RESERVE
BANK
OF NEW ZEALAND

MONETARY POLICY STATEMENT

June 1992

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MONETARY POLICY STATEMENT [1]

JUNE 1992

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

EXECUTIVE SUMMARY

The low inflation rates achieved in 1991 have continued over the first half of 1992.

- In the year to March 1992, the annual rate of inflation in the Consumer Price Index (CPI) declined further to 0.8 per cent, the lowest annual rate for 31 years.
- Allowing for the influence of one-off factors (interest rate effects, last year's oil price declines, and changes in government charges and taxes), underlying inflation is estimated to have been 1.3 per cent in the year to March, down from the 1.7 per cent for the year to December 1991. The underlying rate for the year to June 1992 is expected to be much the same as that for March.
- A broadly similar picture is given by trends in other price indices, including the Housing Adjusted Price Index (HAPI), the Capital Goods Price Index (CGPI) and the Producer Price Indices (PPI) for both inputs and outputs.

Inflationary pressures have remained low. Domestic demand has been relatively weak (though strengthening somewhat lately), international prices for our imports and exports have fallen overall, and record low inflation expectations have been recorded among businesses and households.

The Bank has been comfortable with the outlook for inflation, and with monetary conditions, over the review period. Although there have been no changes to monetary policy settings over the period, the favourable inflation outlook has enabled the Bank to accommodate some further easing in monetary conditions since February.

- 90 day bank bill rates eased from around 7.5 per cent early in the year to around 6.6 per cent at the time of writing. These rates had not previously been below 7 per cent since 1976.
- 5 year government bond rates have fallen to around 8.1 per cent, from levels approaching 8.9 per cent in February, and 10 year bond rates have fallen back to around 8.6 per cent, from levels of up to 9.4 per cent in early February.
- After strengthening earlier in the review period, the exchange rate, as measured by the trade-weighted index (TWI), was back at around 53.7 at the time of writing, little changed from the level in early February.

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1 This Statement has been prepared rather earlier than would have been the case under previous arrangements. The Bank is moving from an August-February cycle for the Statements to a June-December cycle. Text and data finalised on 23 June 1992.

The operation of monetary policy over the review period has been guided quite directly by the outlook for underlying inflation, relative to the announced inflation ranges for 1992 and 1993.

- Given the lags involved in the transmission of monetary policy, however, the scope to 'fine-tune' shorter-term inflation outcomes is limited. Thus, the inflation outlook relative to the ranges has to be interpreted with a medium-term focus.

- Where the trend for inflation one to two years ahead is outside the established ranges, the Bank endeavours to ensure that the inflation trend is moved back within the ranges by tightening or loosening monetary policy to alter monetary conditions.

The same, medium-term oriented framework will guide monetary policy as the achievement of price stability is consolidated in the period to the end of 1993, and maintained thereafter.

Cementing in price stability will bring significant benefits for the economy as a whole, and indeed many of these benefits are already being felt.

- These benefits include a more certain environment for longer-term investment planning, reduced cash flow constraints on investment because of lower nominal interest rates, increased incentives for business efficiency, the protection of recent international competitiveness gains, equity advantages for those on low or fixed incomes, and higher after-tax real returns for savers.

The Bank is cautiously optimistic that the recovery now emerging will not reignite inflation pressures. The environment in which price and wage-setters now operate is significantly different from that which characterised upturns through the 1970s and 1980s.

- The Reserve Bank Act of 1989 requires monetary policy to maintain a clear focus on preserving price stability, and has contributed importantly to stronger policy credibility. Surveyed inflation expectations are at record lows.

- The freeing up of key markets in recent years, including the labour market, appears to have modified attitudes towards price and wage-setting. The precise strength of this effect is somewhat uncertain. On balance, however, it should facilitate the adjustment of relative prices and wages in favour of products and labour skills most in demand, with a reduced risk of spillover to prices and wages more generally.

The inflation rate is expected to pick up a little over the rest of this year, but this increase should be temporary. It reflects mainly the impact of the exchange rate depreciation over the last quarter of 1991.

- Given monetary conditions similar to those at the time of writing (23 June 1992), the underlying CPI inflation rate for 1992 is expected to rise to 2 per cent, before falling back to 1 per cent for 1993 and remaining around that level thereafter.

- Measured CPI inflation is expected to rise to 1.8 per cent for 1992, falling back to 0.9 per cent by the end of 1993.

- The main non-exchange rate influences on inflation are expected to remain relatively weak over the forecast period, notwithstanding the economic recovery expected to continue for the foreseeable future. Unit labour costs are expected to continue to fall over most of the forecast period, as a result of productivity improvements combined with continued low wage growth. The forecasts also assume some moderate strengthening of profit margins and house prices as the recovery proceeds, together with some relatively slow growth in import and export prices.

As with all forecasts, a degree of uncertainty surrounds key variables relevant to the inflation outlook, such as unit labour costs, profit margins, house prices, and world import and export prices.

- The outlook for the fiscal deficit is a different type of risk relevant to the inflation outlook. It is important that the fiscal position - interpreted in a structural sense-remains sustainable over the medium term, and that it is seen as such by financial markets. If investors were to lose confidence in fiscal policy, with this reflected in a material weakening in the exchange rate, monetary policy could well need to be tightened to maintain price stability.

Overall, the risks to the Bank's inflation forecasts currently appear to be evenly balanced. At this stage, no changes in the stance of monetary policy, in either direction, appear necessary in the foreseeable future.

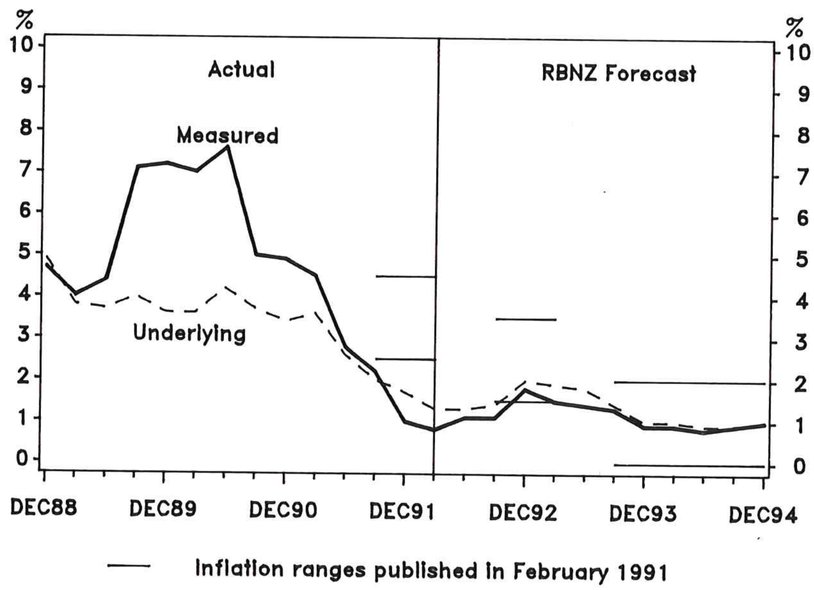
However, there should be no misunderstanding that if inflationary pressures should diverge significantly - in either direction - from those forecast, the Bank will certainly act to ensure that price stability is maintained.

I. RECENT INFLATION

The low inflation achieved in 1991 has continued in the first half of 1992 ...

The first half of 1992 has seen the continuation of the low inflation environment achieved in 1991. The CPI increased by 0.8 per cent over the year to March 1992, the lowest annual inflation rate for 31 years. Underlying inflation is estimated to have been 1.3 per cent for the March year, and is likely to be at a similar rate for the year to June 1992. By comparison, underlying inflation was 1.7 per cent for the year to December 1991, and 3.4 per cent for 1990.

Figure 1
Consumers Price Index
Annual Percentage Changes



...with underlying inflation of 1.3 per cent for the year to March 1992.

Underlying inflation is the key measure used by the Bank to assess the strength of core inflationary pressures. It removes the initial effect on the price level of certain significant influences of a one-off nature. Over the year to March, the main relevant factors of this sort were mortgage interest rate movements, the fall in oil prices after the Gulf War, and increased government related charges. The concept of underlying inflation was explained in greater detail in the February 1992 Monetary Policy Statement. Table 1 shows the derivation of the 1.3 per cent underlying inflation figure for the year to March 1992.

The current low inflation outcome was partly a result of the firm policy stance of preceding years.

Underlying inflation provides a summary measure of trend inflation pressures. The strength of these pressures over time is ultimately determined by monetary policy. But monetary policy works through various transmission channels to affect the more immediate influences on inflation - which include labour costs per unit of output, the exchange rate, and the state of the domestic economy. Partly because of this, its impact on inflation involves significant lags. Reflecting such lags, the firm stance of monetary policy over the last several years has been central to the reduction in the rate of inflation to its current level.

Domestic demand has been weak...

Domestic demand has been weak over most of 1990 and 1991. Although there has been growing evidence more recently of some domestic strengthening, following on from the strong export performance, this has been from a low base. Coupled with record low inflation expectations, weak domestic demand has kept inflationary pressures subdued over the review period.

NEW ZEALAND INFLATION, 1871 - 1992

Although the rate of measured CPI inflation is currently at its lowest level for over three decades, such low inflation rates have not been rare from a longer term perspective, either in New Zealand or in most other countries. Figure 2 shows the CPI inflation rate in this country since the 1870s. Up until about the Second World War, CPI inflation, on average, was very low, despite the occasional sharp fluctuation. Indeed from 1871 to 1934, a period of 64 years, the inflation rate averaged just 0.3 per cent per annum. By way of contrast, CPI inflation averaged 3.3 per cent per annum over the 1960s, 12 per cent over the 1970s, and 11.4 per cent over the 1980s.

Figure 2
New Zealand Consumer Price Inflation (1875–1992)

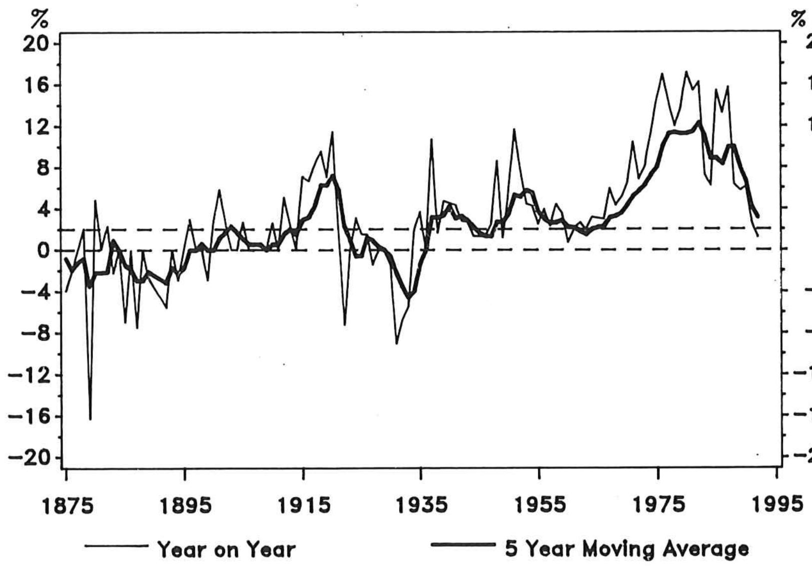


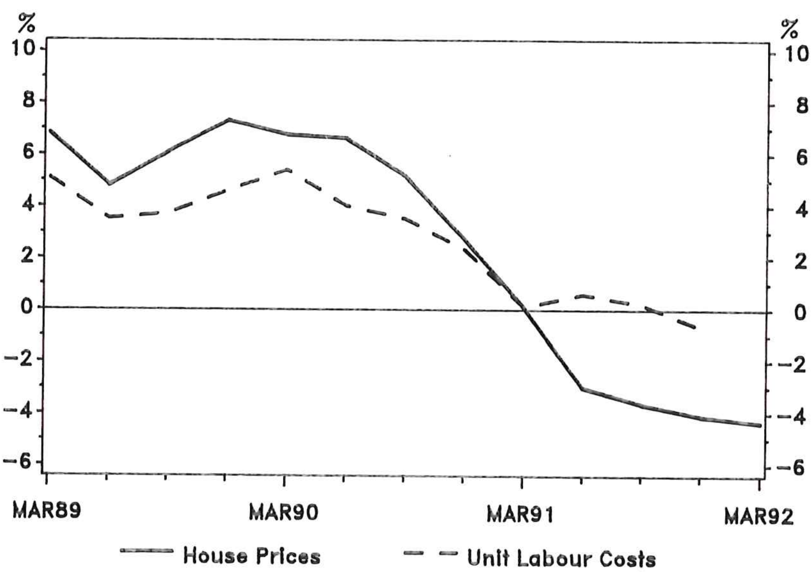
TABLE 1
UNDERLYING INFLATION FOR THE YEAR TO MARCH 1992

	Per Cent	Per Cent
Measured CPI		0.8
Less estimated impact of:		
Interest rates	-0.9	
Oil prices	-0.3	
Government price and tax policies	0.7	
		(-0.5)
Estimated Underlying Inflation		1.3

...as reflected in the continued fall in unit labour costs and house prices.

In particular, unit labour costs are estimated to have fallen by around 2 per cent for the year to March 1992, as low wage increases have continued to be more than offset by productivity gains. Profit margins have been constrained overall, and house prices have fallen. Any upward effect on house prices arising from falls in nominal home mortgage interest rates was more than offset by the effects of low growth in real household incomes, and still high employment uncertainty. The result has been that over the year to

Figure 3
Domestic Inflation Influences
Annual Percentage Changes



March 1992, house prices are estimated to have declined by over 3 per cent, although there are indications of a slight rise in the March quarter.

In addition, world import and export prices have fallen.

External influences on domestic inflation have also contributed to the recent trends. Oil import prices fell by around a quarter for the year to March 1992, as a result of the significant reductions in the price of oil after the Gulf War. In addition, the foreign currency prices of New Zealand's exports and non-oil imports fell somewhat more than expected for the 12 months to March, as world prices for tradeable goods in general continued to weaken. (Indeed, non-oil import prices are still at the level they were about a decade ago.) It is noteworthy that, in recent years, the foreign currency price of New Zealand's non-oil imports has been growing more slowly than the producer price inflation of key trading partners.[2] Some tendency in this direction can be expected because producer price indices include the prices of some non-tradeable products, especially services, which generally increase more rapidly than the prices of tradeable goods. However, the result also appears to reflect changing patterns of sourcing by New Zealand importers and the effect of trade liberalisation.

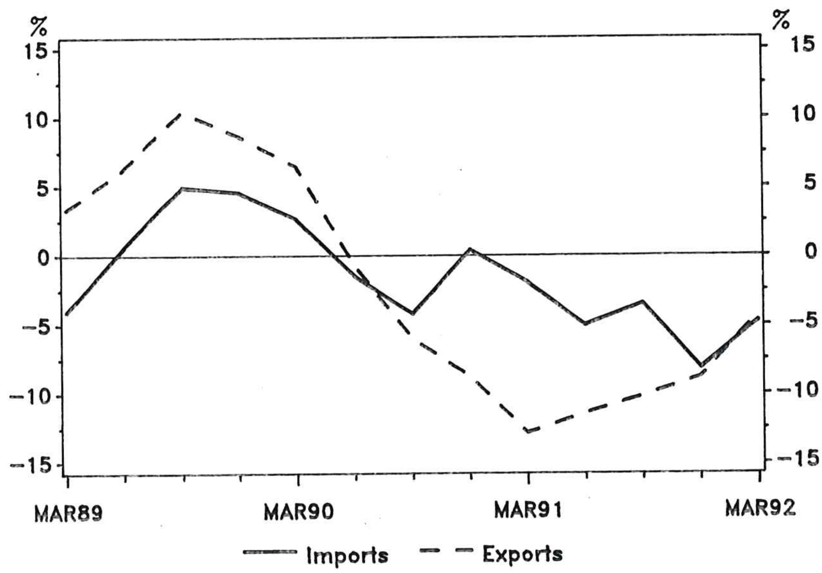
Price indices other than the CPI, including the HAPI,...

While the CPI is the index most commonly used to calculate the rate of inflation, there are several other indices which also convey useful information. One of the most important for the Bank is its Housing Adjusted Price Index (HAPI). This replaces the housing component of the CPI with the estimated imputed rental value of

Figure 4

Import and Export Prices (Foreign Currency Terms)

Annual Percentage Changes



2 And producer price inflation has itself been significantly slower than consumer price inflation in these countries over the last decade.

owner-occupied housing. For the year to March 1992 the HAPI rose by 1.6 per cent. The continued declines in mortgage rates and house prices saw the gap between measured CPI and HAPI inflation, in annual terms, widen to 0.8 per cent (though the differences have narrowed over the last two quarters). After removing the effects of changes in oil prices and government related charges, the adjusted HAPI rose by 1.2 per cent - similar to the underlying CPI inflation rate.

...the PPI,...

Also important are the Producers Price Indices (PPI) for inputs and outputs. In the year to March 1992, price pressures faced by producers remained moderate, with the PPI for inputs recording a 1.2 per cent increase over the year, and the PPI for outputs rising by 1.4 per cent. Both of these figures are somewhat higher than the corresponding results for the year to December 1991, mainly due to the effects of the exchange rate depreciation in the last quarter of 1991 (shown especially in the prices of transport equipment, for example), together with a strengthening of some commodity prices.

..the Capital Goods Price Index,...

The effect of the depreciation was also an important factor behind the 2.5 per cent increase over the year to March in the Capital Goods Price Index (CGPI), which measures the cost of productive equipment and capital. The main contributors to the 1.1 per cent increase in the CGPI for the March quarter alone were the transport equipment group (up 2.7 per cent), and the plant and machinery group, while non-residential building costs declined slightly.

...the retail trade deflator,...

The retail trade deflator, which is derived from the Department of Statistics' Retail Trade Survey, rose by 0.8 per cent for the year to March, the same as the increase in the CPI. The retail deflator excludes various service sectors covered in the CPI and, the March result notwithstanding, there has been a general tendency for services prices to grow more rapidly than goods prices.

...and the Food Price Index ...

Finally, food prices on average have fallen. The Food Price Index (FPI) for the year ended March 1992 fell by 0.9 per cent, and for the year to May fell by 0.8 per cent. These declines have reflected significant falls in fruit and vegetable prices over the year, as well as flat consumer demand, and competitive pressures between food retailers. In the year to May, only two of the 16 categories of the FPI rose.

..all present a broadly similar picture.

Overall, the alternative inflation indicators all give a similar picture of, at most, only very mild inflationary pressures over recent quarters. Inflation is expected to rise slightly - but temporarily - in 1992, and then to remain consistent with price stability in 1993 and thereafter.

TABLE 2
CPI AND OTHER PRICE INDICES

	CPI	HAPI	PPI (Inputs)	PPI (Outputs)	CGPI
Annual Percentage Changes					
1991					
Mar.	4.5	4.7	1.8	0.1	2.7
June	2.8	3.4	0.7	-0.1	1.6
Sep.	2.2	3.4	0.9	0.5	2.7
Dec.	1.0	1.6	0.0	0.7	2.3
1992					
Mar.	0.8	1.6	1.2	1.4	2.5
Quarterly Percentage Changes					
1991					
Mar.	0.6	0.6	-0.6	0.1	0.9
June	0.1	0.3	-0.1	0.4	0.6
Sep.	0.4	1.1	0.2	-0.2	0.2
Dec.	-0.1	-0.4	0.6	0.4	0.7
1992					
Mar	0.4	0.6	0.6	0.8	1.1

Monetary policy is now focusing on consolidating price stability.

Given the inflation results to date, and the promising inflation outlook, the Bank is now focusing on ensuring that price stability is consolidated, rather than on still trying to achieve significant reductions in inflation. Achieving an inflation rate consistent with price stability has involved a difficult adjustment period, but the benefits of price stability for the real economy (as discussed later in this Statement) are now becoming apparent. The Bank is committed to maintaining price stability, as required by its statutory mandate, so that the benefits can continue to be enjoyed and so that the costs of significant disinflation do not have to be borne again.

II. THE OPERATION OF MONETARY POLICY

Recent Monetary Developments

The Bank has been comfortable with the outlook for inflation...

The Bank has been comfortable with the outlook for inflation, and with monetary conditions, over the period since the release of the February 1992 Monetary Policy Statement. As noted in the Economic Forecasts published by the Bank in early May, and reconfirmed by the updated inflation forecasts discussed later in this Statement, underlying inflation is expected to be within both the indicative range for 1992 (1.5-3.5 per cent) and the 0-2 per cent price stability target range for 1993.

...and has been able to accommodate some further easing of monetary conditions.

Although there have been no adjustments to monetary policy instrument settings over the review period, the continued favourable inflation outlook, and the reduction in inflation expectations, has enabled the Bank to accommodate some further easing in monetary conditions since February.

Cash and 90 day bank bill rates fell over the period...

Cash rates have in general continued to ease since the last Monetary Policy Statement. Cash rates started the period at around 7.3 per cent, falling to around 6.4 per cent at the time of writing. This market-led easing has been assisted, in part, by a relative lack of interbank friction in the call market. Ninety-day bank bill rates have also come down, falling to about 6.6 per cent at the time of writing, compared to levels of around 7.4-7.5 per cent earlier in the year. Prior to this, bill rates had not been below 7 per cent since early 1976. This decline partly reflects increased investment in short-term maturities from overseas investors and reductions in short-term rates in a number of overseas countries through the period. In particular, as shown in Table 3, 90 day rates in Australia have fallen somewhat more than have domestic rates, while rates in the US, Japan and some European countries have registered similar or smaller declines.

...and bond rates have come down...

Bond rates have also moved downwards over the review period. Yields for 5 year bonds have fallen from levels averaging around 8.6 per cent earlier in 1992 (and approaching 8.9 per cent in February), to around 8.1 per cent at the time of writing. Yields for 10 year bonds declined from levels around 9 per cent earlier in the year (and up to 9.4 per cent in February) to around 8.6 per cent in mid-June. Only relatively small interest rate movements followed the revised projections of the fiscal deficit announced in late April, the Minister of Finance's press statements of 5 and 9 June on the fiscal outlook, and the 19 June announcement of a lower than expected financial deficit for the 10 months to April 1992. Similarly, the interest rate effect of the revision to the overseas debt and balance of payments numbers, announced in May, was minimal.

Figure 5

90 Day Interest Rates

Monthly Averages

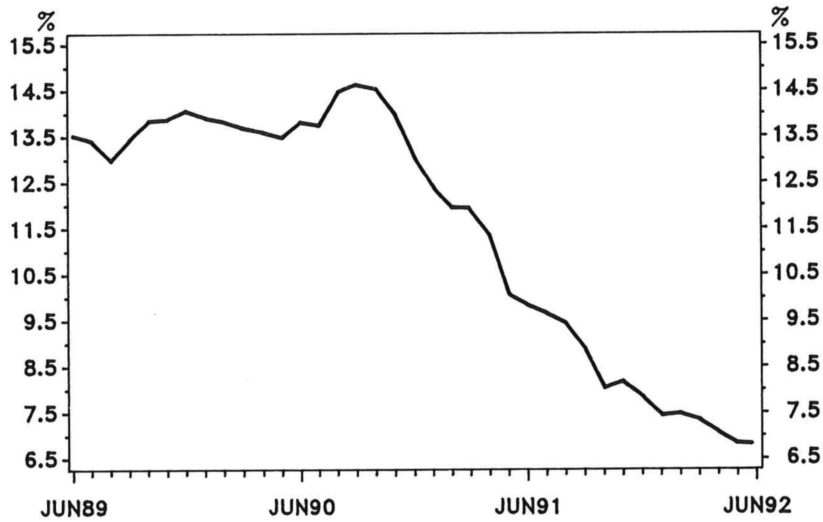


TABLE 3

NOMINAL INTEREST RATES

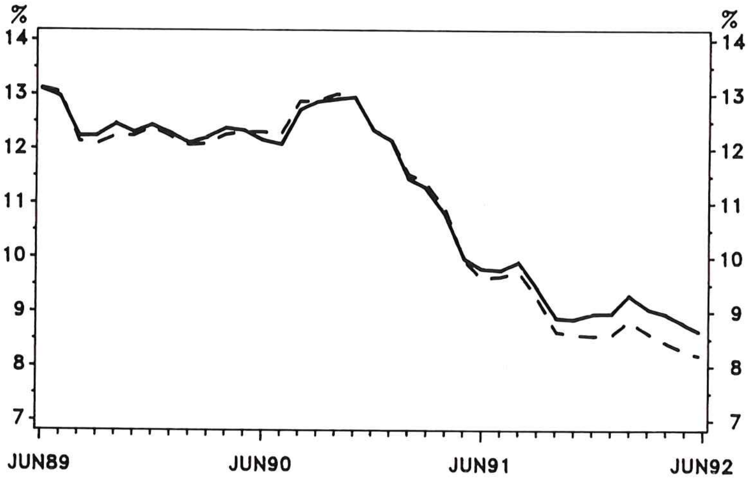
	Short-Term[1]		Long-Term[2]	
	28-1-92	**10-6-92**	**28-1-92**	**10-6-92**
Australia	7.6	6.5	9.3	8.4
Belgium	9.5	9.6	8.5	8.9
Canada	6.9	5.9	8.0	7.9
Denmark	10.2	10.6	8.4	9.2
France	10.0	10.0	8.5	9.0
Germany	9.5	9.7	8.0	8.3
Ireland	10.6	10.0	9.1	9.4
Italy	12.0	13.8	10.7	12.0
Japan	5.0	4.7	5.4	5.5
Netherlands	9.4	9.5	8.2	8.4
New Zealand	**7.4**	**6.8**	**8.7**	**8.2**
Spain	12.8	12.6	11.3	12.0
Sweden	12.4	11.8	9.3	10.1
Switzerland	7.4	9.1	6.2	6.9
United Kingdom	10.4	9.9	9.5	9.4
United States	3.9	3.8	6.4	6.7
Average (excl. New Zealand)	**9.2**	**9.2**	**8.5**	**8.8**

1 Comparisons based on 90 day money market interest rates.

2 Comparisons based on 5 year government bond rates.

Figure 6

Government Stock Rates
Monthly Averages



— — 5 Year Government Stock —— 10 Year Government Stock

Figure 7

Trade Weighted Exchange Rate Index
Monthly Averages

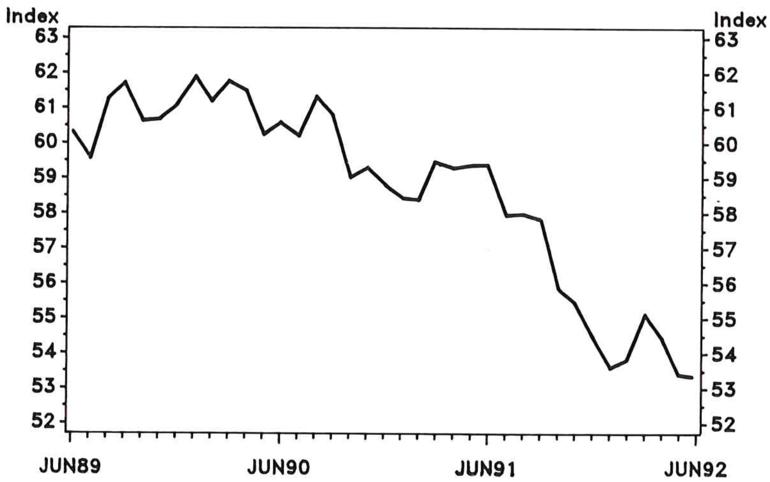
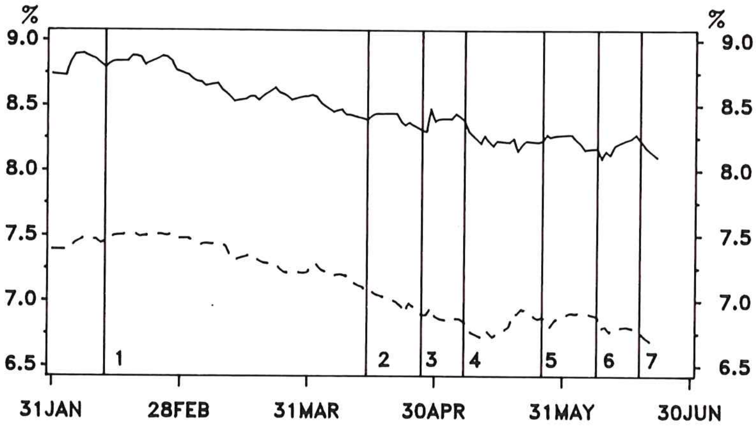


Figure 8

Interest Rates



— — 90 Day Bank Bill —— 5 Year Government Stock

1.Monetary Policy Statement 2.CPI Release 3.Apr 28 Fiscal Announcement
4.RBNZ Forecasts 5.Oil Price Rise 6.Jun 9 Fiscal Announcement
7.Jun 19 Fiscal Announcement

...rather more than comparable rates internationally.

Australian bond rates, following an earlier upsurge, have fallen somewhat more over the period than did New Zealand bond rates, but bond yields in most other countries rose. The domestic bond rate decline relative to rates in most other countries thus seems to imply a continuing broadening of confidence in domestic and overseas financial markets about the prospects for continued price stability in this country, and the perception that the accommodation of lower short-term rates over the period does not threaten price stability.

The yield gap is little changed.

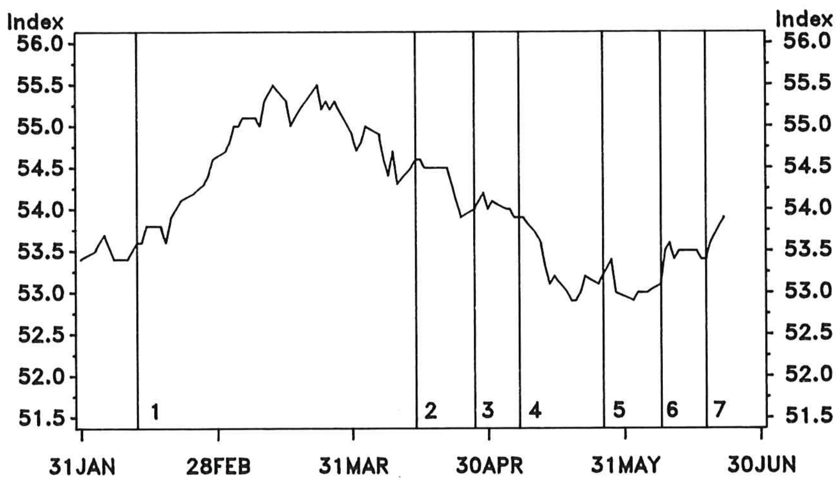
Given the similar declines in 5 year bond rates and bill rates over the review period as a whole, the yield gap - the difference between the two - was marginally higher than early February levels, at a little over 1.4 percentage points in mid-June. This level was higher than in the months preceding February, however, as a result of the general easing in conditions which the Bank has been able to accommodate, given the progress on reducing inflation and inflation expectations.

After initially firming,.....

The exchange rate firmed over the early part of the review period and averaged around 54 to 55 on the TWI until early May. Market sentiment was buoyed by the range of good economic news released over this period, including the confirmation in March that the country's international credit rating would be maintained. There was also a strengthening of non-resident demand for New Zealand dollar-denominated government securities.

Figure 9

Trade Weighted Exchange Rate Index
(June 1979 = 100)



1.Monetary Policy Statement 2.CPI Release 3.Apr 28 Fiscal Announcement 4.RBNZ Forecasts 5.Oil Price Rise 6.Jun 9 Fiscal Announcement 7.Jun 19 Fiscal Announcement

TABLE 4
KEY MONETARY INDICATORS

	90 Day[1] Bank Bill Yield (%)	5 Year[1] Govt Stock Yield (%)	Yield[1,2] Gap (%)	Exchange[1,3] Rate
Annual				
1987	21.1	16.7	-4.3	63.0
1988	15.4	13.4	-1.9	64.5
1989	13.6	12.8	-0.8	60.6
1990	13.9	12.5	-1.4	60.5
1991	10.0	10.0	0.0	57.9
Quarterly				
1990				
Sep.	14.3	12.7	-1.6	60.8
Dec.	13.9	12.8	-1.1	59.1
1991				
Mar.	12.1	11.7	-0.4	58.8
June	10.4	10.2	-0.3	59.4
Sep.	9.3	9.5	0.2	57.9
Dec.	8.0	8.6	0.6	55.3
1992				
Mar.	7.4	8.7	1.3	54.3
Monthly				
1992				
Feb.	7.5	8.8	1.4	53.8
Mar.	7.3	8.6	1.3	55.1
Apr.	7.1	8.4	1.4	54.4
May	6.8	8.3	1.4	53.4

1 Averages of daily observations.
2 Gap between yields on 5-year government bonds and 90-day bills (may not exactly match with the interest rate numbers in this table due to rounding).
3 Daily trade-weighted index (June 1979=100).

....the TWI eased back, ending the review period only slightly higher than in early February.

However, the trade-weighted exchange rate fell back over mid-May, reaching as low as 52.7 at one point. The positive inflation outlook contained in the Bank's Economic Forecasts released in early May probably contributed somewhat to this easing, with the market apparently recognising that a somewhat lower exchange rate would still be consistent with the Bank's price stability objective. The exchange rate fall had followed additional short-term interest rate reductions, and short rates retraced somewhat in the wake of the exchange rate reductions. The exchange rate consolidated again at levels around 53 on the TWI, before firming back to levels around 53.7, slightly above the levels at the beginning of the review period.

Increases in the broader money and credit aggregates apparently reflect signs of increased activity...

The broader money and credit aggregates, especially M3 and Private Sector Credit (PSC), have been growing rapidly in recent months, with seasonally adjusted monthly growth rates averaging around 1 per cent this year. Annual growth rates for these two variables have consequently accelerated somewhat lately, with M3 recording growth of 8.8 per cent in the year to April, and with PSC growth of 3.9 per cent.[3] While the acceleration no doubt reflects in part the emerging domestic recovery, it is important to note that the annual growth rates for M3, and to some extent PSC, are affected by the inclusion of New Zealand dollar funding from, or claims on, non-residents. Changes in these items do not provide an indication of the state of domestic conditions. The Bank has prepared some provisional numbers which exclude these effects and we estimate that a purely resident-based M3 aggregate would have recorded growth of about 5 per cent for the year to April.[4]

TABLE 5

MONETARY AND CREDIT AGGREGATES

(Annual Percentage Changes)

	Currency	M1	M3	PSC	DC
1991					
Jan.	2.6	-3.1	10.8	10.0	12.3
Feb.	2.6	3.5	12.6	10.0	13.0
Mar.	3.2	0.8	12.1	10.1	12.3
Apr.	-2.5	-4.0	12.4	8.4	9.6
May	0.8	-5.9	10.7	9.2	11.3
June	-3.1	-10.7	9.0	8.0	11.4
July	0.9	-5.3	8.2	8.5	11.1
Aug.	3.9	-7.8	4.4	4.2	6.5
Sep.	4.7	-3.8	6.6	3.6	5.6
Oct.	3.5	0.2	6.1	4.8	5.7
Nov.	0.8	-0.3	6.1	4.4	5.4
Dec.	5.6	1.8	6.7	1.2	2.7
1992					
Jan.	-2.9	1.3	9.2	3.2	4.1
Feb.	0.2	-2.7	8.5	3.2	5.6
Mar.	-1.7	2.7	11.0	4.0	6.9
Apr.	3.1	3.7	8.8	3.9	7.8

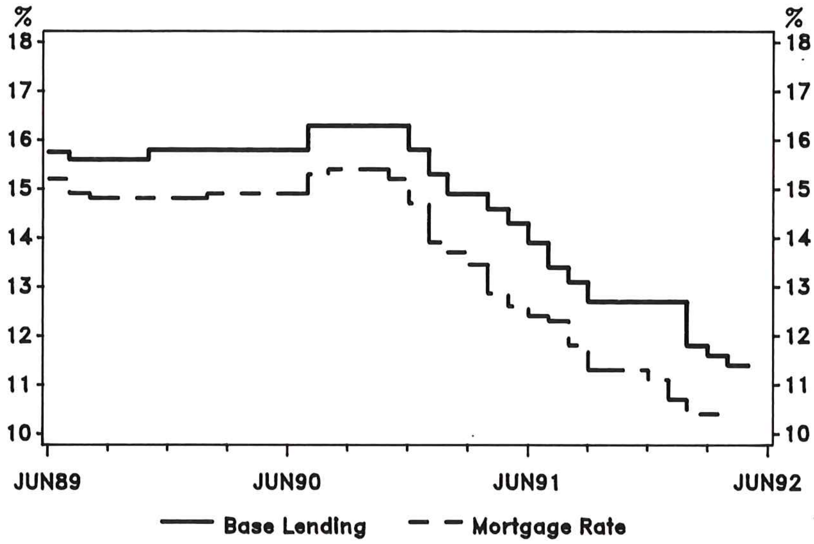
3 Domestic Credit (DC) has been growing more rapidly than PSC - by 7.8 per cent in the year to April - as a result of additional growth in M3 institutions' credit to government.

4 Once a number of data problems have been satisfactorily resolved, the Bank intends making resident-based M3 and PSC aggregates publicly available to supplement the normal New Zealand dollar-denominated aggregates.

...though growth in narrower money aggregates remains relatively slow.

Growth in M1 (mainly transaction balances) and in currency has also accelerated somewhat, but has been much slower than M3 growth. M1 grew by 3.7 per cent in the year to April, while currency grew by 3.1 per cent.[5]

Figure 10
First Mortgage and Base Lending Rates



Retail lending rates have followed wholesale rates down.

One of the major contributory factors to the low measured CPI inflation result for the year to March was the decline in retail lending interest rates. This downwards trend continued over the review period, and by the end of May average base lending rates and residential first mortgage rates had fallen to 11.4 per cent and 9.9 per cent respectively, down from 12.7 per cent and 11.1 per cent at the end of January.

A comparison with real interest rates internationally...

Real interest rate levels play an integral part in the transmission of monetary policy to the rest of the economy. Our real short and long rates, defined in terms of historical inflation rates, have declined somewhat further in the period under review, but were virtually unchanged from those at the end of January when calculated on the basis of forecast inflation rates. (In other words, the declines in nominal rates over the period more or less matched the decline in forecast inflation.) This is shown in Tables 6 and 7, which give New Zealand's real interest rates in comparison with those of other OECD countries, based on both CPI inflation over the last year, and the OECD's latest forecast of the year ahead inflation rate.[6] Both

5 Although M3 has historically been more closely related to nominal GDP, M1 and currency have been more closely related to consumption measures than has M3.

6 OECD forecasts, which relate to the consumption deflator rather than the CPI, are used for New Zealand for reasons of comparability. A footnote in the tables refers to real rates based on the Bank's own forecasts of CPI inflation.

methodologies imply that it is the real interest rate from the point of view of a local investor in the country concerned that is being measured. These are simple methodologies, however, and the comparisons should be treated with some caution.

...shows a relative improvement in our long term real rates, though these remain rather high.

Using the conceptually superior forecast inflation basis for measuring real rates, our real short-term rates remain lower than those of most other countries in the OECD, while our real long-term rates are now on a par with, or lower than, many of the European members of the OECD. In contrast with real rates in New Zealand, real short and long rates increased, on average, in the other OECD countries over the review period. It is clear, though, that real long term rates in New Zealand remain relatively high, suggesting that there is still potential to reduce further the risk premium in our real bond rates. This cannot be achieved directly through monetary policy actions, but should be facilitated over time as the perception spreads that monetary policy in this country is indeed committed to maintaining price stability. It will also be facilitated by continued commitment to maintaining a sustainable fiscal position.

TABLE 6

SHORT-TERM REAL INTEREST RATES[1]

	Historical Inflation Basis[2]		**Forecast Inflation Basis[3]**	
	28-1-92	**10-6-92**	**28-1-92**	**10-6-92**
Australia	6.1	4.8	4.3	2.5
Belgium	6.7	6.9	6.4	6.7
Canada	3.1	4.3	4.0	3.5
Denmark	7.9	8.0	7.5	8.2
France	6.9	6.8	7.1	7.5
Germany	5.3	4.9	5.5	6.2
Ireland	7.0	6.3	7.9	6.7
Italy	6.0	8.3	6.6	9.6
Japan	1.9	2.7	3.0	3.0
Netherlands	4.5	5.3	6.0	5.6
New Zealand	**6.4**	**6.0**	**4.9**	**4.8**[4]
Spain	7.3	5.7	7.2	7.7
Sweden	4.5	9.4	8.9	8.3
Switzerland	2.2	4.2	2.9	6.1
United Kingdom	5.9	5.9	6.3	6.1
United States	0.8	0.6	0.3	0.6
Average (excl. New Zealand)	**5.1**	**5.6**	**5.6**	**5.9**

1 Comparisons based on 90 day money market interest rates.
2 Nominal rate less the CPI inflation rate over the most recent 12 months.
3 Nominal rate less the OECD's latest forecasts of inflation as measured by the private consumption deflator.
4 Using the Reserve Bank's own forecasts of underlying CPI inflation available at the time (instead of OECD consumption deflator forecasts), the forecast inflation basis figure would have risen slightly between 28 January and 10 June 1992.

TABLE 7
LONG-TERM REAL INTEREST RATES[1]

	Historical Inflation Basis[2]		Forecast Inflation Basis[3]	
	28-1-92	**10-6-92**	**28-1-92**	**10-6-92**
Australia	7.8	6.7	6.0	4.4
Belgium	5.7	6.2	5.4	6.0
Canada	4.2	6.3	5.1	5.5
Denmark	6.1	6.6	5.7	6.8
France	5.4	5.8	5.6	6.5
Germany	3.8	3.5	4.0	4.8
Ireland	5.5	5.7	6.4	6.1
Italy	4.7	6.5	5.3	7.8
Japan	2.3	3.5	3.4	3.8
Netherlands	3.3	4.2	4.8	4.5
New Zealand	**7.7**	**7.4**	**6.2**	**6.2**[4]
Spain	5.9	5.1	5.8	7.1
Sweden	1.4	7.7	5.8	6.6
Switzerland	1.0	2.0	1.7	3.9
United Kingdom	5.0	5.4	5.4	5.6
United States	3.3	3.5	2.8	3.5
Average (excl. New Zealand)	**4.4**	**5.2**	**4.9**	**5.5**

1 Comparisons based on 5 year government bond rates.
2 Nominal rate less the CPI inflation rate over the most recent 12 months.
3 Nominal rate less the OECD's latest forecasts of inflation as measured by the private consumption deflator.
4 Using the Reserve Bank's own forecasts of underlying CPI inflation available at the time, the forecast inflation basis figure would have risen slightly between 28 January and 10 June 1992.

The Medium Term Focus of Monetary Policy

The announced inflation ranges....

In its February 1991 Monetary Policy Statement, the Bank published a revised set of indicative ranges for underlying inflation. These ranges were intended to indicate how underlying inflation was likely to track down to the 0-2 per cent price stability target range for 1993, from which time onwards the Bank's goal would be to maintain price stability.

... reflect the medium term focus of monetary policy.

The inflation ranges are central to the formulation of monetary policy by the Reserve Bank. They cannot, however, be interpreted mechanistically. In particular, interpretation needs to take account of the fact that monetary policy is most usefully directed towards medium-term inflation trends. Policy-makers have limited ability to 'fine-tune' inflation outcomes over the short term, given the lags in the transmission process.

The stance of policy has been guided by the medium-term outlook for inflation relative to the ranges,...

Accordingly, the policy stance adopted by the Bank has been - and will continue to be - guided quite directly by the outlook for underlying inflation over the following two years or so, relative to the inflation ranges. Where the trend for inflation up to one or two years ahead is forecast to lie outside the established ranges, the Bank endeavours to ensure that the actual out-turns for underlying inflation are consistent with the ranges by tightening or loosening policy to alter monetary conditions. Where the forecast inflation trend is within the ranges, there is in general reasonable scope for monetary conditions to vary on a market-led basis. As long as conditions remain consistent with desired inflation outcomes, the Bank prefers to stay out of the market as much as possible.

...as was demonstrated by the explicit easing of monetary policy last September.

The easing of monetary policy in September of last year was the clearest recent example of an explicit policy response within this framework. A reassessment of the balance of risks around the Bank's inflation forecasts suggested that there was a significant probability that underlying inflation could undershoot the indicative ranges not just for 1991, but also for 1992. As a result, the Bank took explicit action to ease conditions in order to prevent inflation in 1992 from significantly undershooting the 1.5-3.5 per cent indicative range, knowing that it was not feasible at that stage to affect substantially the outcome for 1991.

Inflation outcomes for particular quarters are unlikely to affect policy.

A corollary of this forward-looking framework for guiding monetary policy is that policy is unlikely to react to announcements of actual inflation outcomes for particular quarters. The exception would be if actual inflation outcomes contained significant new information relevant to future inflation trends which was not already incorporated into the inflation forecasts.

Markets now seem to understand this framework....

The Bank has put considerable emphasis on explaining the role of the indicative inflation ranges over the last year or so, and there now seems to be a good understanding in the financial markets of how monetary policy is likely to react in various circumstances. A monetary policy 'reaction function' which is transparent and well understood should contribute to a further strengthening of monetary policy credibility.

...including the role of the monetary indicators.

More specifically, the Bank has endeavoured to ensure that the focus of its public statements is clearly on the outlook for inflation over the next couple of years rather than on movements in the individual monetary indicators, which are not of importance in their own right; their only importance is in terms of their relevance to the inflation outlook.[7] Rather than serving a role akin to

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7 The monetary indicators include the exchange rate, the level and structure of interest rates, money and credit growth rates, inflation expectations, and real sector developments.

intermediate monetary policy targets in the traditional sense, the indicators essentially provide early information about the likely inflation track over the forecast period, relative to the forecasts established at the time. The indicators need careful interpretation, however, each in light of the others, not least because each indicator is subject to a variety of influences aside from domestic monetary policy.

This framework for monetary policy will continue to apply.

This framework for assessing the appropriate stance of monetary policy will continue to apply, and in particular remains equally applicable as growth emerges. That is, any need to tighten monetary policy in a growth environment will only be because the Bank perceives that there is a significant risk of overshooting its inflation targets over the next year or two. Conversely, policy will only be eased if the Bank believes that there is a significant risk of undershooting the inflation targets one to two years out.

III. THE OUTLOOK FOR INFLATION

A New Environment

The Bank is now focusing on maintaining price stability in an environment of moderate growth.

It has become increasingly clear over recent months that the economy has entered a recovery phase. This is being driven mainly by the export sector but domestic demand is also picking up. The latest set of Economic Forecasts released by the Bank in May shows that the recovery is expected to continue over the foreseeable future, and recent indicators have tended to confirm this view. The electricity shortages will have at least a temporary negative effect on GDP, but at this stage it is too early to say how significant this will be. In general, then, the task for the Bank over the next few years is to maintain price stability in an environment of moderate growth, rather than to reduce inflation during a recession.

The maintenance of price stability need not stifle the growth emerging.

As the Bank has stressed many times before, there is no necessary inconsistency between maintaining price stability and economic growth. It is true that, other things being equal, there is a higher probability of inflationary pressures in an economy in which demand is growing rapidly, particularly as capacity constraints are approached in key sectors. But the central role played by inflation expectations - influenced to a major extent by monetary policy credibility - can make a fundamental difference. A credible monetary policy and low inflation expectations are necessary conditions for obtaining price stability and sustainable growth simultaneously.

Indeed price stability provides the best environment for sustained growth,....

Not only are price stability and economic growth compatible, but price stability in fact provides the best environment for sustainable economic growth, as well as having broader benefits in terms of general economic and financial stability and improved efficiency. The benefits are already becoming apparent in the export sector. The recently achieved gains in international competitiveness are now being protected through price stability, rather than being eroded through the inflationary spiral which has been more typical of the last two and a half decades.[8]

...encouraging longer term productive investment,....

Price stability significantly reduces the uncertainty over future costs and returns faced by businesses. It is therefore conducive to long term investment and, in particular, to investment directed toward productive enterprise, rather than toward hedges against inflation, reflected previously in phenomena such as over-invest-

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8 Although price stability (or the lack of it) does not *directly* affect competitiveness in the long run - see box later in this Statement - there are a number of reasons why it is relevant indirectly, and in the short- to medium-term. These include the fact that price stability increases the incentives for efficiency in production processes as well as in the allocation of resources; and the fact that the nominal exchange rate can, and does, diverge for quite extended periods from levels which reflect inflation differentials vis-a-vis other countries.

ment in commercial real estate and other property. Investment is also encouraged because cash flow constraints are significantly reduced in a low inflation environment, as the servicing costs over the earlier years on a longer term loan are significantly lower with lower nominal interest rates.

...promoting efficiency,...

Price stability also promotes efficiency more generally. For example, managers can no longer count on price increases to cover the effects of fundamental inefficiencies in their businesses. Instead they are forced to tackle the root cause of these inefficiencies; as a result we are now seeing sustained improvements in productivity, which in turn are contributing to the rebound in growth that is occurring.

...rewarding saving,...

Moreover, price stability is likely to increase the incentive to save in financial assets. Inflation discourages saving because, although nominal interest rates are typically high in such an environment, a good deal of the pre-tax interest earned on an investment is paid to the government as tax. Then, an additional portion must be set aside purely to maintain the purchasing power of the investment. Once these components are subtracted from the interest earned, the real after-tax return is typically very low and often negative. On the other hand, where inflation is very low, real after-tax interest returns are likely to be higher (as is the case in New Zealand today), increasing the incentive to save.[9]

...and tending to strengthen the balance of payments,...

To the extent that financial savings are increased as a result of this, a greater quantity of funds is available domestically to finance investment. The result is an improvement in the current account of the balance of payments, as less has to be borrowed overseas to fund domestic investment plans. Due to the lower external debt level, there is also reduced exposure to some types of external shocks which could adversely affect the domestic economy. The reduced uncertainty, the more productive nature and lower short-term cost of investment, and the incentives to save resulting from price stability, all make important contributions to providing an environment in which sustainable growth can be achieved alongside a sustainable balance of payments position.

....as well as having equity advantages.

Furthermore, an additional point which should not be overlooked is that price stability has important equity advantages. It is often those people on lower or fixed incomes who are least able to protect themselves against the effects of inflation. Those with 'nest eggs' in the form of longer-term financial savings may find it very difficult indeed to protect the real value of their savings over an extended period in an inflationary environment.

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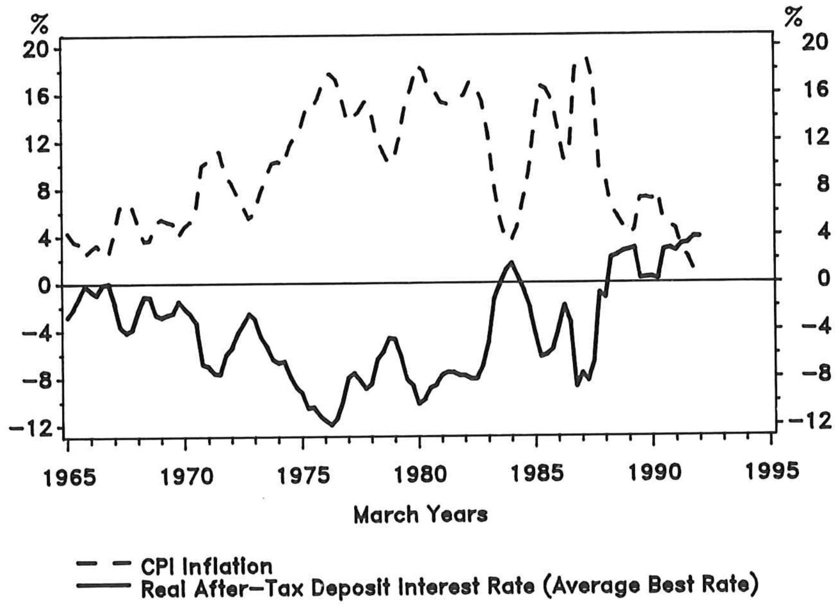
9 An example demonstrating this was given in the August 1991 Monetary Policy Statement.

Figure 11

Real After–Tax Deposit Interest Rate vs CPI Inflation



Key Features of the New Environment

In the short run, inflationary pressures are influenced by cyclical factors.

In the longer run, inflation is determined fundamentally by monetary policy. But the nature and strength of inflationary pressures in the short run are affected by the state of the economic cycle. For example, during an economic downturn, depressed demand, squeezed margins, and falling real incomes act to restrain inflationary pressures. The discussion in Part I described how such factors, together with a reduction in inflation expectations, restrained inflation pressures during the recession from which the economy is now recovering.

Historically, the structure of the economy allowed inflationary pressures to become generalised during upturns...

During an upturn, however, these forces operate in the opposite direction to add inflationary pressures, at least after an initial phase when overheads can be spread over increased production volumes, until such time as capacity constraints are reached. In the upturns of the 1970s in this country, real and nominal wages increased rapidly. The national award system then in place, and fairly rigid wage relativities, facilitated the spillover of wage increases negotiated by one set of workers to many other workers. This occurred regardless of economic fundamentals such as the state of demand faced by particular sectors or firms, or productivity increases.

...given relatively weak constraints on price and wage setting.

Wage increases in turn were readily passed on as price increases in the protected and relatively non-competitive domestic markets typical of those times. Inflation expectations naturally rose in this environment. The cyclical influences on inflationary pressures, in combination with the structure of the economy at the time, facilitated a ratcheting up of inflation into double digit rates over successive economic cycles. Underpinning this whole process was monetary policy, which accommodated the increasing inflation pressures over the 1970s and 1980s.

However, the economic framework has now changed in significant ways.

Over the last eight years, however, there have been major changes in the framework of the New Zealand economy. Important structural and legislative changes have reduced the reliability of the historical profile of inflation pressures as a guide to behaviour in the current recovery.

The Reserve Bank Act 1989 appears to have contributed importantly...

In particular, the Reserve Bank Act 1989 is a legislative change of critical importance, giving the Bank a clear statutory objective of achieving and maintaining price stability, and the policy autonomy with which to achieve it. This Act appears to have led to increased monetary policy credibility - that is, a stronger public belief that the Government and the Reserve Bank are serious about achieving and maintaining price stability. The inflation expectations surveys undertaken by the Reserve Bank and the National Bank (amongst others) give some indication of the public's beliefs about future inflation. These surveys show that inflation expectations have fallen steadily and are now at record lows.

....to record low inflation expectations.

The improved monetary policy credibility and the resulting low inflation expectations are two central features of the new environment. As long as the public understands that the Bank will act as required to keep inflation in check, inflation expectations should remain low, and this will decrease the probability that New Zealand will experience unwelcome inflationary pressures during the recovery. Relative price changes, in favour of the particular types of goods and labour most in demand, should be able to occur without feeding through into the wage and price setting process more generally.

Trade liberalisation, industry deregulation....

Beyond the realm of monetary policy itself, the short-term dynamics of the inflation process appear to have been influenced by other structural changes since 1984 which have affected attitudes to price and wage setting. In particular, the programme of trade liberalisation has both forced and enabled many New Zealand firms to become more efficient and competitive on an ongoing basis. Industry deregulation in key areas, including the transport, ports and telecommunication industries, has similarly lowered costs and introduced more competition.

....and labour market reform ....

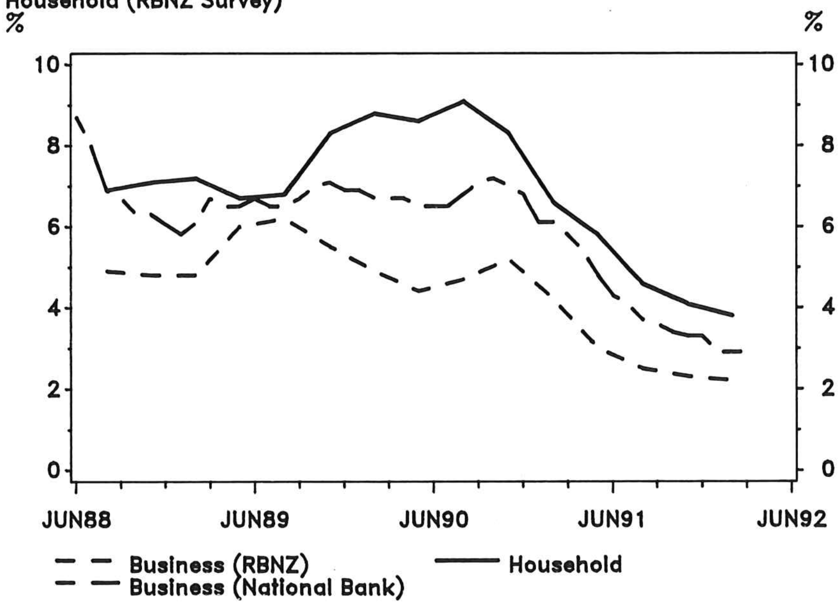
The labour market deregulation of recent years, and in particular the Employment Contracts Act, has reduced the likelihood of generalised wage increases by facilitating bargaining at the enterprise and sub-enterprise level. This should allow wage relativities to change more easily. Wage increases so far appear to be linked more closely than previously to economic fundamentals, such as productivity increases and changes in demand at the level of individual firms.

INFLATION EXPECTATIONS

Figure 12 shows the results of three surveys of year-ahead inflation expectations: the Reserve Bank's Survey of Business Expectations (principally covering expectations within the financial sector and large businesses); the National Bank's Survey of Business Expectations (principally reflecting expectations in the small business sector); and the Reserve Bank's Survey of Household Expectations. As can be seen, inflation expectations have fallen rapidly since September 1990, and are now at record lows. Also, the gap between business and household inflation expectations has narrowed considerably. This trend, coupled with less direct indicators from financial markets, suggests increasing confidence about the prospects for achieving and maintaining price stability.

Figure 12

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



...also seem to have helped modify attitudes.

Against this, however, is some possibility that in response to generalised demand pressures during an upswing, wages overall may rise more rapidly than under the more centralised wage-fixing of the past. This effect could occur if wage relativities do not prove to be as flexible as envisaged in the face of significant wage increases for workers with skills in short supply. Some uncertainty therefore remains about the longer run effect of the Employment Contracts Act, and labour market behaviour will be a key component of the Bank's ongoing inflation assessments. Nevertheless, on balance, wages appear to present only a limited source of inflationary pressure under the current framework. The historically very high levels of unemployment reinforce the likelihood of this outcome.

The new environment bodes well for a non-inflationary recovery.

Given the new environment, there are good grounds for expecting that, as long as an appropriately firm monetary policy is maintained, the current recovery can proceed without experiencing the upsurge in inflationary pressures typical of many past recoveries, both here and overseas. It is worth noting that changes in the behaviour of prices, wages and other costs, as the result of the various structural and institutional changes of recent years, seem to have been an important reason why the Bank and other forecasters had to revise inflation forecasts downwards successively last year. Our latest inflation forecasts assume that these factors will continue to constitute a constraint on inflation pressures over the foreseeable future.

Forecasts for Inflation

After rising a little over the next few quarters, inflation is forecast to fall back to around 1 per cent by December 1993.

Inflation is forecast to rise a little over the next few quarters before falling back comfortably within the price stability range for December 1993. Underlying inflation is forecast to rise from an expected 1.3 per cent for the year to June 1992 to 2 per cent for calendar 1992, still somewhat below the middle of the indicative inflation range for 1992 (1.5-3.5 per cent). It is expected to fall back to around 1 per cent by the end of 1993, the middle of the price stability target range. Measured CPI inflation, which reached a low of 0.8 per cent for the year ending March 1992, is forecast to rise from an expected 1.1 per cent in the year to June 1992 to 1.8 per cent for calendar 1992, but to drop back to 0.9 per cent for the 1993 year.

Price stability is forecast to be maintained after 1993.

Beyond 1993, underlying inflation is forecast to remain around 1 per cent - well within the 0-2 per cent price stability range. Measured CPI inflation is expected to follow a very similar track.

The outlook for inflation has been revised only slightly since our May Forecasts.

The forecasts for underlying inflation for 1992 and 1993 have been revised slightly from those released in early May. As discussed in the May forecast release, the forecasts themselves were lower than those published in the last Statement (see Table 8), because of some reductions in forecast unit labour costs, and somewhat lower than previously forecast foreign import prices.

The main non-exchange rate influences on underlying inflation, including labour costs,....

Underlying these forecasts is the expectation of a recovery driven mainly by the export sector. The recovery is forecast to continue over the foreseeable future, and to include also some moderate growth in domestic demand. However, the main non-exchange rate influences on underlying inflation are forecast to remain generally weak. The Bank expects a continuation of low growth rates in wages coupled with continuing productivity improvements, and thus expects unit labour costs to continue to fall over the next two years.

TABLE 8
RESERVE BANK UNDERLYING INFLATION FORECASTS

	(per cent changes) Feb. 1992	May 1992	June 1992
1992 Year	2.7	2.0	2.0
Year to March 1993	3.0	2.1	1.9
1993 Year	1.2	1.0	1.0

....profit margins,...

Built into the inflation forecasts is the assumption of some moderate widening of profit margins after the pressure that these have been under recently. This is consistent with the expected moderate increase in private consumption demand, falling unit labour costs and improved manufacturing competitiveness more generally. Increased margins need not cause prices to rise absolutely, however, to the extent that productivity gains are taken as increased profit, rather than passed on to consumers through lower prices.

....house prices,

House prices seem unlikely to fall much further, but are expected instead to flatten out and then rise broadly in line with other prices. It is expected that some continuing uncertainty about employment prospects, together with flat or falling real wages, will prevent any significant surge in house prices in the near future, despite the recent falls in nominal and real mortgage rates.

....and import prices in foreign currency terms....

Recently available trade data indicate a continuation of the falls over the last year or two in many import prices measured in foreign currency terms (though there was a slight rise in non-oil import prices in the March quarter). These lower world prices for imports are likely to offset some of the cost increases arising from the late 1991 depreciation of the New Zealand dollar. Thus, net import cost increases to be passed onto consumers over 1992 are likely to be relatively low.[10] Consistent with the divergence noted earlier between our import prices and producer prices in major trading partners, the foreign price of imports is expected to rise over the forecast period, but very slowly as the economies of our trading partners only gradually pick up. The foreign prices of New Zealand's exports are expected to follow a broadly similar, though slightly higher, track.

10 Had there been no depreciation in the exchange rate, of course, the lower foreign price of imports would have resulted in lower priced imports in New Zealand dollar terms.

TABLE 9
CPI INFLATION FORECASTS
(Per Cent Changes)

	Underlying CPI Year to:	Actual CPI Year to:
1991		
Mar.	3.6	4.5
Jun.	2.6	2.8
Sep.	2.0	2.2
Dec.	1.7	1.0
1992		
Mar.	1.3	0.8
Jun.	1.3	1.1
Sep.	1.4	1.1
Dec.	2.0	1.8
1993		
Mar.	1.9	1.5
Jun.	1.8	1.4
Sep.	1.4	1.3
Dec.	1.0	0.9
1994		
Mar.	1.0	0.9
Jun.	0.9	0.8
Sep.	0.9	0.9
Dec.	1.0	1.0
1995		
Mar.	1.1	1.1

....are expected to remain subdued.

As the effect of the depreciation works its way out of the system over 1992, the main direct sources of inflation pressure further out are the expected slowly rising import prices, slightly rising house prices and widening margins as the recovery gathers strength. However, the more competitive nature of the economy, together with further falls in unit labour costs and continued low inflation expectations, are likely to restrain these influences. By the end of 1993, inflation is forecast to be well within the price stability range and to be maintained at that level thereafter.

Risks to the Inflation Outlook

The risks around the latest forecasts....

The inflation outlook as described above represents a central forecast that attempts to balance, as far as possible, the many upside and downside risks to the inflation outlook. Forecasts are inherently subject to error, of course, and the potential risk factors need to be borne in mind when interpreting the outlook.

...relate to developments in wages, ...

At the time of writing, the risks around the current inflation forecast appear to be evenly balanced. However, a degree of uncertainty inevitably surrounds the likely movements of several key variables. In the shorter term, the likely movement of unit labour costs, for example, is particularly uncertain, as the process of change brought about by the Employment Contracts Act is not yet complete. The overall impact of trends emerging since the Act was introduced - for example to reduce penal rates and overtime arrangements but to increase hourly wages in many cases - is still not clear. The forecasts have assumed only a small overall increase in wages, but given the lack of reliable and timely data on which to base our forecasts, it is possible that even this is an over-estimate for 1992.

...margins, house prices,...

Further out, however, the risks on the wage front may be more in the upward direction, for reasons noted earlier. Similarly, the extent to which margins will increase as demand picks up is also uncertain, again with little reliable data, and with a different competitive climate compared to that in previous upturns. House prices - always more volatile than underlying consumer goods prices - are also subject to risks arising, for example, from the effects of lower mortgage rates.

...and international developments.

The track for world import and export prices is affected by the outlook for world growth, which constitutes another source of uncertainty. The major international forecasters are predicting a gradual recovery from recession for most of the large economies, but even this outlook may be a little optimistic for this year given, for example, the recent share market decline in Japan.

The fiscal position is a potential risk...

A different type of risk is that associated with the fiscal outlook. The market response to the revised 1991-92 fiscal deficit forecast announced on 28 April 1992 was subdued, given the recognition that government expenditure still appeared under control, and that the revision was due instead to a shortfall in revenue. Similarly, the Minister of Finance's press statements of 5 and 9 June on the fiscal outlook had a relatively minor effect on the markets. There was no indication in either case of any significant loss of offshore investor confidence.

However, the fiscal position remains an area of some sensitivity. The Bank's key concern here is that the fiscal outlook remain

...if any further deterioration sparks an exchange rate depreciation.

sustainable over the medium term, and that it is seen as such by financial markets.[11] A deterioration of the medium-term structural fiscal deficit can generally be expected to boost bond rates. By itself, this would not call for a monetary policy response, other than to allow the increase in bond rates to occur. Where a deterioration is perceived by the market to be sufficiently fundamental, however, and leads to a significant loss of investor confidence reflected in the exchange rate, the Bank's price stability objective could be put at risk, at least temporarily. In this case, a reaction from monetary policy could well be required to ensure the maintenance of price stability.

Implications for Monetary Policy

Monetary policy needs to consider inflation in 1993 as well as 1992...

In formulating policy over the months ahead, the Bank will remain forward looking when assessing the monetary policy implications of the inflation outlook. In particular, attention will focus on the 1993 outlook, as well as that for 1992. Policy settings must be consistent with achieving the 1993 target, while also aiming to keep inflation within the 1992 indicative range. This balancing has to take into account both the risks to the inflation forecasts and the limited ability of policy-makers to 'fine-tune' inflation outcomes in the short term.

...and there are no grounds currently for an explicit change in policy.

Given that the inflation outlook for 1993 is in the middle of the target inflation range for next year, while the forecast for 1992 is also within the indicative range for this year, there are no grounds for an explicit change in policy in the near future. Already, the 1992 inflation rate is not very amenable to monetary policy influence, and hence the targets for 1993 and beyond are becoming increasingly predominant as guides for monetary policy as 1992 progresses. As always, however, there is some scope for monetary conditions to change on a market-led basis, provided such changes are consistent with the inflation targets.

In 1993, the upside risks for inflation may be somewhat stronger than at present.

The Bank recognises the potential for upside inflation risks in 1993, given the expected continuation of the recovery now underway. It also recognises the need to maintain the credibility of monetary policy by achieving its price stability goal. Both the Bank and financial market participants are well aware that policy-makers overseas have sometimes failed to pick the strength and timing of an upsurge in inflation pressures.

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11 This would normally be assessed in terms of the medium-term outlook for public debt levels relative to GDP. The August 1991 Monetary Policy Statement discussed fiscal sustainability in some detail.

Nevertheless, the Bank is comfortable with the current inflation outlook...

Notwithstanding such considerations, the Bank is comfortable with the current inflation outlook, and does not anticipate a need to change policy settings in the foreseeable future. We believe that monetary conditions at the time of writing are consistent with the consolidation of price stability over 1992 and 1993, and with the continuation of price stability subsequently. This assessment reflects cautious optimism that the economic recovery can proceed over the medium term without reigniting significant inflation pressures, partly as a result of the major changes in the economic environment which have occurred over the last eight years. In particular, the improvement in monetary policy credibility and low inflation expectations are fundamental factors which must be preserved, in order for price stability and sustainable growth to be achieved simultaneously.

....but will certainly react if price stability is threatened.

There should be no misunderstanding, therefore, that if inflation pressures should turn out to be significantly different from what is currently expected - in either direction - the Bank will act to keep inflation within the price stability range.

Implications for the Monetary Indicators

There is no one-for-one linkage between the indicators and inflation outcomes.

When considering the monetary indicators, the qualifications regarding their interpretation noted frequently by the Bank must be borne in mind. These qualifications mean, in sum, that there is no one-for-one linkage between the inflation targets and any of the monetary indicators, and the Bank does not specify a fixed value for the indicators that it considers appropriate for a desired inflation outcome.

On current forecasts, the present values of the monetary indicators, ...

The forecasts for inflation in this Statement are based on values for the monetary indicators that prevailed in the weeks immediately prior to the Statement's release. As discussed, these values are consistent with delivering an inflation track that is comfortably within the inflation target ranges. The corollary of this is that there is some scope for the various monetary indicators to move relative to their recent values and still be consistent with the price stability goal.

... including the exchange rate, are consistent with desired inflation outcomes over the forecast period.

Current exchange rate levels, in particular, are consistent with inflation outcomes within the announced ranges for 1992 and 1993, given that only moderate inflationary pressure is expected from wages, house prices and import prices. Over the longer run, however, if the inflation rates of our trading partners, reflected especially in import and export prices, remain higher than that in New Zealand, some appreciation of the nominal exchange rate would be entirely consistent with the maintenance of price stability. In this context, a gradually appreciating nominal exchange rate would leave the real exchange rate - which is what determines international competitiveness - unchanged.

INTERNATIONAL COMPETITIVENESS AND THE REAL EXCHANGE RATE

When discussing changes in New Zealand's international competitiveness, New Zealand's price level relative to that in other countries needs to be taken into account in addition to the nominal exchange rate. This is achieved through measures of the 'real exchange rate'. There are a number of possible measures of the real exchange rate, with different calculation methods appropriate for different end uses.[1] Nevertheless, the concept is relatively simple and can be readily illustrated with a concrete two-country example.

Suppose New Zealand can produce shirts for NZ$6 each, while the United States can produce shirts for US$3 each, and the nominal exchange rate (US$ per NZ$) is 0.5. The real exchange rate would be defined as:

$$\text{Real exchange rate} = \frac{\text{NZ\$ price of NZ goods}}{\text{US\$ price of US goods}} \times \text{nominal exchange rate}$$
$$= 6/3 \times 0.5 = 1$$

Now suppose that costs and prices in the United States inflate by 5 per cent, while those in New Zealand remain stable. A shirt produced in the US would now cost US$3.15. If the nominal exchange rate remains unchanged, the real exchange rate would depreciate to 6/3.15x0.5=0.95. New Zealand shirts would be 5 per cent more competitive, vis-a-vis US shirts, than previously.

On the other hand, if the nominal exchange rate appreciated by 5 per cent, given the superior inflation performance in New Zealand, the real exchange rate would be unchanged at 6/3.15 x 0.525 = 1.

In other words, an appreciating nominal exchange rate, consistent with better inflation performance domestically, does not change international competitiveness.

Indeed, over the long run, and other things being equal, the latter result is more likely to occur, rather than the nominal exchange rate remaining unchanged. In general, the long term real exchange rate and international competitiveness depend fundamentally on real economic factors such as relative productivity improvements, changes in protection levels for traded goods producers, changes in the terms of trade, and changes in saving rates. They do not depend directly on monetary policy or inflation performance in the long run although, in the shorter term, inflation performance may well have a significant effect on competitiveness, and there may also be long-term indirect linkages such as through changes in productivity.

1 For example, the definition most appropriate for assessing the competitiveness of an exporter may be somewhat different from that relevant for a domestic producer of import substitutes. Measures differ both because of different weighting schemes applied to overseas countries, and because of different measures of the price level. For discussions of the concept of the real effective exchange rate, and various measures of competitiveness, see S. Cooper, "Estimating New Zealand's Real Effective Exchange Rate", *Reserve Bank Bulletin*, Vol. 51, No. 3, 1988; and U. Schoefisch, "Measures of External and Internal Competitiveness", *Reserve Bank Bulletin*, Vol. 55, No. 1, 1992.

There appears to be some scope for New Zealand's real long-term interest rates to fall further.

With respect to interest rates, as noted earlier, New Zealand's real long-term rates remain relatively high by international standards. Given the present low inflation environment, the growing expectation that inflation will remain low, and the likely long-term path of the exchange rate, it appears that there is some scope for long-term interest rates, real and nominal, to fall. This, of course, requires in particular that local and overseas investors continue to gain confidence that the current low inflation monetary policy will not be reversed in the future. As this confidence continues to grow, the inflation risk premium implicit in current relatively high real bond rates should be reduced further.

But a range of influences on real rates need to be considered.

It is important to reiterate, however, that the level of real rates (short and long) will vary in response to other factors as well. In particular, real rates will be influenced considerably by overseas rates. Domestically, the fiscal borrowing requirement (and views about future requirements) will be an important element in determining the risk premium, as will the state of the balance of payments and the country's debt position. The stage of the economic cycle is also likely to influence real rates, particularly short rates.

IV. CONCLUSION

The Bank is now focusing on consolidating price stability in an environment of moderate growth. While there are higher risks of inflationary pressures in a growing than in a recessionary economy, the fundamental changes in the New Zealand economy over the last few years reduce the risk of inflationary pressures being reignited in the manner of past recoveries.

Underlying inflation is forecast to rise to 2 per cent for 1992, somewhat below the middle of the indicative range for this year, before falling away to 1 per cent for 1993, comfortably within the price stability target range. Inflation is expected to remain around that level thereafter. The Bank perceives the risks to the inflation forecasts, at the time of writing, to be evenly balanced.

The Bank is comfortable with this inflation outlook, and also with monetary conditions at the time of writing. At this stage, there does not appear to be much likelihood that the stance of monetary policy will need to change in either direction in the foreseeable future.

However, should inflationary pressures diverge significantly from those forecast -in either direction - the Bank will certainly act to ensure an inflation rate consistent with the price stability range.

Donald T. Brash

Donald T. Brash
Governor

APPENDIX 1
CHRONOLOGY

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

1992
12 February:
The Reserve Bank released its fifth Monetary Policy Statement.

3 March:
International credit rating agency Standard and Poors' reaffirmed the AA-rating of New Zealand's long-term debt.

7 April:
The Governor of the Reserve Bank gave a speech in which he rejected criticism that the Bank's policies were not symmetric, and that they were 'anti-growth'.

15 April:
The CPI out-turn for the March quarter was 0.4 per cent, bringing CPI inflation for the year to March to 0.8 per cent. Underlying CPI inflation was estimated by the Bank to be 1.3 per cent for the year to March.

28 April:
The Minister of Finance announced that the Government's forecast financial deficit for the 1991/92 year was now expected to be $3,425 million, $671 million more than had been estimated in December 1991, due mostly to lower than expected tax revenue.

8 May:
The Reserve Bank released its May Economic Forecasts showing improved prospects for both inflation and growth. Underlying inflation was expected to peak at 2.1 per cent in March 1993, and to fall back to within the 0-2 per cent range thereafter.

13 May:
The Department of Statistics announced a revision to total overseas debt at 30 September 1991 from $51 billion to $60 billion. Of the $9 billion upwards revision, $7.5 billion was due to borrowing from related companies that was previously either unrecorded or considered to be equity investment. The Department also published revised balance of payments statistics, showing a current account surplus of $116 million for 1991, compared to a deficit of almost $2.2 billion for 1990.

27 May:
OPEC members agreed on a new output pact. The Brent Oil price rose to US$21.00/barrel. At that level, oil prices were roughly 12 per cent higher than in early February.

5 and 9 June:
The Minister of Finance announced on 5 June that the projected fiscal deficits for the next two years were likely to be larger than previously expected. This was reiterated in a statement released on 9 June.

19 June:
The government's financial balance for the 10 months to April 1992 was announced. The $1.27 billion deficit for the period was lower than previously expected.

APPENDIX 2
RESERVE BANK STATEMENTS ON MONETARY POLICY

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

Reserve Bank Says Inflation Still Within Target Ranges
7 April 1992

The Governor of the Reserve Bank, Dr Don Brash, today said the Bank believed inflation was still tracking comfortably within the target ranges for this year (1.5-3.5 per cent) and next year (0-2 per cent).

In a speech to the Buttle Wilson/SG Warburg New Zealand Investment Conference 1992, Dr Brash said the outlook for inflation was encouraging.

"As we announced in mid-February, we then estimated that underlying inflation for the 1992 calendar year would be about 2.7 per cent on the basis of monetary conditions at that time," he said.

"We also suggested that year-to-date inflation would rise slightly higher in the first quarter of 1993 before falling off rapidly to be comfortably within our 0-2 per cent target by the end of 1993. We projected a temporary increase in inflation largely as a result of the depreciation in the New Zealand dollar in the last few months of 1991."

"Were we to do those forecasts again today, we would not be projecting inflation to peak at quite so high a figure, so there is every reason to believe that we are still comfortably within our target ranges for this year and next year. Our next formal forecasts will, in fact, be released in a month or so."

Dr Brash also rejected recent criticism by a consulting group that the Reserve Bank had a floor to the New Zealand dollar, but not a ceiling, and that the Bank's policies were therefore asymmetrical and 'anti-growth'.

"Let me state quite categorically: our policy **is** symmetrical. We are as keen to avoid under-shooting our inflation targets as we are keen to avoid over-shooting them. Where there is a danger of breaching the lower limit, we ease - indeed that was the motive behind our easing last September. Conversely, where there is a risk of overshooting the upper limit, we tighten."

Dr Brash added that there was no prospect of monetary policy choking off economic recovery. Nor would the Bank budge from its commitment to price stability.

Growth and Inflation Prospects Improve

8 May 1992

The latest Reserve Bank Economic Forecasts, released today, show that prospects for economic growth and inflation have both improved in recent months.

Commenting on the forecasts, Dr Arthur Grimes, Chief Manager of the Bank's Economic Department, said that growth in the last few quarters has been stronger than the Bank had expected at the time of its December forecasts.

"This recovery is expected to continue. We expect that GDP will rise by a further 2.5 per cent between March 1992 and March 1993," Dr Grimes said, "In 1993/94, further growth is expected, as the annual GDP growth rate rises to around 3 per cent."

Dr Grimes noted that the recovery now appeared to be more broadly based than the Bank had previously expected. Consumer spending had picked up surprisingly strongly, complementing the rapid growth in exports. "Previously, we had expected the strongest export growth of any of the New Zealand forecasters, but export growth has exceeded even our expectations."

"Over the year ahead," Dr Grimes said, "consumption should continue to rise, although less rapidly than in recent months, and rising investment spending will become an increasingly important contributor to growth."

Dr Grimes added that "because of the stronger prospects for the economy, the outlook for employment and unemployment has improved since our December forecasts. We now expect the unemployment rate to rise to 11.9 per cent by March 1993, compared with the 13.1 per cent we had expected in our December forecasts.

"Inflation prospects are also brighter. Underlying inflation is now expected to peak at 2.1 per cent next March. Beyond that date, inflation should fall comfortably back within the 0-2 per cent target range and stay there."

Reserve Bank Says Inflation Comfortably Within Targets

8 May 1992

The Governor of the Reserve Bank, Dr Don Brash, today commented on the outlook for inflation, in the Bank's May Economic Forecasts, released this morning.

Dr Brash said that the Bank's latest forecast show underlying inflation rising to 2.0 per cent in the year to December 1992, peaking at 2.1 per cent in the year to March and then staying comfortably within the 0-2 per cent range over 1993 and 1994.

"On the basis of current monetary conditions, we believe that inflation will be comfortably within the Bank's target ranges," Dr Brash said.