economies of other countries, but it provides a useful reference point. Over shorter-term horizons, however, (and shorter-term here means perhaps three to five years) our exchange rate — like those of all other countries with floating currencies — is prone to deviating quite markedly from the longer-term average. For the last three years or so the New Zealand dollar appears to have been substantially undervalued on most reckonings. That means it shouldn't surprise us to see some appreciation at some stage. But why did the exchange rate rise so strongly earlier this year — and, equally, why has it fallen back so quickly?

In the shorter-term, a wide variety of factors influence exchange rates. A relatively short version of the list would include: relative economic performances (actual and expected), relative interest rates (nominal and real, actual and expected), commodity prices, expected returns on assets (equities for example), the momentum arising from trader behaviour that can develop in the exchange rate itself, and investors' attitudes to risk. The importance of each of these factors seems to vary through time, and sometimes can change quite quickly - one factor or another comes into focus, and can overshadow all else for a period of time. That means that forecasting exchange rates is inevitably very difficult. At times, even after the event, explaining why an exchange rate has moved as it has can be a challenge.

Figure 18
Real exchange rate - relative CPI measure
(1981 Q1 = 100)

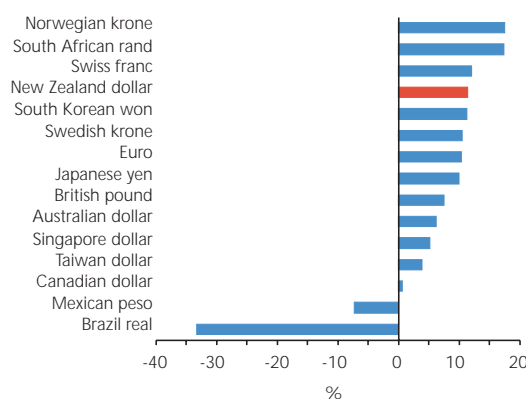


Source: RBNZ calculations

Over the last few months, a number of factors appear to have been at work. First, the US dollar itself has begun to fall, after several years in which it appeared to become increasingly overvalued. Almost every freely-traded currency has appreciated against the US dollar this year, typically quite substantially (figure 19). So, part of the reason that our TWI has risen is simply that the US dollar is falling. US assets are no longer the "flavour of the decade" that they once were.

Monetary policy also matters, but in a more subtle way than is often supposed. In principle, raising interest rates unexpectedly, and by more than other countries are expected to do, is likely to push up the value of a currency when investors consider that the rate increase is warranted by the state of the economic cycle. Reflecting the relative

Figure 19
Changes against the US dollar since 31
December 2001



Source: Bloomberg

states of economic cycles here and abroad, we have raised the OCR by rather more than markets expected at the start of the year, and other countries (on average) have raised their interest rates by rather less than markets expected. That will have tended to push up the exchange rate. But note, in figure 19, that the New Zealand dollar has not risen very much more than the currencies of a number of other developed countries, which suggests that only a relatively modest proportion of the overall rise can be put down to monetary policy *per se*.

Sometimes it can look very different. Immediately following the May 2002 *Monetary Policy Statement*, markets revised upwards the expected future path of interest rates for New Zealand. The exchange rate rose very sharply — indeed in June, the TWI rose briefly above 57. Some observers were quick to attribute the rapid rise in the exchange rate to our projections of further increases in interest rates. Coincidence should not, however, be confused with causation. In May, markets were optimistic that economic growth would continue strongly in this part of the world, and were also fairly buoyant about the US economic recovery. At the same time, the US dollar was falling away quite markedly.

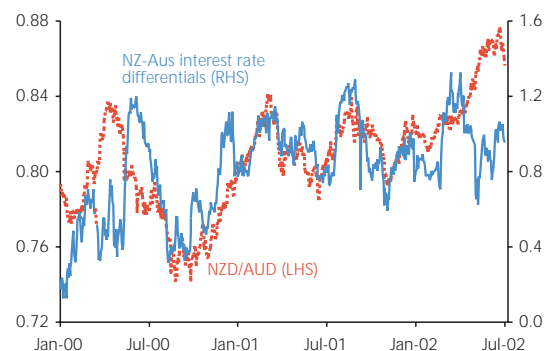
That both monetary policy and other factors are involved is illustrated by the different paths taken by the exchange rate following OCR increases in May and July. In both cases, markets fully expected the 25 point increases in the OCR. In the former case, markets were somewhat surprised by the extent of further increases foreshadowed, whereas in the latter case, the surprise was that the Bank was signalling that emerging events had created uncertainty about how far interest rates would need to rise. That the exchange rate rose after the May adjustment and fell after the July adjustment is consistent with this difference.

In early July, we raised the OCR again but expressed the view that if the exchange rate appreciation was sustained, the forward path of interest rates would likely be weaker than foreshadowed in May. Over the following few weeks, the exchange rate fell sharply. A little of this had to do with people changing their view on the future monetary policy outlook here. Much more had to do with a sharp fall in investor attitudes towards risk, as the US and

global share markets fell away sharply. In that sort of environment, when investors are more reluctant to take on risk, the New Zealand dollar will almost always tend to weaken, as we are very heavily dependent on foreign capital. Currencies of other similar countries — especially Australia — also weakened quite sharply. In this adjustment, the currencies of traditional current account surplus countries — Japan, Euroland, and Switzerland — did relatively better.

On a variety of indicators, the New Zealand dollar remains somewhat undervalued against most currencies. That is not so obvious for the value of the New Zealand dollar against the Australian dollar. It is a little unclear why the Australian dollar has increased so little this year, given the comparative strength of their economy vis-à-vis others. As a result, however, the New Zealand exchange rate against the Australian dollar has increased quite markedly — up 7 to 8 per cent for the year, to levels above most estimates of “fair value”. Even though we have raised interest rates further than Australia (something that markets have generally assessed as being appropriate), the evolution of current and future interest rate differentials is not a sufficient explanation. That can be seen in figure 20, which shows something of a breakdown in what has been an unusually clear historical relationship between the New Zealand dollar/Australian dollar cross rate and expected relative interest rates.

Figure 20
NZD/AUD and expected interest rate differentials since 2000⁴

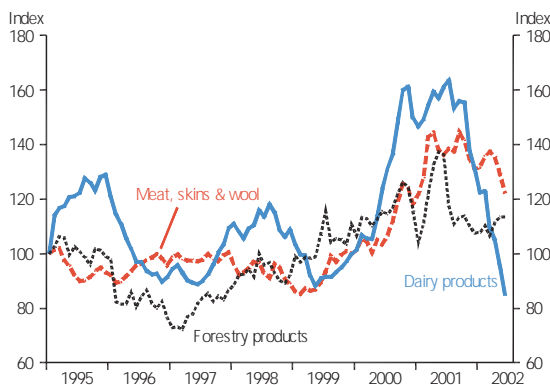


Source: Reuters

⁴ The expected interest rate differential is the expected three-month interest rate in six months time.

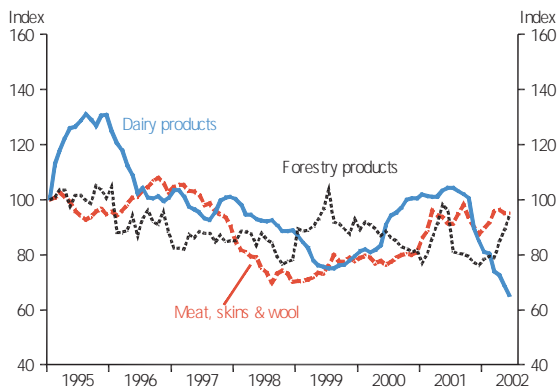
Moreover, the 'world' prices received for exports continue to come under pressure. The ANZ world commodity price index for New Zealand's exports continued to fall over the June quarter and was down around 12 per cent from a year earlier. Lower dairy prices have been the main source of weakness, reflecting further increases in European dairy product subsidies and the expectation of more US subsidy activity in the new season. In contrast, world prices for some products, such as meat and forestry products, have registered increases over the past few months (Figures 21 and 22).

Figure 21
Commodity prices
(New Zealand dollar terms, January 1990 = 100)



Source: ANZ Banking Group Ltd, RBNZ calculations

Figure 22
World commodity prices
(World price terms, January 1990 = 100)



Source: ANZ Banking Group Ltd, RBNZ calculations

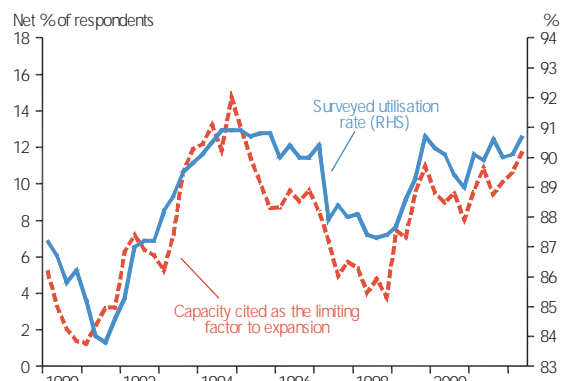
Although imports as a share of GDP levelled off in the late 1990s — probably reflecting the sharp fall in the New Zealand dollar — import volumes have been climbing over the past six months, at least for some categories, such as consumption goods and some types of capital equipment.

The trend is consistent with the notion that an increased portion of domestic demand over recent times has been met through imports. This is associated with the continued strength in household demand — at a time when domestic capacity utilisation is high — and the recent rise in the exchange rate (making imports relatively cheaper for importers and/or consumers). Preliminary data for the June quarter suggest that the growth in imports has been sustained.

The balance of pressure on resources

Our *Monetary Policy Statements* over the past year have emphasised ongoing evidence of sustained pressure on the economy's productive resources. That pressure looks to have been maintained over recent months, given continued strong activity. The June Quarter Survey of Business Opinion showed capacity utilisation of manufacturers and builders taken together⁵ to have remained at above average levels during the quarter (figure 23), while firms across all sectors reported increased difficulty in finding both skilled and unskilled labour

Figure 23
Indicators of capacity utilisation



Source: New Zealand Institute of Economic Research

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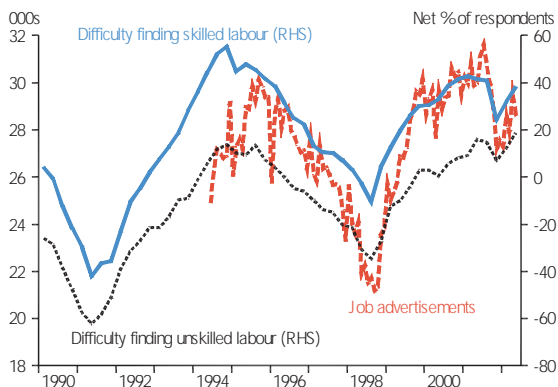
⁵ Capacity utilisation has eased in manufacturing over most of the past year, but has since started to increase again. Capacity utilisation in the building sector has been trending up over the period.

Table 1
CPI, CPI derivative series and other price measures
Annual percentage changes

	2000		2001		2002		
	Dec	Mar	Jun	Sep	Dec	Mar	Jun
CPI	4.0	3.1	3.2	2.4	1.8	2.6	2.8
Food	3.6	4.8	6.0	6.6	6.7	5.3	4.1
Housing	2.3	-0.5	-0.6	-0.6	-0.7	2.3	2.8
Household operations	1.4	2.0	2.2	2.5	1.4	1.5	2.7
Apparel	0.7	1.4	1.5	2.1	2.0	1.2	1.7
Transportation	7.0	4.1	5.5	1.0	-1.4	0.6	0.9
Tobacco and alcohol	9.2	9.6	6.8	3.7	3.5	3.3	3.8
Personal and health	4.3	5.6	4.4	4.5	4.3	3.7	4.1
Recreation and education	3.6	1.9	2.0	2.2	1.5	2.1	2.5
Credit services	2.2	-0.4	-6.9	-7.7	-8.5	-5.9	0.0
Derivatives and analytical series							
CPI ex food, petrol and government charges	3.2	3.6	3.4	2.9	2.6	2.4	2.7
CPI non-tradables	2.4	1.2	1.0	0.9	0.9	2.6	3.1
CPI tradables	5.4	4.9	5.2	3.8	2.5	2.5	2.5
CPI weighted median (of annual price change)	2.6	2.8	2.5	3.0	2.7	2.6	3.0
CPI trimmed mean (of annual price change)	3.4	2.8	3.1	2.4	1.9	2.5	2.9
Merchandise import prices (excluding petrol)	16.7	5.6	5.5	1.2	-4.4	-0.2	n/a
Private consumption deflator	3.7	2.5	2.9	1.7	0.7	1.0	n/a
GDP deflator (derived from expenditure data)	4.7	5.7	6.1	4.2	3.6	2.0	n/a

(figure 24). Indeed, the reported difficulty in finding non-skilled labour reached its highest ever level during the quarter.

Figure 24
Indicators of labour market tightness
(seasonally adjusted)



Source: ANZ Banking Group Ltd, New Zealand Institute of Economic Research

Anecdotal evidence suggests that labour shortages may be most pronounced in parts of the South Island, especially some provincial centres whose economies have strengthened over the past couple of years on the back of very strong export earnings from primary products. Given slower rates of working age population growth than in the urban areas, unemployment rates in some of these centres have been very low.

Another perspective on the intensity of resource usage can be gleaned from a comparison of actual output with its trend or estimated potential level. While rapid growth in the working age population brought about by high net migration and increased labour force participation may have lifted the economy's capacity to grow without generating inflation, actual output growth has outpaced that lift. The strong increase in GDP over the March quarter, together with indications that growth remained robust in the June quarter, suggest ongoing pressure on productive resources.

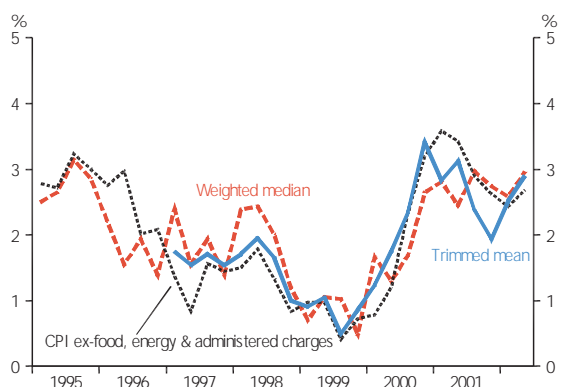
Inflation developments

For monetary policy purposes, a key focus is core or persistent inflation — the general trend in prices — after allowing for 'one-off' or unusual movements within the CPI data or particular price movements that monetary policy ought not to respond to (such as fluctuations in fruit and vegetable

prices). Against the background of ongoing pressure on the economy's productive resources, most indicators of core inflation pressures have been notably strong over 2002. Most of these indicators rose sharply over 1999-2000 from around the 1-1½ per cent mark to around the 3 per cent mark, largely in response to the sharp fall in the exchange rate. The effect of the low exchange rate on prices is now likely to have largely dissipated, but broad inflation measures have not fallen in a sustained fashion. On the contrary, a number of indicators have been edging up again recently, consistent with recent stronger than expected domestic activity and ongoing pressure on resources noted above.

We look at a range of indicators in assessing developments in core inflation (figure 25). Among these indicators are the weighted median of annual changes in the CPI and the trimmed mean. Each of these measures represents an alternative means of filtering unusual movements from the CPI data. The weighted median was 3 per cent for the year to June, up from 2.6 per cent in March. This was the highest movement since the middle of 2001, at which time it was likely to have been affected by the impact of the fall in the New Zealand dollar. The trimmed mean of annual changes was at 2.9 per cent in June, up from 2.5 per cent in the March quarter.

Figure 25
Indicators of core inflation
(annual percentage change)



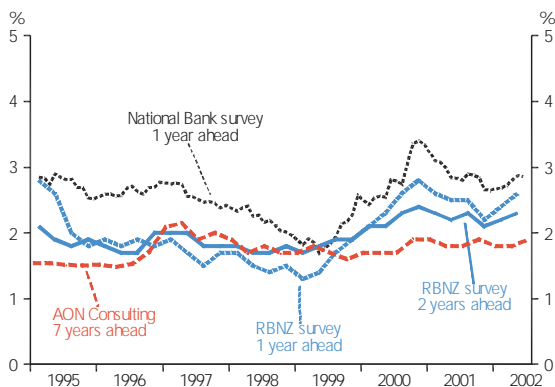
Source: Statistics New Zealand, RBNZ calculations

An alternative perspective on core inflation, may be gained by excluding known volatile items and items not amenable to influence from monetary policy from the CPI measure. One such measure is the CPI excluding food, energy and administered charges. This measure has also accelerated

in the latest quarter rising to 2.7 per cent in the year to June from 2.4 per cent in the year to March.

An examination of the breakdown of CPI inflation into tradables and non-tradables (see figure 1, p. 3) suggests that the rise in core inflation is coming mainly from non-tradables. Given greater than normal pressure on the economy's

Figure 26
Expectations of inflation



Source: National Bank of New Zealand, RBNZ, AON Consulting New Zealand Ltd

resources over the past two years, some inflationary pressures are likely to have accumulated within a number of industries. Some of the increase in non-tradables inflation could also reflect the gradual seepage of inflation pressure from the tradables sector connected with the decline in the exchange rate over the 1998-2000 period, although the extent of this seepage will itself depend partly on the strength of trading conditions. However, while non-tradables inflation has picked up, it remains rather lower than the levels seen during the mid-1990s. Though annual tradables inflation has fallen from its peak last year, there continues to be a solid element of inflation pressure from tradables, associated with the recent relatively strong domestic trading conditions.

Consistent with the rise in non-tradables inflation to around 3 per cent, survey measures of inflation expectations (figure 26) suggest a pick-up in the persistent element of inflation. Inflation expectations accelerated following the exchange-rate inflation spike in early 2001. Although they have eased from their highs at that time, they have drifted up a little over recent times and remain higher than was the case a few years ago.

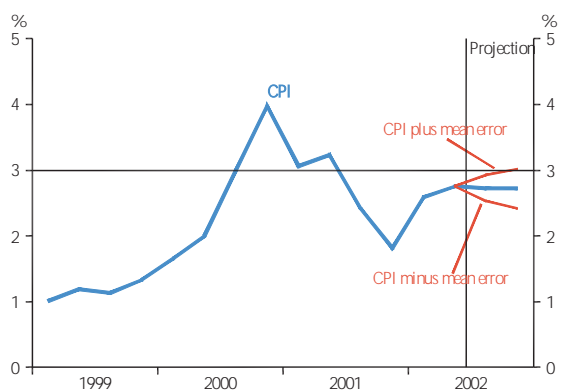
Turning to the specifics of recent headline inflation outturns, the CPI rose by 1.0 per cent in the June quarter (2.8

per cent for the year), which was in line with market expectations, and close to our May *Statement* expectation of 1.1 per cent. Surprises on the downside came from food prices, home ownership, and used cars. The drop in food prices was stronger than expected partly due to improved growing conditions for fruit and vegetables, which allowed supply to rise. Meat, fish and poultry also fell over the quarter, with the fall in meat prices probably being due to lower prices for beef exports and the stronger currency.

On the upside, household appliances and furnishings prices showed their third strongest quarterly rise since the beginning of the 1990s, and expenses of dwelling purchases showed robust growth. Also, personal goods and services prices rose quite strongly, as did apparel prices and healthcare. While the cause of this strength is unclear, stronger trading conditions in retailing could possibly be leading to a further widening of margins. In the case of personal services and healthcare, it is also possible that higher labour costs are contributing to the stronger growth this quarter.

At this stage, we expect the CPI to rise by around 0.6 per cent in the September quarter, giving an annual increase of 2.7 per cent. Based on our analysis of one and two-quarter ahead forecasting errors, there remains a risk that annual inflation over the next two quarters could touch or exceed 3 per cent (figure 27).

Figure 27
Near-term CPI inflation forecast
(annual percentage change)



Source: Statistics New Zealand, RBNZ calculations

Recent wage data provide mixed signals about the behaviour of labour costs. The Quarterly Employment Survey (QES) measure of average hourly earnings showed no change during the second quarter of 2002 and was up just 1.6 per

cent from a year earlier. The alternative Labour Cost Index (LCI) rose 0.5 per cent for the quarter and was up 2.1 per cent on a year ago. It appears that the QES measure has been affected by compositional changes created by rapid growth in employment in some sectors, with employees being

hired at below average wages. When that effect is taken into account, it is likely that underlying wage movements have been somewhat stronger than the QES measure suggests, but that underlying wage growth has been relatively moderate, given reported shortages of skills and labour types.

Chapter 4

The Macro-economic outlook

Overview

Chapter 3 noted signs of pressure on the economy's productive resources over the first half of 2002, reflecting continued robust demand conditions, with some evidence of an increase in inflation pressures emanating from the non-tradables sector. However, it also noted that there were some signs that demand conditions may have softened very recently.

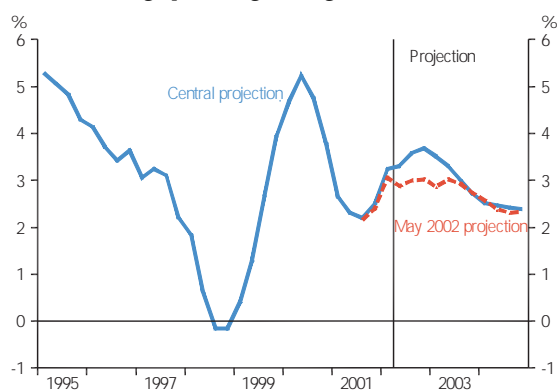
This assessment is an important starting point in our deliberations about the policy outlook. But in reaching a view about appropriate monetary policy settings, we need to consider those factors likely to be shaping economic activity and inflation pressures over the period ahead. This chapter sets out an analysis of the forces expected to impact economic conditions over the next year or so, and lays out a central scenario for the economy (represented numerically in the appendix to the chapter). It bears emphasising that our policy decisions do not hinge mechanically on the projections. On the contrary, a range of judgements must be made when setting policy, many of which are not readily encapsulated by the projections. A flavour of some of these judgements was given earlier in Chapter 2.

Our May *Statement* suggested that a range of influences would act to provide a braking effect on economic activity over the next two years, helping to lower inflation pressures. These factors included the lagged effects of the increase in interest rates over 2002, a rising exchange rate, the flow-on effects of recent weakness in trading partner activity, and an assumed slowing in the recent very strong pace of population growth. However, taken alone these influences looked likely to be insufficient to keep inflation within the target band, especially given the expectation that a recovery in global activity was underway. Accordingly, an upward path for short-term interest rates was projected for the period until mid 2003, with interest rates ultimately moving to a position of restraint on activity. Even so, CPI inflation was projected to average just under 2½ per cent over the next two years, slightly below the average inflation rate over the past two years.

In the revised projections presented here, we show a lower track for short-term interest rates over the next 18 months than in the May *Statement*, with only a modest further increase projected. This revision primarily reflects our

assessment that recent developments in the global economy — emanating from the very sharp decline in equity markets over the past couple of months — are likely to restrain New Zealand's economic activity through a variety of channels (figure 28 highlights the projected GDP growth profile).

Figure 28
GDP
(annual average percentage change)



Source: Statistics New Zealand, RBNZ calculations

The world economy

Consensus Forecasts for growth in New Zealand's 14 main trading partners were, in aggregate, revised up slightly between April and July, with projected growth in GDP for these countries a little higher for 2002 — primarily reflecting improved near-term growth prospects for the Asian economies. These latest forecasts are consistent with these countries progressively reabsorbing existing surplus capacity over the next 18 months.

These forecasts may provide some guide to future trading partner growth prospects, but the path of global activity may well be affected by the recent marked fall in international equity markets over the past six weeks. In order to capture this possibility in our central projections, we have scaled back the annual average growth rates suggested by the July *Consensus Forecasts* by approximately 10 per cent as a basis for preparing our own projections (figure 29 and Table 2). While this scalar is essentially arbitrary, and does not purport to represent a forecast in its own right, it is a convenient way to build in the assessment that the balance of risks to global

Table 2
Forecasts of export partner growth*
(calendar year, annual average percentage change)

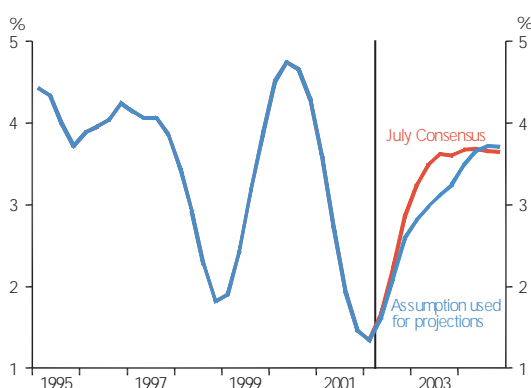
Country	2000	2001	2002f	2003f
Australia	3.1	2.6	4.0	3.8
United States	4.1	1.2	2.8	3.6
Japan	2.2	-0.5	-0.4	1.1
Canada	4.5	1.5	3.5	3.7
Europe - 4**	3.2	1.8	1.4	2.7
Asia ex-Japan***	8.7	1.8	4.9	5.9
14 Country index	4.3	1.5	2.9	3.6
14 country index (assumption used in our projections)	4.3	1.5	2.6	3.3

* Source: Consensus Economics Inc.

** Includes Germany, France, Italy, and the United Kingdom.

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

Figure 29
Forecast of export partner growth
(annual percentage change in real GDP of NZ's main
export partners)



Source: Consensus Economics Inc., RBNZ calculations

growth may be on the downside relative to current *Consensus Forecasts*. Although our trading partner growth assumptions are lower than in our May projections, the assumed growth profile is still one of gradual recovery. We have not assumed a 'double-dip' outlook for US or world growth (whereby growth peters out after a brief recovery), as some international analysts have suggested could eventuate.

Tradables sector activity

Export volumes over the first half of 2002 have been stronger than we expected, reflecting strong agricultural production⁶. But over the coming quarters we project only moderate growth in exports as the assumption of a more muted global

recovery and further trend appreciation in the New Zealand dollar take effect. In essence, these projections incorporate a more marked cycle in export volume performance than in our *May Statement*.

In preparing our projections for exports, we rely heavily on information provided by the major primary sector agencies and companies, which incorporate a view on factors such as climatic conditions, stock-building preferences and productivity. In aggregate, this information suggests modest growth in agricultural and other primary export volumes over the next few years. No major climatic disruptions to agricultural production have been assumed in these projections. Current expert thinking is that the climate is likely to be temperate throughout the crucial spring period and recent rainfall has been above average in many regions. We are aware of the increased risk of dry conditions further ahead, given the development of El Nino conditions, but it appears too early to draw firm conclusions at this point.

We project modest growth in manufactured and services exports over the next two years. The weaker outlook for global demand will act as a moderating influence on volume growth, although the performance of individual regional markets may vary significantly. For example, the current

⁶ Note that strong exports in the first half of the year have the effect of boosting projected *annual average* growth rates for exports over the coming year even though more modest *quarterly* growth rates are projected from the second half of 2002 onwards. Stronger-than-expected primary production is also one reason why near-term annual average GDP growth is actually projected to be stronger than in the May projections.

Box 3

Forecasting Methodology

In contrast to the approach often taken by other official forecasters, our projections are not based on a 'constant' monetary policy setting (i.e. a given level of short-term interest rates). Instead, we make projections for monetary conditions that adjust in response to the various forces impacting on inflation.

In essence, we're asking the question: how much might monetary policy need to change — and in what direction — in order to keep inflation within the target band?

This approach can sometimes lead to confusion — readers occasionally remark that monetary policy actions seem unnecessary since the Bank's own projections show inflation remaining comfortably within the target band, whereas it is precisely because of the assumed monetary

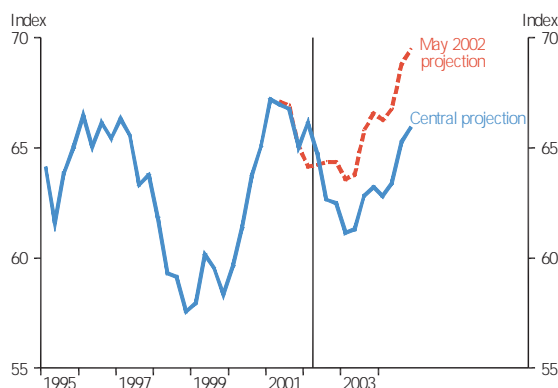
policy actions that inflation remains within the target band. Thus, although our assessment of underlying demand pressures may alter through time, much of the variation tends to show up in the projected interest rate profile, rather than in the interest-rate sensitive components of demand (such as consumer spending). We may take the view, for example, that the drivers of consumption spending are stronger than previously thought, but to the extent that the higher demand pressures are reflected in a higher forward interest rate track, the projected consumption growth path may only increase modestly.

Readers therefore need to bear in mind that our projections for economic activity and inflation are essentially how we project the economy to evolve, *incorporating* the effects of monetary policy adjustments along the way, rather than allowing monetary policy to 'stand back'.

relatively robust demand conditions in some Asian economies could work to the advantage of some export markets, such as tourism. An assumed gradual rise in the exchange rate in trade-weighted terms also acts as a constraint on the overall pace of export expansion in these projections. However, it is important to realise that the influence of exchange rate developments on individual firms and regional markets may vary greatly. For instance, the sharp rise in the New Zealand dollar relative to the Australian dollar over recent months could act as a brake on manufactured export growth into Australia — a key market for some New Zealand products. However, for those markets against whose currencies the New Zealand dollar has shown little increase — such as the euro, yen and British pound — exchange rates should exert less of a braking effect on exports.

Despite the expectation of further growth in export volumes, in these projections aggregate export *earnings* register a relatively sharp fall over the coming year as the recent fall in world export prices, especially for dairy products, takes effect and as the exchange rate continues to rise. World export prices are expected to recover later in the projection horizon (figure 30), but the more muted global recovery and the rising exchange rate⁷ combine to produce only modest increases in New Zealand dollar prices over this latter period.

Figure 30
World export prices



Source: RBNZ

In these projections, import volumes grow at rates considerably faster than for GDP as a whole. In large part, this reflects the significantly stronger starting point for private consumption spending and recent indications that a larger proportion of this demand has been met through foreign output. Recent lower than expected import prices, along

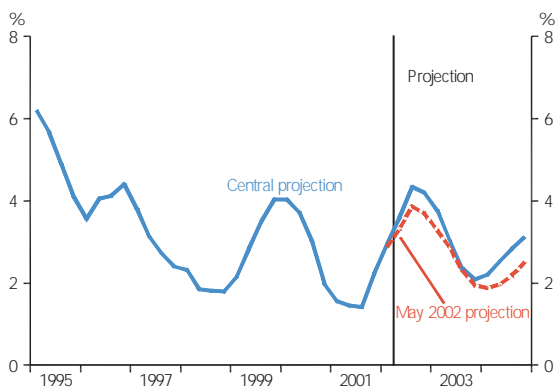
⁷ As in previous projections, we continue to make the technical assumption that the exchange rate appreciates gradually back towards its long run equilibrium. This is purely an assumption and does not purport to be a forecast of the exchange rate.

with our technical assumption of a rising exchange rate, all continue to tip the balance in favour of somewhat stronger import demand (for any given level of expenditure).

Domestic spending

The slowdown in external sector performance foreshadowed in these projections is a major channel through which domestic economic activity is expected to slow from its recent frenetic pace. Lower exporter incomes will be gradually transmitted into reduced household and business expenditures, alleviating much of the current demand pressure on resources discussed earlier. Growth in private consumption is expected to slow relatively markedly over the coming year (figure 31), while growth in business sector investment is also projected to moderate. It is likely that this channel will operate somewhat unevenly throughout the economy: initially at any rate, the biggest impact may be seen in rural economies as the slowdown in agricultural export earnings becomes apparent.

Figure 31
Consumption growth
(annual average percentage change)

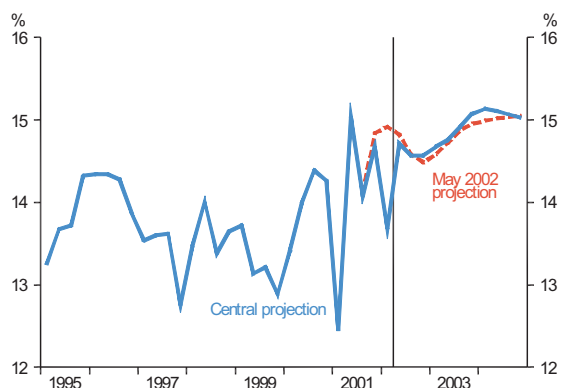


Source: Statistics New Zealand, RBNZ calculations

However, international trade linkages are not the only external drivers of the domestic activity outlook. We have also made specific allowance for the likelihood of some 'wealth' and 'confidence' effects on business and consumer spending arising from the recent marked decline in global equity prices. Multi-national investment policies could potentially tighten in the current, more uncertain international climate, with possible ramifications for New Zealand

businesses. Increased corporate risk aversion arising from recent ructions in financial markets and the global corporate scene may act to constrain business investment spending to some degree, though the magnitudes are highly uncertain. We have balanced these risks against indications that recent investment has held up a little better than expected – hence our investment profile is little changed from May (figure 32). A sharp fall in the market value of New Zealanders' equity holdings abroad (both individual holdings and those held on investors' behalf in managed funds) could also act as a brake on consumer spending.

Figure 32
Business investment
(percentage of GDP)



Source: Statistics New Zealand, RBNZ calculations

Another key influence on the domestic economy over the next few years will be the rate of population growth, which we assume will slow gradually over the next two years. High net immigration over the past 12 months has added both to the economy's capacity to produce (as the labour supply has expanded) and to the demand for goods and services. To date, we assess that the demand effects have been greater than the boost to supply, with extra pressure created on areas such as housing demand. Our projections assume that net immigration gradually tapers off (to a net annual increase of around 10,000 persons by the end of the projection horizon). That outlook would imply that the positive impulse to demand from population growth will gradually dissipate, although current demand pressures (eg in terms of new housing and infrastructure) will take some time to abate. In particular, residential investment activity is expected to remain robust over the next 18 months.

Fiscal policy

Our projections of the fiscal position - and the contribution of the government's fiscal operations to economic activity - are based on the Treasury's latest forecasts prepared ahead of the election.

The operating balance is projected to remain in surplus throughout the projection period, with surpluses approaching 3 per cent of GDP by the 2003/04 fiscal year. This is a slightly stronger outlook than in the *May Statement*, but reflects the carry-over of somewhat stronger fiscal revenues over 2002 than previously anticipated into the projections for the outer years.

After allowing for capital expenditures, which are not included in the operating balance, fiscal policy exerts a mild contractionary influence on the economy over the projection period, with the influence of the government's operations on demand lagging growth in private sector components of demand.

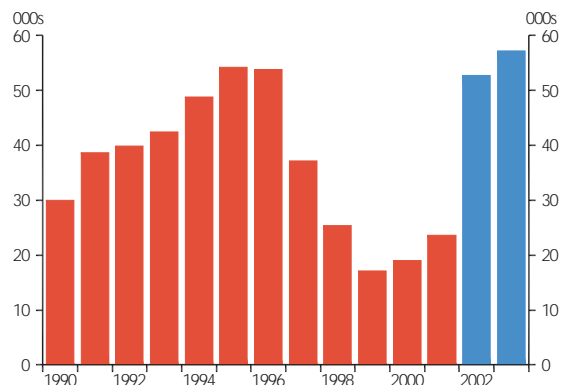
Inflation and monetary policy

These projections reflect some significant changes in the economic backdrop since our *May Statement*. Global equity market conditions have shifted markedly — for the worse — over the past few months and this points to a rather weaker external contribution to demand than we previously anticipated. As a result, the stresses on productive resources — which appear to have generated some lift in core inflation pressures recently — are projected to subside, with less action required on behalf of monetary policy than we projected in May.

Indeed, on the basis of only a modest further increase in short-term interest rates between now and the middle of 2003, annual inflation is projected to average around 2 per cent over the period until March 2005. This is a level consistent with average inflation over the last 10 years, and with surveyed expectations and financial market prices. The projected inflation track is slightly lower than in the May projections, largely reflecting the expected contribution from the weaker external sector.

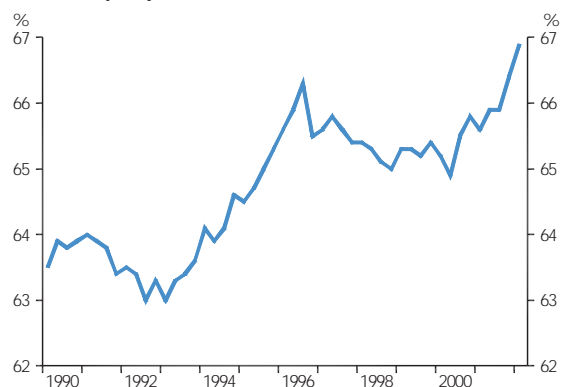
In assessing the likely path of inflation, we need to continually assess the economy's inflationary response to

Figure 33
Labour supply⁸
(annual additions to working age population)



Source: Statistics New Zealand, RBNZ calculations

Figure 34
Labour force participation rate
(seasonally adjusted)



Source: Statistics New Zealand

growth in activity. This is not simply a mechanical exercise of identifying a certain growth rate or speed limit for the economy beyond which inflation will emerge. Rather, it is as much about assessing the *degree* of inflationary response over time. These projections incorporate a slightly more muted inflationary response from the economy than some past historical relationships might have suggested. That is not to suggest an absence of inflationary pressure at present. On the contrary, as noted in Chapters 2 and 3, actual inflation outcomes have been close to the top of the 0 to 3 per cent target band and there is evidence that core inflation has been picking up recently – especially within the non-tradables sector. But following a sustained period of above-trend growth — during which a range of indicators have pointed to intense pressure on resources — actual inflation outcomes have been

⁸ 2002 and 2003 are based on RBNZ projections.

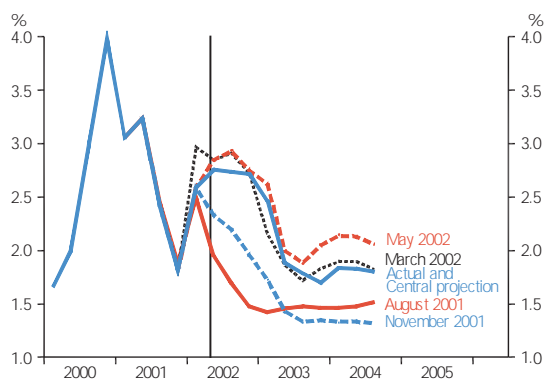
somewhat more muted than history may have led us to believe.

In part, judgements about a more muted inflation response reflect the flow of information on the effective level of productive resources in the economy. Growth in the labour supply has proven a little faster than we envisaged earlier in the year. Net inflows of migrants have been higher than we expected, leading to stronger growth in the working age population (figure 33). In addition, over recent quarters, a significantly larger proportion of the working age population has opted to participate in the labour force (taking up employment or actively seeking work). This increased participation (figure 34) is likely to have reflected the ongoing strength in the labour market (making employment easier to find). Both factors will have helped to boost the economy's capacity to grow without inflation, by helping to alleviate shortages of skilled and non-skilled labour to some degree.

Our CPI inflation projections incorporate a relatively benign contribution from the labour market, with labour cost pressures falling gradually alongside more subdued output growth. We make this judgement because this is how wages have evolved over recent years, despite sustained evidence of shortages in the supply of both skilled and unskilled labour, which could at some point be reflected in stronger wage movements.

We have sought to anticipate some of the downside risks to the global growth outlook emanating from recent financial market developments. Our projections make allowance for both direct trade effects from weaker global growth and from non-trade linkages from weaker equity markets on domestic spending patterns. However, we recognise the difficulty in quantifying the likely magnitude of such effects. However, many of the drivers of previous projections are also operating here. Our technical assumption of a gradually rising exchange

Figure 35
CPI inflation projections⁹
(annual percentage change)



Source: Statistics New Zealand, RBNZ calculations.

rate is also contributing to alleviating demand pressures (and directly reducing prices via lower import prices). Finally, the assumption of a return to more 'normal' rates of population growth also has a major shaping effect on the profile of demand.

In these projections, sectoral inflation pressures – such as those originating from the construction and services sectors – implicitly taper off conveniently in line with the more subdued demand conditions. However, the recent strength in non-tradables inflation (figure 1) serves as a reminder that such pressures could prove stronger and more durable than we have allowed for even in the event that demand conditions soften as projected. Figure 35 shows that our projections of inflation over the past year have, if anything, proven a little optimistic, with successive *Statements* sporting a higher starting point for inflation than the last. Although the economy's capacity to grow without generating inflation has proven stronger than we thought, so too has its actual growth performance.

⁹ Shown are the published inflation projections prepared on the assumption that economic activity and the exchange rate would evolve as assumed.

Appendix 1¹

Summary tables

Table A

CPI inflation projections and monetary conditions

(CPI is in percentage changes)

		CPI* Quarterly	CPI** Annual	TWI	90-day bank bill rate
1996	Mar.	0.6	2.1	64.2	8.7
	Jun.	0.8	2.3	64.6	9.7
	Sep.	0.3	2.3	65.6	10.0
	Dec.	0.6	2.4	67.1	8.9
1997	Mar.	0.2	2.0	68.4	7.5
	Jun.	0.3	1.5	68.0	7.2
	Sep.	0.6	1.8	64.8	8.1
	Dec.	0.5	1.6	63.9	7.9
1998	Mar.	0.3	1.7	61.2	9.0
	Jun.	0.3	1.7	58.5	9.1
	Sep.	0.6	1.7	57.1	6.8
	Dec.	-0.1	1.1	56.0	4.6
1999	Mar.	0.2	1.0	57.6	4.5
	Jun.	0.5	1.2	59.1	4.7
	Sep.	0.4	1.1	56.7	4.8
	Dec.	0.2	1.3	54.4	5.4
2000	Mar.	0.7	1.7	54.1	6.0
	Jun.	0.7	2.0	53.4	6.7
	Sep.	1.4	3.0	50.1	6.7
	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
2003	Second Half Average	1/2	2 3/4	54	6
	First Half Average	1/2	2 1/4	55	6 1/4
2004	Second Half Average	1/2	1 3/4	55 3/4	6
	First Half Average	1/2	1 3/4	56 1/2	5 1/2
	Second Half Average	1/2	1 3/4	57 1/4	5 1/2

Quarterly projections

2001	Dec.	0.6	1.8
2002	Mar.	0.6	2.6
	Jun.	1.0	2.8
	Sep.	0.6	2.7
	Dec.	0.6	2.7

⁽¹⁾ Notes for these tables follow on page 29.

* This series is quarterly underlying inflation until the September quarter 1997, quarterly CPIX inflation from the December 1997 quarter until the June 1999 quarter, and quarterly CPI inflation thereafter.

** This series is annual underlying inflation until the September quarter 1997, annual CPIX inflation from the December 1997 quarter until the June 1999 quarter, and annual CPI inflation thereafter (adjusted by Statistics New Zealand to exclude interest and section prices from the September 1999 quarter to the June 2000 quarter).

Table B
Composition of real GDP growth

(Annual average percentage change, unless specified otherwise)

March year	Actuals										Projections				
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005					
Final consumption expenditure															
Private	3.6	3.8	2.3	2.2	4.0	1.6	2.9	3 ^{3/4}	2 ^{1/4}	3 ^{1/4}					
Public authority	4.9	1.7	8.2	-1.1	4.9	-2.2	1.9	1 ^{3/4}	3 ^{3/4}	1 ⁴					
Total	3.9	3.3	3.7	1.4	4.2	0.7	2.7	3 ^{1/4}	2 ^{1/2}	2 ^{1/2}					
Gross fixed capital formation															
Market sector:															
Residential	0.8	6.1	2.1	-15.1	21.8	-15.9	3.0	14 ^{1/2}	9 ^{3/4}	3 ^{1/2}					
Business	15.9	4.2	-3.2	2.6	0.7	7.4	7.5	5 ^{1/4}	4 ^{1/2}	2 ^{3/4}					
Non-market government sector	7.5	29.6	8.6	-13.6	8.1	-4.2	5.4	1 ^{3/4}	4 ^{1/2}	3 ^{1/2}					
Total	10.8	6.8	-0.7	-3.9	6.4	-0.1	6.3	7	5 ^{3/4}	3					
Final domestic expenditure	5.3	4.1	2.7	0.2	4.7	0.5	3.4	4	3 ^{1/4}	2 ^{3/4}					
Stockbuilding ⁽¹⁾	-0.1	-0.4	0.0	-0.6	1.4	-0.4	0.1	-1 ^{1/2}	0	1 ⁴					
Gross national expenditure	5.1	3.6	2.6	-0.4	6.1	0.1	3.5	3 ^{3/4}	3 ^{1/4}	2 ^{3/4}					
Exports of goods and services	2.3	4.5	4.1	2.8	7.0	6.4	1.0	6 ^{1/4}	3 ^{1/2}	2 ^{1/2}					
Imports of goods and services	6.9	6.5	2.8	2.2	11.3	0.4	2.5	6 ^{1/2}	6	3 ^{3/4}					
Expenditure on GDP	3.7	3.1	2.9	-0.2	4.8	2.0	3.0	3 ^{3/4}	2 ^{1/2}	2 ^{1/4}					
GDP (production)	4.1	3.1	1.9	0.4	4.7	2.6	3.2	3 ^{1/2}	2 ^{1/2}	2 ^{1/4}					
GDP (production, March qtr to March qtr)	4.1	1.8	0.4	2.7	5.6	1.0	4.0	3 ^{1/4}	2 ^{1/2}	2 ^{1/4}					
Potential output	4.0	3.6	2.9	2.5	2.5	2.7	3.0	3 ^{1/4}	3 ^{1/4}	3					
Output gap (% of potential GDP, year average)	1.9	1.4	0.3	-1.7	0.3	0.3	0.5	^{3/4}	^{1/4}	-1 ^{1/2}					

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

Table C
Summary of economic projections

(Annual percentage change, unless specified otherwise)

March year	Actuals						Projections			
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Price measures										
CPI*	2.1	2.0	1.7	1.0	1.7	3.1	2.6	2 1/2	1 3/4	1 3/4
Wages	3.6	4.0	2.6	2.7	1.9	3.1	2.5	3 1/2	3 1/4	3
Import prices (in New Zealand dollars)	-1.3	-4.6	2.9	2.7	11.2	7.4	-3.1	-3 1/2	3/4	3/4
Export prices (in New Zealand dollars)	-3.5	-6.3	4.2	-0.6	9.9	20.6	-3.7	-13	0	2
Monetary conditions										
90-day rate (year average)	8.8	9.0	8.0	6.2	5.2	6.6	5.4	6	6	5 1/2
TWI (year average)	62.2	66.4	64.4	57.3	56.1	50.4	50.3	54 1/4	55 3/4	57 1/4
Output										
GDP (production, annual average % change)	4.1	3.1	1.9	0.4	4.7	2.6	3.2	3 1/2	2 1/2	2 1/4
GDP (production, March qtr to March qtr)	4.1	1.8	0.4	2.7	5.6	1.0	4.0	3 1/4	2 1/2	2 1/4
Output gap (% of potential GDP, year average)	1.9	1.4	0.3	-1.7	0.3	0.3	0.5	3/4	1/4	- 1/2
Labour market										
Total employment	4.4	1.2	0.0	0.6	1.4	2.3	3.5	2	1 1/4	3/4
Unemployment rate (March qtr, s.a.)	6.2	6.5	7.2	7.2	6.4	5.4	5.3	5	5 1/4	5 1/2
Trend labour productivity (annual % change)	0.7	1.0	1.3	1.5	1.4	1.3	1.2	1	1 1/4	1 1/4
Key balances										
Government operating balance (% of GDP, year to June)	3.5	1.9	2.5	1.7	1.4	1.2	2	1 3/4	2 1/4	2 3/4
Current account balance (% of GDP, year to March)	-5.6	-6.1	-5.5	-4.2	-6.7	-4.7	-2.2	-4 1/4	-5	-5
Terms of trade (annual average % change)	-2.2	-0.8	-1.0	-0.4	-0.2	4.4	4.2	-7	-2 3/4	1
Household savings rate	-3.5	-2.5	-4.6	-4.2	-5.2	-3.7	-2 3/4	-5 1/4	-4 3/4	-5 1/4
(% of disposable income, year to March)										
World economy										
World GDP (annual average % change)	3.9	4.1	3.4	1.9	4.5	3.6	1.3	2 3/4	3 1/2	3 3/4
World CPI inflation	2.6	2.2	2.4	0.9	2.0	2.8	1.1	1 3/4	1 3/4	2

s.a. = seasonally adjusted

* This series is annual CPI inflation until the June 1999 quarter, and annual CPI inflation thereafter (adjusted by Statistics Zealand to exclude interest and section prices from the September 1999 quarter to the June 2000 quarter).

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 euro.
90-day bank bill rate	RBNZ. Defined as the interest yield on 90-day bank bills. Forecasts rounded to the nearest quarter per cent.
World GDP	Reserve Bank definition. 14-country index, export weighted. Projections based on <i>Consensus Forecasts</i> . Seasonally adjusted.
World CPI inflation	RBNZ definition and estimate: TWI trading partners' CPI inflation (euro-zone proxied by Germany), weighted by TWI weights. Projections based on <i>Consensus Forecasts</i> .
Import prices	Domestic currency import prices. <i>Overseas Trade Indexes</i> .
Export prices	Domestic currency export prices. <i>Overseas Trade Indexes</i> .
Terms of trade	Constructed using domestic-currency export and import prices. <i>Overseas Trade Indexes</i> .
Private consumption	<i>System of National Accounts</i> .
Public authority consumption	<i>System of National Accounts</i> .
Residential investment	RBNZ definition: Private sector and government market sector residential investment. <i>System of National Accounts</i> .
Business investment	RBNZ definition: Total investment less the sum of non-market investment and residential investment. <i>System of National Accounts</i> .
Non-market investment	RBNZ definition: The <i>System of National Accounts</i> annual nominal government non-market/market investment ratio is interpolated into quarterly data. This ratio is used to split quarterly expenditure GDP Government Investment into market and non-market components.
Final domestic expenditure	RBNZ definition: The sum of total consumption and total investment. <i>System of National Accounts</i> .
Stockbuilding	Percentage point contribution to the growth of GDP by stocks. <i>System of National Accounts</i> .
Gross national expenditure	Final domestic expenditure plus stocks. <i>System of National Accounts</i> .
Exports of goods and services	<i>System of National Accounts</i> .
Imports of goods and services	<i>System of National Accounts</i> .
GDP (production)	<i>System of National Accounts</i> .
Potential output	RBNZ definition and estimate. Refer to: Conway, P. and B. Hunt, (1997), 'Estimating Potential Output: a semi-structural approach', <i>Reserve Bank of New Zealand Discussion Paper, G97/9</i> .
Output gap	RBNZ definition and estimate: The percentage difference between real GDP (production, seasonally adjusted) and potential output GDP.
Current account balance	<i>Balance of Payments</i> .

Total employment	<i>Household Labour Force Survey.</i>
Unemployment rate	<i>Household Labour Force Survey.</i>
Household savings rate	<i>Household Income and Outlay Accounts.</i>
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.
Wages	Private sector ordinary time average hourly earnings. <i>Quarterly Employment Survey.</i>
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: Unless otherwise specified, all forecast data are rounded to the nearest quarter per cent.

Appendix 2

Chronology

Listed below are recent events of particular relevance to monetary policy and inflation.

2002

- | | |
|---------|--|
| 15 May | The Reserve Bank released its thirty-fourth <i>Monetary Policy Statement</i> , increasing the Official Cash Rate from 5.25 per cent to 5.5 per cent. The news release accompanying the <i>Statement</i> is reproduced in Appendix 4. |
| 28 June | Production GDP figures were released showing that the New Zealand economy grew by 1.1 per cent in the March quarter of 2002. |
| 3 July | At the intra-quarter review, the Reserve Bank increased the Official Cash Rate from 5.5 per cent to 5.75 per cent. The accompanying news release is reproduced in Appendix 4. |
| 15 July | CPI statistics were released for the June quarter showing that the CPI increased by 1.0 per cent over the quarter, and by 2.8 per cent over the year to June 2002. |

Appendix 3

Companies and organisations contacted by RBNZ staff during the projection round

3M New Zealand Ltd	Morgan Furniture Ltd
Ace Real Estate Ltd	Nelson Regional Chamber of Commerce Inc.
Axiam Group Ltd	No Suits Ltd
BJ Cocksedge & Co Ltd	NZ Council of Trade Unions
Brintons Christchurch Yarns Ltd	The NZ King Salmon Co Limited
Cambrian Engineering Co Ltd	Optimation New Zealand Ltd
Clelands Construction Ltd	Pacific Doors System Ltd
Colliers International New Zealand Ltd	Pacific Helmets (NZ) Ltd
Compaq Computer New Zealand Ltd	Palmerston North City Council
Croxley Stationery Ltd	Port Nelson Limited
CWF Hamilton & Co Ltd	Ports of Auckland Limited
Datacom Systems Ltd	Rembrandt Suits Limited
Ecolab Ltd	Richina Pacific Limited
Employers & Manufacturers Association (Northern) Inc.	Sanford Nelson
Export Institute of New Zealand Inc.	Steel & Tube Holdings Ltd
EziBuy Ltd	Suzuki New Zealand Ltd
Farmers Mutual Group	Talbot Plastics Ltd
Golden Bay Cement Ltd	Taranaki Sawmills Limited
Gough Technology	Toyota New Zealand Limited
Greens Industries Ltd	Waikato Federated Farmers
Interlock Industries Group Ltd	Wanganui District Council
Kidson Construction Ltd	Wanganui Newspapers
H.G. Livingstone Limited	Westgate Transport Limited
Lucky Petfood New Zealand Ltd	Wyatt & Wilson Print Limited
Mainzeal Property and Construction Limited	
March Construction Ltd	In addition to our formal meetings with the organisations listed above, contact was also made with a range of other companies and organisations.
MG Marketing	
Meco Engineering Co Ltd	
Milburn New Zealand	
Mitre 10 (New Zealand) Limited	

Appendix 4

Reserve Bank statements on monetary policy

Official Cash Rate increased to 5.5 per cent

15 May 2002

The Reserve Bank today increased the Official Cash Rate from 5.25 per cent to 5.5 per cent.

Reserve Bank Acting Governor Rod Carr commented " Demand conditions no longer warrant the degree of interest rate stimulus that seemed necessary late last year. The economy's ability to meet increasing demand without pressure on costs, margins and therefore prices appears limited. Core inflation is still at the upper end of the 0 to 3 per cent target band, leaving little headroom for price pressures to accelerate from here on.

" Pressures on resources look likely to be maintained in the foreseeable future. New Zealand's population is expanding rapidly with the sharp turnaround in net migration. Migration is contributing more to strong household spending, residential construction and housing market activity than it is to the availability of labour. And a recovery in global demand - although fragile in some respects - is now underway with Consensus Forecasts rather more optimistic than earlier in the year.

" The influences on inflation are not all operating in the same direction. The exchange rate has been rising and international prices for some key exports, such as dairy products, have fallen sharply. These factors, if sustained, will reduce domestic activity to some degree and help to dampen inflation pressures in due course.

" On-balance, in the absence of some further withdrawal of monetary stimulus, these factors together would place additional pressure on the economy's already-stretched resources, producing a rise in inflation pressures. Accordingly, today's decision is a further step in the process of reducing the interest rate stimulus that we put in place last year, when the outlook for the economy looked decidedly weaker.

" At this point, it appears likely that further increases in interest rates will be required over the year ahead, possibly to a greater extent than we projected in March. However, as discussed further in this Statement, the outlook is always subject to uncertainty. We will continue to monitor the range of influences on the inflation outlook and make the necessary policy adjustments," Dr Carr concluded.

OCR increased to 5.75 per cent

3 July 2002

The Reserve Bank of New Zealand today increased the Official Cash Rate from 5.5 per cent to 5.75 per cent, but also signalled that further increases were now rather less likely than was indicated in the Reserve Bank's May Monetary Policy Statement.

Reserve Bank Acting Governor Rod Carr commented: " Adjusting interest rates so that they no longer actively encourage accelerated spending makes sense, given that the momentum of the New Zealand economy seems at least as strong as anticipated in May. Retail sales are at near record growth rates, helped along by very robust immigration flows, a strong tourist inflow and export incomes, though they are declining, are still at historically very healthy levels. Given the weakness of the world economy, recent overall growth performance has been outstanding.

" Nonetheless, since May there has been a much sharper rise in the exchange rate than allowed for previously, which has had the effect of tightening monetary conditions. If the exchange rate appreciation is sustained, or goes further, some heat will be taken out of future inflation pressures, reducing the extent to which interest rates may need to rise in the months ahead.

" Working in the same direction, international news from equity markets in particular suggests that the US economic recovery has become more fragile, with implications for the global economy. Furthermore, there are promising signs that New

Zealand's inflation will peak in the next two quarters a little lower than earlier expected. Both factors will reduce inflation pressures further out.

"The balance of these factors will be the focus of the Bank's next full review, due with the Monetary Policy Statement on 14 August," Dr Carr concluded.

Dates for MPS/OCR announcements in 2003

24 July 2002

The following is the Reserve Bank's schedule for the release of its quarterly Monetary Policy Statements and Official Cash Rate announcements for 2003. Each Monetary Policy Statement includes within it an OCR announcement, so, in total, as usual there will be eight OCR announcements during 2003.

- 23 January OCR announcement
- 6 March Monetary Policy Statement
- 24 April OCR announcement
- 5 June Monetary Policy Statement
- 24 July OCR announcement
- 4 September Monetary Policy Statement
- 23 October OCR announcement
- 4 December Monetary Policy Statement

Please note that these changes involve moving the MPS release dates to the first week of each quarter, ensuring an even spread throughout the year. Also, all the announcements have been moved from Wednesdays to Thursdays to facilitate our printing and distribution processes.

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

Appendix 5

The Official Cash Rate chronology

Date	Change in OCR (basis points)	OCR (per cent)
17 March 1999	OCR introduced	4.50
21 April 1999	No change	4.50
19 May 1999	No change	4.50
30 June 1999	No change	4.50
18 August 1999	No change	4.50
29 September 1999	No change	4.50
17 November 1999	+ 50	5.00
19 January 2000	+ 25	5.25
15 March 2000	+ 50	5.75
19 April 2000	+ 25	6.00
17 May 2000	+ 50	6.50
5 July 2000	No change	6.50
16 August 2000	No change	6.50
4 October 2000	No change	6.50
6 December 2000	No change	6.50
24 January 2001	No change	6.50
14 March 2001	- 25	6.25
19 April 2001	- 25	6.00
16 May 2001	- 25	5.75
4 July 2001	No change	5.75
15 August 2001	No change	5.75
19 September 2001	-50	5.25
3 October 2001	No change	5.25
14 November 2001	-50	4.75
23 January 2002	No change	4.75
20 March 2002	+25	5.00
17 April 2002	+25	5.25
15 May 2002	+25	5.50
3 July 2002	+ 25	5.75

Appendix 6

Policy Targets Agreement

This agreement between the Treasurer and the Governor of the Reserve Bank of New Zealand (the Bank) is made under sections 9 (1) and 9 (4) of the Reserve Bank of New Zealand Act 1989 (the Act), and shall apply for the balance of the Governor's present term, expiring on 31 August 2003. It replaces that signed on 15 December 1997.

In terms of section 9 of the Act, the Treasurer and the Governor agree as follows:

1. Price stability

Consistent with section 8 of the Act and with the provisions of this agreement, the Bank shall formulate and implement monetary policy with the intention of maintaining a stable general level of prices, so that monetary policy can make its maximum contribution to sustainable economic growth, employment and development opportunities within the New Zealand economy.

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 12-monthly increases in the CPI of between 0 and 3 per cent.¹

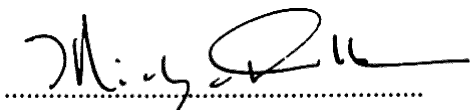
3. Unusual events

- a) There is a range of events that can have a significant temporary impact on inflation as measured by the CPI, and mask the underlying trend in prices which is the proper focus of monetary policy. These events may even lead to inflation outcomes outside the target range. Such disturbances 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 shall react in a manner which prevents general inflationary pressures emerging.

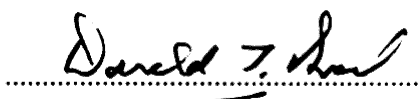
4. Implementation and accountability

- a) The Bank shall constantly and diligently strive to meet the policy target established by this agreement.
- b) It is acknowledged that, on occasions, there will be inflation outcomes outside the target range. On those occasions, 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 comes back within that range.
- c) 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.

d) The Bank shall be fully accountable for its judgments and actions in implementing monetary policy.



Hon Michael Cullen
Treasurer



Donald T Brash
Governor
Reserve Bank of New Zealand

DATED at Wellington, this 16th day of December 1999

¹ Statistics New Zealand introduced a revised CPI regime from the September quarter, 1999. Until the June quarter 2000, 12-monthly increases in the CPI will be calculated by comparing the new CPI series with the old CPI series adjusted by removing the impact of changes in interest rates and section prices. This adjustment is calculated by Statistics New Zealand. (Refer to the RBNZ's November 1999 *Monetary Policy Statement*, p 8, for details.)