

Monetary Policy Statement¹

June 1997

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

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ISSN 1170-4829

¹ Text finalised on 19 June. Projections finalised 6 June.

I. Summary and policy assessment

Following the moderate easing in the stance of monetary policy late last year, the Reserve Bank can now accommodate a significant reduction of 100 basis points in desired monetary conditions. On the new index for our Monetary Conditions Indicator (MCI), the monetary conditions we now think are appropriate are 825, down from the 925 level applying since March. Markets have largely anticipated this easing in recent weeks.

Monetary conditions were eased in December on early signs of falling inflationary pressures. Economic indicators remained ambiguous however, so that it was not clear until recently that inflation could be expected to enter, and for a good period remain firmly in, the middle part of the 0 to 3 percent target range.

We have revised our projection of inflation down slightly since March, partly in view of the softer short-term outlook for demand but also because there are other indications that inflationary pressures are beginning to subside. Capacity constraints may not be as close as we earlier thought. Delayed effects of past exchange rate appreciation are feeding through - most notably in car prices. Even construction cost inflation has slowed markedly.

Despite several indicators suggesting that economic growth is weaker now than it has been for four years, we project that it will soon pick up. While this year's easing in monetary conditions is one reason, we think the resilience displayed by the economy denotes fundamental strength. We believe that the business sector remains ready and able to invest in the future, while New Zealand as a whole will continue to be able to sell its product on world markets, which are themselves expanding.

Figure 1
Consumer price inflation
(annual percentage change)

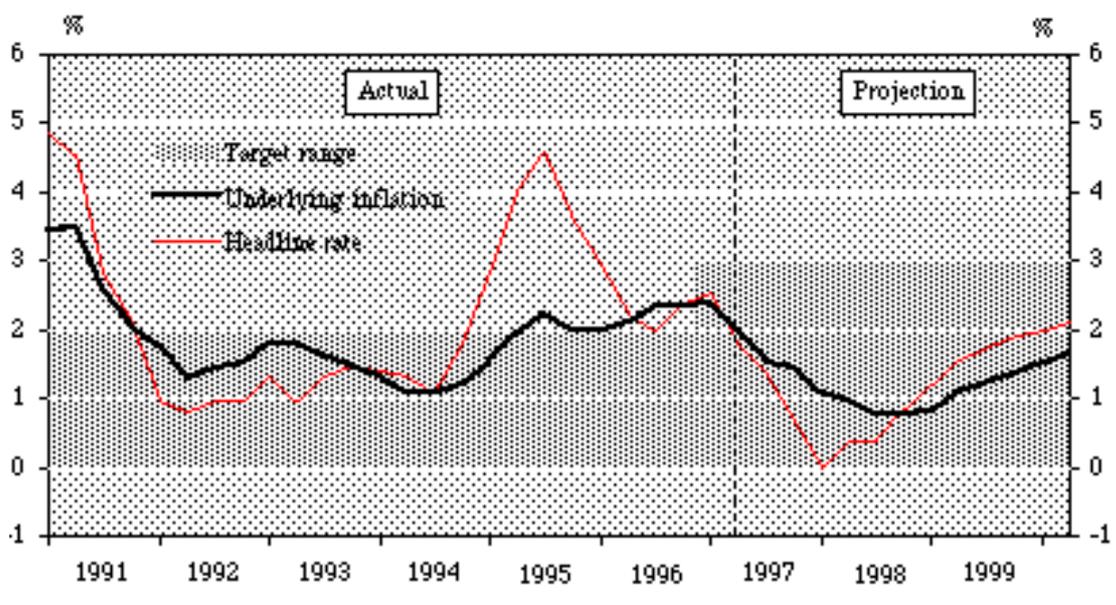
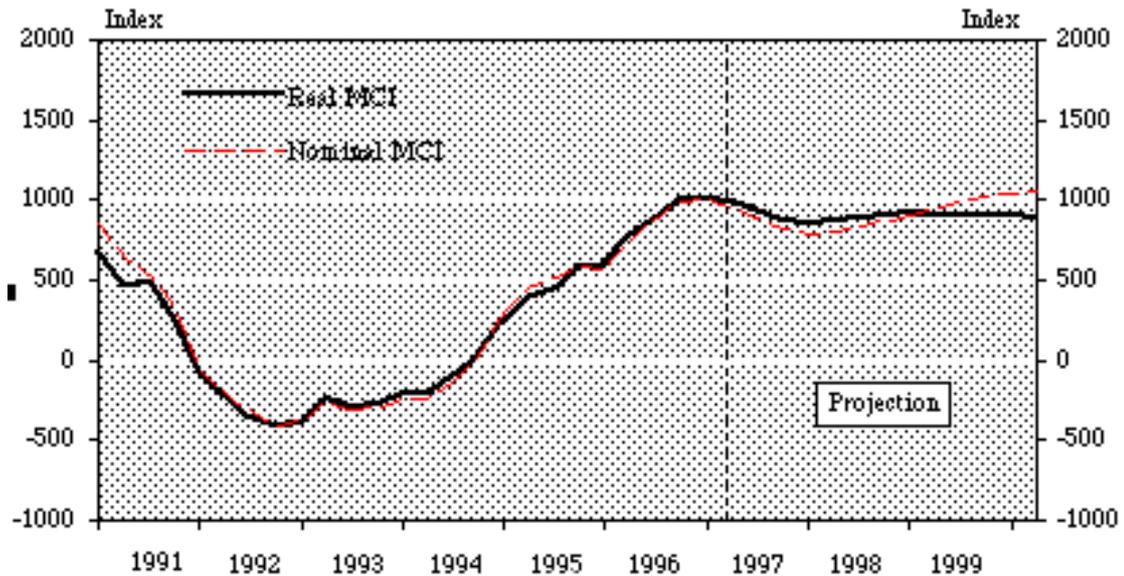


Figure 2
Real and nominal monetary conditions
(December 1996 quarter average=1000)



The main challenge for monetary policy now is to strike a reasonable balance between the possibility of weaker activity and hence lower inflation over the short term, and stronger inflationary pressures induced beyond next year by the planned fiscal stimulus. The path we project suggests that, after a modest further easing in the December 1997 quarter, monetary conditions will remain approximately unchanged in real terms. Without continuing firm monetary conditions, inflationary pressures induced by annual growth projected at around 4 percent in the year to March 1999 would drive inflation strongly towards the top of the target range.

Against this background, a more pronounced easing in the stance of monetary policy now would need to be followed by quite an aggressive tightening in 1998 to prevent a rapid escalation of inflation in 1999. Such a roller coaster ride in monetary conditions would do more harm than good.

This *Statement* introduces a new method of projecting the future path of monetary conditions which allows them to vary over time, interacting with inflation so that it converges gradually towards the middle of the 0 to 3 percent target range. The usual judgemental and risk assessment issues in the projections are unchanged by this new technique. The monetary conditions we desire remain contingent on the accuracy of our projections.

Donald T Brash
 Governor

II. Issues in monetary policy

Easing of strains on productive capacity...

Most indicators of activity in the economy show a continuation of moderate expansion, though slightly weaker than we had projected in the December 1996 *Monetary Policy Statement* and in the March *Economic Projections*.

...has led to better inflation performance.

The gradual abatement of strains on productive capacity has, as expected, helped to bring about an improvement in inflation performance in recent months, though the inflation rate in the year to March remained above the centre of the target range.

Domestically-generated inflation continues to run at a rate substantially above that of internationally-traded goods and services, reflecting the continuing pronounced difference in pressures felt in the externally-exposed sectors from those experienced in more 'sheltered' domestic sectors of the economy. Nevertheless, the fact remains that, compared with six months ago, the cyclical upswing in inflation has been contained and is being reduced towards the middle part of the target range.

Inflation prospects will be affected by:

The real issue for monetary policy is not so much where we are now, but what lies ahead. Given the lags involved in the transmission of monetary policy from adjustments in monetary conditions through to their ultimate impact on activity and inflation, the Bank's decisions today must be based on inflation prospects a year or two hence. In this context three principal considerations bear emphasis:

the positive world economic outlook;

- The international economic environment, which is so influential for a small open economy such as New Zealand's, looks likely to remain relatively benign. Economic activity in our major trading partners, taken as a whole, is expected to strengthen, and New Zealand's international terms of trade are expected to improve.

weaker domestic activity in the short term;

- Forward-looking indicators of activity and business and consumer confidence have been fairly weak in recent months. On balance, the prospects are for weaker expansion of activity over the short term than we had projected previously. That in turn suggests less pressure on productive capacity and lower inflation than we had expected earlier.

the likelihood of fiscal stimulus later on...

- The medium-term outlook is highly contingent on the prospects for fiscal policy. This is the area in which the March *Economic Projections* differed most from the December 1996 *Statement*. In March, and again in our current projections, we are assuming that proposed tax cuts and expenditure increases go ahead, but we have not made any allowance for the possible introduction of a compulsory superannuation scheme.

As a result, the medium-term projection is strongly influenced by the fiscal stimulus to spending. Although of limited duration, the planned stimulus is sufficiently large that the boost to activity is projected to result in significant upward pressure on inflation.

...if a superannuation scheme does not go ahead.

It is recognized that, if a superannuation scheme were introduced, this could significantly reduce the net fiscal stimulus and dampen the rise of inflation pressures. It would not be prudent at this stage, however, to base the stance of monetary policy on the assumption that a superannuation scheme will go ahead.

Overall monetary conditions have eased significantly over the past several months.

It is also important to note that overall monetary conditions - comprising movements in both the trade-weighted exchange rate (TWI) and short-term interest rates - have eased by a considerable margin over the last several months. Monetary conditions began to ease in September-October. At the time of the December *Monetary Policy Statement*, the Bank signalled the appropriateness of a further easing of conditions on the basis of a weaker outlook for inflation pressures. This judgement was reaffirmed in the March *Economic Projections*. While monetary conditions through much of the period since the December *Statement* remained firmer than the Bank had considered appropriate, more recently conditions have eased significantly. A fuller discussion of the evolution of conditions since last December is contained in Section IV of this *Statement*.

The projections suggest that this has been appropriate.

The easing which has already occurred in the overall degree of monetary restraint will tend to support activity levels over the coming year or more. The projection presented in Section III suggests that an appropriate level of monetary conditions for the coming quarter is about 100 basis points (in interest rate terms) below the level the Bank indicated as appropriate in the March *Economic Projections*.

A more complete assessment of desired conditions...

These projections, for the first time, explicitly allow for monetary conditions to adjust over time in response to the evolution of inflation pressures - as is discussed in more detail in Box 1. However, a complete assessment of appropriate or 'desired' monetary conditions must also take into account risks and uncertainties associated with the projections. This assessment may point in the direction of either a more cautious or more pronounced adjustment of monetary conditions than is suggested by the projections.

...must take into account various risks and uncertainties.

The main argument that could be made for a more significant easing of conditions than presented in these projections is that the inflation rate is projected to fall below the centre of the target range for much of the next year or two.

A number of other considerations suggest a more cautious approach:

- Much of the expected short-term decline in inflation results from the direct price effects of past exchange rate appreciation - effects which have tended to be smaller than anticipated through most of the current business cycle. If this exchange rate passthrough remains lower than we expect, inflation will be somewhat higher than projected in the short term.
- Despite the prospect of several more quarters of relatively weak demand conditions, we do not expect a large margin of excess capacity to emerge in the economy. As a result, we do not see a substantial risk of strong downward pressure on inflation developing before the expected fiscal stimulus leads to a re-emergence of excess demand conditions.
- A sharper easing of monetary conditions in the short term would leave the economy with very little spare capacity with which to absorb the stimulus arising from both the lingering effects of monetary easing and the fresh stimulus of tax cuts and increased government spending. In this situation, an aggressive firming of monetary conditions in 1998 would probably be required to contain a rapid escalation of inflation in 1999.
- Experience both here and abroad indicates that it is generally easier to ratchet inflation and inflation expectations up than to ratchet them down. This suggests that if activity weakens by more than we are projecting, the downward risk to inflation would be less than the upward risk to inflation if activity proves to be more resilient than projected. In other words, even if the risks with regard to the activity outlook are balanced, the risks on inflation would tend to be slightly on the upside.

Further easing now would aggravate problems later on.

A significant further easing of the stance of policy now would keep inflation closer to the middle of the target range in the short term. But a looser policy stance would also exacerbate the risks of accelerating inflation further out, or of a sharp firming of conditions to contain that acceleration. These considerations, and a desire not to introduce strong volatility in monetary conditions, lead us to the policy conclusion outlined in Section I.

Box 1: Projections and monetary policy

Over the past year or so the Bank has been developing a new approach to its projections, integrating a new macroeconomic model of the New Zealand economy. Although this approach does not affect the substance of policy decision-making, it does affect the way in which the projection and policy issues are presented and communicated to financial markets and the wider public.¹

The treatment of monetary conditions

Until now, the Bank's projections have included simple 'straight line' assumptions regarding the future path of interest rates and the exchange rate. Using these and many other assumptions, projections were developed for economic activity and inflation. In other words, the inflation outlook was conditional on monetary conditions following the assumed path. If the inflation projection was inconsistent with maintaining price stability over the medium term, it was evident that monetary conditions would need to be different from those assumed.

One of the main drawbacks with using an assumed set of monetary conditions is that the projections cannot then be readily used to indicate how monetary conditions may need to evolve so as to achieve the inflation target. Assuming a particular path for monetary conditions - especially a fairly simple extrapolation of current conditions - is helpful as an indication of whether *average* conditions will need to be firmer or looser than assumed, but it is not very helpful for judging *when* conditions should become firmer or looser.

With the new projection framework being used for the first time in this *Statement*, a more realistic and internally consistent approach is being followed. This change alters the way in which our projections are portrayed.

In particular, changes in inflation pressures are reflected to a much greater extent in the projected path of monetary conditions rather than solely in the projected course of inflation itself. In other words, rather than showing how inflation would probably evolve in response to maintaining a particular set of monetary conditions, the projections now show how monetary conditions might be expected to evolve in order to achieve a path for inflation that converges over time towards the middle of the target range.

Two particular features of the approach may be noted:

- Although changes in inflation pressures are reflected to a greater extent in movements in monetary conditions than previously, projected inflation does still vary. Not all of the variation in inflation pressures is absorbed immediately into changes in monetary conditions. Monetary conditions adjust to ensure progressive rather than extremely rapid reconvergence of inflation towards the centre of the target range.
- Changes in monetary conditions are reflected in movements in both short-term interest rates and in the trade-weighted exchange rate (TWI). In the long run, real interest rates converge towards world real interest rates, and the real exchange rate converges towards a level consistent with achieving balance of payments sustainability. In the short term, however, the

¹ A comprehensive report on the new projection framework will be published in August.

relationship between interest rate and exchange rate movements is substantially constrained by the requirement that financial assets denominated in New Zealand dollars have expected returns similar to those of competing financial assets denominated in foreign currencies.

The projected path for monetary conditions, it should also be stressed, is very dependent on the assumptions made and on the economic information available at the time of preparing the projections. As new information becomes available, and as assumptions are modified, the outlook for inflation pressures will change, and this will alter the projected track for monetary conditions. In this regard, the new approach to the projections is no different from the previous approach. The appropriate stance of monetary policy is not perfectly predictable and must be re-examined regularly in the light of new evidence relating to current and future inflation pressures.

Judgement and uncertainty in the projections

Judgement is an essential ingredient in making any kind of economic projection or forecast. Judgements are inevitably required in interpreting short-term trends, in making assumptions about the outlook for the world economic environment and the evolution of other economic policies in New Zealand, and in making assumptions about the current and future structure of the New Zealand economy. As those judgements and assumptions change, so too do the projections.

One area in which judgement is especially important is in the treatment of uncertainty. As indicated earlier, the new approach to the projections produces a path for monetary conditions consistent with achieving the Bank's inflation objective. In principle, however, there are a great many paths for monetary conditions which could also meet the inflation target. But these alternative paths are unlikely to be considered equally appropriate once uncertainties in the projection are taken into account. A path for monetary conditions that leads to projected inflation outcomes near the edges of the target range is riskier than a path that keeps inflation nearer the centre of the range, for example. In such circumstances, judgement is called for in modifying the path of monetary conditions to take risks and uncertainties into account.

III. Economic projections

This section presents the Bank's projections for the real economy, inflation, and monetary conditions to the year 2000. Key data relating to the projections are presented in Tables 1 and 2.

1. Summary

The outlook for inflation and monetary conditions

Inflation initially declines but begins rising again from mid-1998.

The effects of the past appreciation of the New Zealand dollar and slightly weaker domestic demand conditions lead the Bank to project declining inflation over 1997 and into 1998. Underlying inflation is projected to be 1 percent in the year to March 1998 and to remain close to 1 percent until early 1999. We continue to assume fiscal policy puts significant demand pressure on the economy in the second half of the projection period. With this pressure, and the absence of further favourable price-level effects from exchange rate movements, underlying inflation is projected to begin rising above the centre of the target range in 2000.

The Bank has changed its projection methodology.

The projections differ from the March 1997 *Economic Projections* in that monetary conditions now vary over time so as to achieve progressive convergence of inflation towards the centre of the 0 to 3 percent target range. The implications of this change in approach are discussed in Box 1.

Real monetary conditions remain fairly firm.

Our projection suggests that monetary conditions are likely to remain fairly firm in *real* terms through most of the projection period. This steady profile for real monetary conditions is consistent with a gradually declining real exchange rate and a period of rising real interest rates from late 1997 onwards. Nominal 90-day interest rates increase significantly by early in the year 2000, both to offset marginally higher inflation and to raise real interest rates. In contrast, the nominal exchange rate is projected to remain broadly unchanged. (Box 1 describes the methodology underlying the determination of the mix of monetary conditions.)

The real economy outlook

Activity is weaker in the short term ...

Since publication of the March *Economic Projections*, activity indicators have been weaker than anticipated. As a result, growth is projected to be slower over the short term, with GDP growth of 2.4 percent in the year to March 1998. This slower growth is slightly below our estimate of medium-term sustainable output growth of 2.75 percent and allows for some limited spare capacity to develop in the economy. This helps to ease the pressures on inflation over the first half of the projection.

Table 1. Summary of economic projections
(Annual percentage changes, unless specified otherwise)

	<u>March year</u>	<u>Actuals/Estimates</u>		<u>Projections</u>		
		<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>
<i>Inflation measures</i>						
Underlying inflation		2.1	2.0	1.0	1.1	1.7
Consumer Price Index (CPI)		2.2	1.8	0.4	1.6	2.1
Import prices		-1.3	-5.1	-2.8	-1.1	-0.3
Export prices		-3.2	-9.0	0.8	0.5	-2.1
Wages		3.7	3.6	2.6	2.5	3.1
<i>Monetary conditions (year average)</i>						
Real MCI		600	970	885	905	902
Nominal MCI		608	960	829	886	1029
Exchange rate (TWI)		62.2	66.4	67.3	67.2	68.0
90-day bank bill yield		8.8	9.0	7.1	7.7	8.5
<i>Output and labour force</i>						
Output gap (year average, % of pot'l GDP)		1.3	0.5	-0.6	0.2	1.2
Real GDP (production)		2.8	2.2	2.4	3.9	3.4
Potential output		3.5	3.3	2.9	2.8	2.8
Labour force		3.4	1.4	1.7	1.5	1.4
<i>Other information</i>						
Government operating balance (% of GDP)		3.6	2.1	0.9	0.8	0.7
Current account balance (% of GDP)		-3.7	-4.7	-5.9	-5.4	-4.8
Terms of trade		-2.0	-4.1	3.8	1.6	-1.8
Unemployment rate (year average, % of labour force)		6.2	6.2	6.9	6.5	5.8
<i>World economy</i>						
Industrial production (OECD)		0.1	3.6	2.6	2.9	1.8
Consumer prices		2.7	2.3	2.2	2.6	2.6
Short-term interest rates (year average)		6.0	5.6	5.8	5.8	5.9

Table 2. Summary of short-term projections
(Quarterly percentage changes, unless specified otherwise)

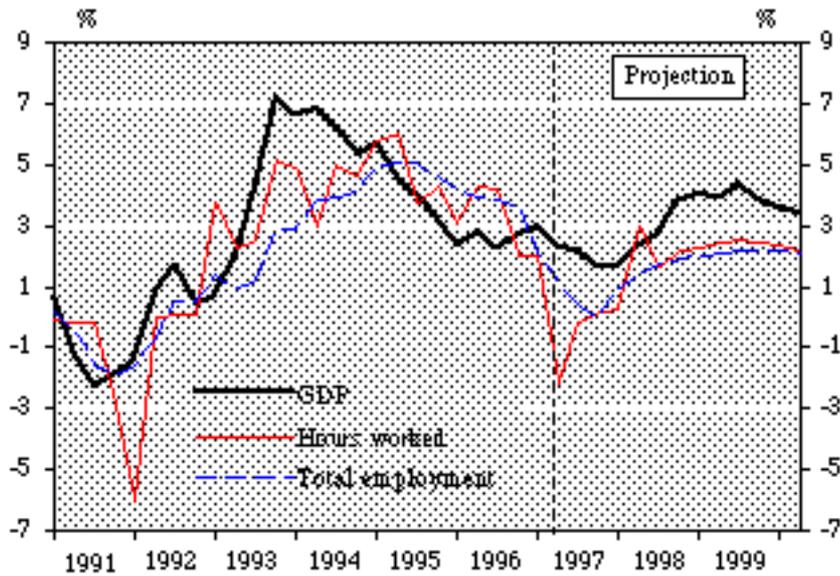
	<u>Actuals/Estimates</u>		<u>Jun-97</u>	<u>Projections</u>		
	<u>Dec-96</u>	<u>Mar-97</u>		<u>Sep-97</u>	<u>Dec-97</u>	<u>Mar-98</u>
<i>Inflation measures</i>						
Underlying inflation	0.6	0.2	0.3	0.3	0.3	0.1
"Consumer" import prices	-1.7	-2.1	-1.6	-0.9	-0.1	0.1
Wages	0.6	1.1	1.2	0.2	0.2	0.9
House prices	2.7	2.2	1.1	1.1	0.9	0.7
Construction costs (residential)	0.4	0.2	0.1	0.5	1.5	1.3
<i>Monetary conditions (quarter average)</i>						
Nominal MCI	1000	956	897	825	785	808
Exchange rate (TWI)	67.1	68.4	68.0	67.3	66.9	66.8
90-day bank bill yield	8.9	7.5	7.2	7.0	6.9	7.2
<i>Output and hours worked (s.a.)</i>						
Real GDP (production)	0.7	0.3	0.3	0.4	0.7	0.9
Total hours worked	0.5	-2.2	1.9	0.1	0.5	0.5

Notes to Tables 1 and 2

Underlying inflation	Reserve Bank of New Zealand definition and estimate.
Import prices	<i>Overseas Trade Index</i> (domestic currency).
“Consumer” import prices	Selected group of import prices relevant to underlying inflation. Reserve Bank of New Zealand estimate of <i>Overseas Trade Index</i> (domestic currency) excluding non-fuel crude materials and petroleum and petroleum products.
Export prices	<i>Overseas Trade Index</i> (domestic currency).
Wages	Private sector average hourly earnings, <i>Quarterly Employment Survey</i> .
House prices	Average house price index, Valuation New Zealand.
Construction costs (residential)	Component of the Housing Group, Consumer Price Index.
Real MCI	Reserve Bank of New Zealand, defined as: $\{(R_{90day} - R_0) + (1/2) * [\log_n(RTWI) - \log_n(RTWI_0)] * 100\} * 100 + 1000$ where R90day and RTWI are the estimated real 90-day interest rate and the real TWI exchange rate. R90day is calculated as the nominal 90-day rate less the annual (four quarter) inflation rate in the CPI excluding credit services. RTWI is calculated as the TWI multiplied by New Zealand’s GDP deflator (interpolated from annual data) and divided by the trade-weighted average of GDP deflators of our trading partners. R ₀ and RTWI ₀ are base levels for the December 1996 quarter, where R ₀ = 6.5 and RTWI ₀ = 1 (normalised). All input numbers are rounded to one decimal place.
Nominal MCI	Reserve Bank of New Zealand, defined as: $\{(90day - r_0) + (1/2) * [\log_n(TWI) - \log_n(TWI_0)] * 100\} * 100 + 1000$ where 90day and TWI are nominal rates and r ₀ and TWI ₀ are corresponding averages of daily rates for the December 1996 quarter, where r ₀ = 8.9 and TWI ₀ = 67.1. All input numbers are rounded to one decimal place.
Exchange rate (TWI)	Reserve Bank of New Zealand.
90-day bank bill yield	Reserve Bank of New Zealand.
Output gap	Defined as percentage difference between real GDP (production, seasonally adjusted) and potential GDP.
Potential output	Reserve Bank of New Zealand definition and estimate.
Labour force	<i>Household Labour Force Survey</i> .
Total hours worked	<i>Household Labour Force Survey</i> .
Government operating balance	Percentage of nominal GDP (production), June year.
Current account balance	Percentage of nominal GDP (production).
Terms of trade	Defined using domestic-currency export and import prices, <i>Overseas Trade Indices</i> .
Unemployment rate	Seasonally adjusted rate, <i>Household Labour Force Survey</i> .
Industrial production (OECD)	Actuals sourced from OECD. Projections based on <i>Consensus Forecasts</i> . Seasonally adjusted.
Foreign consumer prices	Reserve Bank of New Zealand definition and estimate. TWI trading partners’ CPI inflation, weighted by TWI weights. Projections based on <i>Consensus Forecasts</i> .
Foreign short-term interest rates	Reserve Bank of New Zealand definition and estimate. 80:20 weighted combination of US and Australian short-term interest rates. Projections based on <i>Consensus Forecasts</i> .
Annual percentage change	$(Q/Q_{-4} - 1) * 100$
Quarterly percentage change	$(Q/Q_{-1} - 1) * 100$

Except where noted, all historical data is sourced from Statistics New Zealand. Unless specified otherwise, all data conform to Statistics New Zealand definitions, and are not seasonally adjusted.

Figure 3
Economic activity indicators
(annual percentage changes)



... but is boosted later on ...

Over the second half of the projection period, the Government's fiscal initiatives, together with progressively strengthening business investment, contribute importantly to demand pressures. This pressure is countered only partially by the maintenance of firm monetary conditions, so that GDP growth is projected to increase to around 3 to 4 percent during the last two years of the projection.

... by fiscal stimulus ...

Household disposable incomes are projected to be boosted by the tax cuts in 1998, stimulating private consumption. However, relative to our previous projections, growth in household income and consumption is more subdued as a result of slower growth in employment, a somewhat higher unemployment rate, higher real interest rates, and slower increases in real house prices.

... and business investment.

Business investment is projected to continue at moderate levels through the current period of subdued economic growth. However, improved profitability as output growth increases will encourage firms to increase their investment, particularly those in the tradeables sector, which will also benefit from the gradually-declining real exchange rate. Overall, by the end of the projection period the rate of growth of business investment is projected to return to rates achieved in 1995/96.

Risks and uncertainties

These projections are subject to uncertainty.

Conditional on the assumptions made, these projections are the Bank's estimate of the most likely outlook for the economy. As always, however, the projections are subject to many uncertainties.

Substantial sources of uncertainty include:

- the future stance of fiscal policy, particularly the possible introduction of a compulsory superannuation scheme;
- the Bank's estimate of the current level and growth rate of sustainable output;
- the extent and timing of further direct price effects from past appreciation of the exchange rate; and
- the degree of activity in the housing market and implications for construction-cost inflation.

The Bank's judgement is that the risks are balanced.

The Bank's overall judgement is that the medium-term balance of risks is broadly neutral.

2. Real economy

Recent trends and short-term outlook

1996 GDP growth has been revised upward.

Our estimate for GDP growth between the March quarters of 1996 and 1997 has been revised up to 2.2 percent, compared to our previous estimate of 1.8 percent. This upward revision reflects the stronger-than-expected outturn in the December quarter and published revisions back to 1993 in GDP statistics.

Indicators point to weak activity in March 1997,...

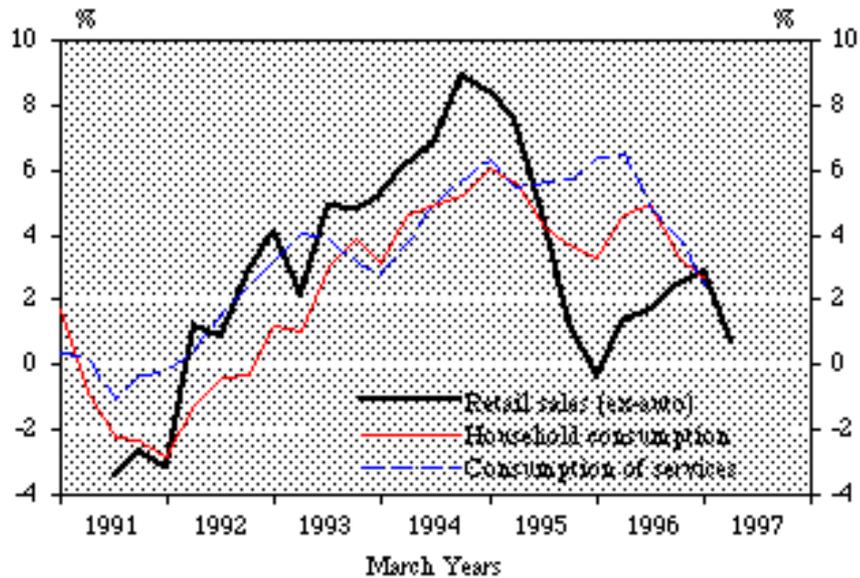
Despite the upward revisions to historical data, activity indicators for the March 1997 quarter and immediately beyond generally suggest that growth in aggregate demand has been weaker than anticipated in the March *Economic Projections*. Over both of the March and June quarters we now estimate growth of 0.3 percent, compared with 0.5 and 0.7 percent respectively in the March *Economic Projections*.

... stemming from slow consumer spending.

The slower growth profile mainly reflects weaker spending by households. This is the case particularly in the March quarter, with our estimate that real private consumption grew by only 0.1 percent (seasonally adjusted) during the quarter. In contrast, spending by firms remains broadly in line with March expectations. Evidence of the weaker short-term outlook includes:

- A decline in retail sales of 0.8 percent during the March quarter, mostly reflecting a decline in motor vehicle sales. This is consistent with import volumes, where declines in most import categories were recorded.
- Declines in business and consumer optimism over the first two quarters of 1997. In conjunction with declines in business confidence, there have been declines in investment and employment intentions.

Figure 4
Retail sales, household consumption and consumption of services
(annual percentage changes)



- Declines in employment and hours-worked data, pointing to slowing output growth relative to our March *Economic Projections*.

Activity has partly recovered in the June quarter.

Our business contacts, and some initial data for the June quarter, suggest that the weakness in consumption in the March quarter has not been carried over to the same extent in the June quarter, though the level of consumption will remain below that of our March *Economic Projections*. In particular:

- Data on retail sales excluding motor vehicles suggest that the underlying level of consumer demand remains reasonable for this stage of the cycle. In addition, the most recent statistics on car registrations suggest that car sales may be rebounding from their lows in March.
- The initially quite sharp decline in consumer confidence in the March quarter appears to have since recovered somewhat.

Assumptions about fiscal policy

Fiscal policy assumptions are consistent with the Budget.

The projections discussed in this *Statement* are conditional on a number of assumptions about the stance of fiscal policy. In particular, fiscal policy is assumed to evolve in a manner consistent with that outlined in the Government's 1997 *Budget*:

- Extra government expenditure of \$903 million in 1997/98, \$1632 million in 1998/99, and \$2465 million in 1999/2000.

- No compulsory superannuation scheme, as it is subject to a referendum in September. (The 1999/2000 tax cuts associated with the introduction of such a scheme are also not included in these projections.)
- However, the tax cuts delayed by one year to 1998/99 are included, as they were in the March *Economic Projections*.

As usual, we have allowed for the extent to which our macroeconomic outlook differs from that underlying the *Budget*.

Medium-term outlook for the real economy

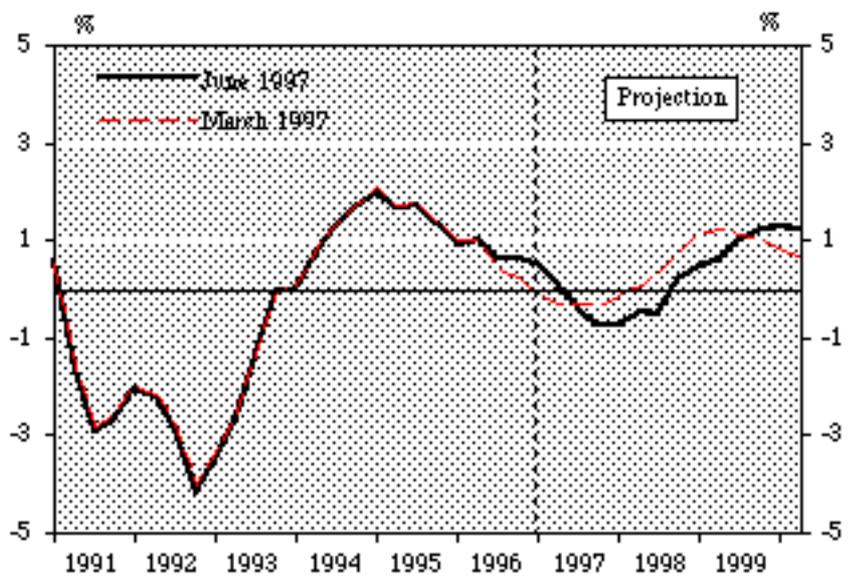
In the medium-term, activity strengthens ...

Apart from the weaker activity early in the projection period, the medium-term outlook for the aggregate economy is little changed from the March *Economic Projections*. We project real GDP to grow around 2.4 percent in the year to March 1998, with growth subsequently increasing to around 3 to 4 percent in the years to March 1999 and 2000.

... in response to fiscal stimulus.

The Government’s fiscal initiatives continue to dominate the picture for the economy. The initial stimulus comes in the form of a 6.1 percent increase in Government consumption and investment (excluding the frigate purchase) in the 1997/98 March year, with this level of expenditure increased in subsequent years. The tax cut scheduled for the 1998/99 year contributes an additional half of one percent to the growth in household nominal disposable income, boosting projected growth in consumption.

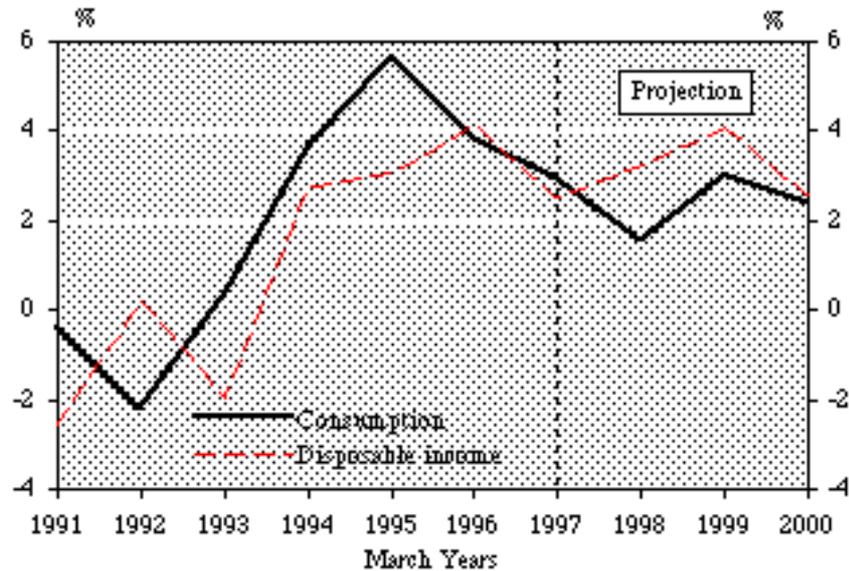
**Figure 5
Output gap**



Output gap: percentage of potential GDP, based on HP1600 filter.

<i>The initial output gap is slightly more negative ...</i>	An important difference between these projections and the <i>March Economic Projections</i> is the slightly more negative output gap through the beginning of the projection period. The output gap represents the extent to which economy-wide demand for goods and services differs from the economy's capacity to supply without causing inflationary pressure (called potential output).
<i>... due to higher short-term potential output.</i>	Although we continue to assume potential output will grow at around 2.75 percent over the medium term, we have revised up our estimate of the current <i>level</i> of potential output. This new estimate, due to the revisions to GDP data mentioned above, accounts for a greater proportion of the downward revisions to the output gap than does the weaker aggregate demand profile over 1997/98. As a result, the negative output gap is somewhat greater even though the medium-term outlook for aggregate demand is little changed from the <i>March Economic Projections</i> .
<i>Real disposable income has been revised down ...</i>	Real disposable income has been revised down somewhat over the projection period. This reflects our projection of less rapid growth in employment, an increase in unemployment, and an increase in the real interest rate from late 1997 onwards.
<i>... dampening consumer spending and house prices.</i>	This combination of lower real disposable income and higher real interest rates has also led us to revise down our estimates of house-price inflation over the whole projection period - albeit to rates still above the rate of general inflation. With the lower growth rate of household wealth this implies, our projection of the level of consumption has been revised down by a total of nearly 3 percent by March 2000. The increase in the rate of unemployment also affects the level of precautionary savings, with the household savings rate increasing from 1 percent to 4 percent by the end of the projection period.
<i>Exporters currently face lower profit margins ...</i>	Many firms in the tradeable sector have experienced falling New Zealand dollar export prices over the last year as appreciation of the exchange rate has dampened the domestic currency increases in the world prices of some New Zealand exports, and accentuated decreases in other export prices. Although there has been some offset from cheaper imported inputs, the net result has been lower unit margins and low profitability for most firms in the tradeable sector and subdued growth in export volumes.
<i>... but this improves in the medium term.</i>	Exporting firms will continue to feel the impact of weak export prices through 1997. However, from 1998 the outlook for the tradeable sector improves as firms respond to a mild stimulus from international demand and the gradual depreciation of the real exchange rate over the projection period. The improved outlook for export growth, along with a reversal of recent declines in the terms of trade, strengthens the trade balance and eases the pressure on the current account deficit, which we project to be just below 5 percent of GDP by the turn of the century.

Figure 6
Real household income and consumption
(annual percentage change)



Investment has been resilient ...

Firms have continued to invest during the current period of subdued growth, with real business investment estimated to have grown by 4.8 percent in the year to March 1997. The continued investment reflects firms' anticipation of renewed profitability and the necessity of introducing productivity- and flexibility-enhancing technology for competitiveness reasons.

... and is projected to strengthen.

Over the short term, the Bank's projections for investment growth remain moderate, reflecting the weak profile for output growth and the related weakness in survey data on business investment intentions. However, the Bank's business contacts suggest that firms are not facing constraints in terms of their debt gearing or credit supply conditions, implying that there is opportunity for investment growth to pick up from 1999 as the output growth gathers pace and firms in the tradeable sector gain from the declining real exchange rate.

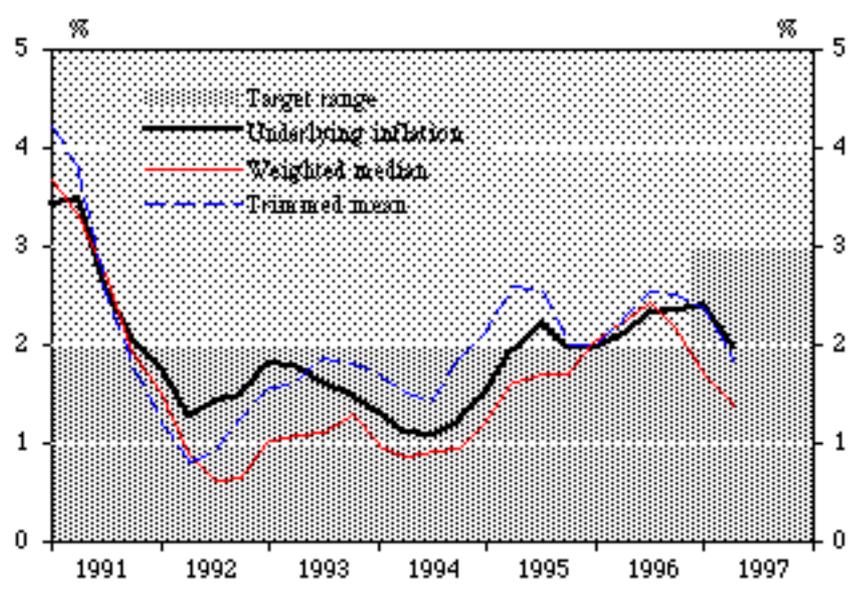
3. Inflation and monetary conditions

Recent trends

Underlying inflation in the March quarter was lower than projected ...

The increase in consumer prices excluding credit charges was 0.2 percent in the March 1997 quarter, 0.3 percent lower than projected by the Bank in the March *Economic Projections*. As a result, underlying inflation over the year to March was 2.0 percent, down from 2.4 percent in the year to December 1996. Most of the explanation for the lower-than-projected inflation rate may be attributed to a low outturn for construction costs and an unexpectedly sharp (but likely temporary) fall in international airfares.

Figure 7
Measures of trend inflation
(annual percentage change)



Other measures of inflation are also trending downwards.

The Bank monitors a range of measures of trend inflation, including a trimmed mean and a weighted median. These other measures exclude the effects of exceptional price movements. Both these alternative measures also point to an easing in inflationary pressures over recent quarters. The trimmed mean recorded an increase of 0.2 percent in the March quarter, while the weighted median measure also rose by 0.2 percent. These were the third successive falls in these measures of the rate of inflation, which stood at 1.8 percent and 1.4 percent respectively in the year to March 1997.

Proximate influences on inflation

Tradeables sector inflation remains subdued ...

Inflation in the tradeable sector remains subdued, but still higher than might be expected given exchange rate movements. The price of tradeable goods and services declined by 0.4 percent in the March quarter.

... and non-tradeables inflation is declining.

In the non-tradeable sector of the economy, the slower growth in aggregate demand is reflected in lower inflation in non-tradeable prices. In the March 1997 quarter, the price of non-tradeable goods and services increased by 0.9 percent, giving a rate of inflation in non-tradeable prices of 3.7 percent in the year to March, compared with 4.3 percent in the year to December.

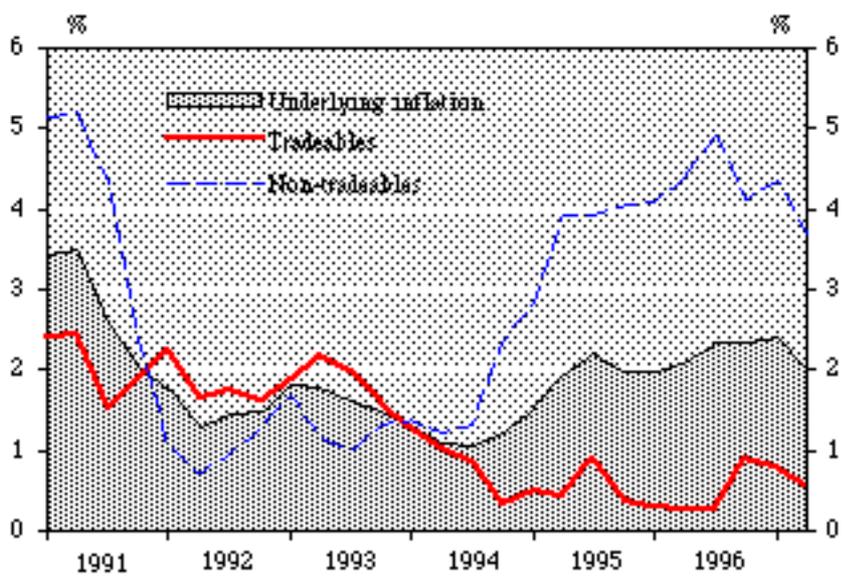
A number of factors are influencing non-tradeable prices:

- Construction-cost inflation has been significantly lower than house-price inflation since December. Although the relationship between the Valuation New Zealand index of existing house prices and construction costs is highly imprecise, our

analysis indicates that a sub-index using the prices of houses less than three years of age helps predict construction costs. Because of this new analysis, the recent trend in construction costs, and information from our business contacts, we have revised down our estimates of increases in construction costs in the June and September quarters.

- Wage pressures have begun to ease, with growth in private sector hourly earnings at 3.6 percent in the year to March 1997, down slightly from a high of 3.8 percent in the year to December 1996.
- Short-term inflation expectations have also eased in recent months, with the Reserve Bank survey of expectations conducted in April showing headline inflation is expected to be 0.3 percent in the June quarter (down from an expected 0.4 percent in the previous quarter) and 0.4 percent in the September 1997 quarter. Underlying inflation for one year ahead is expected to be 1.5 percent by March 1998, down from 1.7 percent in the February survey.
- Our estimate of the output gap turns slightly negative in the June 1997 quarter and is expected to remain negative until June 1998.

Figure 8
Underlying inflation: tradeable & non-tradeable components
(annual percentage change)



Note: 'Tradeables' refers to goods and services whose prices are primarily determined in international markets, while 'non-tradeables' refers to goods and services whose prices are primarily determined in domestic markets.

Box 2: Headline and underlying inflation

The All Groups 'headline' CPI fell by 0.3 percent in the March 1997 quarter. As a result, the headline inflation rate fell to 1.8 percent in the year to March, compared with 2.6 percent in the year to December. The table below accounts for the difference between headline and underlying inflation in both the March quarter and March year. As the table shows, changes in credit costs account for the entire difference between the two measures. Although government charges and oil prices did change, the changes were not large enough to pass the threshold for exclusion.

Reconciliation of underlying and headline CPI inflation to March 1997 (in percent)

	March quarter	Year to March
Underlying inflation	0.2	2.0
Plus/minus the impact of interest rates	-0.5	-0.2
Plus/minus the impact of government charges	0.0	0.0
Plus/minus the impact of oil price movements	0.0	0.0
Headline CPI	-0.3	1.8

Short-term outlook for inflation

Underlying inflation is estimated to be ...

The Bank's estimates for inflation in the current and subsequent quarter are determined by analysing component and sub-group prices of the goods and services included in the CPI. This approach takes into account recent trends, established seasonal patterns, leading indicators, and other specific information gathered from a wide variety of sources.

... 1.5 percent in the years to June and September.

Underlying inflation is projected at 0.3 percent in both the June and September quarters. These estimates imply underlying inflation of 1.5 percent in the years to June and September, respectively. The estimate for the June quarter is 0.2 percentage points lower than that published in the March *Economic Projections*, reflecting two main factors. They are first, significantly weaker construction costs, as discussed above, and second, a further fall in new and used car prices over the June quarter, though by less than the full amount reported by our business contacts (since we doubt whether the data collection process will have picked up the full extent of these price reductions).

Medium-term outlook for inflation

Inflation is projected to fall further ...

Underlying inflation is projected to fall significantly over the first two years of the projection, but to begin climbing again in the final year. Specifically, underlying inflation is shown falling to 1 percent in the year to March 1998, remaining close to 1 percent throughout the year to March 1999, and then increasing to around 1.7 percent by the year to March 2000.

... in response to past exchange rate rises.

The fall in underlying inflation in the first year of the projection is due primarily to falling New Zealand dollar prices of imports because of past exchange rate appreciation. Consistent with the March *Economic Projections*, we have maintained the assumption of longer lags over which import price reductions are assumed to pass through to consumer prices. The Bank's assessment that a small degree of spare capacity will build up over the first year of the projection also provides some additional downward pressure on underlying inflation over the first two years of the projections.

Inflationary pressures re-emerge in late 1998.

As the effects of past exchange rate appreciation wear off, inflation is projected to rise somewhat. More importantly however, the boost to aggregate demand from the forthcoming fiscal stimulus implies a re-emergence of excess demand in late 1998. Despite monetary tightening, a positive output gap opens up over the last 18 months of the projection period and results in renewed upward pressures on prices, wages and profit margins.

We project annual headline inflation to track below underlying inflation until the end of 1998. This reflects the impact of falls in

mortgage interest rates in response to the initial easing in monetary conditions. Although some prices are increasing due to the effects of Government policy (for example, medical insurance premiums) and some commodity prices have increased in world price terms, the Bank does not expect they will reach the threshold to qualify for exclusion from underlying inflation.

The outlook for monetary conditions

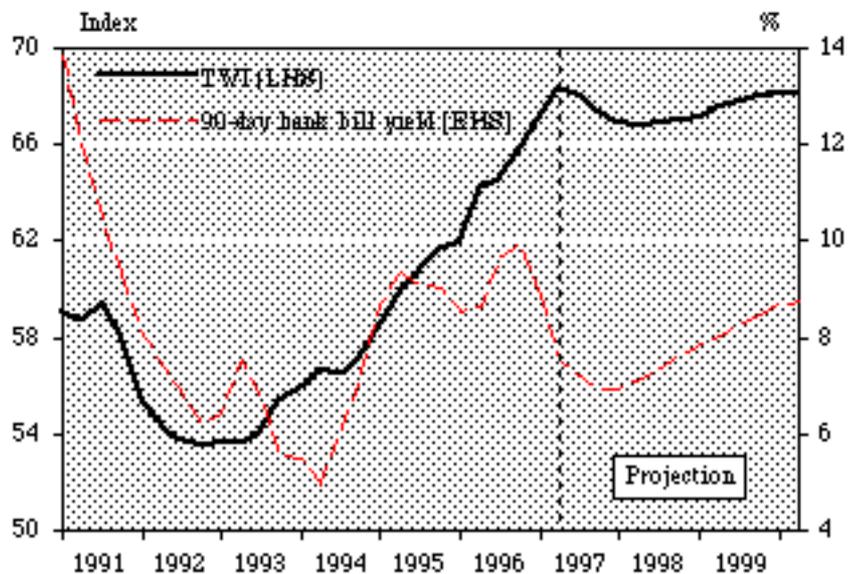
Desired monetary conditions are little changed over the medium term ...

The index of real monetary conditions shows that monetary conditions remain virtually unchanged over 1998 to 2000 (see Figure 2 in Section I). However, underlying this stability are offsetting changes in interest rates and exchange rates. The real exchange rate depreciates around 3.5 percent over the projection period as a result of inflation in New Zealand being less than in our key trading partners, while the real interest rate increases by around 150 basis points by the year 2000. (See Box 3: ‘How to construct and interpret MCI indices’.)

... following an easing this year.

The overall level of nominal monetary conditions follows a path similar to the inflation profile, but brought forward by a year or more. The new level of desired monetary conditions announced in this *Statement* is equivalent to 825 points on the nominal MCI index, down from the 925 level of desired conditions applying since March. Our estimate of average market conditions for the June quarter is slightly less than 900, around 75 points higher than the new desired level of 825 for the September quarter.

Figure 9
Nominal 90-day interest rate and nominal exchange rate



4. Uncertainties in the projection

Uncertainties surround ...

The projections discussed in this *Statement* are the Bank's estimate of the most likely outlook for economic activity and inflation given the assumptions made. The projections are subject to a number of uncertainties, however. The Bank's judgement is that the medium-term balance of risk for inflation is broadly neutral.

Uncertainties related to fiscal policy

... the fiscal policy outlook ...

Our assumptions for fiscal policy are consistent with the Government's 1997 *Budget*. On current assumptions, the fiscal expansion is sufficient to generate a significant positive output gap in the second half of the projection period. As inflation tends to increase more readily than it decreases, additional fiscal pressures beyond those assumed would have a more than proportionate impact on inflation.

The impact of a compulsory superannuation scheme would depend on how households changed their savings behaviour, which in turn would depend on the design of the scheme. The less that people believed that compulsory savings were a substitute for their own savings, the less they would seek to offset its impact. The more that domestic savings rose, the easier monetary conditions could then be relative to those assumed in this *Statement*.

Uncertainties also arise if a compulsory superannuation scheme is not implemented. In particular, the Government has stated its intention to further reduce tax rates (beginning in the fiscal year 1999/2000) if a superannuation scheme is implemented. However, the Government has not signalled whether it would proceed with the tax cuts in the absence of a superannuation scheme.

Uncertainties related to the mix of monetary conditions

... the mix of monetary conditions, ...

The mix of monetary conditions may differ substantially from that projected in this *Statement*. Even if the overall level of monetary conditions evolves as projected, the composition as between interest rates and exchange rates could vary substantially compared to the particular combination employed in these projections.

A larger exchange rate depreciation for a given loosening in overall monetary conditions would cause CPI inflation to increase more quickly until the direct price effects have passed through. The Bank's initial assessment of the likely impact of a stronger-than-projected exchange rate depreciation is that there is little risk that the target range would be breached provided overall monetary conditions remained appropriate. A larger exchange rate appreciation for a given tightening of conditions would reduce CPI inflation temporarily relative to the projection presented in this *Statement*.

Other uncertainties

... estimates of sustainable growth, ...

- If the rate of sustainable growth is lower than we have assumed, then excess demand pressures may increase more rapidly than projected, resulting in higher inflation. Conversely, if sustainable growth is higher than assumed, then inflation pressures may be lower.

... and the exchange rate passthrough.

- Uncertainties continue to surround the magnitude of the exchange rate passthrough. As stated in the previous section, we have taken a cautious approach and maintained the longer lag in the passthrough as assumed in the March *Economic Projections*.
- Over the short term, there is some down-side risk in our inflation forecast. This is principally due to the possibility that car prices, as recorded by Statistics New Zealand, may fall by more than we have allowed for in our projections.
- As with our March *Economic Projections*, we continue to take a cautious view on house prices and CPI construction costs. There is a risk that significant increases in house prices may occur as the economy regains momentum. In addition, the disparity between house prices and construction costs evident over the past nine months may begin to unwind, with either inflation in house prices falling in line with construction-cost inflation or construction costs increasing toward house prices. The former would be benign for inflation, but the latter would lead to higher inflation than projected in this *Statement*.

Box 3: How to construct and interpret MCI indices

In the December 1996 *Monetary Policy Statement*, the Bank introduced the *monetary conditions indicator* (MCI) as an approximate measure of the state of overall monetary conditions. In this *Statement*, the Bank is publishing two measures of the MCI - one in real terms and one in nominal terms - to aid comparisons of how monetary conditions have changed historically and how they may change over the projection period. This box explains how the MCI indices are constructed and how to interpret them.

Real and nominal MCI indices

The MCI is a way of capturing in a single number the approximate influence that both interest rates and exchange rates have on spending in an open economy like in New Zealand's (more detailed discussions are available in Box 2 of the December *Statement* and in the September 1996 issue of the Reserve Bank *Bulletin*).

The key feature of the monetary conditions indicator is that it relates to the effects of *real* interest rates and *real* exchange rates on *real* spending in the economy (by real, we mean inflation-adjusted) and thereby on inflation pressures. The likely effect of changes in interest rates and exchange rates on the real economy is appropriately measured by a real, rather than a nominal, MCI index. This is particularly true over extended periods, such as the three-year period discussed in the Bank's projections.

The Bank has constructed both nominal and real MCI indices so that short-term and longer-term issues may both be examined. Over short periods of time, perhaps as long as several quarters, a nominal MCI provides a reasonable approximation to a real MCI since inflation differentials (between NZ and foreign economies) and inflation expectations change only gradually. The key advantage of a nominal MCI is that it can be calculated at whatever frequency is desired (daily, for example) as an approximation to developments in the real MCI. The construction of a real MCI is restricted to the frequency of published inflation data in New Zealand.

Construction of the MCI indices

Both the nominal and real indices have been constructed using an arbitrary fixed base of 1000 for the December 1996 quarter. The base of 1000 represents the average level of conditions for that quarter, corresponding to an average nominal 90-day interest rate of 8.9 percent and an average TWI of 67.1.

The nominal MCI is defined as:

$$\text{nominal MCI} = \{ (90\text{-day rate} - 8.9) + (1/2) * [\log_n(\text{TWI}) - \log_n(67.1)] * 100 \} * 100 + 1000$$

The first part of the equation is the difference in the 90-day rate from the chosen base level. The second part is the percentage change in the TWI from the chosen base. The weight of 1/2 on the TWI reflects the estimated 2:1 relative impact of interest rates and exchange rates on economic activity.

Similarly, the real MCI is defined as:

$$\text{real MCI} = \{ (\text{real 90-day rate} - 6.5) + (1/2) * [\log_n(\text{real TWI}) - \log_n(1)] * 100 \} * 100 + 1000.$$

The calculation of the real MCI uses the real 90-day rate and real TWI, with base levels of 6.5 and 1, respectively. The real 90-day rate is calculated as the nominal 90-day rate less the annual (four-quarter) inflation rate in the CPI excluding Credit Services. The base level for the real 90-day rate is 6.5 percent, calculated as the nominal 90-day rate (8.9 percent) minus the inflation rate of 2.4 percent in the year to December 1996. The real exchange rate is calculated as the TWI multiplied by New Zealand's GDP deflator (interpolated from annual data) and divided by the trade-weighted average of GDP deflators of our main trading partners. The base level of the real exchange rate is normalised to 1 for the December 1996 quarter.

Interpreting the monetary conditions indices

A change in the nominal MCI relates one-to-one to changes in monetary conditions in interest rate terms and two-to-one in exchange rate terms. For example, beginning at 1000:

- a reduction in 90-day rates of 100 basis points, but no change in the TWI, reduces the nominal MCI by 100 points to 900. A further fall in 90-day rates of 100 basis points with the TWI unchanged reduces the index to 800.
- a fall (rise) in 90-day rates of 100 basis points *and* an appreciation (depreciation) of the TWI of 2 percent, leaves the MCI unchanged.

Figure 2 (in Section I) shows the nominal and real MCIs over 1991 - 2000. Table 1 provides index values in year-average terms for both indices, while Table 2 provides the nominal MCI in quarterly average terms for the first four quarters of the projection.

Interpretation of the MCIs should take account of the following points:

- The level of the two indices has no particular interpretation as the base level has been chosen arbitrarily. For example, neither the value zero nor 1000 are indicative of 'neutral' monetary conditions. Monetary conditions are 'neutral' when they are consistent with economic activity equal to the economy's sustainable capacity to meet demand without causing inflation to increase or decrease. New inflationary pressures - either upward or downward - will often appear so that only rarely would monetary conditions be considered neutral.
- Only the real MCI can be compared over periods longer than a few quarters. Over longer periods, the nominal MCI may be biased significantly by the impact of inflation. For example, if New Zealand's inflation rate is above that of its trading partners, the nominal MCI will tend to drift down, as occurred over most of the 1980s. The converse applies when New Zealand's inflation rate is below that of its trading partners, as has been the case since the early 1990s.
- The MCI is only a summary measure of two key channels of monetary policy, via interest rates and exchange rates. In practice, the actual effect of any given movement in interest rates and exchange rates will differ according to what caused them to move, the extent of excess demand or supply in the economy, and the extent of any existing sectoral imbalances. Furthermore, the MCI does not include one-off direct price effects arising from movements in nominal

interest rates and nominal exchange rates. Both of these effects influence the CPI inflation rate only temporarily (and are taken account of in the full projections).

- The indices constructed above are not unique and alternative formulations may lead to different MCI profiles. First, the 2:1 ratio between the impact of interest rate and exchange rate movements is a rough approximation based on analysis at the Bank. Second, the profile of the real MCI over any short period depends on the deflators used to estimate real interest rates and real exchange rates. For example, a derivation using the real exchange rate defined from consumer price indices (rather than from GDP deflators) would lead to a somewhat different profile for the real MCI from that shown in Figure 2.

IV. Financial market developments

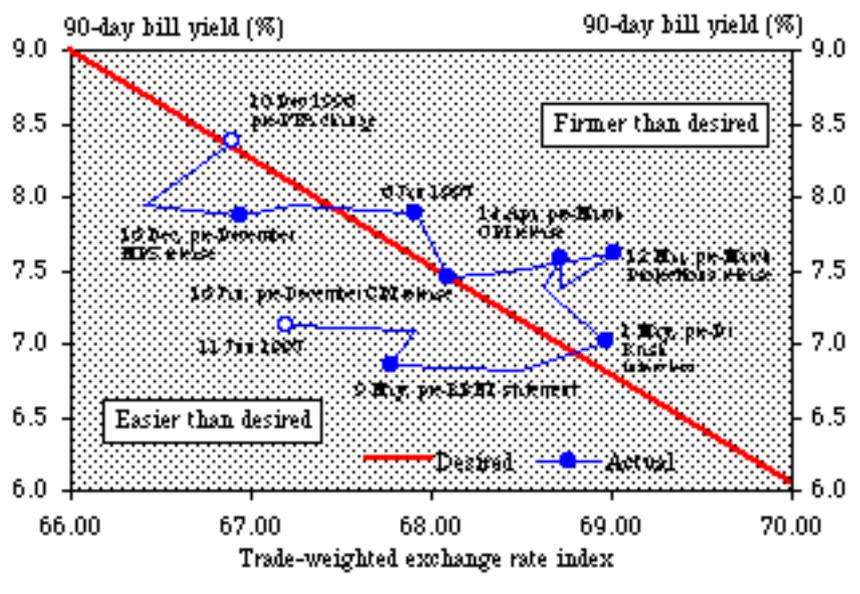
1. Monetary conditions and expectations about the future stance of monetary policy

Desired monetary conditions were eased in December.

At the time of the release of the December 1996 *Monetary Policy Statement*, the Bank sanctioned an easing in monetary conditions, as it had become apparent that inflation pressures were likely to abate over the following year. To some extent this accommodated the market-led easing in actual monetary conditions that had already taken place, partly in anticipation of the Bank's likely stance on releasing the December *Monetary Policy Statement*, and partly in response to political developments.

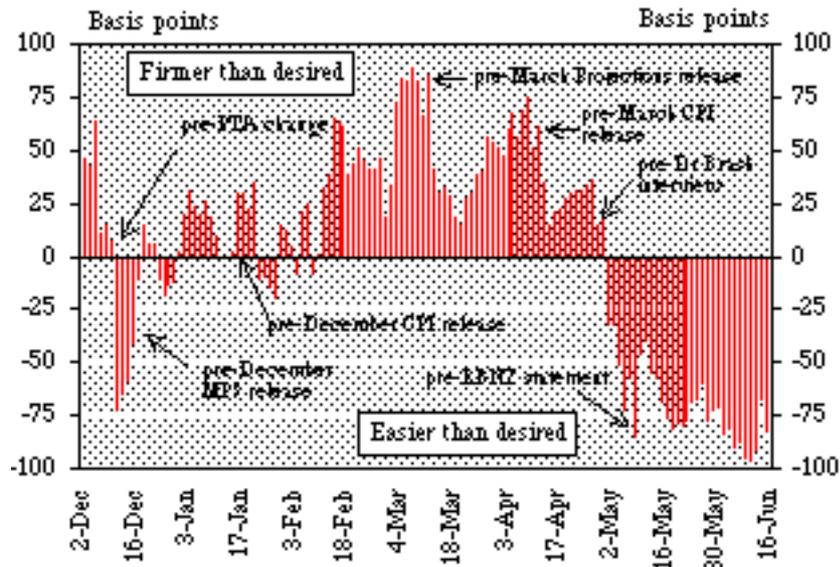
However, the Bank retained a moderately firm stance of policy, and desired monetary conditions were left essentially unchanged from December to June. Over the same period, actual monetary conditions changed considerably, from firmer than desired, to easier than desired. The evolution of interest rates and the exchange rate is shown in Figure 10, while the path of actual monetary conditions relative to the Bank's desired monetary conditions is shown in Figure 11.

Figure 10
Evolution of monetary conditions



Note: TWI / 90-day rate combinations are shown only for selected dates. The dates for unlabelled points are one trading day after the dates for labelled points. The diagonal solid line represents the different combinations of the TWI and 90-day rates that would be consistent with a TWI of 68 and a 90-day rate of 7.5 percent - the values used to indicate desired monetary conditions in the March 1997 *Economic Projections*.

Figure 11
Actual monetary conditions relative to desired monetary conditions



Note: The bars represent the distance between actual monetary conditions and desired monetary conditions as indicated in the March 1997 *Economic Projections*. 100 basis points on MCI = 1 percentage point on 90-day interest rates.

Actual monetary conditions firmed up to April ...

The tendency for monetary conditions to firm over the period from December to mid-April mainly reflected market expectations of future inflation pressures over and above those factored into the Bank's projections. Even when the Bank maintained essentially unchanged desired monetary conditions in the March *Economic Projections* - and signalled a preference for actual conditions to ease back - actual monetary conditions eased only temporarily.

... until market sentiment changed ...

Market sentiment on the future stance of monetary policy shifted noticeably, however, following a lower-than-expected outturn for the March quarter CPI, and a sequence of other economic data suggesting a period of weakening inflation pressures. By early May, the market generally expected the June *Monetary Policy Statement* to sanction a further easing in monetary conditions, and interpreted comments from a published interview with Dr Brash in that light.

... leading to an easing in actual monetary conditions.

The turnaround in actual monetary conditions was substantial: over a month, the MCI fell approximately 150 basis points. The extent to which conditions had dropped below desired led the Bank to issue a statement on 12 May that reaffirmed desired monetary conditions as contained in the March *Economic Projections* and expressed a preference for actual conditions to firm towards that level.

Box 4: Monetary policy signalling and implementation

In the December *Monetary Policy Statement*, the Bank indicated that it was reviewing its techniques for implementing and signalling monetary policy. A detailed discussion document was released in March, canvassing the issues. An overnight cash interest rate target was proposed as the Bank's main operating lever, to replace the existing regime based on targeting an announced level of settlement cash. It was noted at the time that changing the operating system would make sense only if the apparent advantages outweighed any risks. In the December *Monetary Policy Statement*, the Bank had already begun formally to use a composite measure of monetary conditions (MCI), designed to reduce further some of the signalling problems which had prompted the review in the first place.

Two major factors influenced the final decision not to proceed with any further changes to the implementation and/or signalling systems at this stage.

First, there was some risk that conducting monetary policy operations through a cash rate mechanism could undermine the public's understanding that monetary policy affects inflation through both interest rates and the exchange rate, even though the signalling of our policy intentions and discussion of policy intentions would still have been conducted in terms of the MCI. It was suggested that an undesirable degree of attention could fall on the interest rate component of monetary conditions if our proposals had been implemented, with the risk of confusion regarding the signalling of our intentions.

Second, the proposed system would have had the Bank formally considering the setting of the target cash rate each week. Even if the cash rate target was not actually adjusted very frequently, frequent formal review of an instrument like this could have risked giving the Bank and the operating procedures more prominence than is consistent with the medium-term focus of monetary policy. Although a distinction between relatively unimportant operational actions and more fundamental policy matters could have been established, we were advised that such a distinction could in fact be difficult to sustain. We were unwilling to take the risk.

tively known as Eurobonds), as indicated in Figure 12. Capital inflows associated with this retail investment appear to have helped underpin the NZ dollar, despite the substantial decline in New Zealand's short-term interest rates.

... but the future impact of current capital flows is uncertain.

Eurobonds issued in 1996 will begin to mature in the second half of this year, as shown in Figure 12. The overall impact on the exchange rate and the mix of monetary conditions as Eurobonds mature is uncertain. Some investors may reinvest their NZ dollar principal depending on how New Zealand interest rates compare to interest rates in alternative currencies at the time of maturity. Given that the maturity profile of Eurobonds is known by the market, at least some of any expected impact on the exchange rate should already have been incorporated in market prices. Moreover, in a number of cases, a substantial proportion of the issue is likely to have been bought back by the issuer before maturity.

Appendix 1: Chronology

Key events of relevance to monetary policy and inflation since the last *Statement* was finalised are listed.

1996

- 10 December: Reserve Bank Governor Don Brash signed a new *Policy Targets Agreement* with Minister of Finance Bill Birch, widening the inflation target range to 0 to 3 percent (from 0 to 2 percent previously).
- 17 December: The Reserve Bank released its fifteenth *Monetary Policy Statement*. The news release accompanying the *Statement* is reproduced in Appendix 2.

1997

- 17 January: The December 1996 quarter CPI was released. Headline inflation for the year to December 1996 was 2.6 percent. Underlying inflation was calculated to be 2.4 percent in the same period.
- 23 January: GDP production figures showed that the New Zealand economy had grown by 2.3 percent in the year to September 1996.
- 13 March: The Reserve Bank released its March *Economic Projections*. Underlying inflation was projected to be 1.5 and 0.8 percent in the years to December 1997 and 1998, respectively. The accompanying news release is reproduced in Appendix 2.
- 27 March: GDP production figures showed that the New Zealand economy had grown by 2.7 percent in the year to December 1996. Data revisions showed growth in the year to September 1996 of 2.5 percent.
- 15 April: The March quarter CPI was released. Headline inflation in the year to March 1997 was 1.8 percent. Underlying inflation was calculated to be 2.0 percent in the same period.
- 12 May: The Reserve Bank issued a statement on current monetary conditions. The statement is reproduced in Appendix 2.

Appendix 2: Reserve Bank statements on monetary policy

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

Inflation outlook has allowed conditions to ease

17 December 1996

“Overall monetary conditions have eased substantially over the last couple of months and after this easing underlying inflation is expected to remain within the target range,” said Reserve Bank Governor Don Brash today at the release of the latest *Monetary Policy Statement*.

“As recently as mid-September, 90 day bank bill rates were just under 10 percent and the TWI was around its current level. By contrast, 90 day rates yesterday were under 8 percent.

“Economic data to hand as our projections were prepared have, in total, been broadly consistent with achieving the sort of fall in inflation portrayed in our June *Monetary Policy Statement* and September *Economic Projections*. In addition, the new, somewhat wider, inflation target range means that monetary conditions can be a little easier than might otherwise have been the case.

“Looking ahead, however, there are still considerable uncertainties facing us. Some recent indicators regarding activity in the housing market and import prices have been disquieting. It is also difficult at this stage to be certain about the impact of the additional fiscal stimulus envisaged in 1997/98 and 1998/99, and of measures such as the planned increase in the minimum wage. As a result, we still need to be cautious about the extent and speed of any easing.

“Given all these uncertainties, we would have preferred to see conditions move rather more moderately than has been the case over the last week or so - perhaps towards a combination of 90 day rates at 8.5 percent and the TWI at 66.5, or other combinations consistent with that overall level of conditions. Having said that”, Dr Brash stressed, “the Bank can accept monetary conditions which are either a little firmer than those represented by that level, or a little easier as at present.

“I reiterate my absolute commitment to continue operating monetary policy towards the goal of maintaining price stability”, Dr Brash concluded. “Maintaining price stability is - as the new *Policy Targets Agreement* affirms - clearly the best contribution the Bank can make to the prosperity of all New Zealanders.”

Notes for briefing journalists at the release of the December 1996 Monetary Policy Statement, 17 December 1996

Introduction

Good morning, and welcome to this briefing for the release of the Bank's 15th *Monetary Policy Statement*.

As you know, there have often been changes in the financial market environment between the time our *Monetary Policy Statements* are finalised and sent to the printer, and their subsequent release. On this occasion, the changes have been quite important and I therefore want to explain how I propose to handle the situation.

First, I will outline the analysis and conclusions contained in the *Monetary Policy Statement* itself.

Then I will discuss the implications for our inflation track of the announcements made by the new coalition Government last week.

Thirdly, I will talk briefly about the implications of some data which has come to hand since the *Monetary Policy Statement* was finalised.

And finally I will comment on what all that means for the desired level of monetary conditions.

The *Monetary Policy Statement*

First, the *Monetary Policy Statement* itself. This is rather longer than usual because we thought it important to outline the nature of the current economic cycle in New Zealand, to note some of its special features, and to note also that it is a cycle. The key points are made in pages 7 to 16, which note that, on top of a strong recovery from the 1990-92 recession, a strong net immigration flow and quite a sharp change in fiscal policy have added significantly to the strength of overall demand.

As usual, the *Monetary Policy Statement* sets out the various assumptions made in projecting inflation over the next two or three years and I won't repeat all of those assumptions. But let me just recall the key assumptions with respect to monetary and fiscal policy. These are that:

- 90-day interest rates remain at 9 percent throughout the forecast period;
- the exchange rate, measured by the Trade-Weighted Index (TWI), remains at 66.5; and
- the Government's fiscal stance remains consistent with that outlined in the *December Economic and Fiscal Update*, published by the Treasury on 2 December.

Let me stress again that these are purely technical assumptions, made for the purpose of the inflation projection. Nobody in this institution believes for a moment that all of those assumptions will hold true, or would have held true even if the previous Government had

been returned to power. I stress this because it never ceases to amaze me how many commentators express surprise that ‘the Reserve Bank expects interest rates and the exchange rate to remain unchanged for the next two or three years’. Of course we do not. But we make an *assumption* about monetary conditions to illustrate how inflation might evolve *if* those conditions were to prevail, so that we can form a judgement about how conditions need to change in order for inflation to move towards the centre of our inflation target.

On the basis of those assumptions, we projected that inflation as defined in the *Policy Targets Agreement* would reduce to 2.0 percent in the year to March 1997, to 0.5 percent in the year to March 1998, and to 0.2 percent in the year to March 1999.

It is important for what I am going to say in a moment that I draw attention to the fact that this very pleasing reduction in inflation is not a result of our projecting a substantial gap between the economy’s productive capacity and actual demand. We are projecting that, on the assumptions made, a small gap would emerge between productive capacity and demand towards the end of the forecast horizon, and that does, in the projection, contribute to downwards pressure on inflation.

But the main reasons for the sharp reduction in inflation which the *Monetary Policy Statement* projects are:

- a sharp slow-down in inflationary pressures in the housing market (in view of recent reductions in interest rates we are no longer projecting a fall in housing prices, but the projections do assume a period of stability in housing prices, followed by a very gradual increase in those prices);
- an actual fall in the New Zealand dollar prices of imports, a result both of a fall in the international prices of those imports and of the lagged effect of the strong rise in the New Zealand dollar over the last few years.

On the basis of this inflation projection, the *Monetary Policy Statement* notes that the Bank’s assessment is that a modest easing in the stance of policy is warranted’, but it also notes that ‘the signs of declining inflation pressures in the economy are still too tentative for the Bank to sanction a more substantial easing of conditions’. We noted various risks to the inflation projection, and in particular that, at time of writing, the new Government had not been formed, and as a result there was inevitably substantial uncertainty about the prospect for fiscal policy.

Implications of the Coalition Agreement

Since the *Monetary Policy Statement* went to press, of course, a new Government has been formed and the *Coalition Agreement* has been signed and published. That *Agreement* has a number of very important implications for monetary policy and some more minor ones. I will deal only with the three major ones.

Most obviously, the Coalition Agreement provides for the *Policy Targets Agreement* between the Minister of Finance and myself to be amended to provide that the inflation target be changed from 0 to 2 percent to 0 to 3 percent, and of course as you know this has already been done. By implication, this means a small change in the Bank’s ‘aiming point’. Whereas we were previously ‘aiming at’ 1 percent, we will now be ‘aiming at’

1.5 percent, though I put the words ‘aiming at’ in quotation marks to reflect the fact that the nature of monetary policy instruments does not permit ‘aiming’ with the same hope of precision as a marksman. What I mean is that the Bank can be expected to become increasingly uneasy the further that inflation is projected to move away from that mid-point, either above or below. Putting it in another way, we can be expected to become increasingly uneasy the closer inflation is projected to come to either the top of the target range or to its bottom. We will assuredly not be content with projecting inflation at or close to 3 percent.

On the face of it, this small increase in the mid-point of our inflation target leads to some easing in the level of desired monetary conditions, but offsetting this to some degree is the risk that the very fact of increasing the mid-point of the target may tend to increase the public’s inflationary expectations. Indeed, to the extent that many of the public regarded the last target as essentially requiring the Bank to ‘keep inflation below 2 percent’, the increase in the target’s ceiling from 2 percent to 3 percent may increase inflationary expectations not by 0.5 percent (being the increase in the mid-point) but by 1.0 percent (being the increase in the ceiling). To the extent that increased inflationary expectations lead to higher prices, higher wage settlements, increased borrowing demand, reduced saving, and so on, the new inflation target gives much less scope for an easing in conditions than might perhaps be assumed. For this reason, it will be important that, over the next few months in particular, the Bank does nothing which might encourage a ratcheting up of inflationary expectations.

Secondly, the *Coalition Agreement* sets out the fiscal policy of the new Government. This differs in some important respects from that outlined in the *December Economic and Fiscal Update*: as compared with the DEFU projections, government expenditure is projected to increase by \$1.2 billion in 1997/98 but be offset by the deferment of the previously scheduled tax reductions of \$1.0 billion, for a relatively modest additional stimulus to demand; in 1998/99, there is projected to be a small additional increase in expenditure but the reinstatement of the deferred tax reductions; with additional tax reductions tentatively scheduled for 1999/00.

This is a significantly more restrained fiscal stance than many in the market had expected might emerge from the coalition-building process, and this is undoubtedly a major reason for the sharp easing in monetary conditions which followed the announcement of the new fiscal policy. But it is important not to lose sight of the fact that it nevertheless represents a considerable *increase* in the extent of fiscal stimulus as compared to that embodied in the previous projection, particularly in 1998/99 and 1999/00. (For example, the DEFU envisaged a fiscal surplus of 5.5 percent of GDP in 1999/00; the *Coalition Agreement* proposes that that be reduced to 2.4 percent.)

One of the difficulties in trying to assess the implications of this new fiscal track for desired monetary conditions is that the *Coalition Agreement* also envisages a referendum being held on the question of whether to establish a compulsory superannuation scheme. If such a scheme were established as a result of the referendum, there would be a significant *offset* to the fiscal stimulus currently projected for the 1998/99 and 1999/00 years. (The extent of the offset would depend in part on the extent to which people reduced other forms of saving when obliged to contribute to the compulsory superannuation scheme.) And since the referendum is not scheduled to take place until the third quarter of 1997, we will not know whether or not the compulsory scheme will be going ahead until well within the time that the Bank should be adjusting policy to take account

of projected inflation in 1998/99. We have not yet determined how we will handle this matter, but clearly it is an important risk in the inflation projection.

Thirdly, the *Coalition Agreement* envisages an increase in the adult minimum wage on 1 March 1997, from the current \$6.375 per hour to \$7.00 per hour, an increase of almost 10 percent; an immediate review of the minimum wage rates for those under 20 years of age; and a subsequent decision on whether or not to increase the adult minimum wage further to \$7.50 per hour from 1 March 1998. It seems likely that these increases in minimum wages will add noticeably to unit labour costs, especially in labour-intensive industries, and will accordingly add to inflationary pressures. (Data from the Household Economic Survey conducted by Statistics New Zealand indicate that the increase in the adult minimum wage will affect directly about 5 percent of the employed adult labour force. In addition, this increase in the minimum wage could be expected to impact on other low-income workers if relativities are broadly maintained, so the total effect on unit labour costs could well be material.)

The implications of recent data

As indicated in the *Monetary Policy Statement*, the text was finalised on 5 December and the inflation projection was finalised on 26 November. Since that time, several pieces of data have come to hand.

Some of this data is fully consistent with our projections. For example, labour cost data for the September quarter, which became available on 13 December, is closely in line with our expectations, and the same is true of the food price data for November, which became available on 12 December.

Data on monetary and credit aggregates, released on 12 December, was less reassuring. The resident measure of broad money, M3R, grew by a very strong 3.3 percent, seasonally adjusted, in the month of October, bringing the annual percentage change to 15.4 percent; while the resident measure of private sector credit, PSCR, increased by a seasonally adjusted 1.1 percent for the month, the strongest monthly increase since May. What is disquieting is that these strong increases occurred largely *before* the recent reductions in interest rates, and have been accompanied by considerable anecdotal evidence that prices are again beginning to rise in the housing market. This is particularly significant given the fact that the inflation projection contained in the *Monetary Policy Statement* assumes that housing prices will be stable over the next year or so, and then rise only gradually thereafter.

Perhaps more disquieting still is the information released by Statistics New Zealand last Wednesday on the New Zealand dollar prices of imports in the September quarter. This data showed that these prices fell by 0.9 percent during that quarter, a markedly smaller fall than the 3.9 percent which we had assumed on the basis of historical relationships when preparing the projection in the *Monetary Policy Statement*. This forecast error follows a smaller, but still significant, error in forecasting import prices in the June quarter. If the historical relationships on which we base our forecast of New Zealand dollar prices of imports have broken down, there is a possibility that the disinflation which we assumed in making our inflation projection will turn out to be too optimistic, and that as a result aggregate inflation will turn out to be somewhat higher than projected in the *Monetary Policy Statement*.

Conclusion

What does all this mean for the desired level of monetary conditions? On the one hand, there is a somewhat wider inflation target range, with a somewhat higher mid-point, and this would, in itself, suggest that monetary conditions can be slightly easier than might otherwise be the case. In addition, the projection in the *Monetary Policy Statement* shows inflation falling well towards the bottom of the target range. On the other hand, it is now clear that fiscal policy will be somewhat more expansionary in 1997/98 than assumed in the *MPS*; there is considerable uncertainty (because of the possibility of the compulsory savings scheme) about the extent of additional fiscal stimulus in 1998/99 and 1999/00; there is a substantial increase in the adult minimum wage in 1997, with the possibility of a further significant increase in 1998; and there are some disquieting new data about both monetary and credit aggregates and the New Zealand dollar prices of imports.

On balance, it is the Bank's judgment that some easing in monetary conditions as compared with those assumed in the *Monetary Policy Statement* is indeed appropriate.

But it is also our judgement that the initial easing in conditions which occurred in reaction to last week's developments was somewhat excessive. As one market commentator observed, at those levels overall monetary conditions in New Zealand had eased as much in two weeks as monetary conditions had eased over six months in Australia. Certainly 90 day rates have fallen very strongly over the last few months, from 9.9 percent in mid-September to under 8 percent in mid-December.

Given all the uncertainties, we would have preferred to see conditions move rather more moderately compared to those assumed in the *Statement* - perhaps a combination of 90 day rates at 8.5 percent and the TWI at 66.5, or other combinations consistent with that overall level of conditions (such as 90 day rates of 8.2 percent and a TWI of 66.9, or 90 day rates of 8.8 percent and a TWI of 66.1).

Having said that, and also in recognition of the uncertainties, the Bank can accept monetary conditions which are either a little firmer than those represented by that level, or a little easier, as over the last few days.

Three footnotes

There are three additional points on which I should perhaps make a brief comment.

The first relates to the manner in which the Bank signals its views about monetary conditions. As I mentioned in a speech last month, we have for some time been looking at the question of whether we need to modify the way in which we implement policy. As an article in the December issue of the Bank's *Bulletin* makes clear, we have been well satisfied with our present approach to date, but it does suffer from the difficulty that, while we can easily signal when we believe that conditions are too tight, or conversely too easy, it is not well-suited to signalling the *extent* to which we believe conditions have become inappropriate. For this, a more conventional approach may be needed. In the *Monetary Policy Statement*, we have gone some distance in explaining to the market how we see the trade-off between interest rates and the exchange rate, in terms of their medium-term effects on inflationary pressures, and have also spelt out that that trade-off is not unchanging. Today, I am being more specific than in the past about our present

view about the precise *location* of that trade-off line. Within the next two or three months, we propose to release a discussion paper setting out some of the pros and cons of alternative signalling techniques.

The second point relates to a point I have made often before, and that is that while the Bank can influence the overall *level* of monetary conditions, tightening or easing as the inflation outlook requires, it does not have the ability to control the *mix* of conditions. For example, while the Bank can ease monetary policy, it can not determine whether that easing takes the form of a reduction in interest rates, or of a reduction in the exchange rate, or of some combination of both. If anybody had had any doubt about this, recent experience in both Australia and New Zealand, where interest rates have fallen significantly with little or no sustained downward movement in the exchange rate, should have dispelled that doubt. This is not at all a comfortable position to be in: at the moment, it is our judgement that a combination of rather lower exchange rate and rather higher interest rates would be a better way of curbing inflationary pressures than the combination we now have. We have even given careful consideration to whether direct foreign exchange market intervention might assist in producing a better mix of conditions. But at least to this point we have not been persuaded (on the basis of much international experience) that such intervention would have any significant, or lasting, effect.

Finally, you will have noticed that Clause 1 of the *Policy Targets Agreement*, signed last Tuesday evening, makes it clear that the Bank is required to maintain ‘a stable general level of prices, so that monetary policy can make its maximum contribution to sustainable economic growth, employment and development opportunities within the New Zealand economy’. Some people have expressed surprise that I was willing to sign a *PTA* which explicitly refers to growth and employment. On the contrary, I welcome the fact that the *PTA* makes explicit what was previously only implicit, namely that price stability is valuable not only for its own sake but also for the contribution that it makes to growth and employment. Too often people assume that there has to be some kind of trade-off between inflation on the one hand and growth and employment on the other. On the contrary: by protecting the purchasing power of the nation’s money, monetary policy promotes the creation of wealth and of jobs. I am determined that we in the Reserve Bank of New Zealand will do that to the very best of our ability.

Reserve Bank not going soft on inflation

23 January 1997

Reserve Bank Governor Don Brash today warned that the Reserve Bank is not going soft on inflation, despite the recent setting of a wider 0 to 3 percent annual underlying inflation target.

That’s come in a speech today to the Canterbury Employers’ Chamber of Commerce.

Dr Brash told the gathering, “It is crucially important that nobody misunderstand what the Reserve Bank is doing. Let me be absolutely clear. The Reserve Bank has not gone soft on inflation. We will not be targeting an inflation rate of 3 percent, or even an inflation rate close to 3 percent.

“The Reserve Bank will be striving to keep inflation well inside the 0 to 3 percent range, and we best do that by trying to have inflation as close to the middle part of the range as possible.

“That does not mean, of course, that we will always hit the target, anymore than we always hit 0 to 2 percent. But it does mean that we will be constantly implementing monetary policy with the intention of having inflation as defined around the middle part of the target.

“If we do this, the number of occasions on which we miss the target should be minimised. Indeed, given the wider target range, there should be fewer breaches than in the past,” Dr Brash concluded.

Reserve Bank releases technical consultative document

7 March 1997

As foreshadowed late last year, the Reserve Bank today released a consultative document outlining the preliminary results of a review of technical issues associated with monetary policy implementation and signalling.

Chief Manager of the Bank’s Financial Markets Department, David Archer, said today that the review, titled *Monetary Policy Implementation and Signalling*, had been undertaken to ensure that the Reserve Bank uses the best possible procedures to implement monetary policy.

The paper outlines a number of possible refinements to the current operating system by which monetary policy is put into effect. These changes could reduce the cost and administrative complexity of the current system. The review also assesses the merits of shifting to an overnight cash rate, as the key operating lever for adjusting monetary conditions. Nothing in the document affects either the 0 to 3 percent inflation target itself, or how the Reserve Bank assesses what monetary conditions or the stance of monetary policy itself should be.

Mr Archer stressed that the document has been issued to elicit comment on these technical issues from interested and informed parties.

“No final decisions on the nature or extent of any changes will be taken until we have been able to absorb and assess the submissions we receive in response to today’s release,” Mr Archer concluded.

Scope for current conditions to ease somewhat

13 March 1997

Speaking at the release of the Bank’s latest *Economic Projections*, Reserve Bank Governor Don Brash said that the monetary conditions the Bank is seeking have not changed since December.

“However, since December, actual monetary conditions have been firmer than the Bank has wanted. In recent weeks, conditions have tightened further and have become inappropriately firm. We will be looking to see conditions ease towards those we are seeking.

“The projections show the inflation rate falling over the coming 12-18 months, while economic growth is expected to increase. There are clear risks that inflation will remain persistently high in some areas (particularly housing), and the impact of the high exchange rate on prices has been unexpectedly weak to date.

“Together, these factors mean that a cautious approach to determining the stance of monetary policy is appropriate until we can be confident that, after an easing, inflation would still turn down towards the middle of the 0 to 3 percent target range in a clear and sustained manner.

“Accordingly, monetary policy will continue to aim for an overall level of monetary conditions effectively unchanged from that we have sought since the December *Monetary Policy Statement*; that is, combinations of conditions consistent with a TWI of 68 and 90-day bill rates of 7.5 percent.

“Looking further ahead, the tax and government spending policies already announced contribute importantly to the projected rise in inflation in late 1998 and 1999. The Government will need to be mindful of these inflationary risks in setting fiscal policy, particularly if there is no compulsory savings scheme to offset the impact of tax cuts currently planned for next year.

“Maintaining price stability is clearly the best contribution monetary policy can make to New Zealand’s longer-term economic prosperity. The Bank’s responsibility and commitment is to conduct monetary policy with that goal constantly in view”, Dr Brash concluded.

Monetary conditions

12 May 1997

Acting Chief Manager of the Reserve Bank’s Financial Markets Department, Michael Reddell, said today that overall monetary conditions appeared to be settling at levels somewhat too low to be consistent with the intended stance of monetary policy.

“Our desired stance of policy was enunciated at the time of the Bank’s March *Economic Projections*, and reaffirmed by the Governor in his comments at the Finance and Expenditure select committee last Wednesday. To be consistent with this stance, we would prefer to see conditions firm somewhat, to levels rather closer to the announced desired conditions.”

Reserve Bank rejects flip-flop charge

14 May 1997

In response to suggestions that the Reserve Bank has recently flip-flopped on monetary policy, the Reserve Bank today reaffirmed that the stance of its monetary policy has been unchanged since December.

Reserve Bank Governor Don Brash said, “A number of critical comments have been made in response to the Bank’s Monday statement. I urge a careful checking of the record. There has been no flip-flop.

“The Reserve Bank has not changed its view of desired monetary conditions since the release of its *Projections* back in March, which merely confirmed the stance announced when our December *Monetary Policy Statement* was released.

“Recent events began when monetary conditions eased somewhat below levels desired by the Reserve Bank, in response to a statement of the obvious by me (that all indicators are relevant and would be considered in our next projections) in an interview with AP Dow Jones on 1 May.

“On 7 May I advised Parliament’s Finance and Expenditure Select Committee that the Reserve Bank’s view of desired monetary conditions had not changed.

“However over the ten days leading up to Monday monetary conditions eased *substantially* by the equivalent of more than 100 basis points in interest rate terms, with quite a sharp fall in the exchange rate and no rise in interest rates. Only at that point did we indicate that conditions had moved further away from desired conditions than we felt appropriate, pending completion of our next projections.

“Our view of desired conditions has not changed since December. We accept that actual conditions will fluctuate, and we have only acted to limit the easing when we judged that actual conditions had eased substantially and seemed to be settling too far from desired conditions,” Dr Brash concluded.

No change to monetary policy implementation technique

5 June 1997

Governor Don Brash today announced that the Reserve Bank will not be making any substantive changes to the way it implements monetary policy. Possible changes had been canvassed in a consultative paper released in March

After reviewing the submissions and in the light of consultations, the Bank has at this stage decided not to proceed with the proposals contained in the consultative paper.

Dr Brash added that the Bank’s Financial Markets Department would hold a briefing for interested parties at 4pm 18 June 1997, at which the thinking behind this decision would be explained and discussed.

Information note to all market analysts

June 5 1997

Background to the next MPS

The Reserve Bank advises market analysts that parts of the next *Monetary Policy Statement*, to be published on 27 June 1997, will differ from earlier documents. Within the projections we will no longer assume nominal interest rates and the exchange rate to be constant. Instead, the *Statement* will show inflation returning to near the middle of the 0 to 3 percent target range and a path for how monetary conditions *may* need to evolve to achieve this.

The changed approach arises because for the first time we are using our new model of the New Zealand economy to produce the projections underlying the *Statement*. Full details of the new model (called the *Forecasting and Policy System*, FPS) will be published at a workshop to be held at the Bank on 4 and 5 August.

It is important to note that this change in presentation in the *Statement* does not inherently provide new information about our judgments of the extent of inflation pressures. It simply makes the potential implications for future monetary conditions more explicit.

As with the December 1996 *Monetary Policy Statement*, the Bank will continue to use a monetary conditions index as a guide for signalling its intentions, with the same 2:1 ratio (ie, between projections we assume that a 100 basis point rise (fall) in the 90 day rate has approximately the same impact on aggregate demand as a 2 percent rise (fall) in the TWI).