

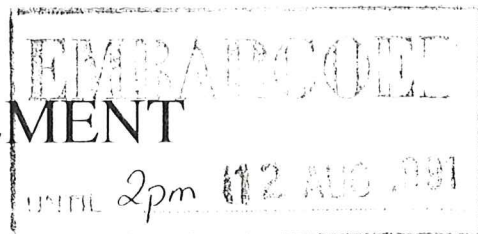


RESERVE  
BANK

OF NEW ZEALAND

# MONETARY POLICY STATEMENT

August 1991



"The primary function of the Bank is to formulate and implement monetary policy directed to the economic objective of achieving and maintaining stability in the general level of prices."

Section 8, Reserve Bank of New Zealand Act 1989



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# MONETARY POLICY STATEMENT

AUGUST 1991<sup>1</sup>

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

## EXECUTIVE SUMMARY

Price stability has now moved firmly into sight. Both measured and underlying inflation have fallen significantly, although measured inflation has fallen faster.

- CPI inflation fell over the last year from 7.6 per cent to 2.8 per cent.
- CPI inflation can be easily affected by one-off price factors which do not, in themselves, represent medium or long-term inflationary pressures. To get round this problem, and to give the Bank a more accurate picture of medium-term inflation trends, the Bank also monitors measures of inflation adjusted for these one-off effects.
- Over the last year, relevant one-off factors included oil prices, mortgage interest rates and various public sector charges. However, in total, the effect of these factors on CPI inflation for the year to June was relatively small. From around 4.4 per cent in the year to June 1990, underlying inflation ( i.e. inflation after adjusting for these types of effects) was estimated to be down to around 2.6 per cent for the June 1991 year.
- The falls in inflation have been a little faster than the Bank had expected.

In some respects, the most significant change in the last 6-9 months has been an increased recognition that the price stability goal will continue to be pursued.

- This change has been reflected in surveys of inflation expectations. Over the last nine months, surveyed expectations have fallen as much as 3-4 percentage points.

The improving outlook for inflation and falling inflation expectations have meant that a further substantial easing in monetary conditions has been possible.

- Of particular significance has been the handling of the yield curve, which had been downwards sloping for almost the entire period of disinflation since 1985, but which has now turned upward sloping.
- To avoid an unduly rapid easing of monetary conditions, on 23 April the Governor indicated that an upward-sloping yield curve could be

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<sup>1</sup> Text and data finalised on 5 August 1991.



appropriate following a favourable June CPI result, further meaningful fiscal progress in the Budget, and if the broader inflation outlook remained favourable.

- These conditions have now all emerged.
- Following the Budget, the Bank welcomed the reductions in the financial deficit and in the public debt ratio and indicated that it had no reason to prevent the yield curve going positive. A significantly upward sloping curve emerged after the Budget.
- In early July, after six months sitting near 59 on the trade-weighted index (TWI), the exchange rate fell quite quickly to around 57.5, before settling a little higher.
- Since February, 90 day rates have fallen by almost 2.5 percentage points, and five year rates are down by 1.7 percentage points, with the biggest movements following the announcement of the March CPI. Real interest rates, on the other hand, have fallen less markedly.

The outlook for inflation is favourable.

- CPI inflation is forecast to fall to around 2.0 per cent for 1991. Adjusting back for mortgage rate and oil price effects and for the impact of Budget price increases, underlying inflation is likely to be around the bottom of this year's indicative range (2.5-4.5 per cent) announced in our February 1991 Monetary Policy Statement.
- Underlying inflation is likely to drop into the 0-2 per cent range during 1992, ending the year towards the bottom of the Bank's 1992 indicative range of 1.5-3.5 per cent. Various price increases and user-charges announced in the Budget will raise CPI inflation above underlying inflation, perhaps to around 2.5 per cent in 1992.
- Given that underlying inflation is still expected to be within the indicative range, that monetary policy cannot target inflation precisely, and that there are inevitably uncertainties surrounding the forecasts, the Bank regards this prospect as a satisfactory outcome.
- Despite the price increases resulting from Budget announcements we still appear to be well on track for an underlying inflation rate in 1993 comfortably within the 0-2 per cent range.

The outlook for inflation will have an important influence on developments in the monetary indicators.

- The Bank will be adjusting policy settings based on the outlook for inflation.

- The Bank no longer has a firm view on whether or not the yield curve should be downward sloping, but equally would not be comfortable at present with a steeply upward sloping curve.
- The exchange rate has fallen by around 5 per cent in the last year. Future rises or falls will be assessed in the context of the price stability target.

Price stability has moved into sight. Consolidating the gains, by achieving sustained price stability, will ensure that the full benefits of the anti-inflation policies are realised. But there are still some challenges in front of us.

- The most immediate challenge will be ensuring that the one-off CPI rises stemming from various Budget announcements are not confused with an increase in underlying inflationary pressures and do not flow into a second round of cost and price increases - as happened to some extent when GST was first introduced and later raised. We do not expect the impact to be as serious as was the case on those occasions.
- Further out, it will be important to ensure that price and cost pressures are kept under control as the recovery gets underway.
- Meeting these and other potential challenges to sustained price stability is helped by the legislation we work under. That framework will keep our attention firmly focused on price stability, and hold us accountable for our progress towards that end.
- Achieving and maintaining price stability will help underpin the sustainable improvements already taking place in New Zealand's economic prospects.

## INTRODUCTION

*After years of high inflation, price stability is in sight ...*

From the mid-1970s until the mid-1980s, New Zealand was plagued with high inflation. Averaging around 12 per cent, and peaking at 18.4 per cent in 1980, New Zealand's inflation was much worse than that of most comparable countries. Today, price stability is in sight. That is the outcome of seven years of firm monetary policies. More recently, the framework established by the eighteen-month-old Reserve Bank of New Zealand Act 1989 has helped. The Act focused the Bank's efforts more surely on price stability, and helped consolidate the major gains that had already been made. Looking ahead, the new framework will help to ensure that price stability, once achieved, is sustained.

*... following the sharp fall in inflation over the last year.*

The CPI inflation rate has fallen from 7.6 per cent to 2.8 per cent over the last year. Adjusting for one-off or special factors, the fall in underlying inflation from around 4.4 per cent to around 2.6 per cent has been less spectacular but at least as important. Since our last Monetary Policy Statement in February, the declines have been marked. Falls in inflation had been expected, but the recent fall has been a little faster than we had forecast.

*Confidence about price stability has been growing ...*

Perhaps as significant as the slowdown in inflation itself has been the marked turnaround in people's views of future inflation prospects. For the first time in almost three decades, confidence is growing that price stability is a realistic goal and one which is likely to be achieved. Helped by welcome progress on the fiscal front, the obvious consequences of this growing confidence have been lower interest rates and the Bank's ability and willingness to accommodate a flatter yield curve.

*... and the outlook for inflation is generally positive ... allowing the Bank to focus on the task of maintaining price stability.*

The outlook for inflation is generally positive. It is likely that 'core' or 'underlying' inflation will be around the lower ends of both the 1991 and 1992 indicative inflation ranges published in our February Statement. Over recent months attention has begun to focus not simply on getting inflation down but also on the challenge of keeping it down and maintaining price stability. Only with sustained price stability will the benefits be fully realised.

Recent developments in the economy, inflation, and monetary policy are reviewed in the next sections of the Statement. Particular attention is given to explaining the Bank's policy stance, and to the improved inflation performance. Some discussion of the monetary policy implications of the recent Budget is also included. The remainder of the Statement discusses the outlook for inflation and monetary policy. A monetary policy chronology and copies of recent Reserve Bank statements on policy are included as appendices.



## ECONOMIC BACKGROUND

*The economy is still relatively weak ...*

Economic trends affect the climate in which the Bank is attempting to lower inflation. Recent indications confirm that the New Zealand economy remains in transition. As foreshadowed in the February Statement, household spending has been relatively weak, significantly influenced by contractionary effects of government spending cuts. Weak household spending has offset relatively strong business investment and a significant rise in the volume of exports. Overall, the weakness of the economy has contributed to the slightly faster than expected easing in inflationary pressures.

*... and sluggish local spending has kept prices in check.*

Falling real incomes, affected in part by the reductions in benefit payments from 1 April and by rising unemployment, have contributed to a drop in retail spending. The volume of retail sales fell by 3.4 per cent in the March quarter, and by 2.3 per cent in the year to March 1991, although some recent indications suggest that spending may have picked up a little in the June quarter. The house building sector has also been contracting. Weak domestic demand has kept profit margins and costs under considerable pressures.

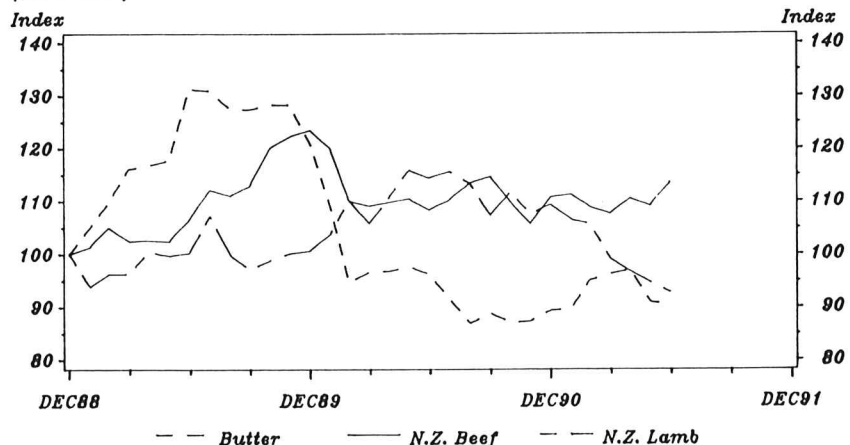
*Commodity prices have been down ...*

Prices of agricultural commodity exports fell sharply from their late 1989 and early 1990 peaks. Reflecting the downturn in the world economy, most other export prices have remained flat over the past year with little change in both forestry and core manufacturing export prices. Generally weak export prices have directly affected local prices for exportable goods.

*... although export volumes are up ...*

The volume of exports is estimated to have grown by 8.0 per cent in the year to March. Further strong growth in exports of forestry products - on top of the increases of recent years - and a small increase in manufacturing export volumes contributed to this rise. The demand for manufactured exports has held up despite the downturn in the economies of many of New Zealand's key markets,

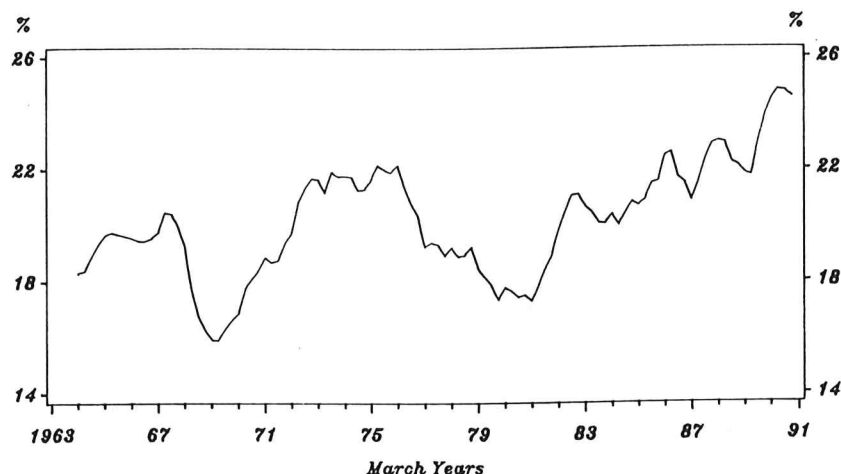
**Figure 1**  
**Commodity Prices**  
(Base December 1988=100)  
(\$NZ Prices)



Sources: Meat Board and Dairy Board.

Figure 2

Investment as a share of Gross Domestic Product



Source: Department of Statistics

TABLE 1  
REAL PRIVATE BUSINESS INVESTMENT  
GROWTH

(annual average percentage changes)

Year to March:	1990	1991 (estimate)
Commercial Buildings	-11.6	- 7.0
Plant and Machinery	22.0	3.4
Transport Equipment	77.9	16.3
Other	-18.3	3.9
Total	20.8	4.4

particularly Australia. Anecdotal reports suggest that significant improvements in cost competitiveness have allowed manufacturing exporters to maintain or increase their exports to Australia.

*... and business investment is high.*

As noted in the previous Statement, business investment, in aggregate, has been at an all-time high, although the rate of growth has fallen from the 1989/90 peak. The high rates of investment have occurred despite weak surveyed confidence and relatively high real interest rates. These statistics come as a surprise to many, but the strong investment performance has come about as firms have adopted more productive and efficient technologies in response to the greater competitive pressures. At a sectoral level, the investment over the last year has been concentrated in the forestry and distribution sectors. Because old capital is still being scrapped, the total impact of the new investment on productive capacity - and hence the scope for increased output without additional pressures on costs - is unclear. However, the rate of scrapping has probably slowed, and both anecdotal evidence and formal survey data point

to considerable scope to increase the utilisation of the capital stock as new markets or increased demand are identified.

*Unemployment has risen further, keeping wage rises down.*

The number of people unemployed has continued to rise in recent months. Weak activity, continuing strong net migration inflows, and the impact of benefit cuts in encouraging people back into active pursuit of work have all contributed. The official unemployment rate reached 10.4 per cent in June, and is forecast to continue rising. The rise in the numbers unemployed to record post-war highs has been one factor behind a further slowing in wage settlements over the period covered by this Statement.

*The current account deficit was of particular concern ...*

The balance of payments had been of considerable concern to many over 1990 and early 1991. Estimates of the current account deficit showed a sharp deterioration over 1989/90. Forecasts suggested little likelihood of rapid improvement, and that there might be downward pressure on the exchange rate if the financial markets began to concentrate on the current account outlook.

*... but these concerns have now largely dissipated.*

However, recent data indicate that the deficit was not as large as had originally been estimated, and that the prospects are somewhat better than many had been picking. Improved data led to the current account deficit for the year to March 1990 being revised from \$4.2 billion (6.0 per cent of GDP) to \$2.2 billion (3.1 per cent of GDP). For the year to December 1990, the current account deficit has been provisionally estimated by the Department of Statistics at \$1.9 billion, although many commentators, including the Reserve Bank, consider the underlying current account deficit over this period to have been somewhat higher, at nearer \$2.7 billion (around 4 per cent of GDP). More recent trade figures provide some cause for encouragement that the current account deficit is likely to fall away further. As a result there is now much less concern about the current account than was the case earlier in the year. This reduced concern makes it less likely that financial markets will be acting on the basis of an adverse view of the balance of payments position.

*Business confidence has picked up ...*

The previous Statement noted the sharp fall in business confidence over the last few months of 1990 and the early months of 1991. However, recent surveys (including the National Bank Business Outlook and the latest NZIER Quarterly Survey of Business Opinion) suggest that, although economic activity - and immediate cost pressures - have remained weak, there has been a sharp improvement in confidence in recent months. Improving sentiment is evident in all sectors, and the surveys show particular optimism about the outlook for manufacturing exports. Measures of business confidence have typically proved to be more volatile than changes in economic activity, but sustained improvements in business confidence should be a precursor to a recovery in activity. Falling interest rates are likely to have helped boost confidence, although the usual lags between falling interest rates and an economic upturn should not be overlooked.

*... helped by falling interest rates.*

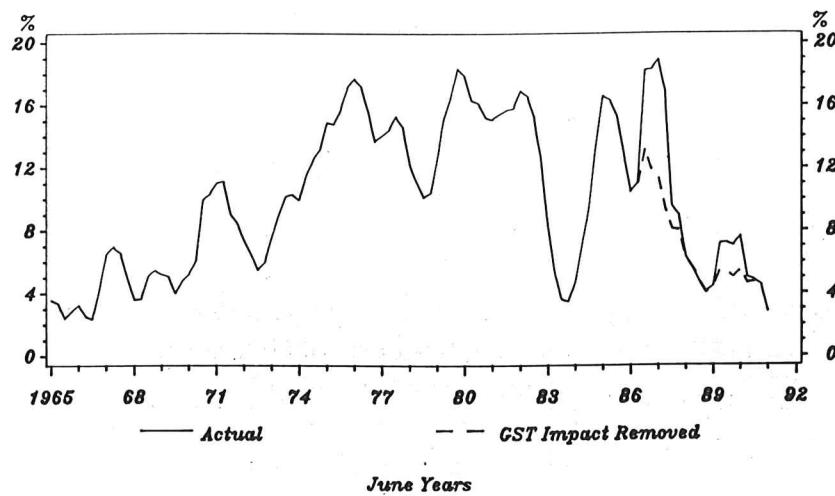


# INFLATION

*Inflation has been cut to its lowest annual rate since 1966.*

In the last six months further headway has been made towards price stability. The gains build on the foundations laid by several years of firm anti-inflation policies. CPI inflation in the year to June fell to the lowest annual rate since 1966. A number of one-off influences contributed, but even adjusting for these factors underlying or 'core' inflation has also fallen sharply. Confidence in the prospects for achieving and sustaining price stability has been growing.

**Figure 3**  
*Year on Year CPI Inflation*  
*(1965-1991)*



## Outlook in the February Statement

*Inflation was forecast to fall significantly in 1991 ...*

The improvement in the inflation outlook has been a little faster than envisaged at the time of the February Statement. In that Statement the Bank forecast a significant fall in inflation over 1991, reflecting in large measure the degree of monetary policy pressure maintained throughout 1990. The small wage increases agreed in many settlements since late 1990 were expected to be the key immediate influence slowing inflation. Weak demand suggested that there would be little scope for sellers' profit margins to be widened. Import prices, excluding oil price effects, remained weak, and food price inflation was abating sharply. These all represented fundamental improvements to the inflation outlook. In addition, after two years in which almost all the special factors had been pushing up the price level, the drop in oil prices following the Gulf crisis and the falls in mortgage rates experienced since December were each expected to place downward pressure on the CPI.

On the other hand, the balance of payments and debt position suggested that some fall in the exchange rate might occur. The direct impact on prices of a modest fall was incorporated into our

inflation forecasts. Despite this, the Bank forecast that CPI inflation would fall from 4.9 per cent in 1990 to 3.8 per cent in the year to December 1991.

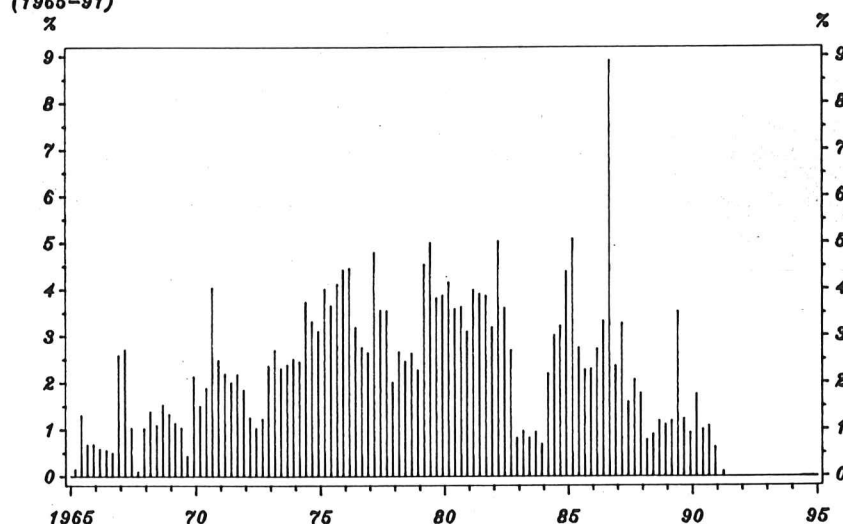
## Developments in Measured Inflation

*... but the fall has been a little faster than expected ...*

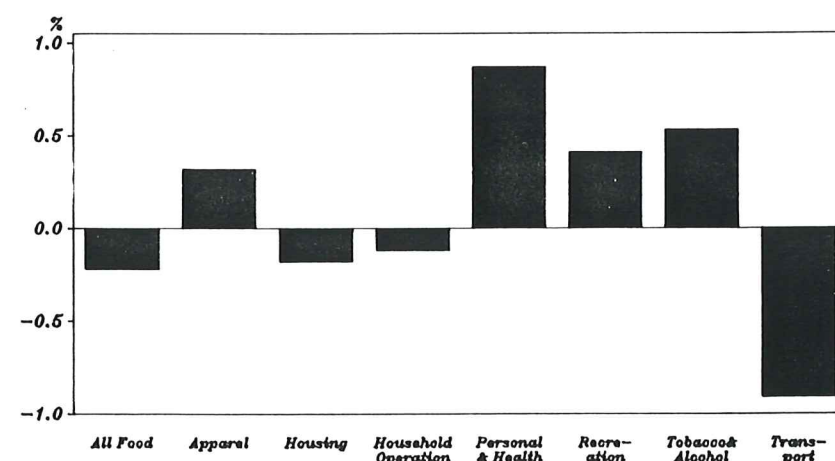
*... with CPI inflation reaching 2.8 per cent in the year to June.*

In the event, CPI inflation has fallen away more sharply. The CPI rose by 0.6 per cent in the March 1991 quarter, bringing the year-on-year rise down to 4.5 per cent. Then, in the June quarter, the CPI increased by just 0.1 per cent, compared with a 1.8 per cent rise in the June quarter 1990. As a result, the year-on-year inflation rate dropped sharply to only 2.8 per cent - the lowest annual rise in the CPI since the December 1966 year, when the CPI increased by 2.4 per cent. A lower quarterly change in the CPI has not occurred since the June quarter of 1961.

**Figure 4**  
*Quarterly CPI Inflation (1965-91)*



**Figure 5**  
*Contribution to the 0.7% Increase in CPI In The March and June Quarters*



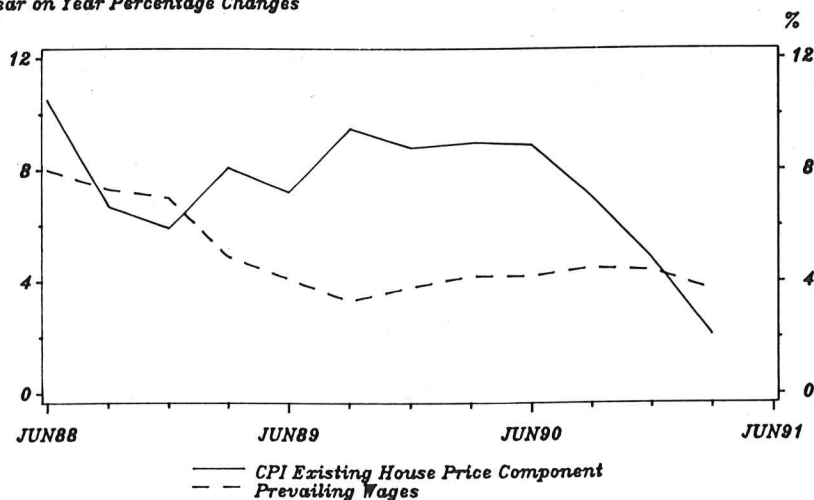
*Wage rises have been small ...*

Lower wage increases have been among the most important channels through which the fall in inflation has come about. As discussed in the last Statement, the Bank's firm monetary policy, the weak economy, and the Growth Agreement contributed to this wage moderation. Rises late last year averaged around 3 per cent - more than 1 percentage point lower than in the previous round - but more recent settlements, especially in the public sector, have averaged well below 3 per cent. Tradeoffs for greater flexibility in work practices and conditions have also been frequent.

*... and so price pressures from labour costs have been minimal.*

Reflecting the impact of lower basic settlements and greater flexibility, surveyed average (ordinary time) wage rates grew by 4.6 per cent in the year to February 1991, down from 7.7 per cent a year earlier. These figures are affected by a number of compositional factors, but vividly illustrate the slowing in wage growth over the past year. Combined with further improvements in productivity trends, unit labour costs (labour costs per unit of output) in many industries have almost certainly risen very little, and have probably fallen in a number of cases. All in all, pressures on prices from labour costs appear to have been minimal in recent months.

**Figure 6**  
**Influences on Inflation**  
**Year on Year Percentage Changes**  
**%**



*Import prices are little changed ...*

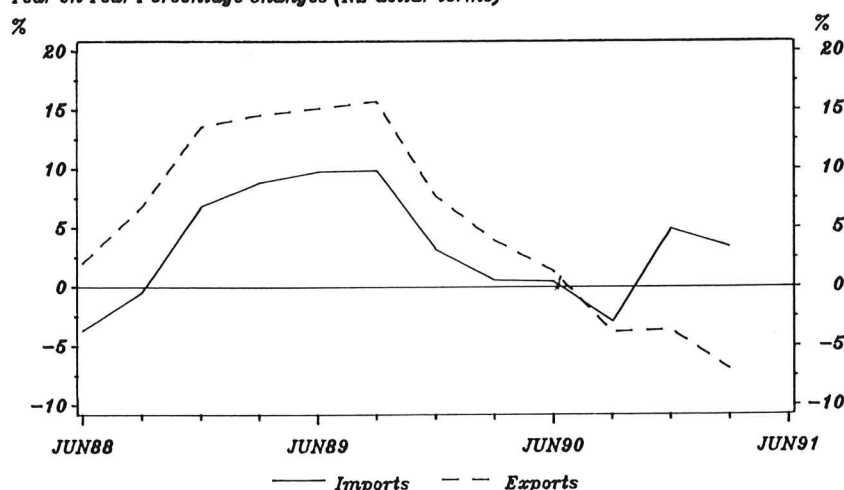
Import prices have also changed little, once allowance is made for the oil price shock. Excluding oil, import prices are estimated to have risen by only 0.4 per cent in the year to June - significantly lower than the average rate of consumer price inflation among our trading partners, but consistent with the relatively low rates of inflation in world prices for manufactured goods.

*... and the exchange rate was stronger than expected, despite some fall.*

Offsetting, to a small extent, these influences on the prices of traded goods was the depreciation of the New Zealand dollar in the December 1990 quarter. However, contrary to the assumption included in our forecasts in the last Statement, the exchange rate did not fall again early this year, so that, overall, the rise in traded goods prices in the year to June was less than expected.



**Figure 7**  
**Import and Export Prices**  
**Year on Year Percentage Changes (NZ dollar terms)**



*The weak economy has put profit margins under pressure.*

Relatively weak domestic demand and the continued firm monetary policy stance seem likely to have moderated the extent to which any cost increases were passed into consumer prices. It is difficult to gauge the empirical significance of this effect, particularly as cost pressures have in any case been quite weak. But those sectors experiencing the strongest fall-off in demand over the past year - such as retailers of cars and other consumer durables - are thought to have faced particular pressure to reduce margins. Certainly, price discounting among such retailers appears to have been common. Price competition among supermarket chains also appears to have intensified. Increased supermarket competition and falls in agricultural food prices have been reflected in the Food Price Index, which rose by only 0.5 per cent in the year to June 1991, the lowest rate of increase since the December 1966 year. Covering a broader range of goods, the retail trade deflator rose by only 2.3 per cent in the year to March.

*One-off factors have contributed to the fall in inflation ...*

One-off factors have also played their part in the fall in inflation. The substantial falls in home mortgage interest rates since December 1990 have contributed to the better-than-expected CPI outcomes. More fundamentally, and despite falling mortgage rates, house prices have been flat over late 1990 and have fallen somewhat over the first half of 1991. House prices in the December quarter (reflected in the March CPI) are estimated to have risen by only 0.6 per cent. House prices fell by 0.6 per cent over the March quarter, and this fall was reflected in the June CPI.

*... with mortgage rates down ...*

The Bank's Housing-Adjusted Price Index (HAPI), which uses an alternative treatment of housing costs, increased in line with the CPI over the March quarter, growing by 0.6 per cent, but rose by 0.3 per cent over the June quarter, bringing the year-on-year increase in the HAPI to 3.4 per cent. Even though house prices and mortgage interest rates have been falling, measured private rentals are estimated to have risen, accounting for the divergence between the CPI and HAPI inflation rates.

**TABLE 2**  
**INFLATION OUTCOMES**  
(% change)

	CPI			HAPI <sup>1</sup>		
	Qtly	Year-on-Year	Excl. GST	Qtly	Year-on-Year	Excl. GST
1989						
Mar.	1.1	4.0		0.9	5.9	
June	1.2	4.4		1.3	5.7	
Sep.	3.5	7.2	5.5	3.8	8.3	6.6
Dec.	1.2	7.2	5.3	1.2	7.2	5.3
1990						
Mar.	0.9	7.0	5.0	0.9	7.3	5.3
June	1.8	7.6	5.6	1.5	7.5	5.5
Sep.	1.0	5.0	4.7	1.1	4.7	4.4
Dec.	1.1	4.9	4.8	1.4	5.0	4.9
1991						
Mar.	0.6	4.5		0.6	4.7	
June	0.1	2.8		0.3	3.4	

<sup>1</sup> Housing Adjusted Price Index.

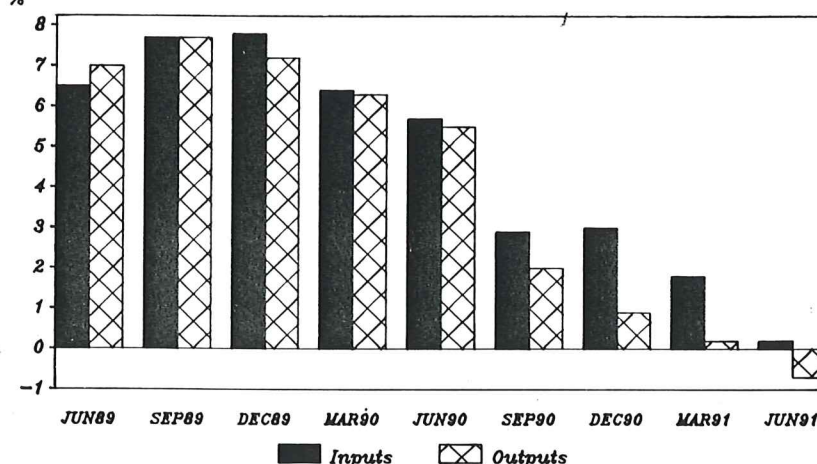
*... and oil prices down more sharply than expected.*

Sharp movements in oil prices have also affected the CPI over the last year. The Iraqi invasion of Kuwait in August 1990, and the outbreak of war in January, created significant uncertainty about oil prices. At the time of the February Statement, the Bank used the assumption that oil prices would average around US\$18 per barrel of Dubai light crude for 1991. In fact, oil prices fell more sharply. Over the March and June quarters the direct effect of falling oil prices is estimated to have reduced the CPI by around 0.4 per cent. In the year to June - over which period oil prices have risen and then fallen sharply - the overall effect of oil prices on the CPI has been a rise of just 0.3 per cent.

The Producers Price Index (PPI) - a key indicator of inflationary pressures in the economy over subsequent quarters - also reflects the drop in inflation. The PPI inputs index fell by 0.6 per cent in the March quarter while the outputs index increased by only 0.1 per cent. In the year to March 1991, the inputs index rose by 1.8 per cent and the outputs index by 0.2 per cent - the lowest increases in the 14 year history of the series. Both the inputs and outputs series

have been held down by falling oil prices and recent weak export commodity prices. But even excluding these effects, the core or trend rate of increase in producer prices appears to be very modest. All this augurs well for future inflation prospects.

**Figure 8**  
*Producers Price Inflation*  
Annual Percentage Change  
%



## Underlying Inflation

*The Bank is required to focus on the medium-term outlook for inflation.*

In the February Statement, and in more recent discussions about the likely path for inflation, the Bank has emphasised that monetary policy should not simply be driven by short-term fluctuations in the measured CPI inflation rate. Rather, the focus should be on the medium-term outlook for core inflationary pressures, which are more directly amenable to monetary policy influence. This approach is required by the Policy Targets Agreement.<sup>2</sup> The Bank applies the same standard to the intermediate indicative inflation ranges published in that Statement, and to the ongoing target beyond 1993 of maintaining annual CPI increases in the 0-2 per cent range.

*The 0-2 per cent range is our basic goal ...*

In the Agreement, 0-2 per cent annual increases in the CPI have been agreed to be consistent with price stability. That measure is the basic yardstick against which the Bank should be assessed. However, short-term movements in the CPI are not a wholly reliable indicator of ongoing inflationary pressures in the economy.<sup>3</sup>

2 The Policy Targets Agreement, signed by the Minister of Finance and the Governor of the Reserve Bank, specifies the targets to be pursued by the Bank in the conduct of monetary policy. The current agreement was reproduced in the February 1991 Monetary Policy Statement.

3 This does not, of course, mean that the CPI is an inaccurate measure of actual prices at a point in time.



The Agreement recognises explicitly that some shocks should be allowed to pass directly into a higher or lower price level. Specifically, Sections 3(a) and 3(b) of the Agreement state that:

*... but there are various shocks which temporarily affect prices ...*

(a) *There is a range of possible price shocks arising from external sources, certain government policy changes, or a natural crisis which are quite outside the direct influence of monetary policy. The Bank shall generally react to such shifts in relative prices in a manner which prevents general inflationary pressures emerging.*

*... which will, at times, legitimately take CPI inflation outside 0-2 per cent.*

(b) *This approach means that the CPI inflation rate can be expected to move outside the 0-2 per cent range in response to particular shocks. The principal shocks are considered to be:*

- *significant changes in the terms of trade arising from an increase or decrease in either import or export prices;*
- *an increase or decrease in the rate of GST, or a significant change in other indirect tax rates;*
- *a crisis such as a natural disaster or a major disease-induced fall in livestock numbers which is expected to have a significant impact on the price level;*
- *a significant price level impact arising from changes to government or local authority levies; and*
- *a significant divergence between the CPI and HAPI inflation rates.*

*The Bank's focus is on trends after adjusting for the one-off price shocks ...*

This approach means that over short periods measured inflation may move outside the 0-2 per cent range if one or more of these shocks occurs. Monetary policy is required to focus on inflationary trends after adjusting for these one-off influences, and to react to the one-off shocks only to the extent that they threaten to flow through into higher inflation expectations and into additional upward pressures on wages and other costs and prices. This focus is in line with the medium-term emphasis of the policy framework: what matters is to maintain a stable general level of prices through time.

*... in other words,  
on underlying  
inflation.*

Inflation adjusted for the temporary impact of these shocks or one-off influences is what we refer to as underlying or core inflation. Unfortunately, because the nature of such shocks cannot be fully specified in advance, and because the impact of shocks can often not be measured precisely, it is not possible to specify a single, comprehensive, definition of 'underlying inflation'. To some extent, interpretation of the impact and significance of the shocks is a matter of judgment, and hence requires clear explanations by the Bank to support any numerical estimates. Estimates published in these Statements should be recognised as approximate.

*In 1989 and 1990  
shocks meant  
that the CPI  
overstated under-  
lying inflation ...*

This approach has been of considerable practical significance in the running of monetary policy in the last couple of years. In 1989, when GST was raised and export food prices rose sharply, the Bank generally adjusted for these influences in formulating monetary policy. We focused policy instead primarily on the underlying rate of inflation: primarily, because the shocks did appear to affect inflation expectations to some extent and monetary conditions tightened somewhat in response. Sharp changes in important public sector charges and in oil prices led to similar effects last year and the Bank did not attempt to counter these price rises. All of these factors have been reflected in our previous published estimates of the underlying inflation rate.

*... but in 1991,  
the CPI has  
overstated the  
fall in underlying  
inflation.*

Over the first two quarters of 1991, the adjustments have generally been working the other way: the fall in measured inflation has been tending to overstate the true pace of the fall in inflationary pressures. Underlying inflation has, however, still fallen significantly over the last 6-9 months, after a year or so of comparatively little progress. From around 4.4 per cent in the year to June 1990 and a similar rate at the end of last year, underlying inflation is estimated to have been down to around 2.6 per cent in the June 1991 year. A fall in the underlying rate of inflation during 1991 had been expected by the Bank - and envisaged in our last two Statements - although the actual fall has been a little quicker than had been expected.

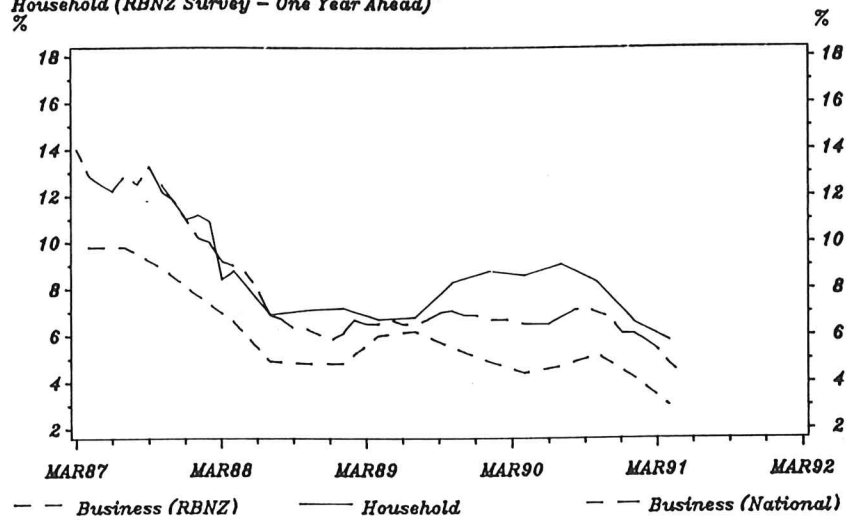
## Inflation Expectations

*Improving local  
confidence about  
inflation pros-  
pects ...*

In some respects, the most significant change in the last 6-9 months has been a change of sentiment - among financial markets and the wider community - about inflation prospects. Doubts that existed last year about the post-election commitment to the price stability goal have substantially dissipated. On top of the fall in underlying inflation has come something of a sea-change in attitudes. Scepticism has begun to turn to acceptance that price stability might actually be attained. This growing acceptance is making it less costly to lower inflation.

Figure 9

**Inflation Expectations**  
Business (National Bank Survey and RBNZ Survey) and  
Household (RBNZ Survey - One Year Ahead)



... is reflected in surveys of expectations ...

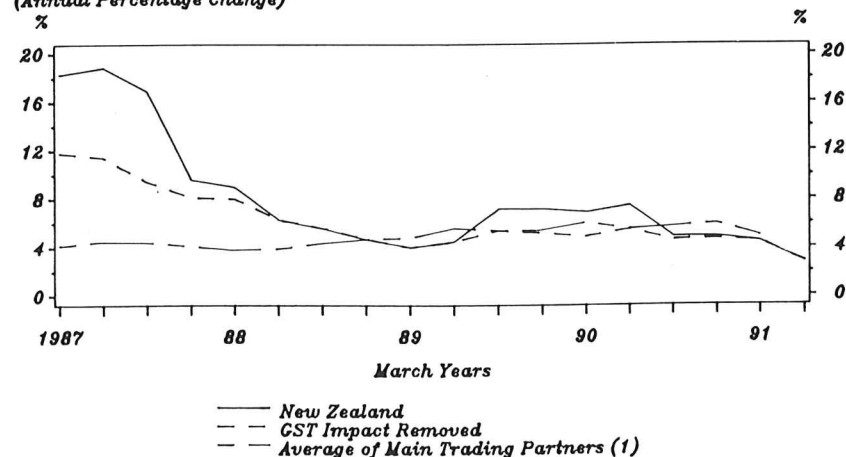
Changing attitudes have been reflected in the various expectations surveys. The Reserve Bank's survey shows that business expectations of CPI inflation for the year ahead had fallen from 4.2 per cent in February to 3.0 per cent in May, while expectations for inflation two years ahead had fallen from 3.7 per cent to 2.7 per cent over the same period. Similarly, the National Bank's more recent July survey of inflation expectations, covering a broader spectrum of the business community, recorded a year-ahead expectation of 4.1 per cent, down from a recent peak of 7.2 per cent in October 1990. (The July National Bank survey was taken before the announcement of the June quarter CPI.)

... and has meant falls in lending rates have not jeopardised inflation.

Household expectations have also fallen sharply. The Reserve Bank's survey showed household expectations for the year ahead to have fallen by 3.3 percentage points since August 1990 to 5.8 per cent in May, finally substantially reversing the rise in expectations that occurred in late 1989. The sharp fall in expectations has meant that the Bank has been able to accommodate the large falls in retail lending rates without jeopardising the inflation outlook.

Figure 10

**New Zealand vs Overseas Inflation**  
(Annual Percentage Change)



1. Trade-weighted average of the inflation rates of Australia, Germany, Japan, United Kingdom and USA.



But encouraging as the falling inflation expectations are, by mid-1991 expectations of inflation were still not much lower than those prevailing during mid-1989. For example, in August 1989, household expectations of inflation one year ahead averaged 6.8 per cent. And a small majority of households in the May 1991 survey still expected inflation to rise over the coming year.

*Overseas investors also appear to expect much lower inflation.*

Among overseas investors, inflation expectations also appear to have fallen. Direct survey evidence is not available on this score, but the fall in bond rates and increased foreign interest in our bond market is strong indirect evidence. Favourable reviews internationally, including the recent OECD Economic Outlook's forecast that New Zealand's 1991 inflation rate will be the lowest of the 24 OECD countries, should be helping to reinforce these favourable expectations.

## MONETARY POLICY DEVELOPMENTS

*Monetary conditions have eased further over the period ...*

Monetary policy over the last six months has remained oriented towards achieving price stability. The inflation outlook has been improving and confidence that the improvement will be sustained has been rising. Together, these factors have meant that a substantial easing in monetary conditions has been possible without jeopardising the price stability goal. Managing this transition, in an environment where emerging credibility remains fragile, has been one of the key challenges of the period.

### Monetary Conditions

*... after easing substantially in the months before the last Statement.*

Monetary conditions had already eased substantially by mid-February, when our last Statement was published, influenced both by Reserve Bank actions and by market developments. The exchange rate, which had averaged 61.0 on the Bank's trade-weighted index (TWI) over the first nine months of 1990, had eased late last year to average 58.3 over the first half of February. Ninety day bill rates had fallen to around 11.8 per cent - down around 3 percentage points since October - and bond rates were down around 2 percentage points over the same period to around 11.4 per cent. After 18 months in which a steeper yield curve had been needed to keep inflationary pressures in check, the slope of the curve had flattened markedly, leaving a negative yield gap of only around 0.4 percentage points.

*Over March and April bond rates were falling gently...*

Over the following couple of months, monetary conditions remained relatively stable. The package outlined in the February Statement, to provide a framework with greater capacity to deal with the pressures which can result from frictions and 'cash plays' in the short-term money market and the interbank settlement process, was implemented on 22 February without any disruption to markets or interest rates. More significantly, the announcement on 12 March of a sharp increase in the 1990/91 forecast financial deficit had little or no sustained effect upon interest rates. Indeed, despite this fiscal deterioration, bond rates continued to fall gently, to around 11 per cent prior to the 17 April release of the March quarter CPI. The yield gap widened correspondingly to around negative 0.7 percentage points.

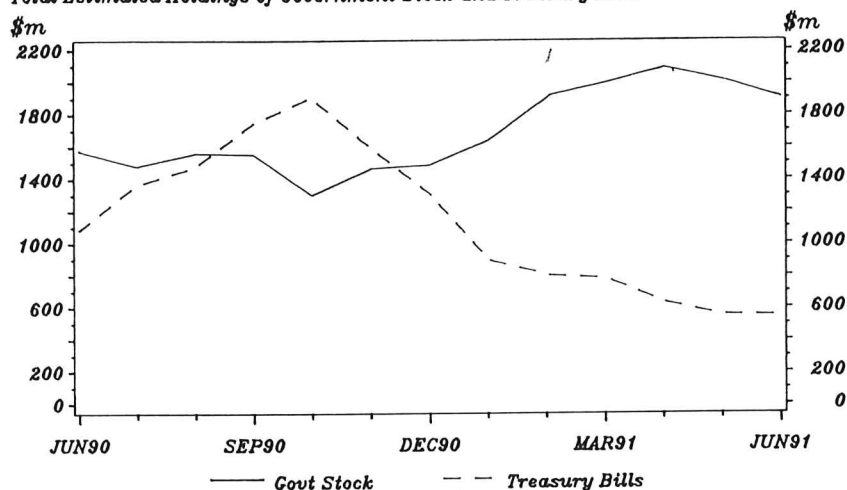
*... driven by increased overseas buying.*

Sentiment about inflation was continuing to improve, as was general investor confidence in the direction of macroeconomic policy, particularly in overseas markets. Indeed, the fall in bond rates appears to have been driven substantially by increased overseas buying. Foreign holdings of Treasury bills had increased very sharply over July-October 1990. Following the election these holdings had been run down, but at the same time foreign bond holdings rose rapidly, from around \$1,300 million in October to a

peak of around \$2,100 million in April 1991. These holdings were increasingly in longer-dated securities. The increasing overseas interest in longer-term New Zealand assets (including also shares and property) was reflected in the slight strengthening of the exchange rate over March to around 59.5 on the TWI.

**Figure 11**

*Foreign Holdings of New Zealand Government Debt  
Total Estimated Holdings of Government Stock and Treasury Bills*

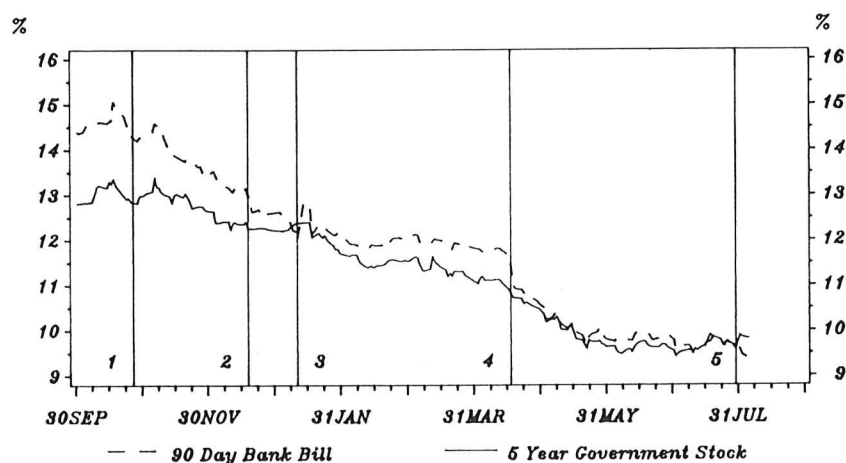


*From mid-April  
interest rates fell  
sharply ...*

Shorter-term interest rates had also begun to ease in mid-April, but following the release of the March quarter CPI on 17 April there was a more substantial and sustained fall - even though the CPI outcome appeared to be very much in line with market expectations. From the Bank's perspective, the immediate policy issue at the time of the CPI release was assessing the appropriate magnitude of any further easing. The Bank released a cautious statement which indicated that it had been happy with the falls in interest rates to that point, particularly as bond rates had been leading the fall. The statement noted that the favourable CPI outcome and good prospects for further falls in the inflation rate should help to ease the pressure on monetary policy as we moved towards price stability.

**Figure 12**

*Interest Rates*



1. General Election 2. 19 December Package 3. 11 January Statement  
4. March CPI Result 5. Budget



*... influenced by the CPI and a statement from the Bank.*

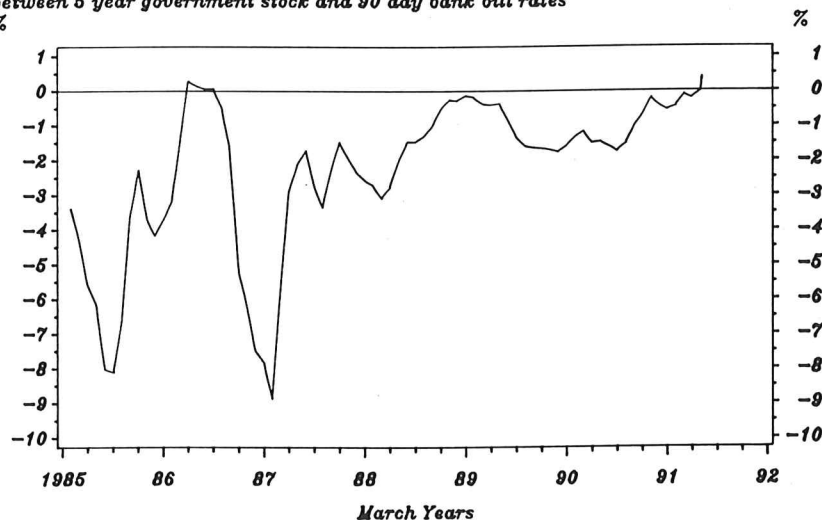
*The yield curve has attracted a lot of attention ...*

The 17 April statement was intended by the Bank to be broadly neutral but, together with the inflation outcome itself, led to a significant further fall in wholesale interest rates. The falls continued over the following six weeks, in turn sparking a new round of retail lending rate reductions.

The slope of the yield curve has been the subject of particular scrutiny this year. The reasons were covered in the last Monetary Policy Statement, in a discussion about the Bank's 11 January media release. That release had followed the emergence of a positive yield gap (upward-sloping yield curve) in the face of very easy liquidity conditions and without a commensurate easing in inflation expectations and longer-term bond rates. It noted that the maintenance of adequate progress towards price stability appeared, at least for the time being, to require a slightly downward sloping yield curve. At the time, almost all other developed countries also had downward sloping curves.

**Figure 13**

**Yield Gap**  
between 5 year government stock and 90 day bank bill rates  
%



*... as the Bank managed a shift to an upward sloping curve.*

This position was never intended as a cast-iron rule. However, after New Zealand's long period with a downward sloping curve, the timing of the eventual reversal of the slope was regarded as having some significance. Although by no means a perfect indicator - none of the indicators is - the downward sloping curve had been an important signal of the Bank's anti-inflationary resolve. In managing the transition to an upward-sloping curve the Bank reached the view that it was important first to ensure that there were enough 'runs on the board' in the fight against inflation. Linking falls in short rates to falling bond rates provided a relatively sound, and cautious, yardstick, helping to avoid an unduly rapid easing in monetary conditions.

*The gap narrowed sharply in mid-April ...*

A significant narrowing of the gap between long-term and short-term interest rates - from around 0.7 percentage points to around 0.2 percentage points - occurred over the few days following the 17 April CPI announcement. This narrowing, coming on top of the general fall in the level of interest rates, amounted to an easing in

... and on 23 April conditions for an upward sloping curve were outlined.

monetary conditions. The improving inflation outlook meant that the Bank was not uncomfortable with some narrowing of the yield gap, but in the context of the rapid easing, and concerned to ensure that any further easing was well-warranted, the Governor commented in some detail on the slope of the yield curve in a speech on 23 April (extracts are reproduced in Appendix 2). The speech indicated that a favourable June CPI, further meaningful fiscal progress in the Budget, and a continuing favourable inflation outlook, might make an upward-sloping yield curve possible without jeopardising the improving prospects.

TABLE 3  
MONETARY INDICATORS

	90 Day <sup>1</sup> Bank Bill Yield (%)	5 Year <sup>1</sup> Govt Stock Yield (%)	Yield <sup>1,2</sup> Gap (%)	Exchange <sup>1,3</sup> Rate	M3 Annual % Changes <sup>4</sup>	Private Sector Credit
<b>Annual</b>						
1987	21.1	16.7	-4.3	63.0	13.6	17.2
1988	15.4	13.4	-1.9	64.5	3.5	9.2
1989	13.6	12.8	-0.8	60.6	3.9	7.7
1990	13.9	12.5	-1.4	60.5	13.7	11.6
<b>Quarterly</b>						
1989						
Mar.	13.5	13.3	-0.2	59.8	3.4	4.8
June	13.5	13.1	-0.3	61.1	5.6	7.2
Sep.	13.3	12.4	-0.9	60.9	5.5	7.8
Dec.	13.9	12.3	-1.6	60.8	3.9	7.7
1990						
Mar.	13.8	12.1	-1.7	61.6	1.4	9.7
June	13.6	12.3	-1.3	60.7	4.0	11.4
Sep.	14.3	12.7	-1.6	60.8	7.0	10.1
Dec.	13.9	12.8	-1.1	59.1	13.7	11.6
1991						
Mar.	12.1	11.7	-0.4	58.8	12.1	10.1
June	10.4	10.2	-0.3	59.4	9.0	8.0
<b>Monthly</b>						
July	9.7	9.6	0.0	57.9	-	-

1 Averages of daily observations.

2 Gap between yields on 5-year government stock and 90-day bills (may not exactly match with the interest rate numbers in this table due to rounding).

3 Trade-weighted index (June 1979=100).

4 At end of period.

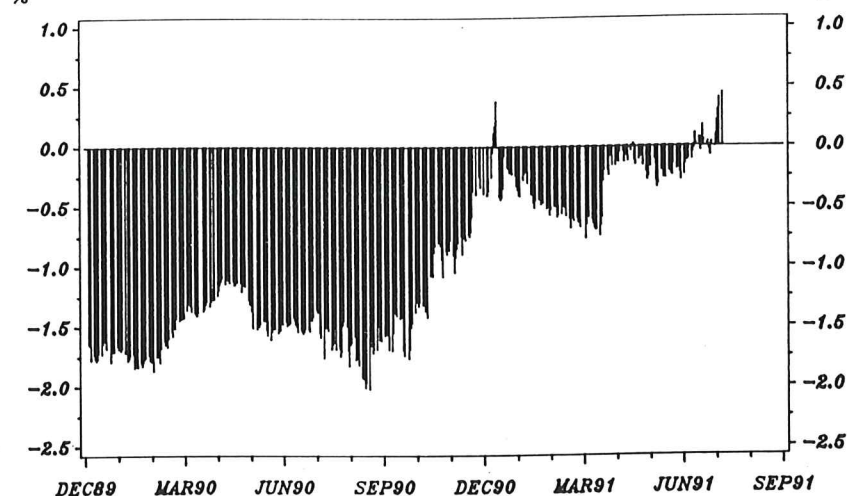
*Interest rates fell sharply during May ...*

The level of interest rates continued to ease rapidly during May, and by late May both 90-day and 5-year rates had fallen to below 10 per cent - with 90-day rates down by almost 2 percentage points in less than two months. Short rates had not been that low since the mid-1970s, and long-term rates only briefly in 1983. The exchange rate and the yield gap initially held firm. However, in mid-May easy cash conditions - and growing expectations that the 23 April conditions would soon be fulfilled - saw the downward-sloping yield curve vanish completely. Only following Reserve Bank reminders that those conditions had not yet occurred was the downward slope restored.

**Figure 14**

**Yield Gap**

between 5 year government stock and 90 day bank bill rates



*... and sentiment about inflation and the Budget continued to improve ...*

By this stage, increasing market attention was coming to focus on the inflation outlook and the likely outcome of the Budget. The Bank's own forecasts of the likely inflation rate for 1991 had been dropping, from the 3.8 per cent forecast in the February Statement, and on various occasions these changes were indicated publicly. Market commentators were coming to the view that a nil rise in the CPI for the June quarter was possible, and that measured inflation for the full calendar year was likely to be under 2 per cent. Moreover, despite occasional nervousness, markets grew increasingly confident about the direction of the Budget.

*... putting pressure on the yield curve slope ...*

In these circumstances, an upward sloping yield curve, led by a further significant fall in 90 day rates, became increasingly likely. Such an outcome was being priced into futures market rates, and rates on longer-dated physical bills - which implied that 90 day rates were expected to fall to around 9.2 per cent by September.

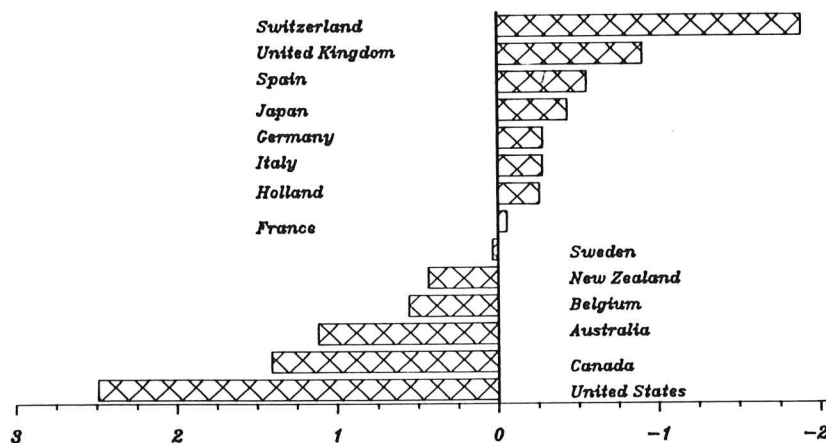
*... and eventually the yield curve became slightly positive.*

A period of pressures in the cash market kept call rates considerably higher than the rest of the yield curve throughout June and, with brief interruptions, much of July. In turn, these pressures prevented any significant fall in 90 day rates and sustained a relatively flat yield curve. Despite these pressures, 90 day rates had consolidated at new lows around 9.5-9.7 per cent by early July. In early July, in



thin 90 day markets, as market confidence in the inflation and Budget outlook grew stronger, the curve turned slightly upward sloping, before fluctuating between a positive and negative yield gap for most of the rest of the month.

**Figure 15**  
*Interest Rate Yield Gaps*

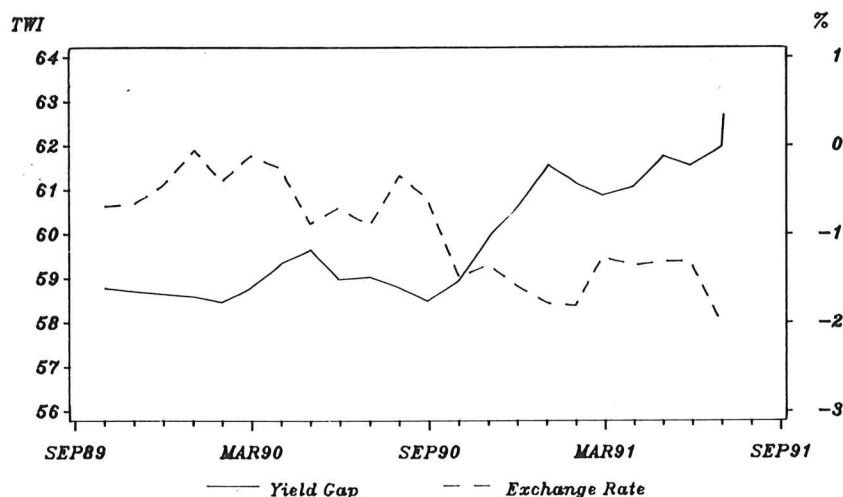


Source: RBNZ and The Economist. Foreign rates as at 23 July, NZ rates 5 August

*The exchange rate fell in early July.*

At the same time the exchange rate had begun to ease, falling from a little over 59 on the TWI in late June, to fluctuate in a narrow range of 57.3-57.5 over much of July. The reasons for this easing were less clear. However, there had been small net foreign selling from the New Zealand bond market since May, removing some support. This selling may have been linked with a view among some investors that immediate prospects for further sharp falls in bond rates (and hence further significant capital gains) were limited.

**Figure 16**  
*Nominal Exchange Rate (TWI) and the Yield Gap (%)*



*Following a good June CPI, attention turned to the Budget.*

The June quarter CPI result was released on 15 July, but had little effect on markets because the rise had been widely anticipated. The Bank commented on the CPI in a statement which welcomed the outcome but indicated that underlying inflation remained higher than the measured rate and that the improvement in the inflation outlook had already largely been factored into monetary conditions. More importantly, the Bank indicated that a good Budget

might allow some further easing in monetary conditions. This was taken, and intended, as a sign that the 23 April conditions had yet to be fully met. Both short and long rates edged up for a few days. The rise in bond rates - briefly back towards 10 per cent - appeared to reflect continuing nervousness following the Minister of Finance's announcement on 12 July that proceeds of asset sales in 1991/92 would be used to offset overseas debt - boosting expected domestic debt sales.

## The Budget

The Budget was brought down on 30 July. Considerable market attention focused on the Bank's reaction.

*The Bank's key interest in fiscal policy ...*

In the long-term, inflation is a monetary phenomenon. However, the Bank has an important interest in fiscal policy because of a number of linkages between fiscal developments and monetary policy.

Of prime importance is the question of the economic sustainability of fiscal policy.

*... is whether the fiscal outlook is economically sustainable...*

Fiscal policies that investors regard as unsustainable over time are likely to cause concern about the growing cost of servicing a rising public debt. Rising servicing costs may be seen by investors as creating a risk that some future government would resort to inflation to reduce its domestic debt burden, in an attempt to reduce real interest rate pressures or simply to free up expenditure for other purposes. In this way, fiscal policy can affect expectations of future monetary policy.

*... and consistent with building confidence in price stability.*

Specifically, starting with already high debt levels, fiscal policies that continue to generate substantial deficits can reduce the credibility of stated commitments that monetary policy will remain directed towards price stability. By increasing the interest rate risk premium associated with government policy in this way, fiscal policies that are viewed by investors as potentially unsustainable are likely to increase the difficulty of carrying through on any particular monetary policy. The sustainability of fiscal policy is difficult to measure precisely; one widely-used indicative approach to the issue (which is used by the Bank) is outlined more fully in the box on pp 30-31.

*Spending cuts reduce demand ...*

Other effects are also important. In the short run especially, fiscal policy can affect domestic demand directly through government revenue and expenditure decisions. Large expenditure cuts - such as the April benefit cuts - show up in lower household spending. Lower spending in turn may influence wage and price-setting behaviour, altering short-term inflation and inflationary expecta-

tions, and reducing the degree of pressure monetary policy has to bring to bear. In the short run, at least, the tougher fiscal policy is the less the need for monetary policy pressure on interest rates and the exchange rate.

*... and some fiscal measures can directly affect measured inflation.*

Changes in indirect tax rates, tariff levels, and government user charges can have a direct impact on measured inflation. Although technically resulting only in one-off changes in the price level, the experience of recent years suggests that these shocks can have an impact on inflation expectations. Through this channel, desirable fiscal consolidation may have a temporary adverse spin-off in the form of stronger inflationary pressures. The Bank is required to let the direct effects of these sorts of measures alter the price level, but needs to hold conditions sufficiently firm to keep any second-round pressures in check. The adverse effects on expectations of the introduction of GST in 1986 and rise in the rate in 1989 are good examples of the sort of difficulties that can arise.

*The method of funding a deficit can also send important signals.*

Finally, the way a government funds its deficits can send important signals about future monetary policy intentions. Funding patterns can appear to investors to support or be at odds with, a commitment to price stability, with potential flow-on effects for inflation expectations. The effects are most likely to be important where investors are already becoming seriously concerned about debt sustainability. The structure of funding between domestic and foreign markets, and between short and long-term maturities, can also directly affect interest rates and the yield curve.

*The Budget saw substantial deficit reductions ...*

It was against these criteria that the Bank was assessing the Budget. Most important was the sustainability question. The Budget contained measures which are projected to cut the financial deficit by around \$3,000 million (as compared with pre-Budget forecasts) to around \$500 million (less than 1 per cent of GDP) in 1993/94. The primary surplus (the financial balance excluding interest payments) is projected to stand at around 4.1 per cent of GDP by 1993/94, reducing the ratio of net debt to GDP to around 45 per cent in 1994, from 52 per cent in 1990. These announcements give a basis for confidence that the fiscal position has now been placed on a solid and sustainable medium-term footing. At the same time, and as discussed more fully later in the Statement, increases in levies and excises, health user charges, and various other Budget decisions are likely to put some temporary upward pressure on the price level over the next couple of years.

*... which the Bank welcomed ...*

Despite these pressures, the Bank welcomed the reductions contained in the Budget, as indicating that fiscal policy had been placed more firmly on a sustainable path. In a statement on 31 July, the Bank indicated this position publicly. The statement noted the one-off impact of the price increases, but emphasised that the deficit cuts combined with progress on inflation meant that there was no



## FISCAL POLICY AND SUSTAINABILITY

As discussed in the body of the text, the Bank's main concern about fiscal policy is that it be economically sustainable over the medium to long term. In essence, this amounts to a concern that policies in place should not involve a continual increase of the Government's debt to GDP ratio. Such an escalation could eventually severely erode the credibility of monetary policy.

Economic theory offers few insights on the appropriate debt level for a government. However, if, for example, the Government were to take as its goal to stabilise the net public debt to GDP ratio at its existing level then policies need to be such that, over time, the public debt is not growing faster than nominal GDP.

What this means for the Government's financial deficit depends on the initial stock of debt relative to GDP, the longer-term rate at which the economy is expanding, and the real interest rate the Government is having to pay over time on its debt. The higher the growth rate the less binding the fiscal problems, whereas the higher the interest rate the more binding the fiscal problem.

In examining this issue, it is useful to examine the financial balance excluding interest payments. This measure, known as the primary balance, is the focus of the Bank's attention. In the current climate, stabilising the debt to GDP ratio (which currently stands at 48 per cent) would require a primary surplus large enough to offset the extent to which the real interest rate the Government is paying exceeds the economy's medium-term real growth rate. In such a situation, a sustainable policy might quite possibly still leave the financial balance slightly in deficit.

A matrix illustrating the implications of this approach under a range of plausible alternative long-term assumptions is set out below.

### PRIMARY BALANCE SURPLUSES REQUIRED TO STABILISE NET DEBT RATIO AT THE 1991 LEVEL

Real Interest Rate (%)	Real Growth Rate (%)				
	0.5	1.0	1.5	2.0	2.5
8	+3.6	+3.4	+3.1	+2.9	+2.6
7	+3.1	+2.9	+2.6	+2.4	+2.2
6	+2.6	+2.4	+2.2	+1.9	+1.7
5	+2.2	+1.9	+1.7	+1.4	+1.2

The table below shows primary balance and debt ratio trends over the last two years, and the outlook for the coming three years, as contained in the Budget.

### PRIMARY BALANCE AND PUBLIC DEBT: GDP RATIO

<b>Fiscal Year</b>	<b>Primary Balance \$m.</b>	<b>Primary Balance % of GDP</b>	<b>Net Public Debt \$bn<sup>1</sup></b>	<b>Net Public Debt % of GDP</b>
1989/90	3,141	4.5	36.2	51.6
1990/91 (e) <sup>2</sup>	1,181 <sup>3</sup>	1.6	34.3	47.9
1991/92 (p)	2,173	3.0	35.4 <sup>4</sup>	48.2
1992/93 (p)	3,160	4.1	35.6 <sup>4</sup>	46.7
1993/94 (p)	3,250	4.1	36.2 <sup>4</sup>	45.3

1 Net Debt is equal to gross public debt less the Government's financial assets.

2 Projections/estimates of nominal GDP and the primary balance are Treasury's projections.

3 Excludes revenue from the sale of forest cutting rights (\$1,054 million).

4 Debt projections exclude any impacts from asset sales and from changes in reserves and debt levels related to exchange rate movements over the period.

Budget announcements suggest that by 1993/94, when the full effects are realised, the primary surplus will be around \$3,250 million (4.1 per cent of GDP), consistent with achieving sustained reductions in the Government's net indebtedness over future years.

*... as indicating a sustainable fiscal position.*

*A significantly upward sloping yield curve emerged.*

longer any reason to prevent the yield curve going upward sloping.

The Budget was also generally welcomed by market commentators, as fulfilling the expectations on which the falls in wholesale interest rates in recent months had been based. Over the days following the Budget short-term wholesale interest rates were little changed, but longer-term rates rose slightly, consistent with the rise in a number of overseas rates in late July and early August. By 5 August (at the time this Statement was finalised), 90 day and five year rates stood at around 9.4 per cent and 9.8 per cent respectively, and a significantly upward-sloping yield curve had emerged. The exchange rate remained steady and was also little changed by Budget announcements, ending the period at around 58 on the TWI, down around 5 per cent since the same time last year.

## Retail and Real Interest Rates

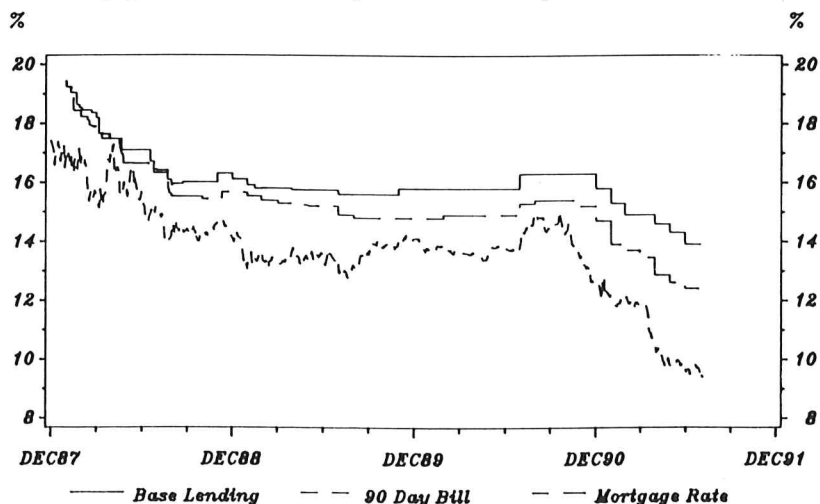
*Post-Budget, retail lending rates have begun to fall again...*

Falls in wholesale interest rates have led to significant reductions in retail lending rates over the review period. Following the Budget, some further reductions in retail lending rates have been announced; at the time of writing these reductions had been concentrated on corporate lending rates. Reductions announced by 5 August appear likely to take base rates down to around 13.2 per cent. With mortgage rates still just over 12 per cent, both business and household rates are now down over 3 percentage points from the post-Budget levels last year.

*... although retail deposit rates have still been slow to fall.*

The margins between wholesale funding costs and retail lending rates which had prevailed over earlier years have not yet been re-established. The key factor here appears to be that retail deposit rates have fallen more slowly than wholesale rates (a similar phenomenon occurred in 1988, the last time wholesale rates fell sharply). Competition has become particularly intense in this market - and at times retail deposit rates have exceeded wholesale

**Figure 17**  
**First Mortgage and Base Lending Rates vs 90 Day Bank Bill Rate**





**TABLE 4**  
**REAL INTEREST RATES**

		<b>Mortgage<sup>1</sup></b>	<b>Base Lending<sup>2</sup></b>	<b>90 Day Bank Bill<sup>2</sup></b>
		(%)	(%)	(%)
1989 -	Sep.	8.1	9.2	6.7
	Dec.	6.5	8.7	7.0
1990 -	Mar.	6.0	9.0	7.0
	June	6.3	9.2	7.1
	Sep.	6.2	9.3	7.5
	Dec.	7.1	9.3	6.8
1991 -	Mar.	7.4	9.3	6.1
	June	7.0	9.8	5.6
	July		9.8	5.6

1 Average mortgage rates, adjusted for the Reserve Bank's quarterly survey of household inflation expectations for one year ahead.

2 Averages adjusted for the monthly National Bank's survey of business inflation expectations for one year ahead.

funding costs. Banks appear to have been placing greater emphasis on developing their share of the household savings market.

In real, or inflation-adjusted, terms, retail deposit and lending rates have actually risen a little this year (for savers this is particularly so in after-tax terms, as illustrated in the accompanying box). However, as Table 4 indicates, real 90 day bill rates, a proxy for real wholesale funding costs - and the sort of rates most amenable to influence from monetary policy - have indeed been falling. Movements in these wholesale rates generally foreshadow movements in retail rates.

## SAVERS AND FALLING INTEREST RATES

In recent months, interest rates have fallen sharply. Many savers have commented on the reductions in interest receipts, claiming that they are worse off as a result.

These comments often appear to overlook the fact that inflation has come down sharply as well. In times of high inflation, interest rates also tend to be high. When inflation falls, so too do interest rates.

In periods of high inflation, a large part of interest payments simply represents compensation for the effects of inflation on the value, or purchasing power, of one's money.

It is important to think about what can be bought with the money. Consider, for example, someone who has had \$20,000 saved and wanted to buy a car for that amount in a year's time. If inflation were 10 per cent per annum, then by the end of the year the saver would need to have accumulated an additional \$2,000 (10 per cent of \$20,000) to be able to purchase the same car. Only interest receipts over and above that \$2,000 could really be considered as 'income', which could be spent without eating into the saver's capital.

By contrast, now that inflation has almost been eliminated, a much larger proportion of interest earnings represents real income, and less has to be set aside to maintain the value of a saver's capital - setting aside tax issues for the moment. Whether inflation is 10 per cent and interest rates 14 per cent, or inflation is zero and interest rates are 4 per cent per annum should be irrelevant from a depositor's point of view. In both cases, the real value of one's wealth, i.e. what can be purchased with the money saved, is the same.

In fact, however, given the way the tax system works, savers are almost certainly better off with low interest rates and low inflation. New Zealanders are taxed on all their interest receipts as if these earnings were income.<sup>1</sup> However, as already explained, only interest receipts beyond those that compensate for inflation can really be considered as 'income'. This inequity, which is due to the interaction of the tax system and inflation, is one reason why the price stability objective is regarded as so important.

The table opposite illustrates the way inflation and the tax system together erode people's savings, using as an illustration our car buyer's situation.

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<sup>1</sup> Similar rules - and problems - apply to the surcharge on GRI (and its replacement announced in the Budget), which treats all interest receipts as income.

Inflation Rate	Interest Rate	Real Interest Rate	Tax Rate	After-Tax Interest Rate	Real After-Tax Interest Rate	Real Value of Savings <sup>2</sup>
(1)	(2)	(3)=(2)-(1) <sup>1</sup>	(4)	(5)	(6)=(5)-(1) <sup>1</sup>	(7)
0	4	4	.33	2.7	2.7	20,540
5	9	4	.33	6.0	1.0	20,200
10	14	4	.33	9.4	-0.6	19,880
20	24	4	.33	16.1	-3.9	19,220

1 This is an approximation to the true formula, adopted simply for illustrative purposes.

2 At end of year, about applying column 6 to the initial sum of \$20,000.

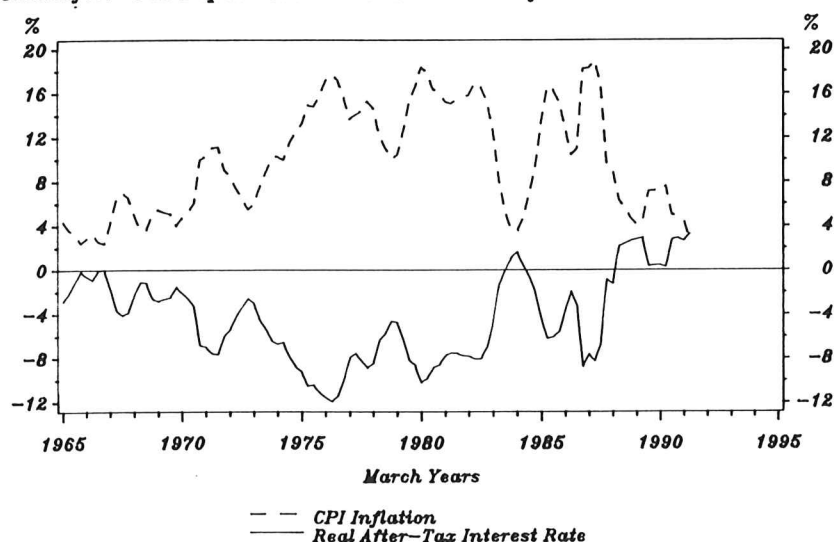
Even though the real interest rate (i.e. after simply deducting the inflation rate) remains constant at 4 per cent per annum, the table makes it clear that the higher the inflation rate the worse off the saver is. After paying his or her taxes, our car buyer would actually have **less** real wealth at the end of the period than at the start, once inflation gets above 9.4 per cent, even if interest rates rose to match the rise in inflation.

From the early 1960s right through until 1988, the real returns to New Zealand savers - that is, the returns after allowing for inflation and tax - were consistently negative. In other words, depositors were worse off at the end of each year - even if they reinvested all of their after-tax interest earnings - than they had been at the start of the year. Since 1988, by contrast, real after-tax returns have become positive. Even though interest rates have fallen, this has been more than offset by cuts in inflation and tax rates. The accompanying graph illustrates this.

In the continued absence of the distortionary effects of inflation, the climate for savings should remain more favourable than it has been for a generation.

**Figure 18**

*Real After-Tax Deposit Interest Rate vs CPI Inflation*





*Real interest bill rates remain relatively high ...*

*... but real rates have been falling for some years.*

Taken over a longer period, New Zealand real bill rates have generally been falling since mid-1987. Although New Zealand rates remain among the highest in the OECD, the fall in New Zealand real rates has occurred over a period when world real rates have generally been rising. The gap between New Zealand and overseas real rates has been narrowing at the same time that our inflation rate has fallen to below those of comparable overseas countries. This outcome is consistent with the observation that countries with sustained low inflation rates are also generally the countries with the lowest real interest rates. As price stability is consolidated in New Zealand, the trend to lower domestic real interest rates, relative to those overseas, can be expected to continue.

## Exchange Rate Behaviour

*Between December and June the exchange rate remained firm ...*

After the pre-election fall in the exchange rate last year, the relative strength of the New Zealand dollar from December to June surprised many observers - including the Bank. The exchange rate remained stable, despite the narrowing of the nominal interest rate differential between New Zealand and overseas rates that many would have expected to lead to some easing. Markets appeared to place little weight on concerns about the balance of payments. Nor did the Reserve Bank's comments that it would not stand in the way of some limited market-led depreciation appear to have had any effect.

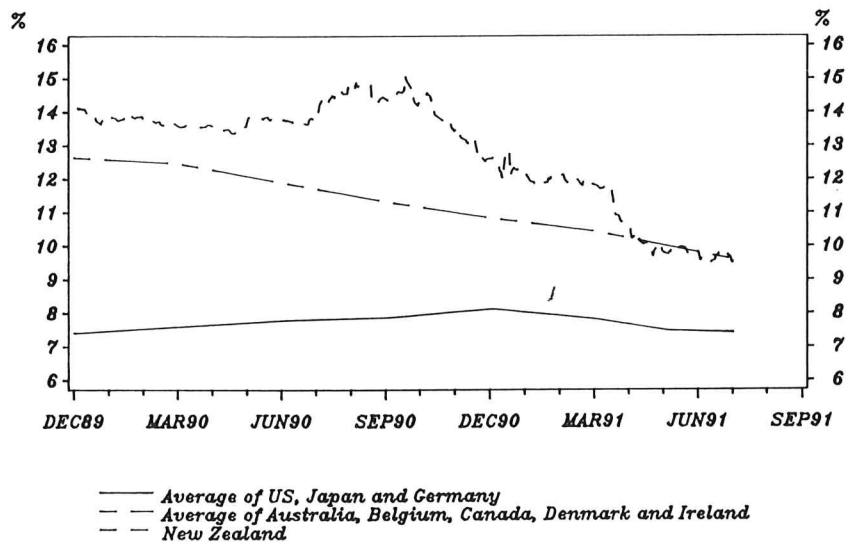
*... even though our interest rates fell faster than foreign rates ...*

Like New Zealand interest rates, foreign rates have generally been falling since late last year. The world recession, some moderation in inflation, and explicit monetary policy easings have contributed to these falls, particularly in short-term rates. However, on average, the overseas reductions have been considerably smaller than those which have occurred in New Zealand.

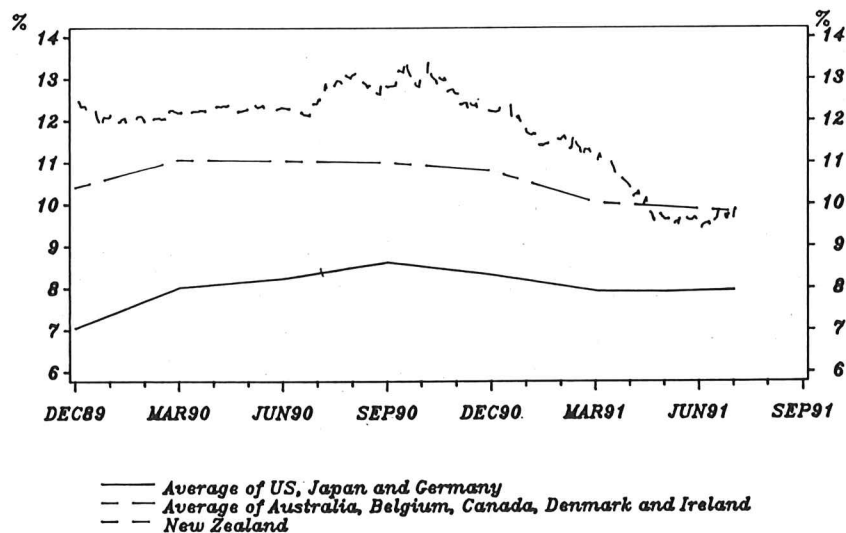
*... so that our interest rates are now around European levels.*

New Zealand's interest rates are now well below those of Australia and the United Kingdom. Perhaps more significantly, New Zealand's rates have moved very close to those in Germany and the smaller low inflation European countries. For example, current 90 day rates are 10.2 per cent in Ireland, 9.4 per cent in Denmark, 9.4 per cent in Belgium and 9.2 per cent in Germany. Comparable bond rates are 9.7 per cent in Ireland, 9.7 per cent in Denmark, 9.5 per cent in Belgium and 9.0 per cent in Germany. As the gap between New Zealand and overseas rates has narrowed significantly, we might, other things being equal, have expected to see some downward pressure on the exchange rate.

**Figure 19**  
**Short Term Interest Rates**



**Figure 20**  
**Long Term Interest Rates**



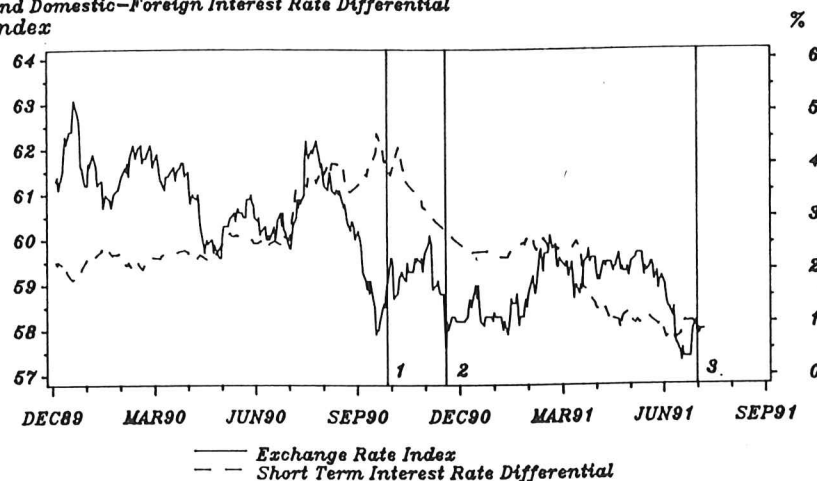
However, other things are rarely equal. Confidence and changing risk premia are important factors in explaining international capital flows. The sustained downward pressure on the exchange rate, and associated upward pressure on interest rates, from May to October 1990 appears to have reflected increased uncertainty in the build up to the October election and, particularly following the 1990 Budget, about the future direction and sustainability of New Zealand's macroeconomic policy. The risk premium demanded for holding New Zealand dollar assets seems to have escalated sharply over that period. By contrast, since the election, and more particularly since the 19 December package, confidence in the long-term economic sustainability of current monetary and fiscal policies appears to have developed rapidly.

*Confidence about New Zealand's prospects has increased ...*

Given this change in sentiment - the magnitude of which initially took most local commentators by surprise - it is perhaps less surprising that interest rates should have fallen sharply, even relative to those overseas, without putting more downward pressure on the exchange rate.

Figure 21

Trade Weighted Exchange Rate Index  
and Domestic-Foreign Interest Rate Differential  
Index



... and the balance of payments has improved.

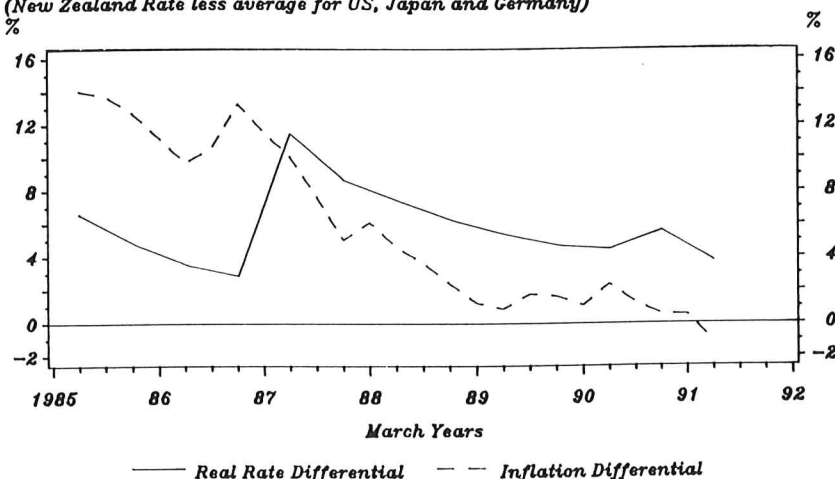
The Bank was not holding the exchange rate up ...

In addition, revisions to the balance of payments current account deficit announced in May, and improving trade data, reduced the perceived severity of the current account situation, helping to diminish the significance of one factor which could well have pushed the exchange rate down.

Some commentators have suggested that the exchange rate did not fall in early 1991 because the markets simply did not believe that the Reserve Bank would tolerate a fall of more than a few points on the index. Discussions with institutions dealing with foreign investors indicate that it was, in fact, widely understood overseas that the Reserve Bank was not intent on holding up the currency at levels of, say, close to 60 on the TWI. This consciousness will presumably have gained ground in view of the fall in the exchange rate over July, particularly as that fall has seen the New Zealand dollar move out of the relatively narrow range against the US dollar within which it has traded for some time.

Figure 22

Short Real Interest Rate and Inflation Rate Differentials  
(New Zealand Rate less average for US, Japan and Germany)  
%



New Zealand Inflation Rate is ex-GST



*... although the inflation target implies some limits on the size of any rises or falls.*

The Bank has continued to emphasise that the scope for rises or falls in the exchange rate is, ultimately, constrained by the inflation target. Because the Reserve Bank cannot be indifferent to the exchange rate - a major influence on the New Zealand dollar prices of goods and services - we could certainly not comfortably accommodate a sharp change in the exchange rate within the confines of the inflation goal. No central bank in a country with a relatively open economy and a concern for lowering inflation could do so.

## Monetary and Credit Aggregates

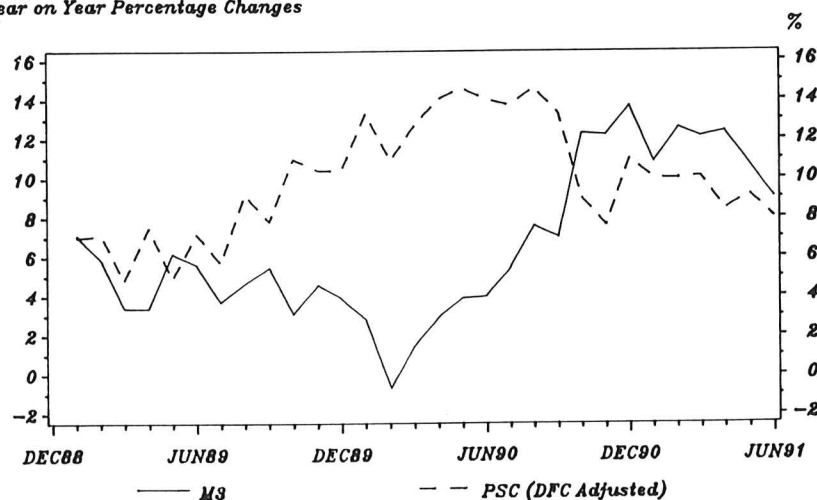
*Little weight is currently placed upon the aggregates ...*

Previous Statements have noted that the Bank currently places relatively little weight on developments in the monetary and credit aggregates when assessing monetary conditions. Specifically, the relationships between each of the aggregates and nominal activity or inflation have not proven robust enough, particularly over the short term, for the aggregates to act as reliable policy indicators, either individually or collectively. The problems with using aggregates have been further aggravated by overly-frequent reporting errors made by financial institutions, which have necessitated frequent revisions to the data. Nevertheless, the Bank continues to monitor the aggregates and to conduct research into their behaviour.

*... but credit and M3 growth have been surprisingly high.*

Over the past year, growth in both private sector credit (PSC) and the broad monetary aggregate M3 has perplexed observers. Against a background of a seemingly weak domestic economy, PSC is estimated to have grown at a peak rate of 14.6 per cent in the year to May 1990<sup>4</sup>, before slowing to 8.0 per cent in the year to June

**Figure 23**  
**M3 and PSC**  
Year on Year Percentage Changes  
%



4 This number is not from the official series, but rather has been derived by adjusting for the impact of the discrete jump caused by the removal of the DFC from the aggregates from October 1989 onwards.

**TABLE 5**  
**LENDING TO THE PRIVATE SECTOR<sup>1</sup>**

	<b>Year to Sep. 1990 (annual percentage changes) (point-to-point)</b>	<b>Year to Mar. 1991 (annual percentage changes)</b>	<b>Mar. 1991 Level (\$m)</b>
Non-Financial Non-Property Business Sector	12.3	9.8	20,261
Household Sector	21.1	9.8	22,758
Other Lending (primarily property and finance)	-17.8	1.8	12,754
M3 Inter-Institutional Lending	19.4	15.5	7,720
Residual Unallocated	<u>-13.6</u>	<u>19.3</u>	<u>2,295</u>
Total Lending to the Private Sector	7.4	9.0	65,788

**PRIVATE SECTOR CREDIT AND GROSS  
NATIONAL EXPENDITURE**

	<b>Year to Mar. 1990 (annual percentage changes)</b>	<b>Year to Mar. 1991 (annual percentage changes)</b>
<b>Private Sector Credit<sup>2</sup></b>		
- point-to-point	12.6	11.1
- annual average growth	9.0	12.0
<b>Gross National Expenditure</b> (annual average growth)	11.6	4.1 (e)

1 Data in the first half of this table are calculated along the lines of previously published sectoral lending data, adjusted for reclassifications from the 'Unallocated' sector, that can be traced to other sectors. These adjustments will be outlined in greater detail and an approximate revised series will be published in the September *Bulletin*. The data include foreign currency lending and so are not directly comparable with Private Sector Credit.

2 The growth rate for the year to September 1990 is not from the official series, but has been adjusted for the impact of DFC (consistent with the other figures in this table).

1991. Similarly, M3 has also grown strongly over the past year, increasing by 9.0 per cent in the year to June. Although part of the growth in M3 has been due to a sharp rise in deposits from non-New Zealand residents, and therefore does not represent an increase in domestic spending power, growth in the aggregate has, nevertheless, appeared surprisingly strong.

*Lending to businesses and individuals has grown relatively fast, reflecting ...*

The Bank and other commentators have previously attributed the strong growth in credit over 1990 chiefly to increased borrowing by the household sector. Lending to households has certainly been growing more rapidly than that to other sectors, but more recent investigations into the growth in private sector credit suggest that the credit growth has also been relatively rapid in the non-financial and non-property business sector. Lending growth to both sectors has slowed since the second half of last year, although this slowing has been most marked in the household sector.

*... a rise in gross national expenditure.*

There is no doubt that the credit growth of 1989/90 was high relative to GDP growth and consumption trends. But although nominal GDP grew by 7.8 per cent in the year to March 1990, and is estimated to have grown by only 5.1 per cent in the year to March 1991, the more relevant spending measure, Gross National Expenditure (the sum of consumption, investment and stockbuilding), is estimated to have risen by 11.6 per cent in the year to March 1990. The strength of spending over 1989/90 largely reflected the strong growth in business investment. Although much of this investment growth involved the import of capital goods rather than domestic production, it nevertheless boosted the demand for business finance. Thus credit growth, particularly over the earlier part of the period, appears to be broadly consistent with spending trends.

*Anecdotal evidence suggests ...*

*... some substitution out of foreign loans...*

Measured lending growth to businesses may also have been boosted by an increased reluctance of foreign banks to lend to Australasian firms. The importance of this factor is difficult to determine but, to the extent that such substitution has occurred, the resulting increase in measured private sector credit extended by New Zealand financial institutions may not be fully matched by an increase in the total debt of local businesses.

*... and there was a surge in mortgage demand in 1989 and early 1990.*

Most of the increase in household borrowing between late 1989 and mid-1990 represented growth in mortgages. This growth was associated with some renewed house price inflation in non-metropolitan urban areas until mid-1990. A sharp increase in household inflation expectations, following the increase in GST in July 1989, appears to have led to a fall in real interest rates - as households saw them - over late 1989 and early 1990, and is likely to have contributed to the demand for credit. In part, the increasing availability of more flexible mortgage facilities, the proceeds of which can be used for purposes other than the specific purchase of a house, may also have spurred the increase in demand. Household

savings appear to have fallen over the past year, and household borrowing may also have grown in response to falling real incomes and increased unemployment. Similarly in the corporate sector, statistics point to increased utilisation of overdrafts and other pre-committed borrowing facilities over the past year. This trend is consistent with the need to finance unexpectedly higher stocks arising from the downturn in the economy.



## TOWARDS PRICE STABILITY

*Inflation has fallen faster than expected ...*

As already noted, inflation has been coming down somewhat faster than we had expected. Even the core or underlying inflationary trends, which we had picked to fall this year, have been dropping away a little more rapidly than seemed likely at the start of the year. There also seems to have been a major favourable break in sentiment. In many respects, the outlook for inflation is now very positive.

*... but price stability has still to be achieved.*

Nevertheless, in the welter of good inflation news that has emerged this year, it is important not to lose sight of the fact that price stability has yet to be achieved, or sustainably maintained. This section outlines the Bank's view of the various influences on future inflation, and of the nature of the risks and challenges that we still face.

### The Outlook for Inflation

*Low quarterly CPI increases are expected ...*

For the remainder of this year we expect to see further low quarterly CPI increases. The CPI will continue to be affected by the impact of mortgage interest rate reductions, and will also be affected by Budget announcements which raise the price of petrol and of tobacco and alcohol products. Including all these effects, quarterly increases are expected to be a little over half a per cent in each of the September and December quarters.

*... based on influences already in place.*

Weak disposable incomes and falling inflation expectations are expected to keep house prices flat or even falling slightly, despite falling nominal interest rates. As the wage round has continued into 1991, the average settlement has fallen to average perhaps 1-2 per cent. The recent fall in the exchange rate is likely to have only a minimal effect on inflation this calendar year, although the cumulative 5 per cent fall over the last year will, no doubt, mean that annual inflation will be higher than would otherwise have been the case.

*CPI inflation for this year could fall to 2 per cent ...*

Overall, we are picking that the CPI inflation rate for the full year will drop to around 2.0 per cent - the lowest annual inflation rate for 30 years. Adjusting back for mortgage rate and oil price effects, and for the new ACC petrol levy and higher alcohol and tobacco excise duties, we expect that underlying inflation will be up to half a percentage point higher than the measured rate this year. Hence, this year's underlying inflation rate is expected to be considerably lower than last year (around 4.3 per cent), and at about the bottom of the 1991 indicative inflation range (2.5-4.5 per cent) announced in our February Statement. This outcome will reflect the firm policy stance maintained throughout last year, and some imprecision in the process of controlling inflation.

*... with underlying inflation around the bottom of the indicative range.*

*The 1992  
inflation out-  
look generally  
appears fa-  
vourable ...*

Looking towards next year, the inflation outlook generally appears favourable. Overseas inflation should be no higher than it has been this year, despite some recovery in the world economy.

More fundamentally, unit labour costs are not likely to put pressure on prices. High and rising unemployment is expected to result in further wage restraint. A number of other factors should also ensure that most wage negotiations occurring over the next year will settle for small or even nil increases.

*... as continued  
wage restraint  
seems likely ...*

First, lower-than-expected inflation is itself likely to moderate demands and settlements. Participants in wage negotiations over the next few months will be seeing an inflation rate of under 3 per cent, whereas a year ago most forecasters would have been picking an inflation rate for the same period of between 3.5 and 6 per cent. Second, benefit cuts will be placing some restraining hand on any wage increases at the lower end of the scale. Third, the Employment Contracts Act appears, in most circumstances, likely to provide greater overall wage restraint in the current climate. Fourth, the large fiscal savings targeted in the Budget leave little or no room for wage or salary rises in the public sector.

*... profit margins  
seem unlikely to  
widen much ...*

Overall, even if some increases are being granted in basic rates, we expect that clawbacks on penal rates and ongoing productivity growth will mean that aggregate unit labour costs are falling. To the extent that this restraint is not entirely absorbed in larger margins, it will help generate a further fall in the underlying inflation rate. As demand is likely to remain weak a significant widening in margins seems unlikely at this stage.

*... and house  
prices are likely  
to stay relatively  
flat.*

Also on the domestic front, the current relatively high real interest rates will keep demand pressures in check for the immediate future. Together with weak incomes, rising unemployment, and slowly growing confidence that inflation is all but behind us, significant rises in house prices are also unlikely.

*But there are still  
risks ...*

Nevertheless, the inflation outlook is not entirely without risk. In addition to some more general risks discussed below, there are two specific threats to the inflation outlook.

The first of these is the direct price impact of various measures and policy changes announced in the Budget. Factors likely to have a direct CPI impact include:

- health subsidy and user charge measures (with spin-off effects on health insurance premia);
- potential changes to tertiary fees;
- excise increases on tobacco and alcohol products;
- the shift to market rentals on Housing Corporation accommodation; and
- the ACC levy on petrol prices.

*... including the CPI impact of various Budget measures.*

*The measurements could boost the CPI by 1-2 per cent ...*

*... but should not seriously threaten underlying inflation.*

*But the inflationary potential could be heightened ...*

*... if the exchange rate were to fall significantly further.*

These charges will almost certainly boost the measured CPI inflation rate at the point of, and for some time after, their introduction.

Initial Treasury estimates of the price impact of the announcements were around 1.2 percentage points. Forecasts of the effects are inevitably imprecise at this stage, both in respect of the precise nature and magnitude of some of the likely price changes, and of how they will be treated in the CPI. Our own early estimate of the impact of the announcements is around 1.5 percentage points, spread over the next two years (although concentrated in 1992). However, this estimate allows for only a relatively modest increase in health insurance premia, and does not allow for any impact of changing tertiary fees. It should be recognised clearly as the mid-point of a range, with the total price effect perhaps somewhere between 1 and 2 percentage points.

In terms of the Policy Targets Agreement, and as foreshadowed in the February Statement, the Bank will not attempt to offset the direct CPI effect of these changes. They do not represent part of an ongoing inflationary process.

The difficulty will be in ensuring that the public do not confuse these one-off changes with a resurgence of underlying inflation and adjust their behaviour accordingly - as happened to some extent in 1989 with the increase to GST. At this stage, for a number of reasons, we do not believe that the impact on expectations and behaviour of such one-off price pressures will be as serious as was the case when GST was introduced in 1986 and raised in 1989.

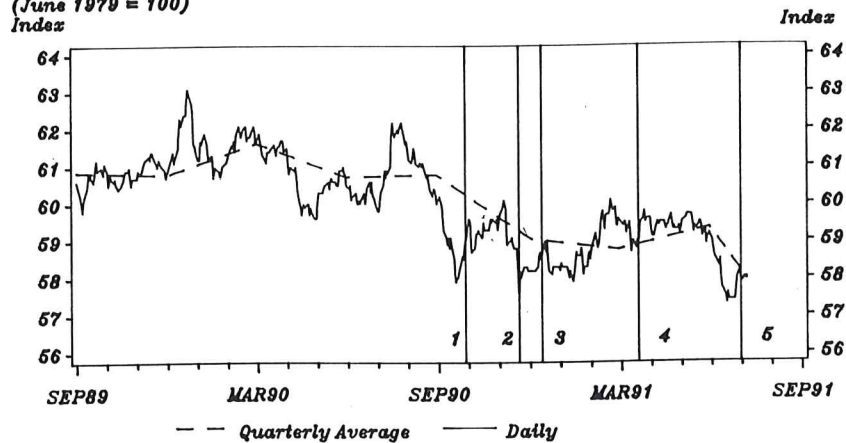
Firstly, the impact will be spread over two years, although on the other hand this means that the direct impact of the changes will not finally drop out of the annual inflation figures until 1994. Secondly, the total impact on the CPI is likely to be lower than was the case with either of the GST shocks. Thirdly, the Bank's credibility, and confidence in the long-term sustainability of price stability, have increased over recent years, improving the chances that such one-off increases in CPI inflation will be seen as temporary. Finally, in 1989 everyone felt the impact of the rise in GST and the surge in food prices, whereas following these changes the price impact will not be universal.

Nevertheless, the risk to inflation expectations cannot be ignored. The Bank must ensure that conditions remain sufficiently firm to prevent any of the one-off rises in the price level from leading to a resurgence in inflation expectations and in underlying wage and price pressures.

This imperative will become particularly pressing if the one-off price rises occur at the same time as the impact of any further fall in the exchange rate. In that case there would be two sources of

Figure 24

Nominal Exchange Rate  
(daily foreign exchange trade weighted index)  
(June 1979 = 100)  
Index

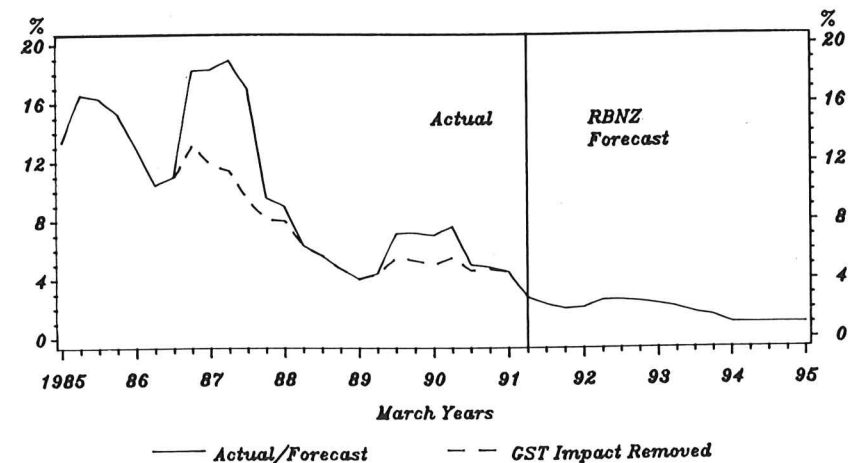


1. General Election 2. 19 December Package 3. 11 January Statement  
4. March CPI Result 5. Budget

temporary inflationary pressures which might adversely affect expectations and cost pressures. As already discussed, our February forecasts assumed some further fall in the exchange rate. Some fall has taken place. If a further significant fall were to occur within a relatively short space of time, there would be a large boost to next year's inflation rate. Combined with the impact of budgetary measures, it would then be a major challenge to keep inflation expectations and wage claims in check.

Figure 25

Consumers Price Inflation  
(Annual Percentage Change)



Underlying  
inflation is  
forecast to fall  
below 2 per cent  
in 1992 ...

... although CPI  
inflation will be  
somewhat  
higher.

As discussed previously in this Statement, under the terms of the Policy Targets Agreement, the Bank's focus is on underlying inflation, rather than measured CPI inflation. Underlying inflation for 1991 is now expected to be around the bottom of the indicative inflation range, and around 0.5 percentage points below the 3 per cent forecast a year ago in the September 1990 Statement. On the basis of the influences discussed earlier in the section, we expect that underlying inflation will fall further to around 1.7 per cent in 1992. Such an outcome would be at the lower end of the 1992 indicative inflation range set in our February Statement, and inside the 0-2 per cent range. However, CPI inflation is expected to be



somewhat higher. The one-off price increases stemming from Budget announcements are expected to boost the CPI inflation rate to around 2.5 per cent in 1992, although movements either way in the exchange rate would alter that outlook. The CPI inflation rate is forecast to drop away to around 1.5 per cent in 1993, still affected by the residual impact of the measures announced in the Budget.

*The falls were faster than expected ...*

The Bank was not targeting quite so rapid a fall in underlying inflation, particularly this year. However, it is crucial to recognise that monetary policy is, at best, an imprecise policy tool, often with significant and variable lags between policy actions and final inflation outcomes. This year's inflation rate, for example, is substantially reflecting the impact of firm monetary policy over the previous 12-18 months. The impact of these actions on the economy and inflation can be specified only approximately. This inherent imprecision was recognised in the setting of fairly wide bands (2 per cent) for the price stability target; it was also reflected in the 1.5-3.5 per cent range for 1992, which allowed for the possibility that price stability could, in effect, be achieved one year early.

*... partly reflecting the inevitable imprecision surrounding monetary policy.*

*But deliberately reversing the fall would be risky ...*

The Bank considers that it would not be appropriate to take policy actions that deliberately attempted to reverse that sort of progress and, say, shift the inflation rate back towards the mid-point of the range. For one thing, underlying inflation is still forecast to be around the lower ends of the published indicative inflation ranges. More importantly, it might not be possible to reverse the lower inflation rates temporarily without overshooting in the other direction and jeopardising the goal of price stability by the end of 1993. It would be particularly difficult for monetary policy to have any additional influence on inflation outcomes for the remainder of this year. It is critical to realise that fine-tuning is not a sensible option in monetary policy management.

*... as it could jeopardise credibility ...*

The credibility won by the success of monetary policy has important spin-offs for the rest of the economy and for economic policy. Thus - even if we did not have to deal with the price impact of the Budget measures - there would be few gains and many potential risks from placing in jeopardy the credibility gains already secured, by deliberately attempting to push inflation back up again. Any deliberate efforts in this direction would risk delaying progress in reducing the risk premium in New Zealand interest rates. Such action would risk sending signals to investors that the New Zealand authorities were less serious than they had appeared to be about seeing the adjustment process through to the end. The resulting erosion of confidence would constitute a major real economic cost for the economy, by pushing interest rates up or holding them up. It is a cost that should be avoided.

*... and unnecessarily hold interest rates up.*

## Outlook for the Key Monetary Indicators

*The Bank looks at various indicators.*

From time to time, the Bank emphasises different indicators when discussing developments in monetary conditions. Fixed weights applied mechanically to the elements of the 'checklist' of indicators are not feasible. Rather, the checklist as a whole is assessed against our view of progress towards price stability.

*An upward sloping yield curve has been sanctioned ...*

As discussed already, during most of 1991, the yield gap (between long-term and short-term interest rates) has been at centre stage. Like all indicators of monetary conditions and the stance of monetary policy, the yield gap indicator is imperfect. It can imply different things at different times. In general though, high short-term interest rates in combination with somewhat lower long-term interest rates usually indicates that the Reserve Bank is keeping liquidity tight and that this is likely to lead over time to lower inflation and thus lower short-term interest rates. Now that inflation has fallen close to our target range and confidence about that outcome is growing, the Bank no longer adopts a particular view on whether the yield curve will remain positively or negatively sloped in the future. However, the slope of the yield curve is still an important policy indicator, and the Bank could not at present be comfortable with a sharply upward sloping curve.

*... but we would be uncomfortable if this went too far.*

*Foreign rates will probably limit falls in interest rates ...*

The Bank does not have a strong view on the appropriate future level of interest rates. By the end of July the generally positive outlook for inflation, positive fiscal developments, and the growing confidence that price stability will be achieved, suggested that there was probably scope for further falls in the level of interest rates. Nevertheless, the scope for nominal rates to fall will be tempered by the smaller differential between domestic and overseas interest rates that has emerged over the past year. Once we build credibility that we can consistently achieve and maintain price stability, our interest rates can be expected to fall to around the same level as, or below, those of the other countries with low inflation rates.

*... but the local preconditions for further falls are being put in place.*

It is reasonable to expect that having one of the lowest inflation rates in the world will have some downward influence on interest rates. Thus, there are still solid grounds to expect further interest rate reductions over the next few years - in both nominal and real terms. It is important to remember, however, that any falls in real and nominal interest rates must be consistent with sustaining price stability: the key criterion the Bank uses in all its assessments of the indicators. Support from continuing responsible fiscal policies will help create a climate for sustainable interest rate falls. More generally, some fall in world real interest rates would help lower New Zealand rates, but significant gains on the international front appear unlikely in the immediate future.

*Lower interest rates may take time to boost the economy.*

However, even if interest rates fall it is important to remember that there are lags in the effects of these falls. Experience has shown there are usually considerable lags between interest rate declines and a consequent increase in spending - particularly if falls occur during a recession. The fact that the economy does not respond quickly to falling interest rates should not be taken as a sign that monetary policy remains, in some sense, too tight. By the same token, in forecasting inflation and in operating monetary policy it is important for the Bank to bear in mind the lagged effects of past interest rate falls. Failing to account adequately for these lags has helped prompt renewed outbursts of inflation in various countries in the late 1980s.

*The exchange rate is an important indicator ...*

In a small open economy such as New Zealand's it should not surprise anyone that the Reserve Bank will always have some view on the general level of the nominal exchange rate. The Reserve Bank's interest in the exchange rate stems largely from the direct role the exchange rate plays in influencing the prices of consumption goods in New Zealand. Given the Bank's mandate to establish stability in the prices of these goods, it must necessarily monitor exchange rate movements closely. Within this mandate, there is scope for some flexibility, for upwards or downwards movement in the exchange rate, particularly as other costs and prices in the economy become more flexible.

The Bank will continue to monitor the growth in the money and credit aggregates. As discussed in previous Statements, it is not, at present, possible to use developments in the monetary and credit aggregates as key indicators of monetary policy, although undoubtedly trend movements do contain some useful information. Specifically, if the broader aggregates were all to move sharply in the same direction, then the Bank would be looking to use this information in reaching policy judgments.

*... but, finally, price stability is the standard for judging monetary conditions.*

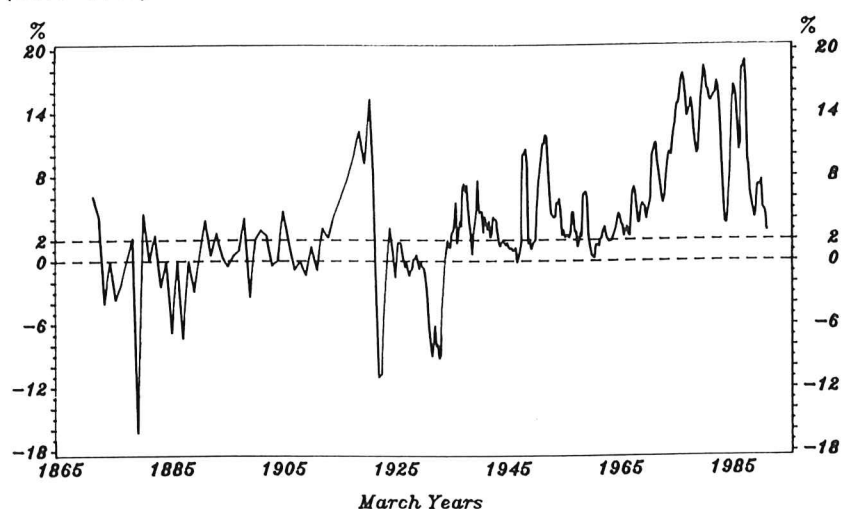
The Bank has no fixed rules for any of the indicators. Each is assessed in the light of the others, and all of them are assessed against the standard of progress towards the price stability goal. The Bank is constantly monitoring progress towards this objective and is adjusting conditions, affecting the levels of the various indicators, as necessary to stay on course. Ultimately, the future course of each of the indicators will be heavily influenced by the policy stance the Bank needs to adopt to achieve and maintain price stability.

## Consolidating Price Stability

*The last steps to price stability have still to be taken.*

In the period since the mid-1960s, when inflation became a particular concern in Western economies, it has proved very difficult for many countries to re-establish price stability on an ongoing basis.

**Figure 26**  
**Year on Year CPI Inflation**  
**(1870-1991)**



Having already lowered New Zealand's inflation rate to 2.8 per cent, our challenge for the next few years will be to take the last steps to price stability and then to cement-in our gains. It will be a testing task to ensure that price stability is achieved **and** then maintained. As inflation is a monetary phenomenon, sustained price stability, and the benefits that flow from that, depend fundamentally on the Reserve Bank fulfilling its parliamentary mandate.

*To get there, the Bank must focus on the medium-term outlook ...*

Delivering on our price mandate requires us to remain firmly focused on medium-term inflationary trends. As discussed earlier, CPI inflation can be easily affected by one-off price factors which do not, in themselves, represent falls or gains in medium and long-term inflationary pressures. Running policy off raw inflation measures can easily mislead at times when one-off shocks are particularly influential. The Bank will certainly not be ignoring the CPI, but we will also be monitoring, and reporting on, measures of underlying inflationary pressures. These will give us a more accurate picture of whether or not the medium-term inflation prognosis is consistent with achieving and then maintaining price stability. Specifically, in the current environment, this focus will help us keep policy on track to ensure that underlying inflation is consistent with price stability as we emerge from the period when CPI inflation will be distorted by the impact of Budget announcements.

*... and is helped in doing so by the legislative framework.*

An important element in achieving and maintaining price stability will be the legislative monetary policy framework the Bank is operating under. The Act has a clear focus on price stability as the only worthwhile sustainable goal for monetary policy, and this is reflected in the Policy Targets Agreement. Without such an explicit focus and the associated accountability procedures it would be easy to follow the path of various other countries, whose authorities have been content to turn monetary policy onto other short-term objectives as inflation is reduced to, say, 3 per cent. However attractive such strategies may be in the short term, they



are detrimental to the inflation outlook and - in the longer term - to the community's wider growth and employment concerns.

It is sometimes asserted that low inflation can be achieved only by permanently suppressing the economy. However, it is often forgotten that near price stability has been a normal state for most countries, for periods of decades or centuries, without apparently doing anything but good for overall economic performance. Further, international experience and empirical evidence have tended to link low inflation with a strong economic performance.

## SOME HISTORICAL THOUGHTS ON PRICE STABILITY

The following quotation is taken from the Bank's 1961 Annual Report.

The social and economic consequences of inflation still do not receive sufficient attention in this country, yet they are sufficient justification for making much stronger efforts to attain stability. Internally, the process of inflation leads to a wasteful use of resources and weakens incentives to produce efficiently. It is harmful to economic growth and there is a real risk that the economy may develop in directions which, in the long run, cannot be sustained. Externally, these outbursts of inflation damage our credit in overseas markets because they seem to indicate that New Zealand is unable or unwilling to apply a sufficient degree of self-discipline.

This observation was written in the context of a CPI that had risen by 1.6 per cent in the year to March 1961. Since then the CPI has risen by a total of 1,218 per cent.

## CONCLUSION

*Price stability is  
now in sight ...*

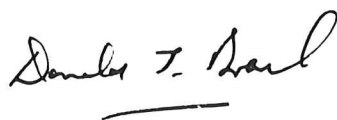
Inflation is now almost behind us. Significant progress towards price stability has become evident over the past six months. Inflation has already fallen to rates considered almost unthinkable only a year or two ago, and towards thirty-year lows. Monetary policy has played a big part in these successes. For example, the Bank's willingness to take a consistently firm monetary policy stance during 1990, in the first year of the new framework, helped counteract re-emerging inflationary pressures.

*... although there  
is still a little  
way to go ...*

But there is still a little way to go, and the Bank is committed to building on the gains already secured. The one-off price movements have worked in a favourable direction over the first half of 1991, helping to generate a marked fall in measured inflation and in inflation expectations. But the shocks are likely to be working in the opposite direction in the coming year. The various price increases and levies from Budget announcements do not in themselves constitute higher underlying inflation, although it will be important to ensure that this point is recognised and that they do not flow into a second round of price increases. Further out, the Bank will have to ensure that as the recovery gets underway price and cost pressures are kept in check.

*... before it is  
securely estab-  
lished.*

By meeting these sorts of challenges successfully, the Bank will have completed the first part of the task which Parliament has mandated for it. We will then be able to focus our attention more fully on our second mandated task of maintaining price stability, so reaping the full benefits of the fight against inflation. Economic prospects are already improving, but by achieving and maintaining price stability the Bank will play its part in laying the foundations for sustainable growth and for improvements in New Zealanders' standard of living.



Donald T. Brash  
Governor

# APPENDIX 1

## CHRONOLOGY

Over the period key events of relevance to monetary policy and inflation included:

- 21 February: The Reserve Bank released its third Monetary Policy Statement.
- 22 February: Technical changes to the monetary policy implementation arrangements were implemented by the Reserve Bank. These changes were agreed to by settlement banks, and were expected to have a neutral impact on monetary conditions.
- 28 February: The President of the United States, Mr George Bush, ordered the suspension of United States-led allied combat operations in the Gulf, signalling the end of the war against Iraq.
- 12 March: The Government announced an increase in the year to June 1991 financial deficit from \$691 million - as projected in the December "Economic and Social Initiative" - to \$1.4 billion.
- 17 April: The March quarter CPI figure was released, having risen by 0.6 per cent over the quarter.
- The Reserve Bank said that the March quarter CPI result, combined with good prospects of further falls in the annual inflation rate, should help to ease the pressure on monetary policy.
- 23 April: The Governor of the Reserve Bank gave a speech in which he outlined the conditions under which a flat or positive yield curve could emerge over the coming year. These conditions include expectations of low inflation in the June quarter being realised, a continuing favourable inflation outlook, and further progress toward reducing the fiscal deficit in the July Budget.
- 15 May: In response to the emergence of a slightly upward-sloping yield curve, the Reserve Bank contacted financial market participants to remind them that the conditions - as stated on 23 April - for a flat or positive yield gap were not yet evident.
- 21 May: The Department of Statistics announced a revision from around \$4.2 billion to \$2.2 billion in the year to March 1990 balance of payments current account deficit.
- 12 July: The Minister of Finance, the Hon. Ruth Richardson, announced that state asset sales proceeds in 1991/92 would be devoted exclusively to the repayment of overseas debt.

15 July: The June quarter CPI was released, having risen by only 0.1 per cent over the quarter.

The Reserve Bank welcomed the CPI outturn. It noted that while measured inflation had fallen rapidly over recent quarters, underlying inflation remained somewhat higher.

30 July: The 1991 Budget was presented to Parliament by the Minister of Finance. Key features relevant to monetary policy included:

- a forecast financial deficit for 1991/92 of \$1,739 million, projected to fall to around \$500 million by 1993/94;
- restructuring of health funding and significant changes in the funding and charging for public housing;
- higher levies on petrol and wages to fund ACC reforms, and higher alcohol and tobacco excise.

31 July: The Reserve Bank issued a statement welcoming the deficit reductions in the Budget. The statement indicated that the forecast fiscal deficits appeared to be sustainable. The Bank noted various Budget decisions would boost the CPI, but that the Bank's focus would be on underlying inflation, excluding this type of one-off effect. The Statement added that recent fiscal and inflation development meant that the Bank had no reason to prevent the yield curve turning upward-sloping, providing conditions remain consistent with price stability.



## APPENDIX 2

# RESERVE BANK STATEMENTS ON MONETARY POLICY

The following significant public comments on monetary policy issues were made by the Bank during the period under review in the Statement:

### Comment on the March CPI

17 April 1991

The 0.6 per cent rise in the March quarter CPI is a pleasing result, Reserve Bank Governor Don Brash said today.

“The latest inflation rate and good prospects of further falls in the annual inflation rate should help relieve the pressure on monetary policy, as we move towards price stability,” Dr Brash said.

The quarterly rise resulted in an inflation rate of 4.5 per cent for the year ended March.

Dr Brash said this rate is consistent with the Bank’s indicative range of 2.5-4.5 per cent for December 1991 set out in the Bank’s February Monetary Policy Statement.

He noted that interest rates, which had been falling over the last five months, have fallen again in recent days. Dr Brash said the Bank is comfortable with these falls.

\* \* \* \* \*

### • Key Extracts from Speech to the Wellington Chamber of Commerce

23 April 1991

In a statement released on 11 January this year, reiterated in our February Monetary Policy Statement, we stated that “short-term rates should generally exceed long-term rates while inflation is being brought down”.

Unfortunately, some market participants have interpreted that to mean that we wanted short-term interest rates to remain above long-term rates literally till December 1993.

That was not our intention, and as I said to the Taradale Rotary Club earlier this month, “provided inflation continues to move down towards our 1993 target, the slope of the yield curve should continue to ease progressively, as it has over the last few years, and at some point 90 day rates are likely to go below longer-term rates”.

The precise timetable over which this may occur cannot be predicted. Everything depends on continuing progress towards price stability, and on continuing support from fiscal policy.

The March quarter inflation result was clearly pleasing, and the markets have reacted to that by reducing the level of both short and long-term interest rates, and by reducing the yield gap from 50-70 basis points to around 20 basis points today.

But in our judgment it is not yet time for the yield gap to disappear entirely, let alone reverse.

At this stage, the prospects for inflation in the June quarter also look very encouraging.

If these expectations prove to be well founded, if the Government's July Budget delivers further meaningful progress on reducing the fiscal deficit, and if other factors also point to continuing reductions in inflation - and these are important qualifications - then it may in those circumstances be appropriate to see short-term rates fall to, or even slightly below, long-term rates over the next year.

\* \* \* \* \*

## Inflation Rate "Significant Achievement"

15 July 1991

Reserve Bank Governor Don Brash said the 0.1 per cent rise in the Consumer Price Index for the June quarter, announced today, is a significant achievement.

"This brings New Zealand closer to realising the benefits of sustained price stability," Dr Brash said.

"For too long, high inflation has imposed an unfair burden on those with fixed incomes. It also distorted investment and savings signals to the extent that investment flowed away from productive enterprises and into areas such as real estate, which benefited from inflation-induced capital gains.

"Price stability will remove that distortion and provide a stable and more predictable environment in which businesses can plan ahead," he said.

He added that core inflation is unlikely to be falling as fast as the CPI might suggest.

"Recent falls in oil prices, for instance, are not expected to continue through the next year, so their effect on 'underlying' inflation is somewhat overstated by the raw CPI," he said. The Bank treated last year's increases in oil prices in the same way.

Nevertheless, the drop in inflation should be welcomed, Dr Brash said. He noted that the fall in inflation had already been largely reflected in the significant easing of wholesale interest rates and the exchange rate over recent months. Provided the inflation outlook

remained favourable and if this month's Budget confirmed that the Government's fiscal position was being placed in a sound and sustainable position, then there could well be room for some further easing in monetary conditions.

\* \* \* \* \*

## Reserve Bank Welcomes Deficit Reductions

31 July 1991

The Governor of the Reserve Bank, Dr Don Brash, today welcomed the deficit reductions announced in last night's Budget.

Dr Brash said these reductions, and the projected fall in the net public debt ratio, mean that the announced fiscal position appears sustainable.

"Fiscal sustainability will help build confidence in the ability of monetary policy to achieve and maintain stable prices," he said.

He added: "Although various price rises and user charges announced last night will boost the CPI, the total impact will be spread over at least two years and looks likely to be in accordance with most expectations."

Dr Brash recalled the provisions in the Policy Targets Agreement between the Government and the Bank, which meant the Bank would not be attempting to prevent the one-off price impacts of the Budget from impacting on the price level.

The Bank will continue to focus on underlying inflation, that is, inflation excluding these types of one-off impacts, he said.

- Dr Brash commented on several factors that the Bank had previously referred to as influencing its view on financial developments.

"Inflation has fallen considerably, the outlook for achieving price stability looks promising, and the Government has delivered a Budget which removes concerns that fiscal policy may have been on an unsustainable path.

"Those factors mean that the Bank has no reason to prevent the yield curve turning positive (short-term interest rates below long-term rates) - as indeed is already priced into futures contracts - provided that overall monetary conditions remain consistent with the achievement and maintenance of price stability."

The Reserve Bank's fourth Monetary Policy Statement is due for release at 2.00 p.m. on 12 August. This document will provide further details of the Bank's assessment of recent monetary developments.