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Robert

# Monetary Policy Statement<sup>1</sup>

December 1993

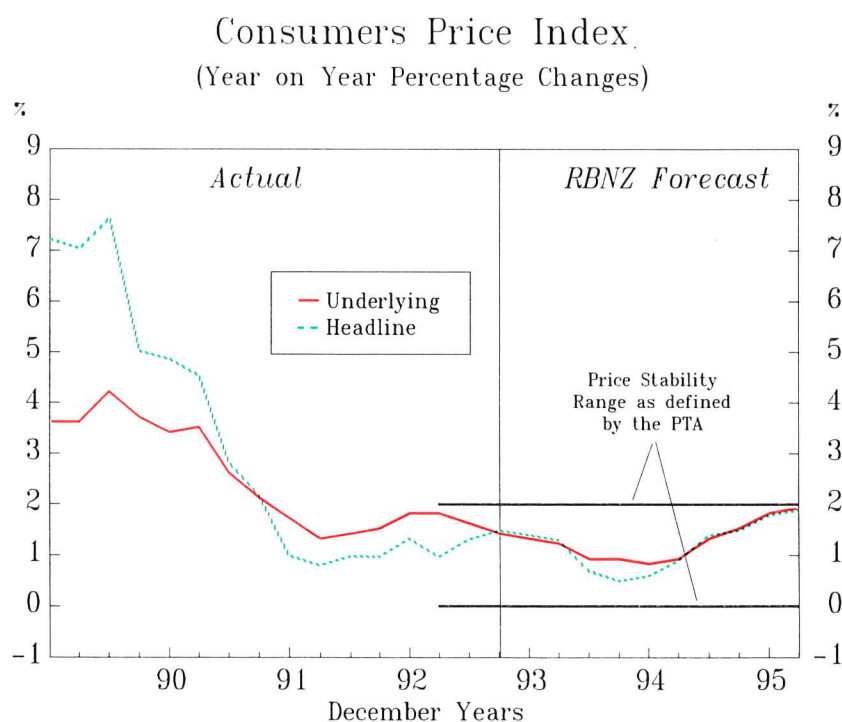
*This Statement is made pursuant to Section 15 of the Reserve Bank of New Zealand Act 1989.*

## Executive Summary

The Bank's latest inflation forecasts, summarised in this *Statement*, show some further decline in the inflation track over the next year or so. Accordingly, the Bank is comfortable currently with monetary conditions.

However, the forecasts also show an acceleration in inflation over the latter part of 1995 and into 1996, taking the inflation track close to the top of the 0-2 percent target range by the end of the forecast period. This acceleration reflects both firmer domestic and firmer external inflation pressures later in the forecast period, in the context of our normal technical assumption of a constant nominal exchange rate. Some increase in the nominal exchange rate and interest rates may be required later in the forecast period, especially if demand pressures strengthen more than we currently predict. If market-led exchange rate and interest rate movements turn out to be insufficient, the Bank would need to tighten monetary policy.

Figure 1



<sup>1</sup> Text and data finalised on 1 December 1993.

Price stability has been maintained since 1991.

- In the year to September 1993, inflation in the Consumers Price Index (CPI) was 1.5 percent, slightly higher than the 1.3 percent increase recorded over the year to June 1993. However this rise is likely to be reversed; and we expect inflation over the year to December 1993 to be around 1.4 percent.
- Adjusting for the influence of special factors, underlying inflation fell from 1.6 percent in the year to June to 1.4 percent in the year to September, and is expected to ease further to 1.3 percent in the 1993 calendar year.

During the review period, monetary conditions have remained consistent with the maintenance of price stability, notwithstanding some volatility after the election and referendum on 6 November and the announcement of Cabinet positions on 28 November. The existence of, and continuing political support for, the current monetary policy framework was an important factor in limiting volatility in monetary conditions during this latter period.

The Bank's latest inflation forecasts are based on a stronger than previously foreseen outlook for economic activity and demand, as well as the technical assumption of a continuation of current monetary conditions. As a consequence, the inflation pressures later in the period are expected to be a little stronger than those outlined in the September forecasts.

- Our current assessment is that the balance of risks around our central forecast track is relatively even in the near term; but further out, if inflation differs from our central forecast track, it is more likely to be higher than we are forecasting, than lower.
- We envisage no change to the way that prices and wages are set in the New Zealand economy as a result of post-election developments. The establishment of, and broad support for, the current monetary policy framework; the structural and regulatory changes of the last few years in goods and labour markets; and the improved fiscal track, are all expected to continue to moderate inflation pressures and restrain inflation expectations in the future, assisting the task of monetary policy.
- If, contrary to expectation, current price and wage-setting behaviour and expectations do change, the inflation outlook could also change quite quickly. Similarly, a change in the general fiscal policy track could directly or indirectly add to inflation pressures. If such events threatened the maintenance of price stability, the Bank would react to maintain price stability.

If policy action is required in the future to avert a threat to price stability, it is important that we recognise the need as early as possible, so that we can take timely action, consistent with the six to 18 month period over which monetary policy has its main effect. Timely monetary restraint, aimed at preventing the economy accelerating to the point of overheating, is likely to be less severe than delayed action. The recovery should be made more sustainable by making a damaging boom and bust cycle less likely.



# I. Maintaining Price Stability

*Price stability is the sole objective of monetary policy.*

Price stability has formally been the sole objective of monetary policy since the Reserve Bank of New Zealand Act 1989 came into effect, and it has been a reality since 1991. Monetary policy will be determined by this objective through and beyond the current forecast horizon. Economic performance is likely to be enhanced by the consistency and certainty that comes with price stability, thereby adding to the gains from the economic reform programme that are becoming increasingly evident.

*Price stability is defined as 0 to 2 percent headline inflation, ...*

Price stability is defined such that, in most circumstances, inflation outcomes will remain between 0 and 2 percent, measured by the CPI. This target range is established by the Policy Targets Agreement (PTA) which links the Bank's specific operating target with the price stability objective of the Act. Provision is made within the PTA for CPI inflation ('headline' inflation) to move outside the 0 to 2 percent target range occasionally, where needed to avoid monetary policy acting strongly against particular price changes that do not threaten a resurgence of inflation. For instance, changes in the terms of trade, indirect taxes or government charges are usually one-off in character, and emanate from sources outside the influence of monetary policy.

*... although there may be circumstances where inflation may move temporarily outside this range.*

The 'caveats' in the PTA that cover these circumstances maintain the focus on price stability, and would be invoked only where the potential first round impact on headline inflation would be significant but temporary. The Bank has a duty to ensure that such price shocks are managed so as to prevent general inflationary or deflationary pressures emerging, and is also required to publicly justify its decisions and actions (or lack of action) in relation to such events.

*Operationally, the Bank focuses on underlying inflation.*

Operationally, the Bank uses a measure of inflation that excludes such price shocks as a guide to policy formulation. This measure, underlying inflation, is broadly equivalent to the concept of inflation encapsulated in the PTA and the caveats therein, and is regarded as a better indicator of trend inflation than the headline rate. But underlying inflation is not a formal target for us, not least because we calculate it ourselves, based on our own estimates of the direct effects of relevant price shocks.

*Inflation has remained fairly comfortably within the 0 to 2 percent range since 1991.*

## Recent Inflation Outcomes

### (i) Overview

Most recently recorded headline inflation was 1.5 percent for the year to September 1993, within the 0 to 2 percent range, as has been the case since 1991. That the inflation rate rose from the 1.3 percent

recorded for the year to June is not an indication of an upward trend - we expect the December rate to be around 1.4 percent. Moreover, a better sense of trends is provided by the underlying inflation measure, which fell from 1.6 percent in the year to June to 1.4 percent in the year to September, and which is likely to ease further to 1.3 percent in the year to December.

*Timber price rises have pushed up headline inflation recently, ...*

The most significant factor increasing headline inflation in both the June and September quarters was higher timber prices, which have fed through to the CPI broadly as expected. The June 1993 *Monetary Policy Statement* noted that the one-off and significant nature of the timber price increases meant that they fitted the criteria for exclusion from headline inflation when calculating underlying inflation. Their exclusion is the reason why the underlying inflation rate in the year to September fell below the headline rate. The mortgage interest rate component of the CPI, which is also excluded when calculating the Bank's measure of underlying inflation, recorded an increase in the June quarter but then fell again in the September quarter, reflecting the retail interest rate reductions that were announced after the July Budget. Given this and other developments, it now seems unlikely that timber price rises will push headline inflation above 2 percent, as once seemed possible (see Table 1).

**Table 1**

**Underlying Inflation for the Years to:**

	<b>June 1993 Percent</b>	<b>Sep. 1993 Percent</b>
Measured CPI	1.3	1.5
Adding back the impact of interest rate falls	+0.6	+0.3
Subtracting the impact of Government charges	-0.1	0
Subtracting the impact of timber price rises	-0.2	-0.4
Underlying inflation	<b>1.6</b>	<b>1.4</b>

*... but at the same time underlying inflation has declined.*

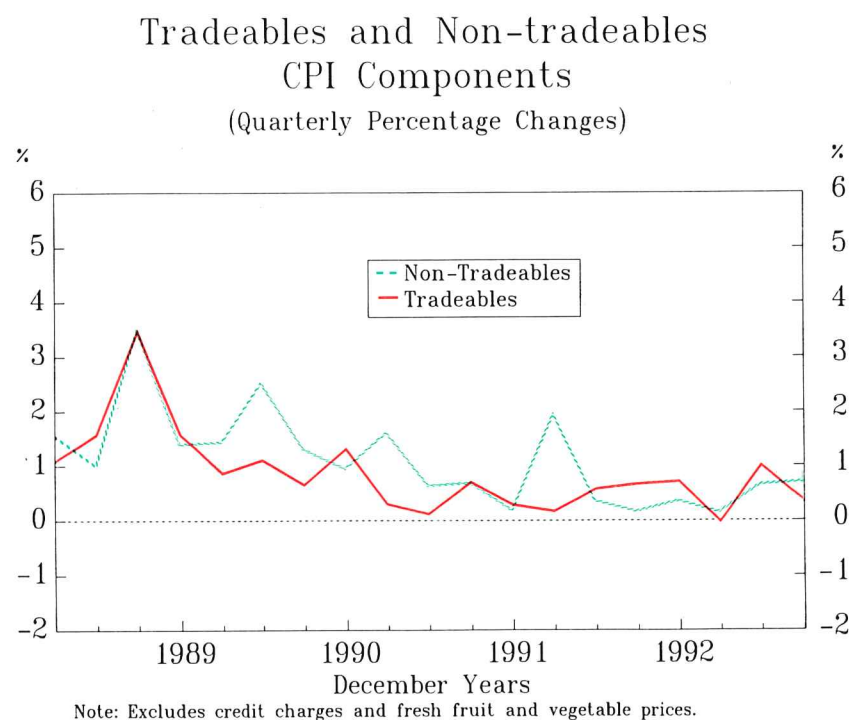
Underlying inflation, after dropping reasonably sharply into the 0 to 2 percent range in late 1991, rose back towards 2 percent through 1992 (see Figure 1). This year, however, underlying inflation has been on a mild downward trend towards the middle of the range. This trend is likely to continue for a few quarters yet. Two

*External influences on inflation appear to have weakened....*

important factors shaping this profile are exchange rate movements, as seen in the different trends in tradeables and non-tradeables<sup>1</sup> price movements; and the shape of the recovery, as seen in profit margins and labour cost movements.

Throughout 1992, the New Zealand dollar prices of those tradeable goods included in the CPI rose more rapidly than non-tradeables' prices, reflecting the effects of the depreciation of the New Zealand dollar in late 1991. The strengthening of the Yen internationally since late 1992 also appears to have contributed somewhat to tradeable goods inflation over the first half of 1993, mainly through its effect on the price of imported consumer durables such as motor vehicles. However, the contribution of exchange rate movements to tradeable goods inflation appears to have tailed off by the September 1993 quarter, due to the appreciation of the trade-weighted exchange rate since the beginning of the year. Despite the impact of higher timber prices, weaker out-turns for other tradeable goods - including a decline in petrol prices - held down the overall increase in the price of tradeables over the September quarter (see Figure 2). Inflation in non-tradeables prices was higher than that for tradeables over the quarter, largely because of rises in construction costs, electricity prices, Housing Corporation rentals and local authority rates.

Figure 2



1 Tradeables are goods and services whose prices are primarily determined in world markets, while non-tradeables are those whose prices are primarily determined in the domestic market.



In foreign currency terms, international prices appear to have been fairly flat in recent quarters. Although volatile on a quarterly basis, import prices in foreign currency terms have increased only marginally over the past year. This reflects the continued low inflationary pressures in most of New Zealand's major trading partners. Aggregate export prices in foreign currency terms continued to increase over the first half of 1993, due mainly to higher timber prices. However, world prices for a number of New Zealand's other export commodities have either eased or begun to flatten since the March quarter. Indeed, the ANZ Commodity Price Index showed world prices for key export commodities to be 1.6 percent lower for the three months to October 1993 compared to the corresponding three months last year.

*... while domestic influences have become somewhat more important, ...*

While the external influences on inflation appear to have weakened, a number of domestic influences upon inflation have become relatively more important in recent quarters. In particular, domestic demand has strengthened. For example, real final domestic expenditure for the year to June 1993 grew at an annual average rate of 3.7 percent (with rapid growth in investment expenditure in particular), compared to 2.7 percent growth for the year to March 1993, and a decline of about 4 percent for the March 1992 year.<sup>2</sup> Further expansion in profit margins appears to have taken place in this environment, and there has also been an acceleration in house prices. Wages have continued to grow only modestly, however, holding down unit labour costs.

*... especially profit margins.*

The relative movements in profit margins and wages recently reflect two influences. First, the structural adjustment that has taken place over the last few years has allowed significant productivity and efficiency gains in many sectors. Second, the movements also partly reflect normal cyclical lags, where profit margins tend to expand first as productivity rises cyclically, and wage growth occurs later in the recovery phase as the demand for labour rises. We expect these two influences to continue to moderate wage growth in the shorter term, but the most recent labour market information, showing a sharp increase in employment in the September quarter, suggests that labour market slack is now being absorbed rather more rapidly than previously expected.

*Other price indices have been consistent with price stability.*

## **(ii) Other Price Measures**

In assessing inflation trends, the Bank looks at a range of price indices in addition to the CPI (see Table 2). Although some indices have risen more quickly than the CPI over the past year, such movements do not appear to foreshadow a significant change in general consumer price inflation pressures.

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<sup>2</sup> Final domestic expenditure includes total consumption expenditure and total fixed investment expenditure, but excludes the contribution from stockbuilding.

Table 2

## CPI and Other Price Indices

	CPI <sup>1</sup>	HAPI	PPI Inputs	PPI Outputs	FPI	CGPI	RTD
<b>Annual Percentage Changes</b>							
<b>1991</b>							
Sep.	2.2	3.4	0.9	0.5	0.2	2.7	1.6
Dec.	1.0	1.6	0.0	0.7	-0.8	2.3	0.6
<b>1992</b>							
Mar.	0.8	1.6	1.2	1.4	-0.9	2.5	0.5
June	1.0	1.9	1.9	1.7	-0.8	2.5	1.2
Sep.	1.0	1.3	2.4	2.6	0.4	3.2	2.1
Dec.	1.3	2.0	2.7	3.1	1.7	2.9	2.5
<b>1993</b>							
Mar.	1.0	1.6	2.5	3.2	2.7	2.3	2.8
June	1.3	1.2	2.5	3.0	1.4	2.3	2.6
Sep.	1.5	1.2			0.5	2.1	1.8
<b>Quarterly Percentage Changes</b>							
<b>1991</b>							
Sep.	0.4	1.0	0.2	-0.2	0.4	0.2	0.1
Dec.	-0.1	-0.4	0.6	0.4	-1.1	0.7	0.3
<b>1992</b>							
Mar.	0.4	0.6	0.6	0.8	-0.1	1.1	0.1
June	0.3	0.6	0.5	0.7	-0.1	0.6	0.7
Sep.	0.3	0.4	0.7	0.7	1.6	0.8	1.0
Dec.	0.3	0.4	0.9	0.8	0.3	0.4	0.7
<b>1993</b>							
Mar.	0.1	0.2	0.4	0.9	0.9	0.5	0.5
June	0.6	0.2	0.5	0.5	-1.4	0.6	0.4
Sep.	0.5	0.4			0.7	0.7	0.2

1 Statistics New Zealand's ex-interest CPI measure (CPI All Groups excluding Credit Charges) showed an increase of 1.8 percent for the year to September 1993, the same as that recorded for the year to June 1993. The quarterly increase for September 1993 was 0.6 percent, compared to 0.5 percent for the June quarter.

*These other  
indices include  
the HAPI ...*

The Housing Adjusted Price Index (HAPI) replaces the housing component of the CPI with an imputed rental value of owner occupied housing.<sup>3</sup> The HAPI inflation rate exhibited a downward trend over the period from late 1992 through to mid-1993, and then remained flat over the June and September quarters. Over these quarters the increase in the HAPI has been lower than the corresponding increases in the CPI, because the housing component of

3 As noted in the June *Monetary Policy Statement*, changes to the compilation of the CPI, effective from the March 1994 quarter, will remove the main reasons for calculating the HAPI (although conceptually, the HAPI will remain generally superior in our view). In the interim, at least, the Bank continues to compile and monitor the HAPI.



the CPI has been dominated by timber price rises, which have been stronger than increases in the imputed rentals measure over this period.

*... the Producer Price Indices, ...*

Higher timber prices have been behind recent increases in the Producer Price Indices (PPIs) for both inputs and outputs, although these indices have not shown the full effect of these price rises because of decreases in beef and wool prices. The March and June quarterly out-turns are somewhat lower than those seen over 1992. During that period, the PPIs were affected by the 1991 exchange rate depreciation and the sharp upward movement in New Zealand's terms of trade, driven mainly by higher sheepmeat, dairy and forestry prices.

*... the Food Price Index, ...*

The Food Price Index (FPI), after growing more rapidly than the CPI from the end of 1992 until early 1993, has since been growing more slowly. The index rose just 0.1 percent in the year to October. A key influence on the FPI over the past year has been falling fresh fruit and vegetable prices.

*... the Capital Goods Price Index, ...*

The Capital Goods Price Index (CGPI) increased by 2.3 percent in the year to June 1993, and 2.1 percent in the year to September. These increases are lower than those seen throughout 1992, when capital goods prices were widely affected by the 1991 exchange rate depreciation. Rises in the price of transport equipment, caused mainly by the strengthening of the Yen referred to earlier, were a major factor in the increase in the CGPI for the year, but the largest contribution most recently has come from increases in building costs (reflecting especially the timber price effect).

*... and the Retail Trade Deflator.*

The Retail Trade Deflator (RTD) trended upwards over 1992 and early 1993, but since then has been on a mild downward trend. The deflator is heavily weighted towards goods incorporating a substantial imported component. Again, the 1991 exchange rate depreciation was a key influence on the deflator over 1992 and early 1993. Although the trade-weighted exchange rate index (TWI) has since appreciated, the strengthening of the Yen over early 1993 increased the price of consumer goods imported from Japan, which has limited the downward trend in the RTD over 1993.

*Inflation expectations have either declined or remained broadly unchanged ...*

### **(iii) Inflation Expectations Surveys**

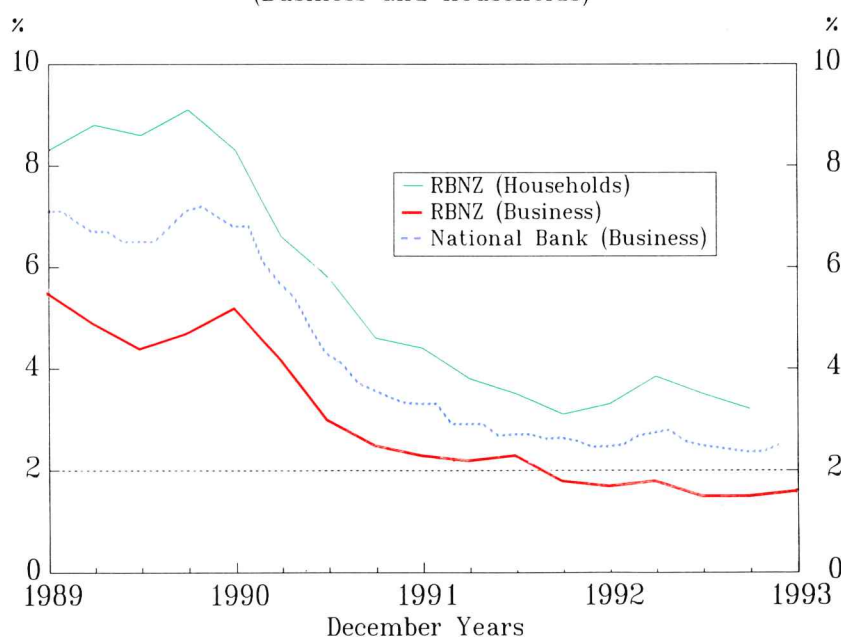
Most surveys of inflation expectations since the June *Monetary Policy Statement* have shown that expectations have either declined or remained broadly unchanged. At the short-term end, the Institute of Economic Research's September 1993 Quarterly Survey of Business Opinion recorded a sharp drop in the net number of respondents who expected to increase their selling prices over the following quarter.

...at least up until  
the election.

In terms of year-ahead inflation expectations, the Reserve Bank's November Survey of Expectations (held before the General Election, and covering larger businesses) showed that expectations in this sector have been broadly unchanged at around 1.6 per cent over recent months, while household inflation expectations (as recorded in the Marketscope survey) have been steady at around 2.6 percent, down slightly from the 2.8 percent recorded early in 1993. The National Bank's Survey (mainly covering smaller businesses) shows that expectations remained largely unchanged at around 2.4 percent up to the election. But respondents replying immediately after the election indicated some increase in expected inflation. (Bearing in mind the temporary volatility in financial markets in the week or two after the election, we are not putting much weight on this result.)

Figure 3

Inflation Expectations - One Year Ahead  
(Business and Households)



Beyond the one year horizon, the Reserve Bank's November Survey showed an expectation of inflation two years ahead of 1.7 percent, unchanged from the August survey. Longer-term inflation expectations have also remained broadly unchanged, according to the Alexander Consulting Group's October Economists Survey of Key Indicators. Respondents expected inflation rates in four and seven years' time to be 1.5 and 1.6 percent respectively.

## Recent Monetary Conditions

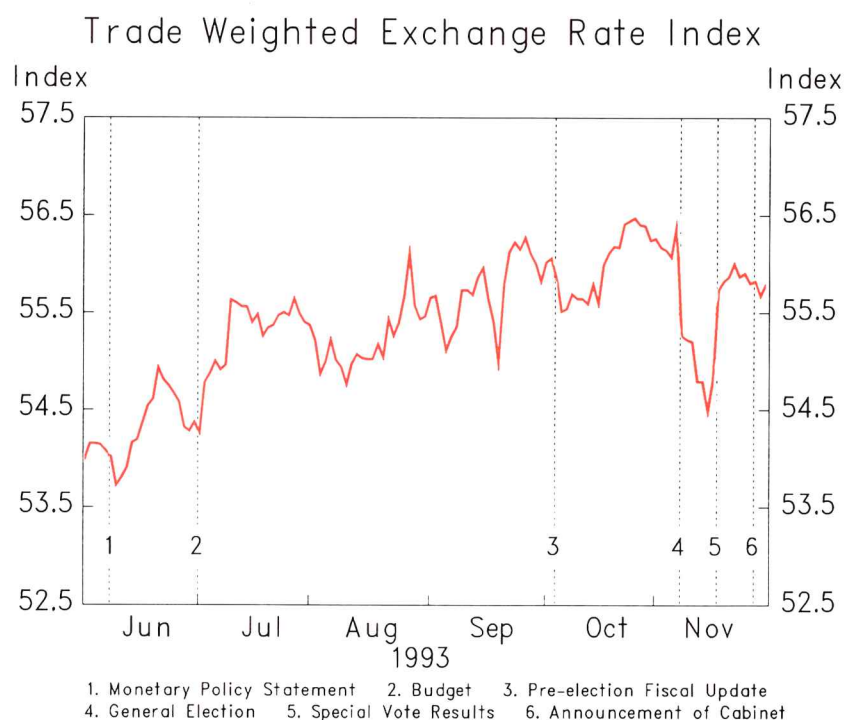
*Monetary conditions since June have remained consistent with price stability.*

Monetary conditions over the period since June 1993 have remained consistent with the maintenance of price stability, notwithstanding some volatility after the election and referendum on 6 November, and again after the announcement of Cabinet positions on 28 November. No changes in policy settings were required. The strengthening of the TWI that became evident towards the end of the previous review period continued up to the election, while interest rates generally eased in response to both the underlying strength in the exchange rate and movements in overseas interest rates. The movements in the exchange rate and interest rates tend to have offsetting effects on inflation. Over November, there were the two periods when there was some uncertainty in financial markets, but monetary conditions had largely stabilised again by the end of November.

*The TWI strengthened over much of the review period ...*

The strengthening of the TWI through most of the last six months appears to be the result of a number of factors (see Figure 4). First, confidence in New Zealand's economic prospects appears to have increased, driven by the growing record of price stability, a substantially improved fiscal track (confirmation of which came during the review period), and renewed growth. Related to this confidence, the TWI has been bolstered by increased inflows of overseas investment, encouraged by attractive expected returns

Figure 4



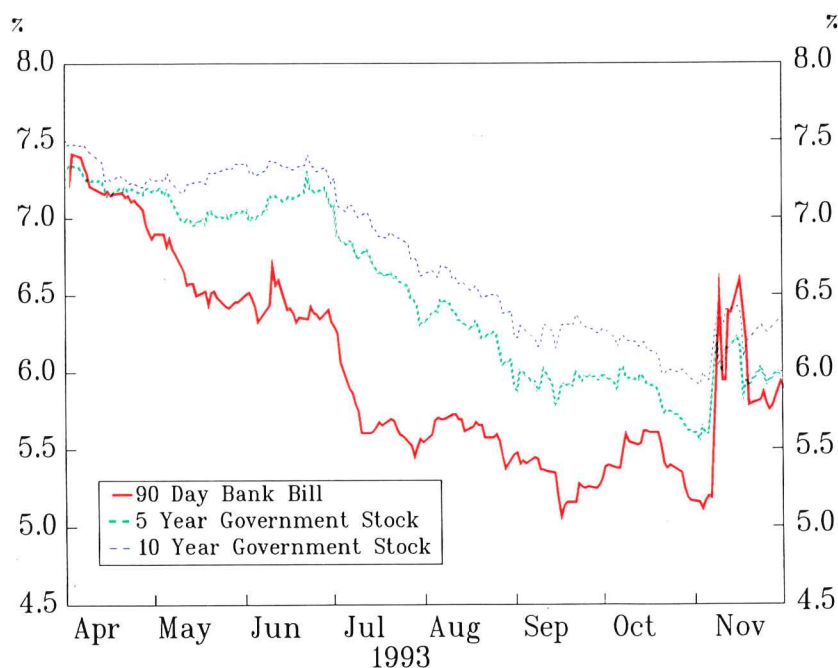


locally compared to internationally<sup>4</sup>, especially with the prospect of further gradual nominal exchange rate appreciation given the likelihood of local inflation remaining lower than overseas. In addition, the improvement in the terms of trade (until very recently) probably also contributed to the strengthening in the TWI over the period.

*... while interest rates declined.*

The 90-day bank bill rate declined from around 6.5 percent in June to around 5.2 percent in early November as the TWI strengthened, with short-term interest rates in real terms (i.e. adjusted for expected inflation) falling similarly, following declines in overseas real short-term rates. Domestic bond yields also fell significantly in the period up to the election, with five and 10 year yields declining by approximately 1.3 percentage points (see Figure 5). Five and 10 year real yields fell by a similar amount. Major contributing factors behind this decline were continuing confidence in New Zealand dollar investments and a fall in international bond rates over this period, particularly Australian and US rates.

Figure 5  
Interest Rates



The five year - 90 day yield gap initially widened, reaching around 1.2 percentage points in July, as a result of the relatively rapid fall in the 90-day rate at the time. This widening did not represent an easing in monetary conditions, but was only a transitory development pending further market adjustment. Thus, with the five year rate falling further than the 90-day rate over the rest of the period

4

The removal of the non-resident withholding tax on government securities in the Budget on 1 July effectively raised the yield on domestic bonds for international investors.

to early November, the gap fell back to around 0.4 percentage points, slightly lower than in June.

*There was a temporary fall in the TWI and a rise in interest rates following the election.*

Immediately following the inconclusive election night result, the TWI fell to 54.6 while the 90-day bank bill rate rose by 1.4 percentage points to around 6.6 percent. While bond rates did not react as strongly as shorter-term rates, they firmed by approximately 0.6 percentage points. Rates remained around this level until the final outcome of the election became known, when the TWI firmed towards 56, and interest rates moved back closer to - but still somewhat above - pre-election levels.

New Zealand's real five and 10 year interest rates have also risen slightly over November, although so have real interest rates in the United States and Australia. At this stage at least, New Zealand's 'risk premium' does not appear to have been much affected by the political uncertainty generated by recent political developments. (See the box on developments in real interest rates and the risk premium.)

*Broad support for the current monetary policy framework limited volatility in the period surrounding the election.*

It is notable that in the period leading up to the election and referendum, there was no significant volatility in the TWI. A number of financial market commentators and domestic and international investors have made the point that the existence of, and broad political support for the present monetary policy framework was an important factor in this relative stability in conditions pre-election; and also in limiting volatility in monetary conditions in the two periods of uncertainty during November.

*Money and credit growth has accelerated since the middle of the year, but is not inconsistent with price stability.*

Turning to the money and credit aggregates, two features of recent developments are of note. First, after slowing over the first quarter of the year, growth in the broad money and credit aggregates bounced back in the middle of the year (see Table 3). In particular, growth in Private Sector Credit (PSC) and in M3 (and its resident-only equivalent M3(R)) has been quite strong on average over the last few months. In seasonally adjusted terms, monthly growth in each of M3, M3(R) and PSC has averaged around 0.6 percent per month over the six months to September. Second, a rather different picture is shown in the growth of the narrow aggregates (currency and M1). As can be seen from Table 4, growth in these variables has been quite erratic, and lower than for the broader aggregates.

Considering these trends together, and in the light of developments in other indicators, recent movements in the aggregates do not yet seem to indicate 'excessive' money and credit growth over recent months. The short-term relationships between developments in the aggregates and in activity have been quite variable in the past. Recent monetary growth rates have been within the range of this historical variation, and are not therefore considered inconsistent with the maintenance of price stability.



**Table 3****Money and Credit Aggregates**

	Currency	M1	M3	M3(R)	PSC	
DC						
	Annual Percentage Changes					
1992						
Apr.	3.1	3.3	8.2	4.4	4.7	8.6
May	2.6	6.6	7.6	4.3	5.2	8.1
June	3.0	6.9	7.5	3.2	3.4	5.7
July	1.5	7.7	7.4	3.2	4.7	7.4
Aug.	1.3	5.5	11.3	4.1	5.3	8.2
Sep.	-0.2	3.1	9.3	3.8	7.7	9.2
Oct.	-0.1	3.0	6.6	4.2	8.2	8.2
Nov.	5.9	0.6	7.3	6.6	8.3	8.3
Dec.	0.9	1.1	7.9	6.2	8.4	7.7
1993						
Jan.	3.0	1.0	6.2	4.1	7.1	7.6
Feb.	2.7	-0.4	5.5	3.4	5.5	6.0
Mar.	4.2	-3.2	4.1	0.1	3.9	3.6
Apr.	2.1	1.8	4.7	2.8	4.0	4.0
May	3.1	-4.2	4.6	1.8	5.8	4.9
June	3.7	-1.7	5.7	2.7	5.6	4.6
July	3.1	-0.6	6.2	5.2	5.0	4.6
Aug.	-0.3	0.9	4.3	4.5	6.0	4.5
Sep.	2.1	0.2	4.5	4.2	4.6	2.6
	Monthly Percentage Changes in Seasonally Adjusted Terms					
1993						
Jan.	-0.4	0.1	0.0	-0.4	0.0	0.5
Feb.	0.0	-0.4	0.2	0.0	-0.3	0.0
Mar.	0.8	-0.9	-0.2	-0.3	-0.2	-0.3
Apr.	-0.3	2.2	0.5	0.1	0.3	0.5
May	0.8	-2.0	0.4	-0.1	1.1	0.8
June	0.4	1.4	1.0	0.9	0.5	0.3
July	-0.5	0.7	0.9	1.6	0.5	0.4
Aug.	-1.7	0.7	-0.1	0.5	1.1	0.4
Sep.	0.5	-0.2	0.5	0.5	0.1	-0.4

# Real Interest Rates

The level of nominal interest rates locally depends on several key factors, including especially expectations of domestic inflation, the level of real interest rates abroad, and the 'risk premium' attached to investment in New Zealand dollar assets. As noted in previous *Statements*, it is difficult to measure real interest rates accurately because, among other things, their measurement requires appropriately defined measures of expected inflation. Such expectations must inevitably be approximated. Interpretation difficulties are compounded when making international comparisons, especially given the range of different factors that may have influenced interest rates at various times and places.

Bearing in mind the need for some caution in interpreting individual observations, it is useful nevertheless to examine trends in comparative real interest rates over a reasonable time scale, particularly long-term real interest rates. Since investors' views about longer-term prospects here (compared to prospects in other countries) are reflected in these rates, the margin between real long-term rates locally and those overseas is commonly used as a measure of the risk premium.

**Table 4**

## 10 Year Real Interest Rates<sup>1</sup>

End of Period	NZ	Margin <sup>2</sup> with U.S.	Margin <sup>3</sup> with Aust.	Margin <sup>4</sup> with TWI countries
1989	7.5	4.9	0.6	3.1
1990	8.5	4.8	2.5	3.7
1991	6.5	3.4	0.8	2.1
1992	5.8	2.3	0.1	1.5
<b>1993</b>				
Oct. <sup>5</sup>	4.5	1.8	0.5	1.4
Nov.	4.8	1.8	0.6	1.6

1 Nominal rates less the OECD's latest forecast of year ahead inflation.

2 New Zealand's real interest rate less equivalent U.S. interest rate.

3 New Zealand's real interest rate less equivalent Australia interest rate.

4 New Zealand's real interest rate less weighted average of real interest rates from Australia, Germany, Japan, U.K. and U.S.

5 If long-term inflation forecasts, where available, are used for these comparisons, instead of year-ahead OECD forecasts, the October 1993 numbers would be as follows:

	Margin with U.S.	Margin with Aust.	Margin with TWI countries
NZ			
4.5	2.7	1.4	2.0

(These figures are based on the Alexander Group's survey results for New Zealand, and international consensus forecasts for other countries.)

Table 4 shows that New Zealand's 10 year real interest rate fell by around 3 percentage points between the end of 1989 and November 1993. The table also shows changes in the real interest rate differentials between New Zealand and the United States, Australia and our main trading partners as a group. The data suggest that a good deal of the fall in New Zealand real interest rates was probably due to a fall in New Zealand's 'risk premium'. The fall in the risk premium is likely to be attributable, to an important extent, to growing confidence that low inflation will continue and that the fiscal situation is relatively sound.

Overseas real rates and developments in the risk premium will continue to be key determinants of the course of domestic bond rates in coming periods. For example, if foreign real bond rates were to continue their recent rise from low levels by historical standards, this can be expected to be reflected in local real bond rates, though there is still some potential for further reductions in the risk premium to offset this.

## II. Monetary Policy in 1994 and Beyond

### The Inflation Forecasts

*Inflation forecasting is crucial to monetary policy.*

Inflation forecasts play a crucial role in helping us to maintain price stability. Their importance is due to the lags inherent in monetary policy. Changes in monetary policy settings typically have little impact on inflation outcomes in the very short term, but in New Zealand have their strongest influence six to 18 months into the future. Therefore, in determining whether the monetary policy stance at any particular time is appropriate for keeping inflation within the 0-2 percent target range, the Bank requires projections of the likely path of inflation at least a couple of years ahead. In arriving at such forecasts, we pay close attention to developments in domestic and external economic activity, together with the various indicators of inflation and inflation expectations. The Bank's inflation forecasts are regularly revised as the general economic outlook, and the various specific inflation indicators, change.

*Underlying inflation is forecast to remain within the 0-2 percent range,...*

The Bank's latest forecasts for headline CPI and underlying inflation for the period to March 1996 are shown in Table 5. These show that underlying inflation is expected to remain within the 0-2 percent target range over the forecast horizon. Over the next year, inflation will continue to fall away to around, or just below, the middle of the target range. During 1995, however, underlying inflation is projected to rise quite sharply, and be close to the top of the target range by March 1996, reflecting a firming of both domestic and external inflation pressures, given the normal technical assumption of a constant TWI. Headline CPI inflation is expected to fall further than the underlying rate over the coming year, reflecting the impact of interest rate reductions (following the July 1993 Budget) on the annual rate. However, headline inflation rises in line with the underlying rate toward the end of the forecast horizon.

*...but be close to 2 percent late in the forecast period, given the constant exchange rate assumption.*

The forecasts are based on monetary conditions similar to those prevailing on average over the last two or three months. They employ a starting exchange rate of 55.5 on the TWI, with the technical assumption that the exchange rate remains at this level, on average, over the entire forecast period. (This compares with a constant TWI assumption of 55.0 in our forecasts of inflation published in early September.) It should be noted that the acceleration in inflation in the latter part of the forecast period is in part a reflection of this constant exchange rate assumption. If the TWI was instead assumed to appreciate to reflect the difference between higher overseas inflation and low local inflation, the projected



**Table 5**  
**CPI Inflation Forecasts**  
(Percent Changes)

	Underlying <sup>1</sup> CPI	Headline CPI
<b>Year to:</b>		
<b>1992</b>		
Mar.	1.3	0.8
June	1.4	1.0
Sep.	1.5	1.0
Dec.	1.8	1.3
<b>1993</b>		
Mar.	1.8	1.0
June	1.6	1.3
Sep.	1.4	1.5
Dec.	1.3	1.4
<b>1994</b>		
Mar.	1.2	1.3
June	0.9	0.7
Sep.	0.9	0.5
Dec.	0.8	0.6
<b>1995</b>		
Mar.	0.9	0.9
June	1.3	1.4
Sep.	1.5	1.5
Dec.	1.8	1.8
<b>1996</b>		
Mar.	1.9	1.9

<sup>1</sup> Underlying inflation is defined to exclude the effects of mortgage interest rate changes, changes in government charges, and timber price rises.

acceleration in inflation over late 1995 and early 1996 would still be roughly two-thirds of that shown in Table 5, and would then reflect the increase in domestic inflation pressures. Indeed, there is likely to be some natural tendency for the nominal exchange rate to appreciate gradually over time, given likely inflation differentials, in which case part of the increase in inflation shown at the end of the forecast period would be offset naturally.<sup>5</sup>

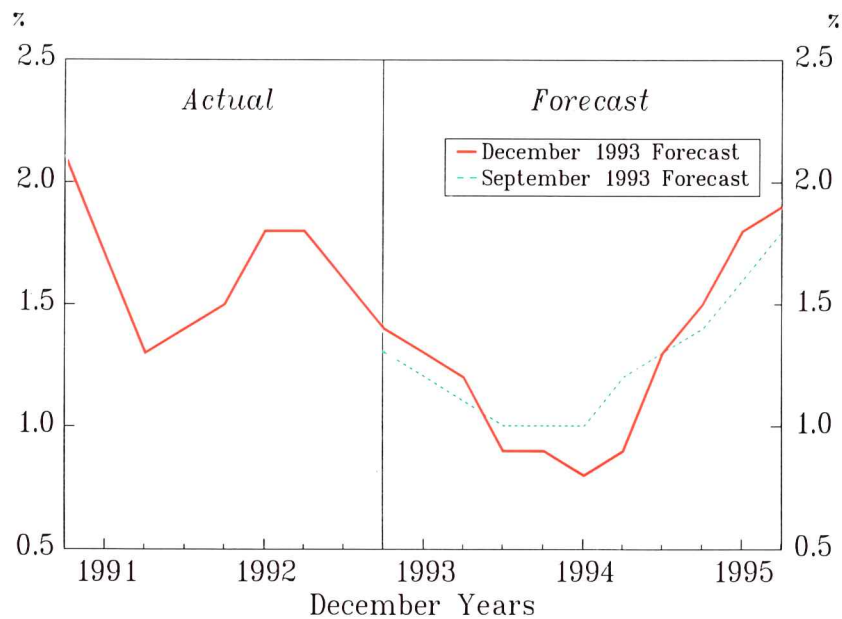
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<sup>5</sup> As this analysis demonstrates, the use of a constant nominal exchange rate assumption can bias inflation forecasts upward when domestic inflation rates are less than those in our trading partners. The advantage of a constant TWI assumption, however, is that it distinguishes more clearly between exchange rate and all other influences on inflation.



Figure 6

## Underlying Inflation



Note: September 1993 forecast is based on a TWI assumption of 55.0, while that of December 1993 is based on a TWI assumption of 55.5.

*Inflation later in the forecast period is expected to be a little higher than in our September forecasts.*

The current inflation forecast is a little lower through 1994 and early 1995 than that presented in our September *Economic Forecasts*, but somewhat higher through the latter part of 1995 and early 1996 (see Figure 6). The lower track initially reflects the appreciation in the exchange rate since September, which is reflected in the higher exchange rate assumption used in these forecasts. With the same exchange rate assumption as in the September forecasts, the inflation track would have been a little higher throughout the forecast period.

*Our view of the individual influences on inflation has changed from September.*

Although the changes from September in the central inflation track are not particularly large overall, our assessment of the various individual influences on inflation has evolved quite significantly over the past few months. Indicators pointing to a stronger than expected domestic economy have been a key factor. Production GDP statistics, released shortly after the last forecasts showed a 1.7 percent seasonally adjusted GDP increase during the June quarter, substantially stronger than was expected. Indicators of capacity utilisation and profit margins also appeared to have strengthened relative to our earlier projections.

*We see stronger domestic demand and activity than previously...*

Other indicators released after the September forecasts also suggest that the stronger economic activity over the June quarter will be sustained. Retail sales data, and surveys of investment intentions and of business and consumer confidence point to higher levels of activity than anticipated in the September forecasts, notwithstanding a decline in some indicators of business confi-

dence immediately after the election. These indications appear to have been strongly confirmed by the release of labour market data for the September quarter, showing significant increases in employment and hours worked, as well as a sharp decline in the unemployment rate.

*... implying more upward pressure on domestic sources of inflation.*

Higher rates of activity evident across the economy can normally be expected to increase the likelihood of a build-up of domestically generated inflationary pressures over time. During an economic upswing, strong demand tends, in the first instance, to stimulate increases in output, employment and the rate of use of productive capacity, rather than upward pressure on prices. Later, as spare capacity shrinks and labour market slack diminishes, sustained high levels of demand tend increasingly to put upward pressure on market prices, profit margins and, subsequently, wages.

*However, investment in productive capacity should help moderate inflation pressures,...*

Although the outlook appears to contain somewhat stronger inflation pressures than envisaged in September, it should also be noted that much of the growth of activity over the June quarter could be traced to a sharp increase in investment spending, particularly on plant and machinery. The acceleration occurring in import volumes also in large part reflects investment demand. In contrast, the other main elements of total demand - consumption and exports - evolved roughly in line with the Bank's September forecasts. Stronger investment activity appears to enhance the prospects that pressures on capacity utilisation may begin to moderate somewhat as additional new capacity comes on stream. This, in turn, should help to mitigate the potential inflationary impact of higher demand and activity on profit margins, although we are still forecasting a further significant contribution to inflation from margins in the first half of the forecast period.

*... and recent wage pressures have been more moderate than previously thought.*

In addition, recent wages data suggest a slightly weaker outlook for wage growth in the near term, compared to our September forecasts, despite the firmer activity and demand track. The September forecasts had noted that the Quarterly Employment Survey (QES) pointed to a gradual increase in wage inflation over the first half of 1993. The data appeared consistent with information pointing to the emergence of skill shortages in certain sectors as activity was picking up. However, subsequent revised data, new September quarter QES data, and Statistics New Zealand's new labour cost index for the March and June quarters, now suggest slightly lower settlements over the recent past than were indicated earlier. We have consequently allowed for slightly lower wage increases over the early part of the forecast horizon than previously.

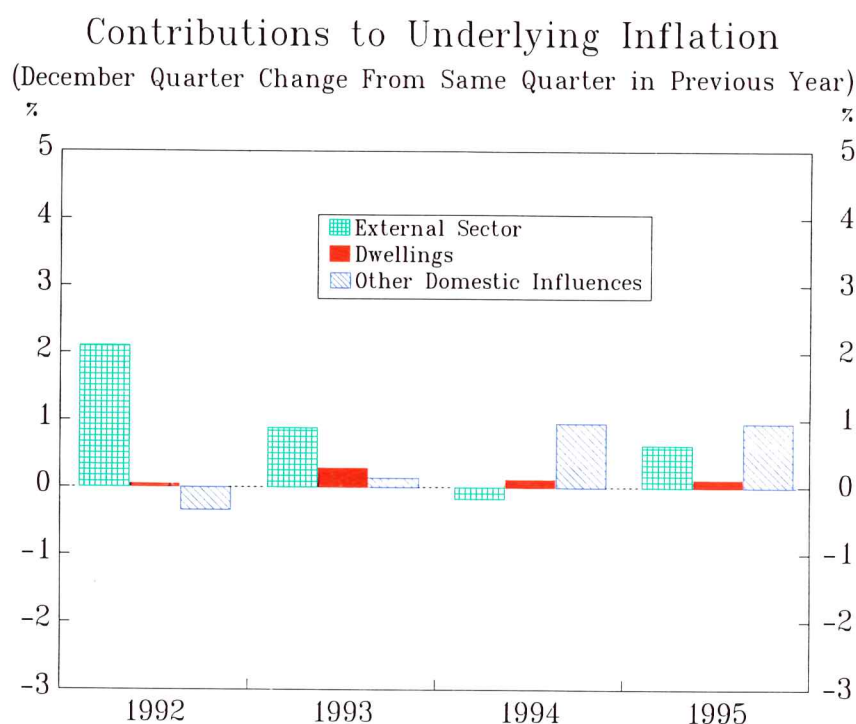
*Stronger wage pressures are still expected further out in the forecast period.*

But, given the indicators of stronger demand, activity and employment growth, we still expect a strengthening in wage increases in the latter part of the forecast period, in response to further tightening in the labour market and worsening skill shortages. Nevertheless, the expected acceleration in wage pressures is only a little



stronger than we previously forecast, as we continue to expect that the structural reforms of the last few years will contribute importantly to more moderate wage pressures than would otherwise be the case. (The wage moderation apparent in recent periods, in the face of accelerating demand, appears to provide evidence supporting this view.) In terms of the effect on inflation, we also continue to expect that in the latter part of the forecast period, the cyclical upswing in wages will be partly absorbed by slower growth in profit margins, in line with normal cyclical patterns.

Figure 7



*External inflation pressures are likely to remain mild until later in the forecast period.*

Other changes from our September forecasts are as follows. First, the external price outlook assumed in these forecasts is weaker than that underlying our September forecasts, though the change is partly one of timing. International consensus forecasts of producer price inflation for the year ahead in the major economies such as Japan and the United States have been revised down slightly in recent months, reflecting the protracted weakness in current world economic activity. This points to a marginally lower outlook for New Zealand's import prices over the coming year than previously. Further out, and as in the September forecasts, we expect a higher profile for import price inflation as world activity and price pressures gather pace.

Export prices, excluding timber prices, also appear likely to be a little weaker over the coming year than we assumed in September. This assumption reflects the marked flattening or decline in a number of key agricultural prices in recent months. We have not altered our view of stronger export price trends later in the forecast horizon.

*But dwelling construction costs expectations have been revised up from September.*

Second, as we noted in September, the new CPI regimen, to be implemented from the March quarter of 1994, will contain a significantly lower weight on existing house prices, and a higher weight on dwelling construction costs. The recent timber price increases have added significantly to construction costs, as expected, but recent data now suggest margins in the building industry have also been widening. As a result, we have revised upwards our estimate of construction costs over the forecast horizon.

*We envisage recent political developments having only a marginal impact on activity and inflation ...*

Post-election political developments have led us to make only minor alterations to the picture of somewhat stronger economic activity and (non-exchange rate) inflation pressures, compared to our September forecasts. The minor changes we have made assume somewhat increased uncertainty, with a consequent small impact on investment in particular.

*... and no changes are seen for the fundamental driving forces supporting price stability.*

We envisage that the fundamental driving forces supporting medium-term price stability will continue to operate. These forces include, in particular, the current monetary policy framework; the much lower inflation expectations, together with more open and competitive labour and product markets, which have restrained wage and price-setting behaviour; and the improved fiscal outlook, which should see further gradual improvements in the public debt ratio over coming years.

## Monetary Policy Implications

*The profile of our latest inflation forecasts has important implications.*

The current Policy Targets Agreement requires that the Bank act to maintain 12-monthly CPI inflation rates of between 0 and 2 percent. As discussed in the previous section, our current forecasts indicate that inflation will remain within this range, with some decline initially, before a re-acceleration later in the period takes the inflation track close to the top of the range. This profile has important implications, given the nature of the lags between monetary actions and their inflation consequences.

*We are comfortable currently with monetary conditions ...*

Given the dip in the forecast inflation track over the next year or so, we believe current monetary conditions are consistent with maintaining price stability for the time being. As already noted, monetary conditions at the time of writing (1 December) have returned to levels closer to those pertaining before the General Election and referendum in early November.

*... but some firming of conditions may be needed later in the forecast period,...*

But the fairly sharp acceleration in forecast inflation through 1995 means that some increase in the exchange rate and interest rates may be needed later in the forecast period. Some of this movement is likely to occur spontaneously, given lower inflation trends in



New Zealand than elsewhere, normal cyclical pressures on interest rates, and financial market anticipation of monetary policy action. It would be premature for us to seek such a development in the very near future, however, because the main effect at this stage would be to pull the inflation track further down during 1994 and early 1995, rather than later on.

*... especially if aggregate prices and wages are more sensitive than expected to stronger demand, ...*

The forecasts represent our best estimate of the future inflation path, given current monetary conditions, but there are always risks associated with forecasts. The major risks that we can see relate to the pace at which the economy grows, and to the behaviour of wage and price-setters in response. These risks become increasingly pronounced further out in the forecast period. The chances of the economy growing faster or slower than projected are probably fairly evenly balanced. But we have assumed - as in past forecasts - that recent structural reforms will assist importantly in moderating generalised profit margin and wage pressures in the face of stronger demand, a tightening labour market, and growing skill shortages. This assumption is relatively optimistic, in the sense that the effect of the structural reforms is yet to be tested in an environment of continuing, reasonably robust growth; and in the sense that the assumed behaviour represents a favourable departure from what has historically been typical in recovery phases. Accordingly, the balance of risks is more likely to be towards higher rather than lower-than-forecast inflation later in the forecast period.

*... or if domestic activity and demand turn out stronger than currently forecast.*

Of course, if domestic activity and demand do turn out stronger than assumed, or if wages and prices are more sensitive to the emergence of pressures on resources than assumed, monetary conditions would have to firm accordingly. Such a firming may also occur through spontaneous increases in the exchange rate and interest rates, but if this was insufficient to contain emerging inflation pressures, the Bank would need to tighten monetary policy.

*Policy action should be timely, so that it can be less severe.*

If a policy tightening is required to prevent excessive demand spilling over into higher inflation pressures, it is important that we recognise inflation trends as early as possible. To this end, the Bank monitors a wide range of monetary and general economic indicators. Accurately identifying inflation trends as far as possible in advance enables policy adjustments to be done relatively gradually, causing the least possible surprise and disruption. Although a policy tightening would tend to slow the pace of economic activity in the short term, the earlier the action is taken, consistent with the lags with which monetary policy in New Zealand normally has its main effects, the less severe the action will usually need to

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As indicated earlier, at this stage we are not putting much weight on the small post-election increase in inflation expectations in the National Bank's Survey of Expectations, which were recorded during the period of temporary volatility in financial markets.



be. Timely monetary restraint should therefore make the recovery more sustainable by making it less likely that the economy will overheat and go through a damaging boom and bust cycle.

*If the post-election uncertainty effect is larger than we expect, activity and demand could be a little weaker than forecast.*

Another issue around the current inflation outlook relates to the increased uncertainty associated with post-election political developments. Although financial markets have largely settled down after the two periods of volatility in November, some element of uncertainty - or at least increased caution - is likely to persist for some time to come. As already noted, the forecasts make an allowance for a small effect of this sort, but if the effect were to be larger than we currently expect, economic activity and demand would be slowed. Inflation pressures would also tend to be eased in this case, provided price or wage inflation expectations are not boosted for some reason independent of the track of economic activity.<sup>6</sup> If price or wage expectations were boosted, this could be damaging for sustainable growth prospects.

*We will act to maintain price stability if changes in wage and price-setting behaviour threaten this objective.*

As already noted, our inflation forecasts assume no changes in the basic economic behaviour and structures that affect inflation, such as labour market behaviour and fiscal policy. If these structures are changed in a way that results in significant behavioural changes, pressures on inflation could also change quite quickly. For example, if changes to wage policies are made which lead to generalised wage increases in excess of productivity, without offsetting changes in margins, then inflation pressures are likely to be higher. Similarly, if the general track for fiscal policy is changed, this could impact on inflation through domestic incomes and spending. Fiscal policy changes may also affect financial market confidence in fiscal sustainability, which would tend to push down the exchange rate (adding to inflation pressures), while simultaneously increasing real interest rates (tending to dampen activity). If such pressures do emerge and on balance threaten price stability, the Bank will need to react.

*Uncertainties regarding inflation pressures are greater beyond the forecast horizon, ...*

Looking further ahead than the two to three year horizon of our inflation forecasts, the potential uncertainties that could impact on inflation trends over the next five years or so become greater. The behaviour of wage and price-setters, in the face of what seems likely to be continuing growth in activity and demand, is perhaps the most important single issue within the forecast period. This behaviour is an even more important area of uncertainty beyond the formal forecast horizon. The major structural and regulatory

changes in the economy over the last few years have made it difficult to project when generalised skill shortages and capacity constraints will occur, and more importantly when, and how strongly, they will impact on inflation. Related issues for inflation trends over a five-year horizon include the extent to which continuing investment expenditure will keep capacity constraints from becoming too important, and the extent to which increased training expenditure can reduce skill shortages.

*... but inflation trends will continue to be determined by monetary policy in much the same general way as in the last few years.*

Although we have little specific data on inflation pressures out five years or so, inflation trends beyond the forecast horizon will continue to be determined by monetary policy, in much the same general way as over the last few years. The Bank will continue to carefully monitor the inflation outlook as it evolves and, based on this, will act when required to ensure that monetary conditions remain consistent with the maintenance of price stability. Significant changes in our view on the inflation outlook, and the consequences for monetary policy, will be promptly and clearly conveyed to the public and financial markets through our regular *Monetary Policy Statements* and *Economic Forecasts*.

### III. The Operational Framework

*The exchange rate and interest rates are key indicators for monetary policy.*

The Bank monitors a range of indicators to help it set the monetary policy parameters required to maintain price stability. These indicators include the exchange rate and the level and structure of interest rates, money and credit aggregates, surveys of inflation expectations, and a variety of real sector indicators. We pay particularly close attention to movements in the exchange rate and interest rates for two reasons. First, these financial market prices build in expectations about future inflation more quickly and significantly than other prices. Second, they are central aspects of the monetary policy transmission mechanism, through which monetary policy has its direct and indirect influence on inflation trends.

#### The Exchange Rate

*Movements in the exchange rate have a strong and direct influence on inflation.*

Movements in the exchange rate have a particularly strong and direct influence on inflation in a small open economy like New Zealand. But, as is also the case with other indicators, the relationship between the exchange rate and inflation is not a mechanical, one-for-one, linkage. This means that the levels of the exchange rate consistent with maintaining price stability (what we call the exchange rate 'comfort zone') change as our inflation forecasts are updated and revised, and specifically as labour costs, profit margins, international inflation, and other influences on inflation - including interest rates - alter.

*Recent research implies the TWI comfort zone can be somewhat wider than previously.*

Part of the Bank's ongoing work is to keep under review the evolving relationship between the exchange rate (and other indicators) and inflation trends. One recent result of this research, announced in our September *Economic Forecasts*, was the downward revision of our estimate of the exchange rate 'pass-through coefficient' - i.e. our estimate of the impact a given change in the exchange rate has on the inflation rate<sup>7</sup>. The implication of this for day-to-day monetary policy has been that our exchange rate comfort zone is now somewhat wider than previously. In other words, our view is that the exchange rate can move in a rather wider range before either end of our inflation target is threatened.

*Research on alternative exchange rate indices ...*

The appropriateness of the TWI as a measure for assessing the exchange rate's impact on inflation is another area where research is continuing. Over much of the last few years, New Zealand's bilateral exchange rates with each of the individual currencies that make up the TWI have moved in a broadly similar fashion to the TWI itself. As a result, and notwithstanding that some TWI currencies (especially the US dollar and Yen) have tended to be

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The exchange rate pass-through coefficient was reduced from around 0.4 to around 0.3.



more important than others for determining import prices, the exact composition of the exchange rate index the Bank uses as a monetary indicator has not been particularly significant - the TWI has in fact been better than other indices would have been.

*... has indicated the TWI remains the most useful index.*

Recent work by the Bank in this area has focused on the fact that over the last year or so the relative strength of the Yen internationally has meant that the New Zealand dollar has depreciated fairly significantly against the Yen while appreciating against other TWI currencies, especially the Australian Dollar and Pound Sterling. Given these divergences, it is important to assess whether there would be a different effect on import prices, and hence inflation, from that projected using the TWI. Our analysis has shown that there are some short-run differences, but that the evidence still favours maintaining the TWI as the principal guide to the influence of exchange rates on inflation. However, it is possible that in the future we may make greater use of complementary exchange rate indices when key bilateral rates diverge.

## Interest Rates

*Interpretation of developments in interest rates...*

Interpretation of the inflation implications of interest rate developments is complicated by the fact that the relationships between movements in interest rates and subsequent inflation outcomes are not well quantified in New Zealand. Nevertheless, consistent with overseas evidence and experience, we consider both the level and structure of interest rates to be significant for monetary policy.

*... is hampered somewhat by the lack of well quantified relationships.*

Though careful interpretation is needed, we consider that the difference between long-term and short-term interest rates can be a useful indicator of future activity and inflation. We also expect an important negative connection between the level of real interest rates on the one hand, and economic activity and underlying inflation trends beyond the short term on the other (higher interest rates, for example, leading ultimately to lower inflation). Work in the Bank continues to seek to quantify the relationships in New Zealand better than has been possible to date. Such quantification is particularly relevant when interest rates and the exchange rate are tending to have opposite effects on the inflation outlook, so that a judgment has to be made about the relative importance of the two effects. This issue is further complicated by the fact that interest rates are very likely to affect inflation more slowly than the exchange rate. Timing differences are also relevant when a policy action is taken which pushes both interest rates and the exchange rate in the same direction: here, the short-term effect on inflation (mainly the direct exchange rate effect) may well be quite different in size from the longer-term effect.

## Money and Credit Aggregates

*Some of the longer-term relationships for monetary aggregates perform reasonably well, ...*

On the money and credit aggregates, the Bank's research over recent years has found that M3 has had a fairly close longer-term relationship to overall nominal GDP, while the narrower money aggregates seem to have been related more to household consumption. Longer-run relationships between the credit aggregates and nominal activity, however, have been weak or ill-defined. In all cases, these relationships have been considerably more variable in the short term than in the long term, and even the direction of causality in the short term has been unclear.

*... but shorter-term relationships are of limited use for day-to-day monetary policy.*

This situation has limited the usefulness of the money and credit aggregates as leading indicators of inflation trends and short-term guides to monetary policy. The Bank monitors the aggregates as one of a number of indicators of monetary conditions, but developments in these are not likely to figure prominently in monetary policy decisions unless there are clear trends, probably visible in most of the aggregates, which are consistent with movements in other indicators important to monetary policy.

*The Bank continues to keep these relationships under review.*

As with interest rates, the Bank continues to keep these relationships under review. If they should become more stable - or simply more visible - in future, the Bank would want to make more active use of them, as all the available information needs to be brought to bear in inflation forecasting and monetary policy analysis. For the time being, however, the Bank will continue to use the various indicators in much the same way as it has done over recent years.

## Real Time Settlement Reforms

*Possible future changes to the payments system, ...*

Turning finally to the technical details of our operating procedures, we noted in the June 1993 *Monetary Policy Statement* that, in the not too distant future, some recalibration of our various monetary policy settings and instruments may be needed to fit with reforms to the payments system. These reforms are currently being considered by financial institutions and the Reserve Bank.

*... involving a move to 'real time gross settlement', ...*

The payments system reforms are likely to involve a shift to what is known as a 'real time gross settlement system' (RTGS). Such a system would mean that banks' settlement accounts at the Reserve Bank are debited or credited on a real time basis (i.e., at any time during the day), on account of every individual payment transaction (or at least every individual large transaction) between banks and their customers. This is in contrast with the current net, end-of-day, settlement system, whereby all the credits and debits for each bank's settlement account at the Reserve Bank are added up



*... are likely to require some technical changes to the details of our operating procedures.*

at the end of the banking day, and only one net amount is debited or credited to each settlement account before the start of the next banking day.

Under RTGS, banks' required holdings of settlement cash balances and primary liquidity may change, and there may be a need for new mechanisms for the Reserve Bank to inject liquidity into the banking system during the course of the day. The Bank is continuing work to ensure its operational techniques evolve appropriately for a RTGS payments system, and we are confident that monetary policy can be at least as effective in such a new environment as it is now.

## IV. Conclusion

Based on the forecasts presented in this *Statement*, the inflation track is likely to dip a little further over the next year or so, before strengthening again through 1995 and early 1996, to levels close to the top of the 0-2 price stability target range. The projected re-acceleration later in the forecast period reflects both firmer domestic and firmer external inflation pressures, in the context of our normal constant exchange rate assumption.

Given this profile, there is no need for firmer monetary conditions in the near term, and we are comfortable with monetary conditions as at the time of writing.<sup>8</sup> Indeed, a significant firming of conditions in the shorter term would be premature, in the sense that the main effect of this would occur over a period when the inflation track is expected to still be around the middle of the price stability target range. Further out, however, there may well be a need for an increase in the exchange rate and interest rates to ease inflation pressures through late 1995 and into 1996. There is likely to be some natural tendency towards a gradually strengthening nominal exchange rate, given continuing lower inflation in New Zealand than internationally, and also towards somewhat higher interest rates. These tendencies will help offset the expected rise in inflation. But if the natural tendencies are insufficient, or if the inflation pressures turn out much higher than expected, the Bank will take action to ensure that monetary conditions remain consistent with the maintenance of price stability.



In doing this, we will also be making our best contribution to ensuring that the general economic recovery remains sustainable, by making it less likely that the economy will overheat and go through a damaging boom and bust cycle.

A handwritten signature in black ink, reading "Donald T. Brash". The signature is written in a cursive style with a horizontal line underneath the name.

Donald T. Brash,  
Governor.

# Appendix 1

## Chronology

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

### 1993

- 1 June: The Government announced that the projected (unadjusted) financial deficit for the 1992/93 fiscal year was \$2,570 million, down from \$3,219 million forecast in December 1992.
- 8 June: The Reserve Bank released its eighth *Monetary Policy Statement*.
- 1 July: The Government released its 1993 Budget. The estimated adjusted financial deficit for the 1992/93 financial year was \$2,340 million. For the 1993/94 and 1994/95 fiscal years, deficits of \$2,278 million and \$2,013 million were forecast respectively.
- 14 July: The June quarter CPI outcome was released. During the quarter the CPI increased by 0.6 percent, bringing CPI inflation for the twelve months to June 1993 to 1.3 percent. Underlying inflation was estimated to have been 0.3 percent for the quarter and 1.6 percent for the preceding twelve months.
- 14 September: The Reserve Bank released its September *Economic Forecasts* showing continued growth concurrent with price stability. Underlying inflation for 1993 was expected to be 1.2 percent falling to 1.0 percent for 1994.
- 22 September: The Government announced the actual financial deficit for the 1992/93 fiscal year was \$1,823 million, \$517 million less than estimated on Budget night.
- 14 October: The September quarter CPI outcome was released. During the quarter the CPI increased by 0.5 percent, bringing inflation for the twelve months to September 1993 to 1.5 percent. Underlying inflation was estimated to have been 0.4 percent for the quarter and 1.4 percent for the year.
- The Government released its *Pre-Election Economic and Fiscal Update*. The financial deficits for the 1993/94 and 1994/95 fiscal years were forecast at \$1,442 million and \$1,194 million respectively.
- 6 November: Initial election results show a hung Parliament with National winning 49 seats, Labour 46, and the Alliance and New Zealand First parties winning 2 each.

- 8 November: The Governor of the Reserve Bank issued a press statement indicating that the Bank would continue to focus on maintaining price stability.
- 17 November: The National Party gained a clear majority of seats (50) in Parliament after the counting of special votes changes the election night result for Waitaki. Results for other electorates remained unchanged with Labour reduced to 45 seats and the Alliance and New Zealand First holding on to 2 seats each.



# Appendix 2

## Reserve Bank Statements on Monetary Policy

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

### **RBNZ Forecasts See Price Stability Maintained**

14 September 1993

The Reserve Bank's economic forecasts, released today, show inflation remaining within the 0-2 percent range over the next two years while economic growth consolidates, the Governor of the Reserve Bank, Dr Don Brash said.

"The Bank believes present monetary conditions are consistent with inflation remaining within the 0-2 percent range," Dr Brash said.

"We remain committed to maintaining monetary conditions that are consistent with this goal."

### **RBNZ Forecasts Non-Inflationary Growth to Continue**

14 September 1993

The latest Reserve Bank Economic Forecasts, released today show growth rates of between 2.5 and 3.0 percent over the next two years.

Grant Spencer, Chief Manager of the Bank's Economics Department said that, after a slight slowdown in early 1993, economic growth had now strengthened again, and was expected to become more broadly based.

The main contributions to GDP growth are expected to come from further improvements in export performance and an expansion in private consumption, supported by strengthening business investment.

The continued growth of exports, together with a further improvement in New Zealand's terms of trade will ensure that the current account deficit continues to fall, despite the forecast expansion in domestic spending.

Mr Spencer said that significant employment growth is expected over the next two years. However, this is unlikely to be reflected fully in the rate of unemployment as improving labour market conditions will encourage more people to enter the labour force.

The outlook for the real economy remains consistent with the price stability goal.

Due to the recent rise in the nominal exchange rate, slightly lower rates of annual inflation are now expected in the years to March 1994 and March 1995. Annual underlying inflation is forecast to fall from its current 1.6 percent to 1.1 percent by March 1994.

### **Reserve Bank Remains Firm on Price Stability**

8 November 1993

The Governor of the Reserve Bank, Dr Don Brash, indicated today that, from the Bank's perspective, it is "business as usual".

"The Bank's focus on price stability remains unaltered. We will continue to act in keeping with our statutory responsibility," Dr Brash said.

"The Bank will be monitoring developments closely, and will take action as necessary to ensure that the price stability objective is not threatened."

