
Monetary Policy Statement¹

December 2000

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

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ISSN 1170-4829

¹ Projections finalised on 17 November 2000. Policy assessment finalised on 5 December 2000.

1 Overview and policy assessment

The Reserve Bank has again decided to leave the Official Cash Rate unchanged at 6.5 per cent.

When the Bank finalised its last *Monetary Policy Statement* early in August, it was clear that CPI inflation would be approaching the top of our target band by the end of the year, driven by higher international oil prices and cigarette taxes, and by the fall in the exchange rate. It was also clear that the economy had slowed markedly during the first half of this year from the very rapid growth of the second half of 1999.

What was not clear was how the economy would respond to the stimulatory monetary conditions then prevailing. Would depressed business and consumer confidence yield to the buoyant world environment and low exchange rate, leading to a strong resurgence in economic activity and resultant medium-term pressures on the economy's capacity? Or would low levels of confidence become self-fulfilling, leading to slow growth and higher levels of unused capacity? The two scenarios had very different implications for medium-term inflation, and therefore for the direction in which interest rates would need to move.

Three months on, we believe that business confidence is set to strengthen, consistent with economic activity having picked up in recent months and being noticeably stronger in the second half of the year than the first. To be sure, some sectors remain subdued, and this is especially true of the residential construction sector. But in other sectors, most obviously those serving export markets, conditions are very buoyant, with widespread anecdotes of significant staff shortages. Unless economic activity in our major trading partners stalls, we believe that growth in New Zealand will pick up further as we go into 2001, supported by an exchange rate that is even lower than in August.

Three months on from August it is also clear that, in the short-term, annual CPI inflation will peak even higher than we judged likely in August, and indeed will well exceed the top of the target band for the next several quarters. Even so, stripped of the transient elements of the inflation story to do with international oil prices and cigarette taxes, CPI inflation remains well within the target range. In accordance with our longstanding agreement with Government, the Bank will continue to focus on the persistent elements of inflation and ignore the transient elements.

Inevitably, our degree of confidence that the temporary spike in inflation will not become persistent is affected by the

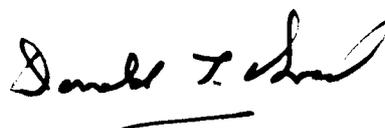
wider situation, including the degree of pressure on the nation's resources. Assuming the exchange rate appreciates modestly from its currently very low level, we believe that the pressure on resources associated with this growth resurgence can be kept in check with a gradual and – by historical standards – rather small firming of interest rates next year. That should, in our judgement, be sufficient to ensure that the current spike in inflation will prove transitory.

But, as always, there are risks. On the downside, there is the possibility that the world economy could slow by more than we presently expect. This could slow the New Zealand economy and reduce inflationary pressures. On this occasion, however, we see the upside inflation risks as rather greater. Not only have we assumed some appreciation of the exchange rate, but more importantly we have not allowed for as strong a response of economic activity to the low exchange rate as has been observed historically. If the exchange rate stimulus proves greater than we have allowed for, the need to increase interest rates will also be greater.

Such a situation would heighten another risk. We have assumed that employers and employees will not adjust their behaviour to reflect the temporary spike in the inflation rate. But if businesses attempt to restore their margins, or employees seek compensation for the increased price of cigarettes, petrol and other imported goods, then inflationary pressures will be more persistent and the need to increase interest rates commensurately greater.

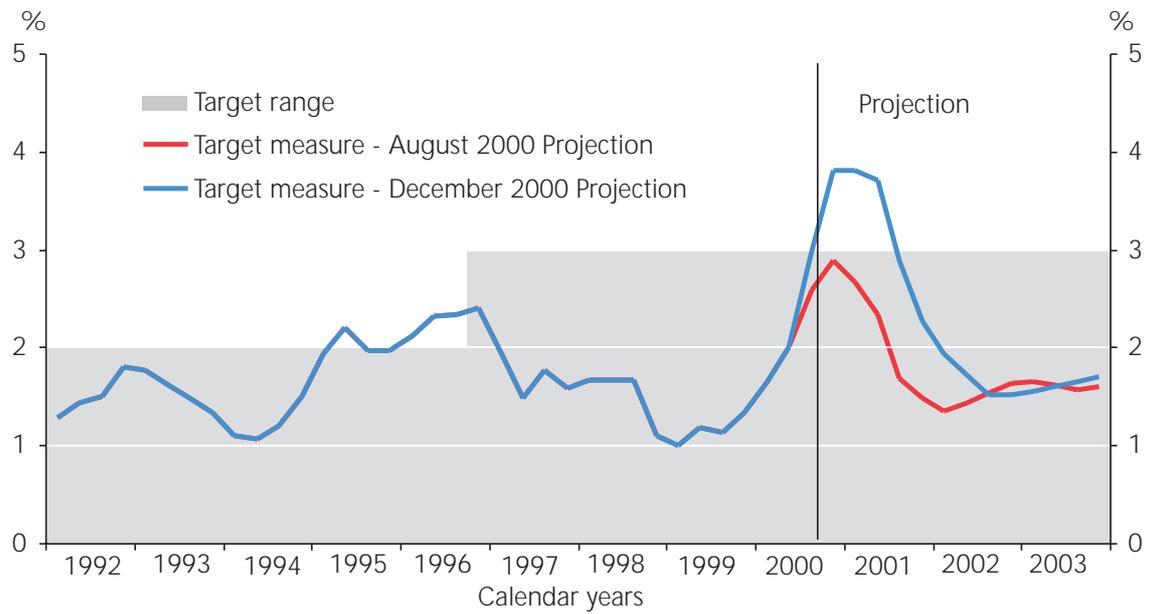
The reality is that the export and import-competing sectors are already operating close to capacity. They will only be able to grow further by attracting people and capital from other sectors of the economy. For this to happen without inflation, it will be important that growth in those other sectors of the economy, those not directly stimulated by the low exchange rate, remains relatively subdued.

In sum, somewhat higher interest rates are likely to be needed, but not quite yet, and the extent of the increase will depend very much on how the world economy evolves, on how the economy responds to the stimulus provided by the low exchange rate, and on the response of employers and employees to the near-term increase in the inflation rate.



Donald T. Brash
Governor

Figure 1
Consumer price inflation²
(annual percentage change)



² The target 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).

Table 1

Summary of economic projections

(Annual percentage change, unless specified otherwise)

March year	Actuals		Projections		
	1999	2000	2001	2002	2003
Price measures					
CPI*	1.0	1.7	4	2	1½
Wages	2.7	2.0	3	4	3½
Import prices (in New Zealand dollars)	2.7	11.2	9½	-4	0
Export prices (in New Zealand dollars)	-1.1	9.6	11	-4	0
Monetary conditions					
90-day bank bill rate (year average)	6.2	5.2	6½	7	7½
TWI (year average)	57.3	56.1	49½	49	51½
Output					
GDP (production, annual average % change)	0.0	4.2	2½	3½	3½
GDP (production, March qtr to March qtr)	1.8	5.1	1½	4	3½
Output gap (% of potential GDP, year average)	-1.8	-0.1	0	½	1
Labour market					
Total employment (annual % change)	0.6	1.4	1½	2	2½
Unemployment rate (March qtr, s.a.)	7.2	6.4	6	5½	5
Labour productivity (annual average % change)	0.0	2.2	1½	1½	1
Key balances					
Government operating balance (% of GDP, year to June)	1.8	1.4	1	2	2½
Current account balance (% of GDP, year to March)	-4.4	-7.1	-5½	-4½	-4½
Terms of trade (annual average % change)	-0.5	-0.1	-1	0	0
Household savings rate (% of disposable income, year to March)	-1.5	0.0	-1	-½	0
World economy					
World GDP (annual average % change)	1.2	4.2	4	3½	3½
World CPI inflation	0.9	2.0	2½	2	2
Quarterly projections					
	Mar-00	Jun-00	Sep-00	Dec-00	Mar-01
CPI (quarterly percentage change)	0.7	0.7	1.4	1.0	0.7
CPI (annual percentage change)	1.7	2.0	3.0	3.8	3.8

e = estimate.

s.a. = seasonally adjusted

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

Notes for this table are in Appendix 4.

Box 1 Policy Targets Agreement – Inflation outside the target band

We note elsewhere in this *Statement* that the inflation rate, measured using the CPI, reached the upper limit of the target band in the year to September, principally due to temporary effects such as the increase in international oil prices, the direct price effects of the exchange rate depreciation and the increase in tax on tobacco. It is also noted that the inflation rate is expected to exceed the upper limit of the target band on a 12-month basis in forthcoming quarters, again largely due to these temporary effects. The *Statement* sets out the Bank's reasoning for the judgement that the projected breach of the inflation target is attributable to temporary factors, and why we believe that the policy stance in place will be sufficient to ensure that these temporary factors do not lead to general inflationary pressures emerging in the economy.

The Policy Targets Agreement (PTA) between Minister of Finance and Governor contemplates situations where certain events can lead to inflation moving temporarily outside the target band and sets out the Bank's obligations when this occurs. This box outlines the approach adopted in the PTA and the Bank's obligations under it.

The PTA requires the Bank to formulate and implement monetary policy with the intention of maintaining a stable general level of prices. The specific objective is to maintain inflation, measured using the All Groups Consumers Price Index (CPI), within a range of 0 to 3 per cent on a 12-monthly basis.

The PTA notes, however, as previous PTAs have done, that there are several events that can have a significant temporary impact on inflation, as measured by the CPI, and that these events may, on occasions, lead to inflation moving outside the target band. It cites some illustrative examples of these events, including: exceptional movements in international commodity prices, changes in indirect taxes, significant government policy changes that directly affect prices, or a natural disaster affecting a ma-

ior part of the economy. These examples are not exhaustive and the PTA contemplates the possibility that other factors could result in the inflation rate temporarily moving outside the target band.

In this context, to the extent that movements in the exchange rate are projected to result in a one-time shift in tradables prices and not spill over into persistent inflation, then the consequential one-time shift in the CPI is also something that can be 'looked through'. Of course, it can be very difficult to discern what lies behind sharp exchange rate shifts (or, for that matter, changes in international commodity prices). And it can be difficult to assess whether the increase in prices is temporary (posing little risk of ongoing inflationary pressures), or one which might feed into persistent inflationary dynamics. But the PTA at least provides a framework for making these judgements, and for being accountable for them.

When a price shock occurs, the PTA requires the Bank to react in a manner that prevents general inflationary pressures from emerging, but does not require the Bank to seek to prevent the temporary effects that can arise from price shocks. This recognises that, even if it were always feasible to do so, it would not be desirable for the Bank to be required to hold inflation within the target band in all circumstances. If the Bank were required to keep inflation within the target band in all circumstances, this would impose potentially severe adjustment costs on the real economy, for little longer term gain. Rather, the PTA enables the Bank to look through temporary effects on prices, and instead, to focus its efforts on ensuring that temporary price effects do not lead to ongoing inflationary pressures.

Looking through temporary price shocks is consistent with clause 4(c) of the PTA. This clause requires the Bank, in pursuing the price stability objective, to implement monetary policy in ways that avoid unnecessary instability in output, interest rates and the exchange rate. If the Bank were expected to keep inflation within the target band in all circumstances, regardless of the factors causing an increase in prices, and regardless of whether the increase

in prices was likely to be temporary or more enduring, this would be inconsistent with the requirement contained in clause 4(c).

Where inflation moves outside the target band, or is expected to do so, the PTA requires the Bank to explain in

its *Monetary Policy Statement* why the breach of the target has occurred or is likely to occur. It also requires the Bank to state what measures it has taken, or proposes to take, to ensure that inflation comes back within the target range.

2 Recent developments and current economic situation

Our August *Statement* described some of the dominant developments influencing our current policy deliberations. Included among these developments were: (i) the prospect that CPI inflation would threaten the top of the 0 to 3 per cent target band; (ii) a significant (and unexpected) further fall in the exchange rate; and (iii) the prospect of slowing or even negative economic growth. Since then events have only served to reinforce the prominence of these developments. First, June quarter GDP fell by $\frac{1}{2}$ per cent more than estimated. Second, we now have an exchange rate (on a trade-weighted basis) that is around 3 per cent lower than we assumed for September 2000 and a new forecast for the December 2000 quarter that is 10 per cent lower than our August forecast. Third, we have had an increase in the consumer price index of 1.4 per cent in the September quarter, rather than the 1.0 per cent that was forecast.

Other data received since August have been very noisy and reflective of an economy growing in an uneven manner, with the export and import-substituting sectors outperforming the domestic sector.

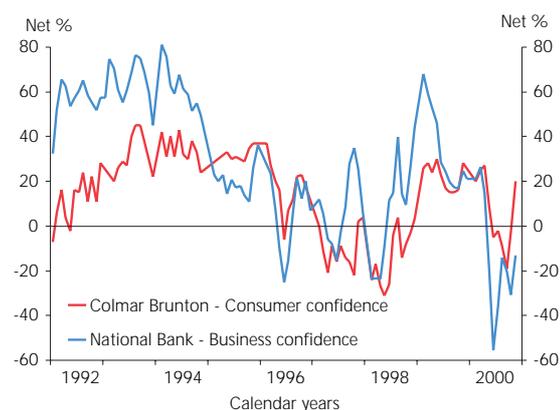
This chapter discusses the Bank's assessment of the current state of activity and inflation, in light of these developments. Our updated medium-term projection for growth, inflation and monetary conditions is presented in Chapter 3. Some of the important policy issues that we had to address in arriving at the OCR decision announced with this *Statement* are discussed in Chapter 4.

Current activity

A combination of factors, including a sharp deterioration in sentiment, has led to uneven economic activity through 2000, with considerable contrasts between the situation in different sectors. The fall in confidence, to the point where pessimists significantly outnumbered optimists, seemed to be initially associated with prospective changes in labour legislation and other policy announcements, higher interest rates, and parallel falls in confidence across the Tasman. Latterly, the weakness of the New Zealand dollar and the patchy domestic economy may have contributed to a protraction of the weakness in confidence. More recently still, there has

been an improvement in business and consumer confidence (Figure 2).

Figure 2
Business and consumer confidence³
(optimists minus pessimists, percentage expecting better general economic conditions in 12 months time.)



In our August *Statement*, we expected growth to be mildly negative in the June 2000 quarter, followed by a modest pick-up in the September quarter. In the event, June quarter GDP fell by 0.7 per cent.⁴ Following last year's pattern, we believe that a reasonably strong bounce-back occurred in the September quarter, leaving the overall level of economic activity at nearly the same level as that anticipated in our August *Statement*.

The weaker-than-expected June quarter GDP outturn was influenced by sluggish residential construction and slower primary food manufacturing. As anticipated in August, residential investment fell by nearly 25 per cent in the June quarter to levels more consistent with the low number of building consents being issued. Primary food manufacturing made a negative contribution to the June quarter growth in GDP of 0.2 per cent, due partly to an early 'drying off' of dairy herds in some regions.

³ Source: National Bank of New Zealand, Colmar Brunton.

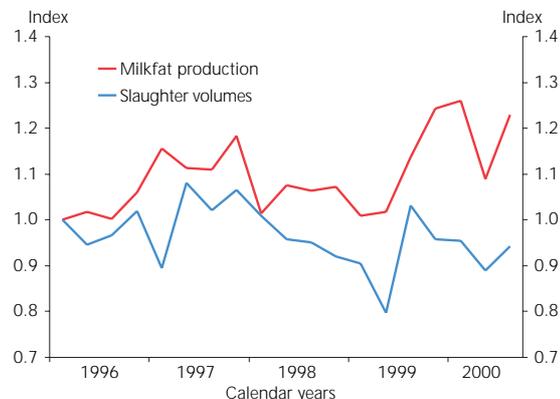
⁴ Statistics New Zealand have revised the fall in June quarter GDP to 0.9 per cent in their upgrade of New Zealand's National Accounts. Our projections were finalised before this upgrade was released. The revision made during this upgrade has not significantly altered the historical path of GDP and so no adjustments to our projections are warranted.

Our judgement is that following the brief interruption in the June quarter, the economy has started growing again – helped by a competitively-placed export sector. Over the second half of this year, we expect that the economy will have expanded by around 1½ per cent.

However, growth in the near term will not necessarily be smooth, nor even across different sectors. Picking the near-term direction of the economy with any degree of precision is made difficult by noisy data and inconsistent indicators. Meanwhile, the dichotomy between the rural and urban parts of the economy widened as the year progressed, primarily reflecting the disparity between domestic and external demand. Signs are that this disparity is likely to persist over the near term.

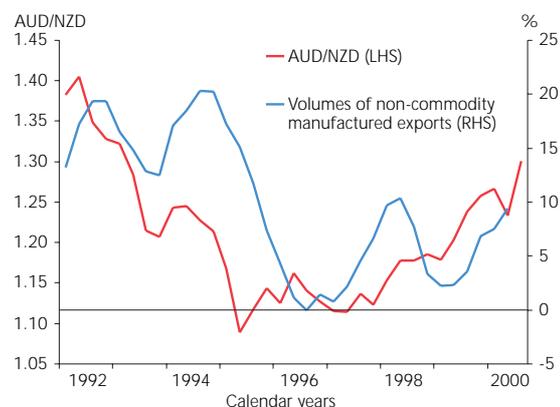
Part of the reason the export sector has been doing so well is simply that the low exchange rate means that export revenues – in New Zealand dollar terms – are very strong. Generally favourable weather conditions (at least up until relatively recently) and improved primary commodity prices in the international market have also played their part. Certainly, mild, wet, weather in most dairy regions saw a good start to the dairying season, with milkfat volumes bouncing back from the June quarter interruption. The meat industry is also expected to be reasonably strong, with the September quarter slaughter numbers rising by about 6 per cent – although this is not as large as the nearly 30 per cent increase seen at the same time last year when farmers delayed some of the normal pre-winter slaughtering (Figure 3). All in all, it seems that the primary sector has boosted growth in the second half of the year.

Figure 3
September quarter primary sector growth indicators⁵
(seasonally adjusted: March 1996 quarter = 1)



More significantly for the future, we are now starting to see signs that the low exchange rate is encouraging growth in the volume of other exports. Non-commodity manufactured export volumes are currently expanding by over 10 per cent (on an annual basis), which is what we might reasonably expect given the level of the New Zealand dollar against the Australian dollar (Figure 4).

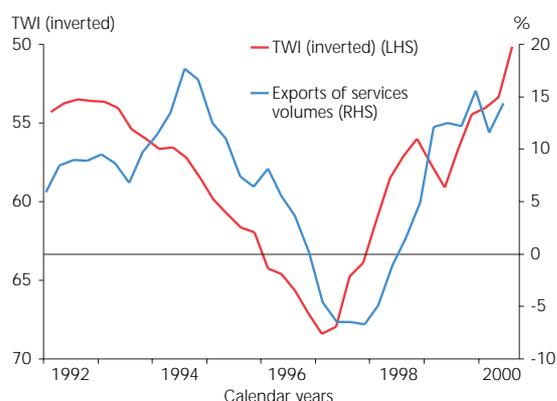
Figure 4
Non-commodity manufactured exports and the AUD/NZD exchange rate
(exports: annual average percentage change)



⁵ Source: New Zealand Dairy Board, Statistics New Zealand.

Exports of services have also picked up strongly as the exchange rate has depreciated. Exchange rate movements generally feed more quickly into exports of services than of goods, because of the additional responsiveness of tourist spending to changes in prices. In fact, there is a roughly contemporaneous relationship between the TWI and the real export of services (Figure 5).

Figure 5
Exports of services and the TWI
(exports: annual average percentage change, TWI inverted)

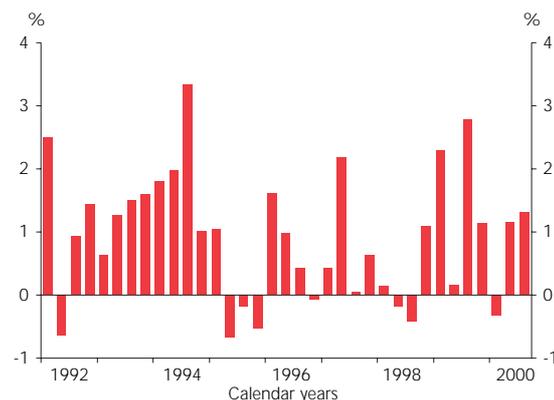


However, despite the improved export growth, *net* exports have not yet made a sizeable contribution to GDP growth because imports have continued to grow strongly. As Chapter 4 indicates, we expect the balance to shift towards positive net export volumes over the forecast period, due to both increased exports and a slowing in import demand.

The domestically-oriented side of the economy has been weaker than the internationally-oriented side and this is reflected in sluggish residential investment and the overall growth profile of consumption. Despite weak consumer confidence, consumption probably grew by over half a per cent in the September quarter, but may be slightly weaker in the December quarter. Our view of this consumption profile is premised on the fact that real retail (excluding auto components) spending was reasonably strong in the September quarter (Figure 6), which was something of a surprise in view of the weak confidence and the squeeze on disposable incomes from higher petrol prices. But, given that some consumption was probably brought forward in response to 'beat the price rise' advertising, we believe that some of this spending will be unwound during the December quarter, leav-

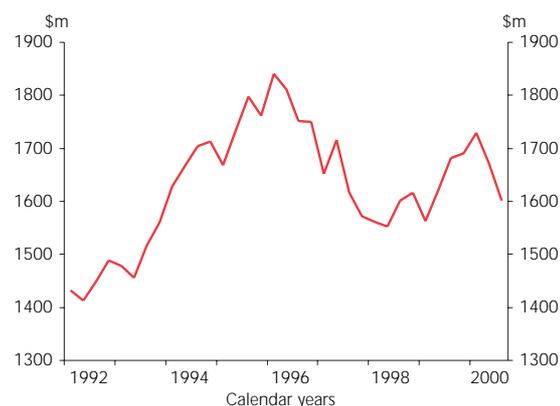
ing consumption (excluding auto components) growth modest for the period as a whole.

Figure 6
Real retail sales excluding automotive components
(seasonally adjusted quarterly percentage change)



Moreover, motor vehicle sales fell sharply over the quarter (Figure 7). Although some of the fall is likely to reflect weak confidence, it mostly reflects the near-satiation of households' demand for cars, after a sharp increase in motor vehicle imports following the removal of tariffs in 1998.

Figure 7
Motor vehicle sales
(real, seasonally adjusted)



Residential investment has been sluggish in the second half of this year after what was clearly an unsustainable expansion in the second half of last year and the first quarter of this year. The restraining influences on the housing market have been gradually rising interest rates, a net migration outflow, and the overhang of an exceptional boom in house and apart-

ment building through the second half of the 1990s. In general, weakness in the housing market has shown up in average national house prices falling slightly, with average house prices falling sharply in some regions. Weakness can be seen even more clearly in falling house sales turnover and the increased time that houses remain on the market (Figure 8). Weakness is also reflected via a widening of the gap between house sale prices and actual list prices (Figure 9).

Figure 8
Quarterly house sales and median days on market⁶
(seasonally adjusted four-quarter moving average)

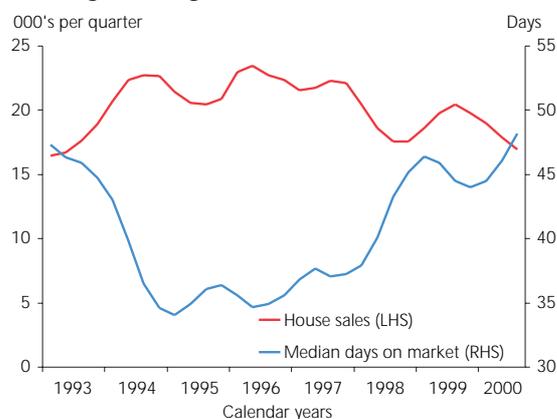
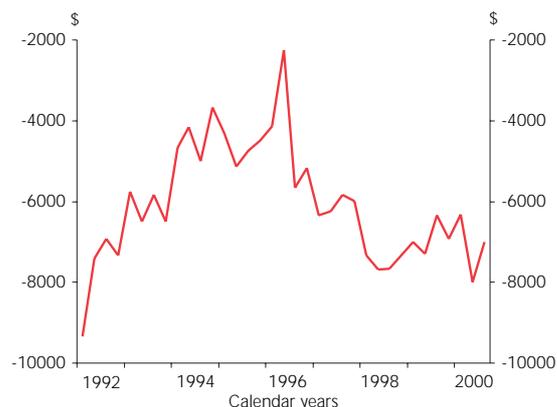


Figure 9
Quarterly difference between house sale prices and list prices⁷



Relatively moderate levels of investment and a subdued domestic sector are confirmed by recent weakness in credit growth rates (at least by historical standards). The rate of

growth of credit has declined steadily through 2000, from around 10 per cent per annum to 6 per cent now. At around 6 to 7 per cent per annum since March, household borrowing growth has been the slowest in over a decade, with relatively sluggish mortgage demand more than offsetting strong credit card borrowing. Business lending has been volatile, with large corporate loans affecting the aggregate, obscuring slow growth in rural and small-to-medium size firms' borrowing, which we estimate is running at less than a 5 per cent per annum rate.

Resource stresses in the economy

The historically low exchange rate and strong trading partner growth provide strong incentives to those in the export and import-competing sectors to increase production. As in August, both indicators of near-term activity and our discussions with businesses indicate that internationally-oriented industries are typically doing very well, while domestically-oriented firms have reported generally weak business conditions. However, in order for firms in the external sector to continue to increase production they need additional inputs of labour and capital. The process of shifting resources from a weak sector to a strong sector is unlikely to be smooth or predictable. It takes time to re-train labour and redirect capital spending for new tasks in a different sector. In the meantime, firms in the external sector may find that they are facing capacity constraints, while firms in the domestically-focused sector may be left with spare capacity that they cannot easily transfer to other uses.

As stressed in our August *Statement*, monetary policy cannot be set specifically for each sector but must be set to manage overall inflationary pressure in the economy. But the existence of widely divergent circumstances makes the assessment of the average degree of pressure all the more difficult.

There are number of ways we can assess overall stresses and inflationary pressures in the economy. One convenient device for making this assessment is to calculate an output gap, which measures the overall demand for goods and services relative to the economy's capacity to produce those goods and services. The latest GDP outturn and recent indicators

⁶ Source: Real Estate Institute of New Zealand.

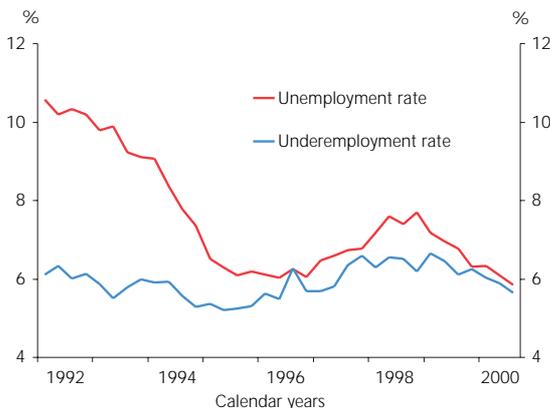
⁷ Source: Real Estate Institute of New Zealand.

suggest that the output gap over the September quarter was weaker than expected in our August *Statement*. However, our assessment from this approach is that the economy has remained at a more-or-less neutral cyclical position over the second half of this calendar year.

We can cross-check our estimate of output relative to the economy's potential by looking for imbalances in the demand and supply of the resources required to produce goods and services, namely capital and labour.

Recent Household Labour Force Survey (HLFS) data indicate a labour market that is becoming tighter, with employment, hours worked, and the participation rate in the September quarter higher than anticipated. The unemployment rate of 5.9 per cent for the September quarter, the lowest in 12 years, was below market expectations. The implications of this low unemployment rate on wage demands and inflation pressures are uncertain. The unemployment rate has been trending downwards after rising to high levels following the economic reforms of the late 1980s and early 1990s. Moreover, underemployment (those in part-time work who want to work more hours) is still at relatively high levels, albeit falling, providing further evidence that there is some available labour in the economy (Figure 10).

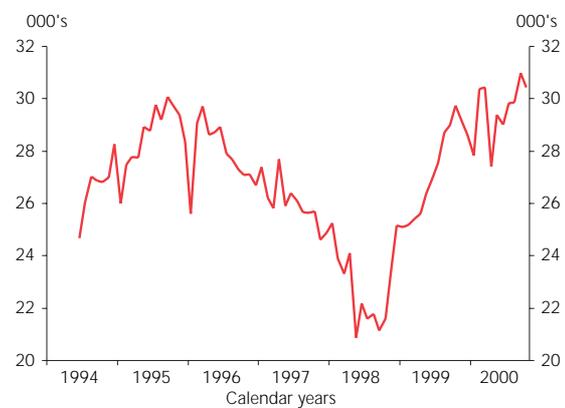
Figure 10
Unemployment and underemployment



Some reservations have been expressed about how to interpret the September quarter HLFS, with changes in some sectors being hard to understand. But the nature of the survey means that the aggregate data is typically more reliable

than the individual components. In addition, we can look at other indicators of employment growth – the majority of which still point to a growing economy that is using more labour resources. The Quarterly Employment Survey (QES) data confirm the indication from the HLFS that the labour market is robust, while the ‘ANZ job ads’ monthly series has this year been at its highest level ever and foreshadowed the strong HLFS outturn (Figure 11).

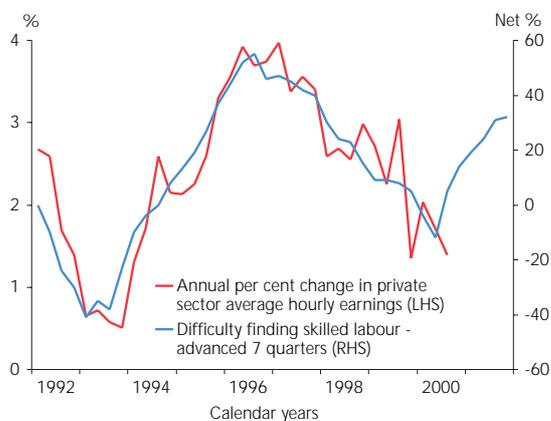
Figure 11
ANZ ‘job ads’⁸
(seasonally adjusted)



Further evidence of a tight labour market and prospective wage pressure is to be found in reported skill shortages in the economy. The measure of the difficulty of finding skilled labour, as reported in the Quarterly Survey of Business Opinion (QSBO), tends to be a good leading indicator of wage growth. Historically, wage growth rises about a year and half after an increase in the reported difficulty of finding skilled labour (Figure 12, overleaf).

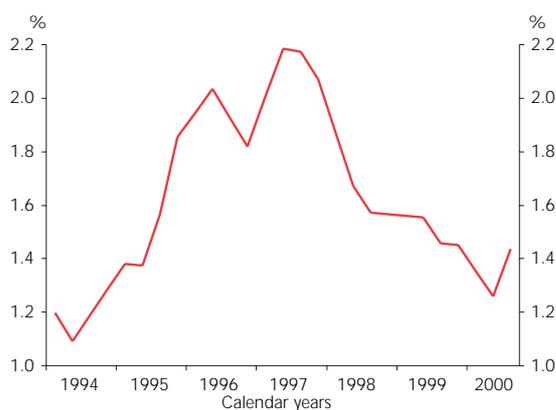
⁸ Source: ANZ Banking Group.

Figure 12
Difficulty of finding skilled labour and private sector earnings⁹



For the moment, however, wage growth still appears to be subdued with private sector earnings rising less than 1½ per cent in the year to September. In addition, estimates of unit labour cost inflation also appear low (Figure 13). It remains to be seen how long this can last in the face of higher prices, especially for items like petrol, and with changes in labour market legislation intended to strengthen the bargaining position of labour.

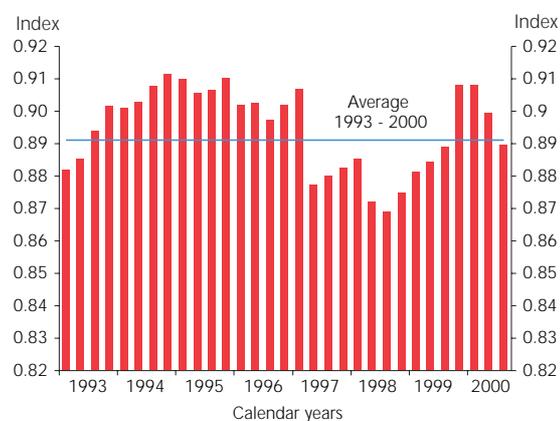
Figure 13
Unit labour cost inflation
(labour cost index: annual percentage change)



⁹ Source: New Zealand Institute of Economic Research. Difficulty finding skilled labour is defined as the percentage of firms reporting it harder to find skilled labour minus the percentage of firms reporting it easier to find skilled labour.

The absence of capital stock data in New Zealand means that indirect indicators must be used to assess demand and supply imbalances. Reported capacity utilisation provides such a reading on the extent of pressure on capital resources. Capacity utilisation has decreased slightly over the past six months, although it remains at around its average level (Figure 14). This seems consistent with a neutral level of the output gap and also the changes in the proportion of companies reporting capacity as a constraint to increasing output.

Figure 14
Capacity utilisation¹⁰

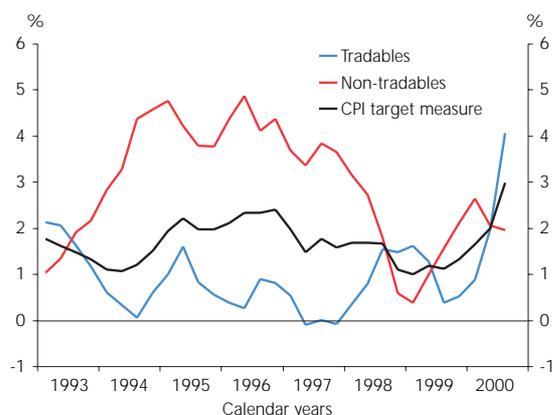


Developments in inflation

Our assessment of the pressure on resources suggests that, over the past several quarters, the economy has been fluctuating around a more-or-less a neutral cyclical position and, as a result, there is no current pressure on 'core' inflation. However, CPI inflation rose sharply to the top of the inflation target band in the year to September 2000, mostly reflecting the impact of higher prices for tradable goods, especially oil and tobacco. Prices in the tradables sector are estimated to have increased by more than 2 per cent in the September quarter alone, taking the annual rate for tradables inflation to over 4 per cent. In contrast, non-tradables inflation remained around ½ per cent in that quarter, bringing the annual rate below 2 per cent (Figure 15).

¹⁰ Source: New Zealand Institute of Economic Research.

Figure 15
Tradables and non-tradables
inflation
(annual percentage change)



Consistent with our assessment of little pressure, one way or another, on 'core' inflation, excluding petrol and cigarettes from the CPI regimen inflation is near the middle of the target band. In addition, measures of inflation that are less prone to the influences of 'special factors', such as the median and trimmed mean, have increased marginally but remain well within the target band (Table 2). While the trimmed mean measure exceeds 2 per cent, it is affected by the price increases directly attributable to the lower exchange rate, which do not necessarily represent core or persistent inflation.

We now expect a further increase in the headline rate of inflation and this is reflected in our updated forecast of quarterly CPI inflation of 1.0 per cent for the December 2000 quarter and 0.7 for the March 2001 quarter. This forecast implies inflation of 3.8 per cent for the years to December 2000 and March 2001. We expect tradables inflation to con-

tinue to be the main contributor to CPI inflation in these quarters. In particular, we expect a range of increases in the price items that are directly affected by the high international oil prices and the low New Zealand dollar, such as airfares, household appliances, and taxi fares. Compared with cigarette excise taxes and petrol price increases, it is more difficult to disentangle these 'first-round' direct price effects from pressures on prices attributable to excess demand. However, our assessment is that, once the direct price effects are accounted for, 'core' inflation remains around the midpoint of the inflation target. This assessment can be seen in the profile of our inflation projection, which has the inflation rate dropping quickly back towards the middle of the target once these temporary factors pass by (see Chapter 3).

There are a number of risks to our projection for near-term inflation. The areas of particular uncertainty include the possibility of further changes in international oil prices and the impact of the introduction of income-related rents by Housing New Zealand. The change in rent policy will undoubtedly tend to reduce dwelling rents but it is difficult to judge the magnitude of this impact.

Another risk to near-term inflation projections comes from the sharp increase in producer prices. After our forecasts were finalised, producers' input prices were reported as having increased by nearly 4 per cent in the September quarter, as compared to the market expectation of around 1½ per cent, while producers' output prices rose nearly 3 per cent. The September quarter increase takes the annual percentage change to about 8 and 5½ per cent for producers' input and output prices, respectively (Table 3).

Table 2
Annual percentage change in CPI and derivative series

	CPI	CPI ex petrol and cigarettes ¹¹	Weighted median	10% trimmed mean
Sep-99	1.1	1.0	1.0	0.5
Dec-99	1.3	0.9	0.5	0.9
Mar-00	1.7	1.0	1.7	1.2
Jun-00	2.0	0.9	1.3	1.8
Sep-00	3.0	1.3	1.7	2.3

¹¹ Source: Statistics New Zealand. This series was constructed by assuming no price movement for petrol, alternative motor fuels, and cigarettes and tobacco from September 1998.

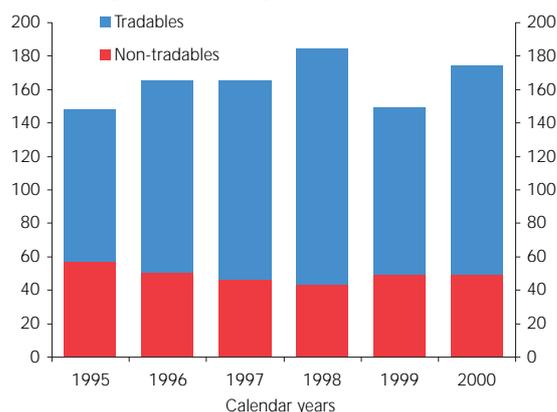
Table 3
Annual percentage change in PPI and import prices

	Merchandise import prices	PPI – inputs all industries	PPI – outputs all industries
Sep-99	-0.2	1.1	0.7
Dec-99	5.5	2.8	2.0
Mar-00	11.2	4.9	3.3
Jun-00	13.3	5.5	3.9
Sep-00	Not available	8.0	5.6

Rising import prices pose a related risk for future inflation. If the exchange rate starts to appreciate, import prices may hold or even start to fall, relieving pressure on CPI inflation. However, if the exchange rate remains at current low levels, then the higher import prices may feed through into CPI inflation. The risks posed by the current level of the exchange rate are discussed in more detail in Chapter 4.

But these are risks rather than realities. Overall, for the moment we are not seeing the high-profile price increases that are behind the spike in inflation to nearly 4 per cent spilling over into generalised inflation. One indication of this is that the number of items in the CPI regimen whose price increased in the September 2000 quarter is very similar to the number of items whose price increased in the previous five September quarters (Figure 16). Part of the reason for the limited spillover is that the economy is now more open to competition than it used to be, making it very difficult for firms to pass on cost increases to the consumer without losing market share. Price increases are squeezed out all along the distribution chain.

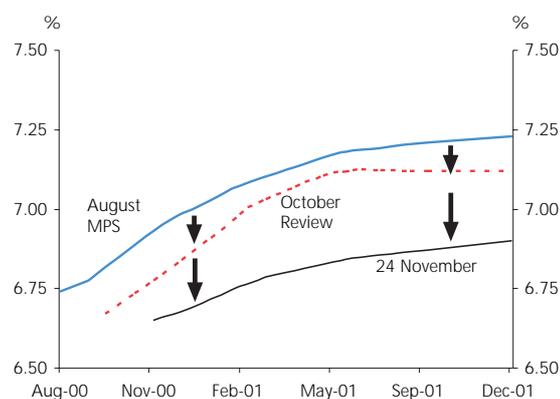
Figure 16
Number of items in the CPI basket whose price increased in the September quarter



Financial market developments

As the outlook for inflation pressures, and therefore the prospective stance of monetary policy, has evolved over recent months, so has the collective view of financial market participants as to future interest rates. The nature of this evolution can be seen in Figure 17, which shows market expectations of future 90-day interest rates as at the time of the August *Statement*, at the 4 October OCR review point and most recently. (These expectations are extracted from prevailing interest rates for various maturities.)

Figure 17
Market expectations for 90-day bank bill rates



Clearly, since August, and especially since October, the degree to which we are expected to raise the OCR has moderated considerably. Year-ahead interest rate expectations are more than 25 basis points lower than in August, with overall only one 25 basis point OCR rise 'priced in' by the end of next year (whereas previously nearly three such rises had been priced in). Implicitly, financial markets have interpreted the flow of data and anecdotes as being favourable for keeping pressure off inflation.

As noted in Chapter 3, a similar evolution of policy expectations has been underway in other countries, with some likely influence on forward interest rates in New Zealand.

3 Medium-term macroeconomic outlook

This chapter presents our central projection for growth, inflation and monetary conditions over the next three years. The medium-term projections incorporate a path of monetary conditions consistent with returning annual CPI inflation close to the middle of the target range of 0 to 3 per cent in the medium-term.

The projections are, as usual, conditional on judgements covering a wide array of variables. To the extent that new economic developments occur, both internationally and domestically, our projection of monetary conditions will also evolve, reflecting the changed degree of monetary stimulus or restraint required to maintain control over inflation.

In our August *Statement*, we noted the prevailing uncertainty surrounding the direction the economy was taking. We outlined two plausible scenarios for the future direction of the economy. The first scenario focused on strong trading partner growth, moderate interest rates, and a historically low exchange rate. In this scenario, these strong fundamental influences would soon reassert themselves after the pause in growth, propelling business confidence and the economy upwards. The second scenario recognised the risk that business confidence might take time to recover and that such weak confidence could continue to restrain growth. To keep medium-term inflation comfortably within the target band the first scenario required noticeably tighter monetary conditions over the next year or so; the second potentially required an easing within the not-too-distant future.

As noted in Chapter 2, we have, since August, observed further falls in the exchange rate, had confirmation of weak growth in the June quarter, and seen CPI inflation move to the top of the Bank's target band earlier than projected. The extra stimulus to the export sector from the even lower exchange rate and recent near-term indicators point to the first scenario as being the more likely, even though both scenarios remain plausible outcomes for the future.

The international environment

As usual, developments in the international environment strongly condition our projections. Our medium-term projections for growth in New Zealand's main trading partners are based on *Consensus* forecasts released in November (Table 4).

Table 4
Trading partner growth projections
(calendar year, annual average percentage change)

Country	1998	1999	2000f	2001f
Australia	5.3	4.7	4.5	3.3
United States	4.4	4.2	5.2	3.4
Japan	-2.5	0.3	1.9	2.0
Europe-4*	2.4	2.0	3.0	2.8
Asia ex-Japan**	-3.6	6.1	7.8	5.4
14-country index	1.0	3.6	4.6	3.5

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

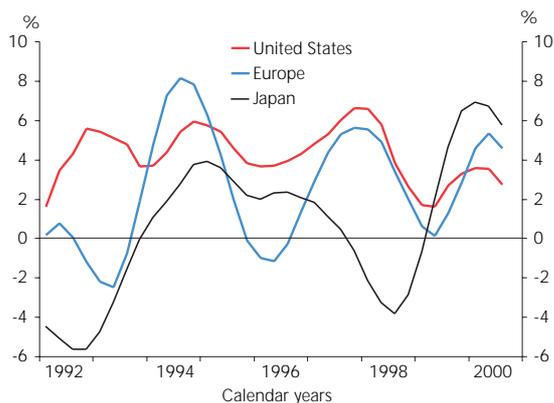
** Includes China, Hong Kong, Indonesia, Malaysia, South Korea, Taiwan, and Thailand.

World growth in 2000 has been the fastest for a decade, resulting in a very supportive international trading environment for New Zealand's export sector. World growth has been broad-based, with the United States and Australia continuing their remarkably long economic expansions, the Asian economies bouncing back strongly after the Asian crisis and growth in Europe being robust.

Unfortunately, the future for global growth does not look quite so positive. This is reflected in the recent downturn of the OECD's leading indicators of world growth (Figure 18) and the widening US credit spreads between 10-year Treasury bonds and junk bonds. Much of this sense of an emerging slowing is captured in the latest *Consensus* forecasts. In the short term, global growth relevant to New Zealand is projected to drop back to near its long-run average of 3½ per cent per annum. US growth is starting to slow to levels that seem more consistent with its potential. The Japanese economy is still struggling uphill and may achieve growth of around 2 per cent this year and next. Recent indicator data for the

large eurozone countries has tended to be relatively weak, suggesting that output growth may slow from the relatively strong levels seen in the first half of 2000. Prospects for Asia are mixed, but would be adversely affected by a slowdown in US spending on technology, since a significant portion of the Asian export sector is centred on the production of information technology hardware. Moreover, many of the Asian countries have not fixed the structural problems in their financial sectors that were exposed during the Asian crisis and are therefore still vulnerable to external shocks. The recent troubles of some Japanese corporations such as Sogo, Chiyoda Mutual, and Hyoei, as well as that of the Korean firm Daewoo, are indicative of potential problems in this regard.

Figure 18
OECD composite leading indicators of GDP¹²
(annual average percentage change)



One of the factors that has led forecasters and many investors to the view that global growth could slow is the rise in oil prices to over US\$30 per barrel. Recent oil price increases have been likened to those of the 1970s. While world growth is not as dependent on oil as it was during the 1970s, if oil prices remain this high, they will indeed put some pressure on global inflation rates and have a dampening influence on global economic growth, as has been reflected in the *Consensus* forecasts we use. New Zealand's oil dependence and the implications of the recent oil price increases are discussed in Box 2.

The prospect of slower global growth has resulted in weaker international equity prices this year as compared to last year, with technology-based equity markets, such as the NASDAQ, being particularly affected. Other major markets around the world have also seen dramatic reversals of last year's strong performance (Table 5).

In line with expectations of slower global growth, financial market participants are coming to the view that the global monetary policy tightening cycle has ended, or will come to an end soon. Since our August *Statement*, financial market participants have lowered their expectations of 90-day interest rates by around 30 to 50 basis points in some key overseas markets (Table 6, p 20).

Table 5
International equity price movements
(percentage change)

Equity market index	Price movements over 1999 2000 (to 27 November)	
NASDAQ (United States)	84.3	-30.3
DJIA (United States)	25.2	-7.1
S&P500 (United States)	19.6	-7.3
Wilshire 5000 (United States)	22.2	-9.6
Dax (Germany)	32.5	-0.8
Nikkei (Japan)	41.1	-22.5
KOSPI (Korea)	91.5	-47.6
All ords (Australia)	14.8	6.9
Hang Seng (Hong Kong)	72.9	-15.9
NZSE40 (New Zealand)	4.3	-9.1

¹² Source: OECD

Box 2 Oil and the New Zealand economy

In February 1999, the (Brent) price of oil fell below US\$10 per barrel. By September 2000, just nineteen months later, the price had increased above US\$37 per barrel. Since then, the price has stabilised between US\$30 and US\$33 per barrel.

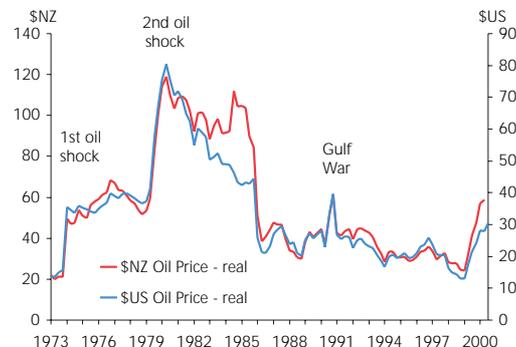
These dramatic movements in the price of oil have attracted a great deal of attention, and we briefly address the likely effects of higher oil prices on both the New Zealand and international economies.

Recent strengthening of world economic activity has prompted a substantial increase in the demand for petroleum products. While some of the original momentum in the price of oil in 1999 arose due to the decline in oil production among the OPEC countries and political tensions in the Middle East, this recent price increase does not appear to be the result of an OPEC supply disruption. Rather, it is mostly a demand-driven episode with some distribution and refining capacity issues intermixed.

The likely impact of an oil price increase depends on both the magnitude of the increase and its duration. Although the recent increase in the nominal price of oil was large by historical standards, the real price is by no means unprecedented. Even with the NZ dollar currently trading at around 40 cents US, the real price of oil would have to increase substantially more before it would be comparable to its level in 1980 (Figure 19).

In the present situation, a key uncertainty faced by macroeconomic policy-makers is whether the oil price increase is likely to be enduring, like the oil shocks of the 1970s, or simply transitory, as during the Gulf War. If the shock is transitory, then any increase in inflation should inherently be of short duration even without monetary policy action.

Figure 19
Real price of oil¹³
(NZ dollar and US dollar)



Most outside oil analysts are currently expecting the price of oil to fall below US\$25 per barrel within the next two years. Many of these analysts point to growing inventories, OPEC's publicly stated desire to keep prices between US\$22 and US\$28 per barrel, and the imminent easing in supply constraints as recent capacity-enhancing investments come on stream. For the Reserve Bank, this projected decline in the price of oil is somewhat reassuring, since it indicates that the future price of oil may have a relatively beneficial effect on inflation outcomes over the next two years.

Nevertheless, the price of oil is currently quite high, and that raises some interesting questions about the short-run impact of the price of oil on output and inflation, both internationally and domestically.

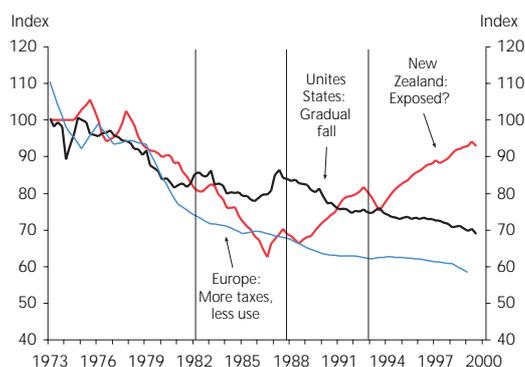
The IMF estimates that the impact effect of a 10 per cent increase in the price of oil *decreases* the output of industrial countries by about 0.1 per cent. A 10 per cent increase in the price of oil is also thought to temporarily *increase* CPI inflation by 0.1 to 0.2 per cent, with the euro zone and United States being more affected than Japan and the United Kingdom.¹⁴ The impact on output and CPI inflation in developing Asian economies is thought to be roughly double the impact in industrial economies.

¹³ Source: Federal Reserve Bank of St. Louis, Statistics New Zealand, Reserve Bank of New Zealand

¹⁴ If the price of oil stays around US\$30/BBL, it would be about 30 per cent higher than the benchmark used for 2001 in the IMF's *World Economic Outlook*.

The impact of the oil price increase on New Zealand is difficult to quantify, but seems likely to be at the higher end of the spectrum. Unlike the United States and Europe, in New Zealand there has not been a significant long run decline in the consumption of oil relative to GDP. Oil usage relative to real GDP fell until about 1986, and then subsequently rose back to the levels seen in the mid to late 1970s (Figure 20), quite possibly because of the large decline in the price of transport equipment as tariff rates on motor vehicles were reduced.

Figure 20
Index of exposure to oil¹⁵
(real oil consumption/real GDP)



While substitution away from oil is a possibility in the long term, New Zealand's oil imports are primarily used to produce petrol and the demand for petrol is fairly unresponsive to price changes in the short run. However, there are factors – such as taxis and couriers switching to LPG and conservation techniques – that may cause the quantity demanded to decrease more in response to this large price increase.

In any case, the short run inflation implications of oil price increases are already evident in the inflation outcome in

the third quarter of 2000: petrol price increases raised the CPI by at least 1 per cent in the year to September. The projections contained in this *Statement* allow for a decline in international oil prices over the next two years to around US\$25 per barrel, with the December 2000 quarter CPI peak containing the last of the petrol price increases in this episode.

The degree of spillover expected into other prices is relatively small, consistent with the temporary nature of the event and the nature of competitive forces. As to the impact on the real economy, allowance has been made for a small negative impact on growth, consistent with the real income loss that the nation bears when global oil prices rise.

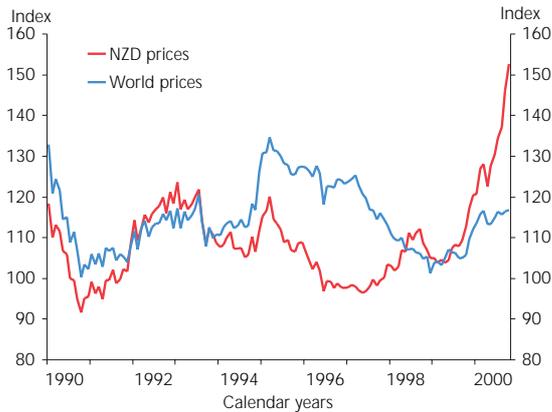
¹⁵ Source: Datastream, Ministry of Economic Development, Statistics New Zealand

Table 6
International 90-day interest rate
expectations for March 2001

	Expectations as at:		
	16 August	24 November	Change
	%	%	(basis points)
US	6.85	6.48	-37
Euro	5.37	5.09	-28
UK	6.47	5.95	-52
Australia	6.70	6.21	-49
New Zealand	7.10	6.77	-33

Reflecting the likelihood of slower global growth, the outlook for world commodity prices is likely to be flat or weakening. Nevertheless, the weakness of the New Zealand dollar has caused a substantial divergence between world and New Zealand dollar commodity prices, making for healthy returns (in New Zealand dollars) to local commodity producers (see Figure 21).

Figure 21
World commodity prices¹⁶

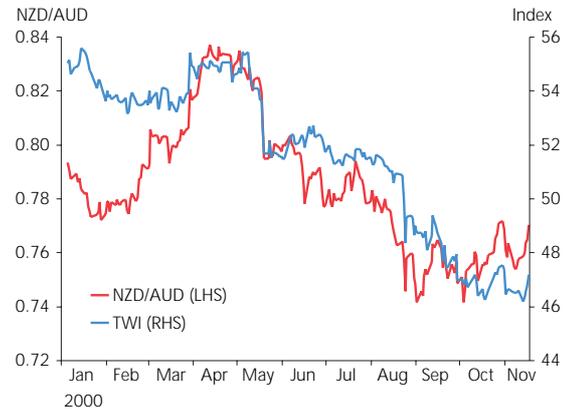


As will already be evident, the weakness of the New Zealand dollar is highly germane to the current situation and how the economy will develop over the next several quarters. This weakness does not solely reflect New Zealand-specific factors but in part also reflects general US dollar strength. This is emphasised by the similar behaviour of the New Zealand and Australian dollars in the last few months. While our TWI has depreciated around 7 per cent since August, the NZD/AUD bilateral rate has remained broadly the same as in August (Figure 22). And it is not just the Australasian currencies that have been falling against the US dollar. The euro/US dollar exchange rate fell to new lows in September, and after a brief respite fell even further in October. Even sterling

¹⁶ Source: ANZ commodity price index, ANZ Banking Group

reached 15-year lows against the US dollar in September. It seems only the yen has avoided the surge of demand for US dollar-denominated assets.

Figure 22
TWI and NZD/AUD exchange rate



Much of the strength of the US dollar appears to have arisen because international investors have increasingly sought to invest in US dollar-denominated investments based on a perception that these assets will yield superior returns compared to alternative asset classes. These increased flows into the US have pushed the US dollar higher. However, recent financial market speculation about the future relative strength of the US economy and accordingly future returns on US dollar-denominated assets suggests the possibility of some reversal of US dollar strength (and other currencies' relative weakness). Of course, this is only conjecture and any signs of another burst of US productivity growth may quickly see an end to this line of argument.

Evidence that the recent fall in the exchange rate is not solely due to New Zealand-specific factors is also available from the fixed interest markets. If currency weakness were a product of flight from New Zealand, we would expect to see widening interest rate differentials between New Zealand and other

markets. However, domestic bond yields (both corporate and government) have not risen significantly relative to yields on similar bonds offshore, indicating that there has not been an increase in the New Zealand currency risk premium. For example, the interest rate differential on 10 year bonds between New Zealand and the United States has mostly remained between 80 and 100 basis points since August, peaking at 106 basis points in October.

Judgements underpinning the central scenario

Overall, then, our December projections are set against a backdrop of an international environment with strong, albeit slowing, trading partner growth and a competitive exchange rate. The main additional judgements we needed to make when forming these projections related to:

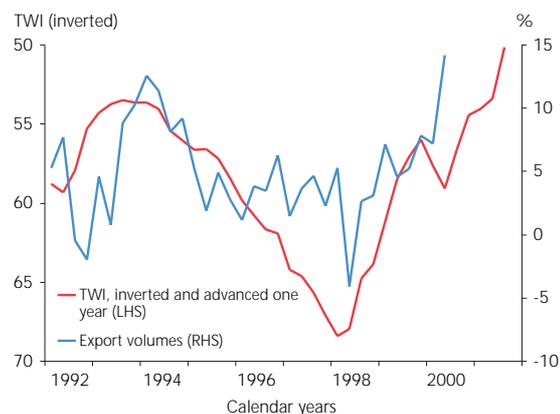
- How much stimulus does the lower-than-expected starting point for the exchange rate provide for the export and import-competing sectors?
- What is the underlying trend through the volatile GDP path experienced recently?
- How likely is it that the blip in headline inflation will spill over into on-going, persistent, inflation?

Combining the judgements (to be commented on in more detail shortly), we have produced a central projection that is similar to that outlined in our August *Statement*, even though the lower exchange rate would suggest significantly more stimulus to the external sector than we projected in August. While export growth in this projection is indeed higher over the projection period than expected in August, it is not dramatically so. More significantly, as in August we have assumed that the overall impact of the exchange rate on export growth is currently more muted than previous relationships – as embodied in the Bank’s forecasting model – might suggest.

There are several reasons for this muted response. First, there is some uncertainty about how rapidly resources can be transferred from the domestic sector to the external sector. Second, the fact that we cannot fully explain the weakness of the currency means we cannot be sure of its effects, or if the weakness will be sustained. Third, our business discussions

with export manufacturers have revealed surprising concerns about the profitability of exports and this may delay any response. This was particularly true of exporters to the Australian market (where the New Zealand and Australian cross-rate has not moved much) and for exports which have a significant imported content (especially if the imported content is priced in US dollars). Fourth, competition from other countries against New Zealand exporters into Australia – an important market for New Zealand manufacturing exporters – has evidently maintained downward pressure on the prices of New Zealand goods exported to Australia. Finally, exporters recall the last exchange rate cycle and may be hesitant to commit themselves to irreversible investment plans, wishing instead to wait and see if the weakness in the New Zealand dollar persists. In short, as we have seen in the past, the lags in the response of exports to a depreciation of the exchange rate are often long and uncertain – as long as one or two years (Figure 23).

Figure 23
Export of goods and services and TWI
(exports: annual percentage change, TWI inverted and advanced one year)



In amongst these concerns are more lasting factors that have led the Bank to reconsider how stimulatory a given exchange rate may be to the export sector. On balance, we have decided to lower our estimate of the equilibrium real exchange rate (see Box 3). Of course, there is a risk that we are underestimating the degree of stimulus that the low exchange rate is providing to the external sector. This risk and the policy implications that follow will be discussed in Chapter 4.

Box 3

How stimulatory is the exchange rate?

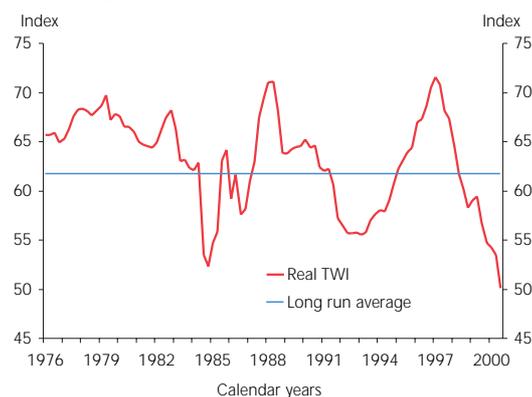
Since early 1997, the nominal exchange rate has fallen by over 30 per cent, to a low of around 46 on the Trade Weighted Index (TWI). This raises questions about the extent to which the current level of the exchange rate will stimulate the tradables sector and thus result in lower imports, stronger exports, and possibly strong inflationary pressures. Our projections tell a story of a buoyant export sector, with export growth projected to outstrip import growth over the next couple of years. But the overall contribution to GDP from net exports is expected to remain quite modest (about 2 percentage points in the year to March 2001, and about 1 percentage point in the year to March 2002). We do not expect a strong boom in exports or a slump in imports.

So why do we not expect the exchange rate to be more stimulatory at such low levels? One reason is that we think the *long-run equilibrium* level of the exchange rate may be lower than our previous estimates. The notion of an equilibrium exchange rate stems from the belief that short and medium-term factors will often cause short term fluctuations and medium-term cycles in the exchange rate, but over a longer time horizon the exchange rate will gradually return to some equilibrium value. The long-run equilibrium is what we think the exchange rate would be if short-term 'noise' (like currency speculation) and medium-term factors (such as monetary policy) were not affecting the actual exchange rate.

Unfortunately, the equilibrium exchange rate cannot be directly observed, which makes it very difficult to estimate. To complicate matters further, the equilibrium may change over time in response to structural factors that affect New Zealand's relative competitiveness. There are, however, a number of approaches to estimating the equilibrium exchange rate. The simplest of these is to assume that the actual exchange rate cycles around a constant equilibrium, and to simply take the long-run average of the real exchange rate. Figure 24 illustrates that the average of

the real TWI since 1985 has been a little above 60. The main disadvantage of this approach is that it does not allow for changes in the equilibrium over time.

Figure 24
Real TWI and long-run average¹⁷



Another simple way of estimating an equilibrium exchange rate is to use the concept of Purchasing Power Parity (PPP). In its simplest form, PPP states that the 'fair value' (or equilibrium) exchange rate is the one that would equate the price of internationally-traded goods across countries. A well-known example of this is *The Economist's* Big Mac Index.¹⁸ *The Economist's* 2000 update of this index showed that a Big Mac cost about NZ\$3.40 in New Zealand and US\$2.51 in the United States. To equate these two prices the New Zealand dollar would have to have appreciated to about US\$0.74.

However, this simple form of purchasing power parity is incomplete, because it ignores the existence of transport costs and other impediments to trade, as well as sales taxes, productivity differentials, and the existence of goods and services that cannot be traded. Some forthcoming

¹⁷ This index is a relative CPI-based real trade-weighted exchange rate rebased so that the value of the real index is the same as the average level of the nominal TWI in the September 2000 quarter. The long-run average is the average level of the real TWI since the exchange rate was floated in early 1985.

¹⁸ For background information, see www.economist.com. For the 2000 update, see the 29 April, 2000 issue of *The Economist*, p85.

Reserve Bank research¹⁹ attempts to account for such complications to PPP by including productivity differentials and interest rate differentials (which affect the exchange rate through capital flows) alongside PPP in statistical relationships. By varying the exact statistical equation employed, the results from this exercise supported a range of plausible equilibrium exchange rates, from about 52 to 63 on the TWI.

Yet another approach to estimating equilibrium exchange rates focuses on the role of the current account balance and the associated build-up in net foreign liabilities. In the case of New Zealand, which has run persistent current account deficits for some time, it makes sense that an accumulation of net foreign liabilities will eventually tend to lower the equilibrium exchange rate. This is because, in equilibrium, the exchange rate must be such that it will produce a level of net exports that will offset the expected outflow from servicing New Zealand's net foreign liabilities. A large stock of liabilities, such as New Zealand has, will increase the investment income deficit and thus need to be offset by a larger surplus on the balance of goods and services. To achieve this, a lower exchange rate is required.

The role of the external balance, more formally integrated into what is known as the macroeconomic balance model of the exchange rate, has been used for many years by the IMF in exchange rate assessments.²⁰ The macroeconomic balance model relies heavily on assumptions about how much and how quickly export and import prices and volumes will respond to exchange rate changes. As a result, it is vulnerable to incorrect assumptions. However, it is a useful framework for thinking about the role of the external accounts and the evolution over time of the equilibrium exchange rate. The model shows that,

in 1996, New Zealand's current account deficit was larger than was warranted by the underlying fundamentals, suggesting that the exchange rate must have been overvalued relative to its equilibrium level – an impression fully consistent with the views of most observers at that time. Currently we have the opposite situation. If the exchange rate were to remain at its current very stimulatory levels, then the macroeconomic balance model predicts that the current account deficit would eventually fall so far that we would conclude that the exchange rate must now be undervalued relative to its equilibrium.

Our best estimate of the equilibrium real exchange rate using a version of the macroeconomic balance model that has been recalibrated for New Zealand was also around the middle of the TWI range discussed above.²¹ Together with other models of the exchange rate, this methodology provides further justification for the notion that the equilibrium is lower than previously assumed, by perhaps 5 to 10 per cent. It is hard to tell whether this is because the equilibrium rate has fallen – which seems likely given New Zealand's ongoing accumulation of foreign liabilities – or because earlier estimates were wrong, which is also plausible. Whichever the case, our view now is that the exchange rate is clearly below its long-run equilibrium. We expect the stimulation from the competitive exchange rate to boost net exports and lead to a significant reduction in the current account balance, but not at the pace that might previously have been expected.

¹⁹ Brook, A and D Hargreaves, "PPP-based analysis of New Zealand's equilibrium exchange rate", *Reserve Bank of New Zealand Discussion Paper*, DP2001/01, forthcoming.

²⁰ For a recent version of this model, see "Exchange rate assessment: extensions of the macroeconomic balance approach", edited by Isard and Faruquee, IMF Occasional Paper 167, Washington DC (1998).

²¹ Brook, A and D Hargreaves, "A macroeconomic balance measure of New Zealand's equilibrium exchange rate", *Reserve Bank of New Zealand Discussion Paper*, DP2000/09, forthcoming.

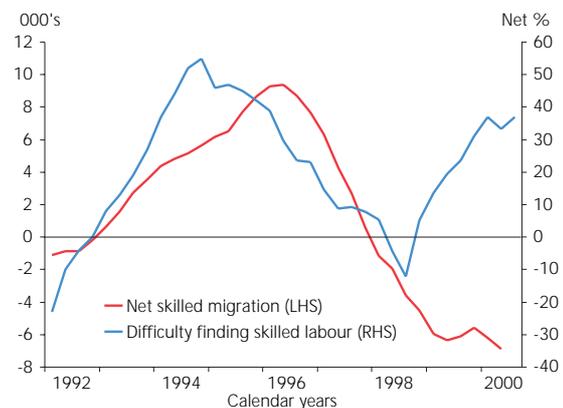
Clearly though, the exchange rate remains stimulatory and trading partner demand is still buoyant. Export growth has been increasing over the past year and, even with our downward estimate of the degree of stimulus from the lower exchange rate, is expected to be the main driver of economic growth over the projection period. From a revenue perspective, there is little doubt that most exporters are benefiting from the presently low exchange rate. In addition, as hedging contracts mature, more exporters will tangibly feel the benefits. As confidence improves, investment opportunities currently on hold are likely to be dusted off, increasing the ability of exporters to expand production. On top of this, the agricultural sector is likely to have another good season this year and the benefits of the on-farm investment that has been made are likely to support the sector for some time.

As growth in the export sector becomes evident and some of the benefits of this growth spills over into domestic activity, the general pessimism of the last nine months or so that has been holding down business investment (with the exception of computers and telecommunication equipment) is expected to dissipate. This pick up in confidence may lead to a surge of 'held back' investment being pushed through. Some of our business contacts report that investment has been tentatively increasing, but others, particularly in the agricultural sector, report that repaying debt has been their first concern. Anecdotal evidence supports the view that there are investment opportunities available should confidence rebound quickly, and there appears to be plenty of venture and traditional capital available for new projects. In addition, ongoing investment in the dairy, timber, and telecommunications industries will continue to provide a base to investment levels. On balance, our assessment is that business investment growth will be robust, although not spectacular, growing steadily at just over 6 per cent per annum for the next two years. This assessment assumes a gradual recovery in business confidence and a presumption, supported by anecdotal evidence, that enhancing efficiency rather than expanding capacity is the driving force behind most of the current investment activity.

Sluggish residential investment held back growth in the second half of this year, and the ongoing weakness in the housing market suggests that residential construction will remain

mutated over the projection period. Migration may affect this outlook however. The increasing difficulty local firms are facing in finding skilled labour increases the prospect that potential immigrants will be offered positions in New Zealand and thus qualify for entry – such a relationship appears to have been at work previously (Figure 25). If net migration does increase to fill the growing shortage of skilled labour, it could have a material impact on residential construction over the next two or three years.

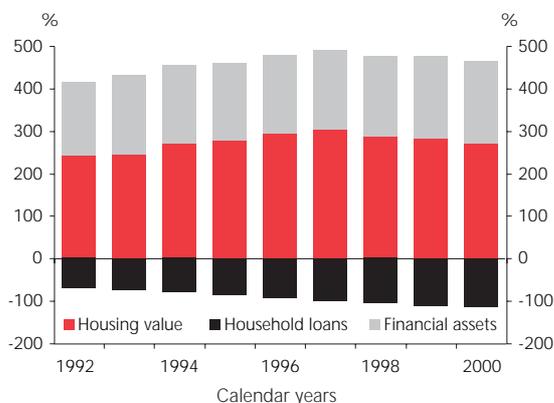
Figure 25
Net migration of skilled people and difficulty of finding skilled labour²²
(net migration: annual number)



Weakness in the housing market is restraining the accumulation of household wealth (as a proportion of disposable income). While household financial assets have grown over the last few years, this growth has not been sufficient to offset the loss of real wealth caused by house prices that have remained essentially unchanged in the last two or three years. Moreover, gross financial liabilities have continued to grow as a portion of disposable income (Figure 26).

²² Source: New Zealand Institute of Economic Research. Difficulty finding skilled labour is defined as the percentage of firms reporting it harder to find skilled labour minus the percentage of firms reporting it easier to find skilled labour.

Figure 26
Household assets and liabilities
(percentage of personal disposable
income)

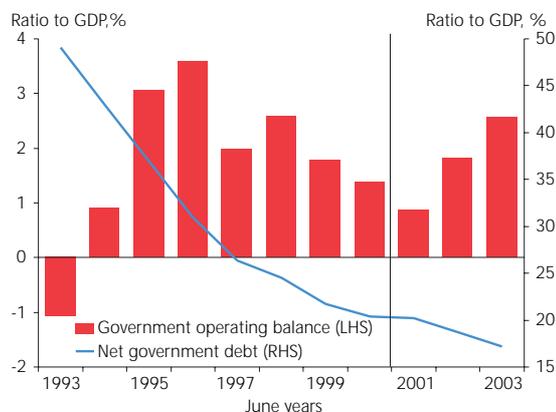


As we have noted in previous *Statements*, we expect the higher levels of household sector debt and limited scope for wealth accumulation via rising house prices to constrain growth in household expenditure. Consequently, private sector consumption growth is expected to be subdued over the medium term. Further out, we would expect the increased returns to the external sector to lead to increased domestic demand and consumption growth. In the meantime, the downward trend in the household saving rate is expected to halt and even turn around as farm incomes improve.

Strong growth in income from exports, a projected modest reversal of the downward trend in the household saving rate, and moderate investment together mean that the current account deficit should steadily diminish over the projection period. The current account deficit is anticipated to fall throughout 2001, levelling off at around 4½ per cent of GDP by early 2002, partly as increasing pressure on the economy's resources leads to faster import growth.

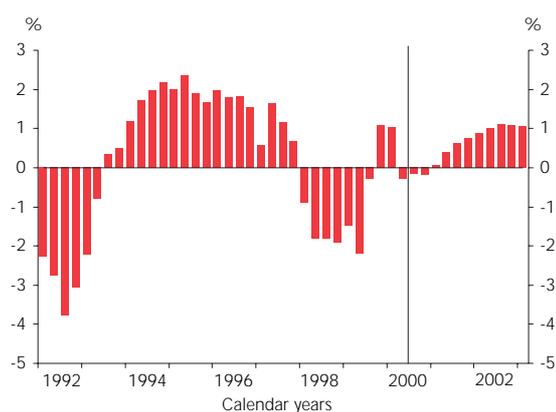
The fiscal position is not expected to greatly affect the shape of the coming business cycle. Based on the Treasury's forecasts prepared for the *Budget Economic and Fiscal Update*, fiscal policy is expected to have a broadly neutral effect on domestic demand growth. Slight rises in the government operating balance are projected over the medium term (Figure 27). This outlook is based on the same information the Bank had in August, together with the actual June 2000 outturns.

Figure 27
Government operating balance
and net government debt²³



Drawing the foregoing points together, these projections yield a GDP profile that is slightly lower in the near term than forecast in August, but which steadily lifts to reach a similar growth rate by the end of 2001. This profile predominantly reflects the larger-than-expected drop in the June 2000 quarter, and places the economy in a more-or-less neutral cyclical position over the next year. A mild degree of excess demand will emerge by the middle of calendar 2001, reflecting the growth in net exports (Figure 28).

Figure 28
Output gap
(per cent of potential GDP)



²³ Historical source: The Treasury. Adjusted by the RBNZ over the projection period.

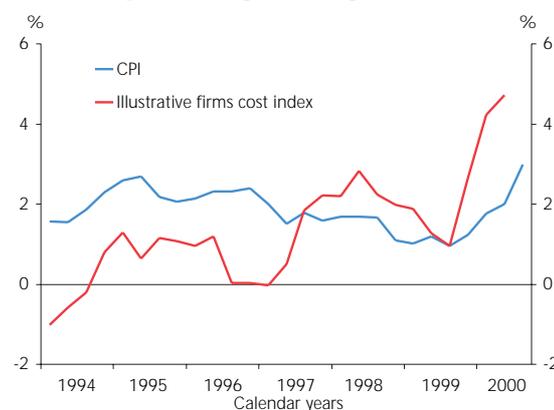
Inflationary prospects

Two distinct stories shape the path of inflation pressures in this projection. First, the rise in international oil prices, the increase in cigarette excise taxes, and the lower exchange rate result in CPI inflation spiking to almost 4 per cent in the very near future. Inflation returns to target over the next year as these 'special factors' vanish. Moreover, NZ dollar import prices are expected to hold or fall over much of the projection period as the exchange rate gradually appreciates. Second, as the projected output gap becomes more positive over the latter part of the forecast period, upward pressure is progressively placed on domestic inflation.

A crucial question for monetary policy is whether those two stories – the short-term spike and the medium-term upward pressure – merge into each other in an unhelpful way. We have maintained that we will 'look through' the first round price level effects of the special factors causing this near-term blip in CPI inflation, but that we need to act to prevent any second round effect. However, distinguishing a first round from a second round effect is empirically difficult. An assessment of when first round effects are spilling over into a more persistent inflation problem requires reference to a broad range of indicators, including some related to goods and labour market resource stresses, and some more directly related to inflation. To illustrate the nature of the indicators that may be used we can, for example, examine: (i) where inflation is relative to where it might be expected to be given historical relationships between inflation and production costs; (ii) inflation expectations; and (iii) pricing intentions.

Predictions of inflation based on historical relationships suggest that we could have expected to have seen more inflation already. While the pass-through of exchange rate changes to import prices has started to re-emerge after being absent throughout the late 1990s, the pass-through from firms' costs (import prices and unit labour costs) to consumer prices still remains limited, as can be seen from Figure 29.

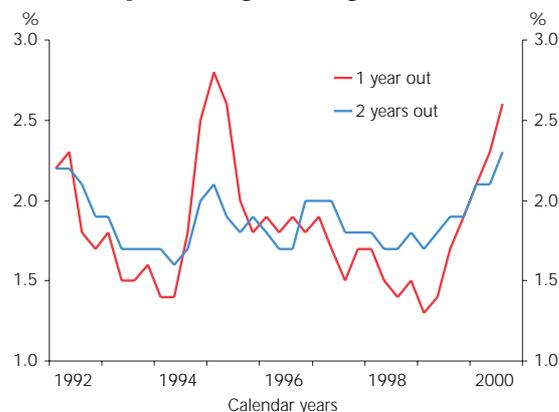
Figure 29
Firms' costs and CPI inflation²⁴
(annual percentage change)



In our judgement, the projected near-term increase in inflation to nearly 4 per cent will not feed materially into generalised inflation, unless the medium-term growth path is significantly stronger – and therefore the pressure on resources materially greater – than our central projection portrays. While measures of one-year ahead inflation expectations indicate that people expect inflation to be close to the top of the Bank's target band, inflation expectations two years ahead are more stable (Figure 30), even though the latter tend to follow the former somewhat. The sharper increase in one-year ahead expectations is completely rational since people can easily observe 'special factors' such as the high-profile petrol price increases and expect the increase in inflation to be temporary. However, if expectations and responses to those expectations turn out to be more influenced by current inflation than we are assuming, there could be more persistent inflationary pressure over the forecast period. This issue is discussed in more detail in Chapter 4.

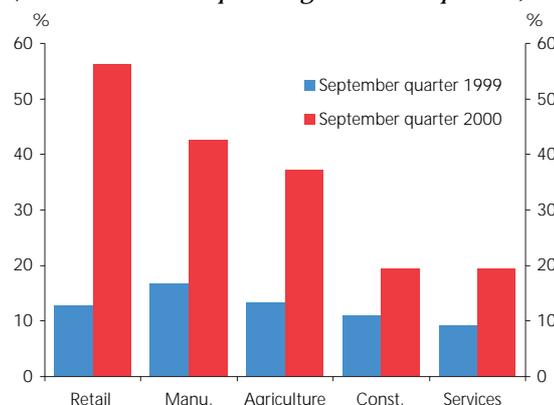
²⁴ Firms' costs are based on a 70/30 geometric weighting of the private sector labour cost index (wages and salaries) and OTI import prices.

Figure 30
RBNZ survey of inflation expectations
(annual percentage change)



However, our judgement is also that the economy is in a situation where some sectors are facing margin pressures that are unsustainable. Both our contacts with businesses and surveys of business sentiment show that typical domestic businesses now expect a decrease in profits over this quarter, whereas this time last year businesses were expecting an increase in profits. We are seeing reports of increased price pressures as the result of falling margins in travel and transport, whiteware, and computer goods, among others. It is inevitable that firms in such sectors will therefore be looking to increase their prices in the near term. Both surveys and discussions with the business community suggest that firms expect, or intend to make, somewhat larger price rises in the near future. Pricing intentions data indicate that it is predominantly manufacturers and merchants who are looking to increase their prices (Figure 31). The number of manufacturers and merchants who intend to increase their prices in the next three months is significantly higher than it was last year. This may be largely a result of the initial exchange rate pass-through; it is less clear to what extent, if any, these intentions represent second round impacts. In the services sector, the proportion of firms intending to raise their prices has not increased much, reflecting the fact that this sector is not subject to the same imported cost pressures as other sectors. The sector with the smallest proportion of firms intending to raise their prices is the building and construction sector, probably reflecting weak demand in this sector.

Figure 31
Pricing intentions²⁵
(net balance expecting to raise prices)



These developments in inflation pressures over the next few years suggest that tighter monetary conditions will be required in order to prevent inflation from accelerating over the medium-term. Our projected view of inflation, which does not show such an acceleration, assumes a gradual tightening in monetary conditions over the forecast period, via both an exchange rate appreciation and a rise in interest rates. The interest rate projection is conditional on assumptions about the key drivers of demand and inflation, including the effects of the current low exchange rate and its assumed gradual appreciation from here. The near-term interest rate profile is similar to that projected in August but is slightly higher in the outer years, in order to restrain the inflationary pressures generated as the export sector absorbs additional resources.

The rate of appreciation of the exchange rate is also similar to that assumed in August, even though the currency is significantly lower at present. The TWI exchange rate is assumed to be over 50 by the end of 2002. Lack of exchange rate appreciation is a key risk to our central projection. The longer the exchange rate persists at current low levels, the more likely it is to provide a very strong stimulus to exporters. The opposite turn of events could equally throw these projections off course. We discuss this issue in more detail in Chapter 4.

²⁵ Source: National Bank of New Zealand

4 Policy issues

Throughout this year, we have framed our monetary policy decisions against a presumption of an economy continuing, in trend terms, to grow at a pace that will eventually put inflationary pressure on resources. Clearly, the data over that period have portrayed quite uneven progression, so judging the point at which excess demand-related inflation pressures are likely to emerge has not been straightforward. Also, we have been conscious of the widely different demand conditions faced by the tradables and non-tradables sectors and of the significant short-term blip in headline inflation now upon us. While we have recognised the need not to confuse the price level effects of rising international oil prices, increased tobacco tax and exchange rate depreciation with generalised inflation, we have also been wary of the ease with which those direct price effects could spill over into a more protracted and wide-spread bout of inflation.

Our August *Statement* referred to the difficulty of discerning the medium-term or cyclical trends in an environment characterised by substantial volatility and contradiction in short-term data releases. The period since August has underlined that difficulty. While most business and consumer confidence surveys have remained weak, and the June quarter GDP data emerged even more negative than anticipated, other data, including recent labour market and retail sales surveys, suggest a contrary picture of activity remaining fairly robust throughout this period. Moreover, the exchange rate's path over this period has only reinforced the reasons for expecting a solid growth path into the future.

Against that background, in this *Statement* we have again chosen to manage monetary policy on the basis of a presumption that inflationary pressure on resources, while still evident on the horizon, is not imminent enough to warrant immediate action. In doing so, we are aware that our assumption relies on the economy exhibiting a fairly muted response to the stimulatory influences acting on it.

A muted response to stimulation?

As described in earlier sections, developments since August, if anything, go in the direction of exaggerating some of the key influences which we identified in August as likely to shape

the evolution of the New Zealand economy over the next year or two.

The performance of the international economy over the past year or more has been uncommonly favourable. The US has enjoyed a prolonged period of growth and prosperity unmatched in its modern history. Our near-neighbour and key trading partner, Australia, is one of the few developed economies to have surpassed the US growth performance. Our Asian trading partners, with the exception of Japan, have bounced back from the travails of 1997 and 1998 with unexpected vigour. Europe also has looked stronger than for many years. While the expectations for 2001 and beyond are for a softening of international growth, that comes off an exceptionally strong base.

Coupled with a global economy favouring New Zealand exporters, the exchange rate has declined to record lows in nominal and real terms. Indeed, the currency has weakened significantly further from when we were finalising our August *Statement*. This combination of weak currency and strong global growth would normally be expected to provide very strong stimulus to exporters and lay the platform for a growth phase perhaps as vigorous as that experienced in the 1993/94 period.

Moreover, we enter this phase with unemployment down to levels not seen for over a decade and with the added complication of the forthcoming CPI spike provided by oil prices, the tobacco tax and exchange rate effects. These are circumstances that could readily unhinge inflationary expectations and thereby elongate and make more difficult the period over which headline inflation returns to the target range.

Such a situation is illustrated in the 'alternative scenario' discussed in Box 4. The scenario involves a fairly strong – but, by historical standards, quite normal – surge in net exports in response to the weak exchange rate, and a degree of spillover from the forthcoming inflation spike into pricing behaviour. In such circumstances, a late and/or weak monetary policy response to the emerging inflation pressures could give rise to an eventual need for interest rates to be higher for longer. That in turn would imply an extended period of below-par output growth in order to bring inflation back within target and to 're-anchor' inflationary expectations.

However, despite that risk, we have chosen to base our policy strategy on an outlook involving a somewhat less vigorous response of net exports to the exchange rate stimulus, and accordingly an inflation track that returns quite rapidly to within the target range (with only a small disturbance to inflationary expectations en route). Adopting such an outlook and the associated moderate policy stance is based on several factors:

Confidence, while off its troughs of May/June, remains soft – more so than is consistent with recent labour market, exports and retail sales data. This provides a cautionary note in the interpretation of the more buoyant data.

Asset prices, notably real estate and equities, remain quite flat, which could moderate consumption behaviour to a greater extent than we are currently allowing for.

Likewise, and associated with the asset price track, credit growth is far more subdued than we have seen in New Zealand for some years, raising question marks about the expenditure path embedded in our central projection.

Net emigration, while slowing, has persisted. While a shift to net immigration flows would put us on notice of the prospect of stronger domestic demand, that reality has not yet emerged (and should it do so, we will have time to respond).

To date, domestic price responses to the exchange rate depreciation have been very subdued. With fairly weak demand conditions in much of the domestic economy, competitive pressures have ensured that margin compression, either within the New Zealand business community or abroad, has absorbed much of the price impact that might otherwise have emerged as the exchange rate fell.

Even as healthy income growth in the internationally-oriented parts of the economy improves demand conditions in the domestic economy, the same forces of globalisation and competition are likely to minimise the risk of inflation spillover, notwithstanding reported desires for margin recovery through price increases.

The extent to which the exchange rate has overshot – both in relation to estimates of equilibrium and in relation to expectations – raises the prospect of a sharper bounce back than we have allowed for in our technical assumptions.

While, as noted, the international economy has been very strong, some slowing is now likely. There are indications of stress in some areas (notably credit spreads and in continuing balance sheet weakness in key Asian economies, including Japan) that could readily trigger a bout of weakness. In short, the balance of risks for the international economy appears to be well to the downside.

Associated with the shifting prospects for the international economy, expectations within financial markets for future monetary policy actions in the key international economies have begun to point to the prospect that the top of the monetary policy cycle has been reached, at least for now. With that comes the possibility that, even without further lifts in our OCR, the margin between short-term interest rates in New Zealand and other key economies could begin to open up. In other words, our policy stance could come to be seen as relatively tighter, with consequences for capital flows and exchange rate behaviour.

The lift in the OCR from 4.5 per cent, between November 1999 and May of this year, to the current level of 6.5 per cent, has left monetary policy well placed, reducing the possibility that we will find ourselves significantly 'behind the curve' if this phase of the business cycle begins to unfold in a manner closer to the alternative scenario painted in Box 4.

In short, there remains a considerable degree of uncertainty about the likely response of the economy to the forces currently at work, and as to how those forces will themselves unfold. To presume a stronger pattern of behaviour, and adopt the monetary policy stance that would go with that presumption, could turn out to be over-aggressive and delay the return of the business confidence needed to support healthy, non-inflationary (or deflationary) growth.

Taking these factors together, we feel that our decision in this *Statement* represents an appropriate balancing of risks, bearing in mind the key objective of on-going price stability, and the concern to avoid unnecessary harm to the real economy in the process.

It may be helpful to tie this judgement back to our August *Statement*. Then, we based our policy decision on a central track which is similar in most respects to that contained in this document. But we were concerned about the broad range of plausible future developments from that point. Now,

Box 4
Stronger net exports, more inflation spillover: an alternative scenario

As noted, our central scenario portrays a fairly muted response of net exports to the strong international economy and weak real exchange rate – a response that is more moderate than historical relationships might suggest is possible (see Chapter 3 for further discussion on this). We have also assumed that inflationary expectations remain well anchored throughout the next year as we pass through the headline CPI spike associated with the first round effects of the oil price rise, increased tobacco tax and the exchange rate decline.

As a consequence of these key assumptions, the interest rate actions required through the course of 2001 are also moderated. Our central scenario sees 90-day interest rates rising by around 100 basis points through the forecast horizon, to a peak of over 7½ per cent.

Should we see the emergence of something closer to ‘traditional’ New Zealand responses to the current circumstances, what are the implications for monetary policy? This alternative scenario provides for the difference between the growth of exports and imports to tilt more in favour of exports – by up to 2 per cent relative to our central scenario – increasing the gap between output and capacity (Figures 32 and 33). At the same time, we have assumed greater spillover from the immediate inflation spike into secondary inflation pressures.

Figure 32
Export less import growth
(annual percentage change)

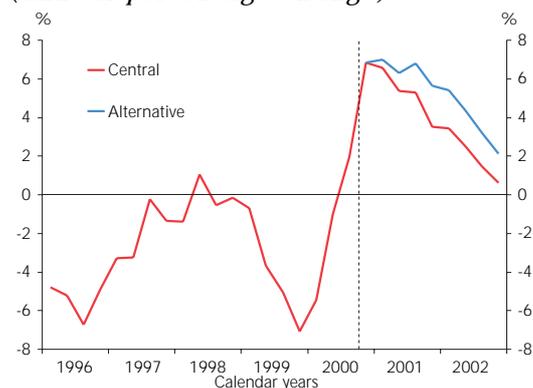
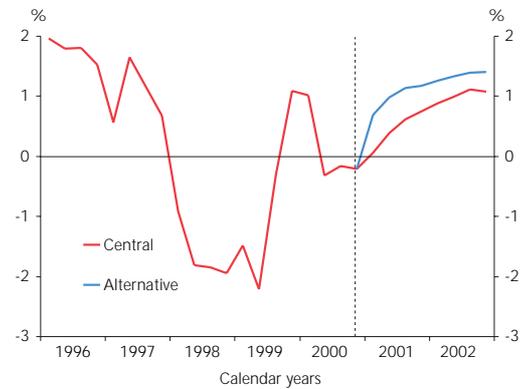


Figure 33
Output gap
(per cent of potential GDP)



The outcome is additional and more prolonged inflationary pressure throughout the projection period (Figure 34). A more vigorous monetary policy response is required, with 90-day interest rates peaking almost 100 basis points higher than in the central scenario – at between 8½ and 9 per cent (Figure 35)

Figure 34
CPI inflation
(annual percentage change)

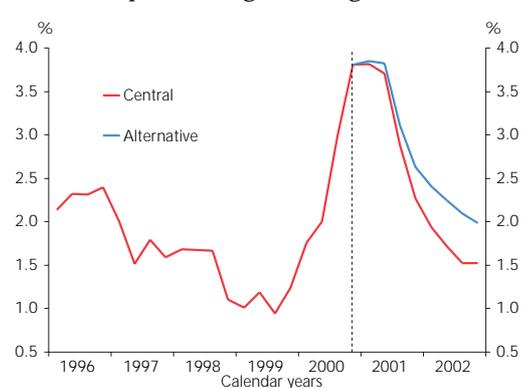
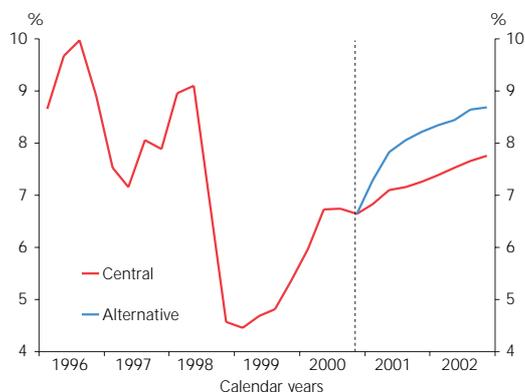


Figure 35
90-day bank bill rate



As always, we encounter significant uncertainties when interpreting the likely direction of inflationary pressures over the next year or two. Alternative scenarios of the sort developed here help us to explore the risks, sensitivities and implications associated with key assumptions employed in the forecasting process. In this manner, we can explore the different response paths available to us and choose policy strategies that might best satisfy our obligation under the Policy Targets Agreement to maintain price stability while avoiding unnecessary volatility in output, interest rates and the exchange rate.

while the range of plausible developments remains wide, the balance of our concerns has shifted to emphasise more the risks of higher inflation over a more extended period. But – in part because of the sequence of OCR increases which began a year ago – we do not feel that the case for an immediate tightening is compelling. At the same time, if things evolve as now seems probable, some further tightening is certainly likely within the next few months.

The transition to a lower current account deficit?

A feature of the New Zealand economy for many years has been the heavy reliance on foreign savings to fund investment. This is captured in the persistently large current account deficits and the matching accumulation of net foreign liabilities. With the sharp decline in the exchange rate over the past three years comes the prospect, at least, of some narrowing of the current account deficit.

But the transition to a lower current account deficit cannot happen in isolation. It is not a matter of simply producing faster growth of exports and/or fewer imports. There are broader implications that we need to be conscious of, some of which have considerable significance for the path of monetary policy.

Our central track provides for the current account deficit to reduce from over 7 per cent of GDP in the year to March 2000 to around 4½ per cent by March 2002. If net exports prove to be more responsive to the low exchange rate, along

the lines portrayed in the alternative scenario above, the adjustment could be greater – perhaps reducing the deficit to less than 3 per cent of GDP by March 2003.

To achieve transitions of that magnitude, however, will require some resource shifts within the economy. The immediate impact of the lower exchange rate is to boost returns to exporters and those engaged in import substitution. But that boost can only come at the expense of others within the community. There is no net, economy-wide, short-term gain from the lower exchange rate – only transfers within the economy.

That some prices should rise is integral to a transition of this sort. It is the higher prices for exports and imports that encourage greater export and import-competing production. In a world of costless adjustment, we would also see *declining* prices and incomes in the non-tradables part of the economy. It is shifts in *relative* prices that encourage labour and other factors of production to move towards the export or import-competing activities.

The pattern of growth in the New Zealand economy over the past year or more has been consistent with such a transition. In August, we referred to the 'dichotomous economy', with the domestic market, in particular real estate activity and urban confidence, being weak while the rural and manufactured export sectors enjoyed substantial strength.

To successfully achieve the transition to a more balanced current account position implies a continuation of that dichotomous pattern over a sustained period of time. The

characteristics of such a phase would likely include comparatively weak domestic consumption and continuing sluggishness in residential real estate markets and mortgage lending. Associated with these would be rising domestic savings, in all or some of the household, business or government sectors.

Without such a pattern, the process of current account adjustment becomes more difficult. A less restrained domestic economy would compete more vigorously to hold the labour, land and capital sought by the export and import-competing sectors to facilitate their growth. In that event, the prospect is that the desired relative price adjustment associated with the weaker exchange rate is transformed into inflation – with the necessary monetary policy response in the form of higher interest rates.

That some prices should rise as resources are encouraged to migrate into the externally-focused economy is part of the reason that monetary policy should normally ‘look through’ the first round or direct price effects of the exchange rate, oil prices and tobacco tax. But there is a danger that this desirable relative price adjustment transforms into a generalised inflation process, requiring monetary policy to lean against spillover of first into second round price level effects.

In practice, of course, it will be very difficult to distinguish between these impulses. The exchange rate has been depreciating for over three years with even the first round effects being difficult to distinguish to date. Ultimately, we should expect some of those effects to be revealed. Indeed, we have seen some evidence – and heard rather more – of those prospects recently. But the time profile of any pass-through of exchange rate effects is highly uncertain. ‘Normally’, if there is such a thing, pass-through will be dispersed over several quarters and will be impossible to identify (separate from

other events) with any precision. Just as likely, pass-through will not occur to any significant extent for sustained periods (with margin compression and expansion absorbing the adjustment), and then occur with a rush. Again, separating first from second round becomes very difficult, and possibly meaningless.

One possible monetary policy strategy in these circumstances would be to stick fairly rigidly to the inflation target – in other words, to run policy with the intention of engineering price declines to offset the exchange rate, oil and tax effects. Our Policy Targets Agreement does not require such a strategy – there has always been an explicit acknowledgement that monetary policy settings should aim to accommodate the initial price impact of shocks of this sort.

Rather, the challenge for monetary policy over the next year or so will lie in forming the judgement about when those initial impacts have run their course and whether or to what extent we are beginning to encounter secondary inflation pressures that should be resisted. The policy decision in this Statement is based on an expectation that inflation falls away rapidly through the course of 2001. This is assuming a fairly gradual appreciation of the exchange rate, and a further increase of the OCR through the course of the projection period to counter growing inflation pressures as the economy runs increasingly into capacity constraints. By historical standards, that is a fairly modest monetary policy response – previous cycles have required rather more restraining monetary conditions as we approach the top of the activity cycle. In essence, this modest policy response is conditional on an assumption that the near-term price shocks do not spill over to any significant extent into more persistent inflation pressures. Clearly, the validity of that assumption will need to be monitored closely as we progress through 2001.

Appendix 1

Chronology

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

2000

- 16 August: The Reserve Bank released its twenty-seventh *Monetary Policy Statement*, leaving the Official Cash Rate unchanged at 6.50 per cent. The news release accompanying the *Statement* is reproduced in Appendix 2.
- 29 September: Production GDP figures were released showing that the New Zealand economy contracted –0.7 per cent in the June quarter.
- 4 October: At the intra-quarter review, the Reserve Bank left the Official Cash Rate unchanged at 6.50 per cent. The accompanying news release is reproduced in Appendix 2.
- 16 October: CPI statistics were released for the September quarter showing that the CPI increased by 1.4 per cent over the quarter, and by 3.0 per cent for the year to September 2000.

Appendix 2

Reserve Bank statements on monetary policy

The following are reports or texts of official statements on monetary policy issues made by the Bank during the period under review in this *Monetary Policy Statement*.

OCR unchanged at 6.5 per cent

16 August 2000

The Reserve Bank today announced that it was leaving the Official Cash Rate (OCR) unchanged at 6.5 per cent.

That's come with the release of the Reserve Bank's August *Monetary Policy Statement (MPS)*.

Commenting on the announcement, Reserve Bank Governor Don Brash said: "Since the Reserve Bank's May *MPS*, a lot has changed in the New Zealand economy.

"Both business and consumer confidence have fallen sharply, which appears to have led to some deferment of spending, new investment and employment. As well, the exchange rate has fallen markedly to record lows.

"CPI inflation now looks set to spike to the top of the Bank's inflation target. But this is mainly due to sharp rises in oil prices and indirect taxes on cigarettes, which the Reserve Bank is able to ignore, so long as they do not trigger an upsurge in general inflation.

"It now appears that the economy may have contracted slightly in the June quarter and that growth in the September quarter may also be weak. As a result, pressure on the economy's capacity seems likely to be less over the next few quarters than previously expected.

"Clearly, the data on economic activity in a small economy such as ours tend to be 'noisy', and the Bank needs to steer through that noise as best it can. Given the uncertainty about the outlook, leaving the Official Cash Rate unchanged seems the prudent thing to do right now," Dr Brash concluded.

QES revision consistent with today's OCR announcement

16 August 2000

The Reserve Bank today confirmed that it had been advised yesterday of the Quarterly Employment Survey numbers released this morning.

Reserve Bank Assistant Governor David Archer said: "In view of the large corrections to the previously released March quarter employment numbers, the Acting Government Statistician advised the Reserve Bank yesterday of both the corrected March quarter numbers and the June quarter results.

"At the margin, these additional data reinforced the earlier decision to leave the Official Cash Rate unchanged in the *Monetary Policy Statement* released this morning", Mr Archer said.

The official cash rate remains at 6.5 per cent

4 October 2000

The Reserve Bank today announced that the Official Cash Rate would remain at 6.50 per cent.

The next Official Cash Rate announcement will take place on 6 December with the release of the December *Monetary Policy Statement*.

Schedule of MPS and OCR review dates for 2001

27 October 2000

The Reserve Bank today announced indicative dates for *Monetary Policy Statements* and intra-quarter Official Cash Rate (OCR) reviews for the coming year.

The following dates are confirmed.

Wednesday 6 December 2000 *Monetary Policy Statement*

The indicative schedule for the remainder of 2001 is as follows:

Wednesday 24 January 2001 OCR Review

Wednesday 14 March 2001 *Monetary Policy Statement*

Thursday 19 April 2001 OCR Review

Wednesday 16 May 2001 *Monetary Policy Statement*

Wednesday 4 July 2001 OCR Review

Wednesday 15 August 2001 *Monetary Policy Statement*

Wednesday 3 October 2001 OCR Review

Wednesday 14 November 2001 *Monetary Policy Statement*

Please note that from March to November the dates are indicative only. Any changes will be announced well in advance. Also note that each *Monetary Policy Statement* includes with it an OCR review. Consequently, eight Official Cash Rate reviews will be undertaken in 2001.

Monetary Policy Statement: format changes

29 November 2000

The Reserve Bank today indicated that tables in the upcoming December *Monetary Policy Statement* would include some minor format changes.

Tables 1, A and C will remain, while tables B, and D to H will no longer be published. In addition:

- Quarterly GDP projections will no longer appear.
- All projected numbers will be rounded to the nearest half per cent and will be expressed as fractions rather than as decimals. This will not apply to the first two quarters' CPI inflation projections.
- The Monetary Conditions Index will no longer appear.

A mock-up of the newly formatted tables can be viewed on the Reserve Bank's website at www.rbnz.govt.nz using numbers from the August *Monetary Policy Statement*.

Reserve Bank Assistant Governor David Archer said: "The intention of these changes is to better indicate the substantive and medium term elements of the Reserve Bank's monetary policy decision making. The Reserve Bank has come to the judgement that the level of detail previously published added little, and may sometimes have created misleading impressions. The previous format provided so much detail that a false impression may have been created that monetary policy depended heavily on highly detailed and mechanistic economic forecasts.

"In fact, what really matters is the quality of the Reserve Bank's judgements, based on its understanding of the broad forces shaping the economy and the inflation outlook. The new format is designed to be consistent with that.

"An additional change will be that, unlike previously, when the Reserve Bank makes an interim Official Cash Rate announcement and the OCR is not changed, a brief commentary explaining the no-change decision will be provided. A no-change decision can be as important as a decision to adjust the OCR, and markets need to understand the reasons for both," Mr Archer concluded.

Appendix 3

Summary Tables¹

Table A
CPI inflation projections and monetary conditions
 (CPI is in percentage changes)

		CPI* Annual	TWI	90-day bank bill rate
1994	Sep.	1.2	57.2	7.2
	Dec.	1.5	58.5	8.7
1995	Mar.	1.9	59.8	9.4
	Jun.	2.2	60.8	9.1
	Sep.	2.0	61.7	9.0
	Dec.	2.0	61.9	8.5
1996	Mar.	2.1	64.2	8.7
	Jun.	2.3	64.6	9.7
	Sep.	2.3	65.6	10.0
	Dec.	2.4	67.1	8.9
1997	Mar.	2.0	68.4	7.5
	Jun.	1.5	68.0	7.2
	Sep.	1.8	64.8	8.1
	Dec.	1.6	63.9	7.9
1998	Mar.	1.7	61.2	9.0
	Jun.	1.7	58.5	9.1
	Sep.	1.7	57.1	6.8
	Dec.	1.1	56.0	4.6
1999	Mar.	1.0	57.6	4.5
	Jun.	1.2	59.1	4.7
	Sep.	1.1	56.7	4.8
	Dec.	1.3	54.4	5.4
2000	Mar.	1.7	54.1	6.0
	Jun.	2.0	53.4	6.7
	Second Half Average	3 ¹ / ₂	48 ¹ / ₂	6 ¹ / ₂
2001	First Half Average	4	47 ¹ / ₂	7
	Second Half Average	2 ¹ / ₂	49	7
2002	First Half Average	2	50 ¹ / ₂	7 ¹ / ₂
	Second Half Average	1 ¹ / ₂	51 ¹ / ₂	7 ¹ / ₂

¹ Notes for these tables are in Appendix 4.

* 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 SNZ 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		
	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003			
Final consumption expenditure													
Private	3.4	6.0	4.1	3.7	3.0	1.3	2.6	1½	2½	3			
Public authority	-1.1	-0.7	3.3	2.5	5.3	0.1	7.3	-4	1½	1			
Total	2.4	4.6	3.9	3.5	3.4	1.1	3.5	½	2	2½			
Gross fixed capital formation													
Market sector:													
Residential	17.0	12.3	-0.1	4.0	1.8	-15.1	22.0	-11½	3½	8			
Business	22.5	18.5	14.2	4.9	1.0	4.4	6.7	8½	6½	6			
Non-market government sector	-3.8	21.8	2.0	31.8	12.4	-7.6	11.7	-5½	4	8			
Total	18.2	17.2	9.6	7.0	2.4	-1.1	10.1	3	5½	6½			
Final domestic expenditure	5.1	7.0	5.1	4.3	3.2	0.6	4.9	1	3	3½			
Stockbuilding ⁽¹⁾	1.1	0.0	-0.7	-0.3	0.1	-0.9	1.4	-½	0	0			
Gross national expenditure	6.2	6.9	4.3	3.9	3.3	-0.3	6.3	½	3	3½			
Exports of goods and services	7.9	8.4	2.6	3.7	3.9	2.1	6.3	9	7½	5			
Imports of goods and services	8.0	14.3	7.4	7.2	4.8	3.3	11.2	2½	4½	5			
Expenditure on GDP	6.2	5.3	2.9	2.7	3.0	-0.8	4.6	3	4	3½			
GDP (production)	6.3	5.4	3.8	2.7	1.9	0.0	4.2	2½	3½	3½			
GDP (production, March qtr to March qtr)	6.9	4.6	3.8	1.3	1.0	1.8	5.1	1½	4	3½			
Potential output	2.8	3.7	3.7	3.3	2.7	2.4	2.4	2½	3	3			
Output gap (% of potential GDP, year average)	0.3	2.0	2.0	1.4	0.6	-1.8	-0.1	0	½	1			

e = estimate

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

Appendix 4

Notes to the tables

CPI	Consumers Price Index
TWI	RBNZ. Nominal Trade Weighted Index of the exchange rate. Defined as: A geometrically-weighted index of the New Zealand dollar bilateral exchange rates against the currencies of Australia, Japan, the United States, the United Kingdom, and the euro.
90-day bank bill rate	RBNZ. Defined as: The interest yield on 90-day bank bills.
World GDP	Reserve Bank definition. 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> .
Export 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	Defined as GDP (production) divided by HLFS hours worked. This series is smoothed by taking a four-quarter moving average.
Wages	Private sector ordinary time average hourly earnings. <i>Quarterly Employment Survey.</i>
Quarterly percentage change	$(\text{Quarter}/\text{Quarter}_{-1}) * 100$
Annual percentage change	$(\text{Quarter}/\text{Quarter}_{-4}) * 100$
Annual average percentage change	$(\text{Year}/\text{Year}_{-1}) * 100$

Source: Unless otherwise specified, all data conform to Statistics New Zealand definitions, and are not seasonally adjusted.