REVIEW OF MONETARY CONDITIONS AND POLICY

In this article, Michael Reddell and Craig Heppleston review developments in monetary conditions and policy over the period to mid-February 1988.

Introduction

The inter-relationship between the markets in the financial and real sectors of the economy was very clearly illustrated in the final quarter of 1987, following the sharp slump in share prices in both overseas and New Zealand markets. The effects of the crash pervaded all sectors of the economy and became a major factor in the interpretation of economic and monetary conditions.

This article principally reviews developments in the financial sector and monetary policy from the commencement of the sharp downturn in the sharemarket to mid-February. Over that period the inflation outlook appears to have improved and, combined with a reduction in credit demand, this improvement has contributed to a considerable easing in wholesale interest rates. By the end of the review period, the reduction in wholesale rates was being reflected in substantial reductions in retail lending rates.

Background

In mid-October, real economic activity indicators had been providing rather mixed signals. However, on balance, the evidence tended to suggest that the domestic economy was approaching the trough of a fairly shallow recession. In respect of monetary policy, a range of unfavourable evidence regarding inflation and inflation expectations had prompted the Bank to announce a tightening in the policy stance on 7 October, involving an increase in the penal discount margin from 1 to 1.5 percentage points. The sharemarket itself had been drifting back from an all-time high reached in mid-September.

The sharemarket crash significantly altered both the real economic outlook and the environment within which assessments of the appropriateness of monetary policy had to be made. Unlike prices in most major overseas markets, New Zealand share prices failed to stabilise, and continued to fall throughout the review period. The continued falls brought share prices, expressed in real terms, back very quickly to early 1984 levels, representing a significant loss of wealth for both the corporate and household sectors. As share prices plummeted, the level of uncertainty and nervousness in the economy increased sharply, contributing to a deterioration in business confidence and a contraction in corporate credit demand for new projects.

Liquidity, Interest Rate and Exchange Rate Developments

Liquidity conditions remained stable and relatively firm in the immediate aftermath of the 20 October crash. Neither interest or exchange rate movements suggested any significant increase in the demand for liquidity. Because of this, the Reserve Bank saw no immediate need to follow the example of the central banks in many other countries, which had responded to the share price collapses by intervening to inject liquidity. The intention in those countries was to offset any incipient upward pressures on interest rates and restate the commitment of the authorities to ensuring the continuing liquidity of financial markets. In this country, the Bank publicly reaffirmed its commitment to both of its principal objectives – continuing the fight against inflation, and ensuring the continuing stability of the financial system.

However, despite further large new issues of overseas New Zealand dollar denominated bonds, the exchange rate fell sharply (by almost 9 per cent) in late October. The fall appeared to reflect the liquidation of New Zealand dollar assets by overseas investors, and to some extent, a reassessment of the risks involved in investing in the relatively 'exotic' New Zealand market. In the money markets, interest rates began to rise, peaking on 2 November, with the yield gap between 90 day bank bills and 5 year government stock reaching a maximum of 4.45 percentage points; bills up to 90 days were trading at over 21 per cent. The upward pressure on interest rates appears to have reflected the sharp drop in the exchange rate, the imminence of the first major November tax flow, and rising uncertainty in both local and overseas financial markets.

The exchange rate began to recover some of its lost ground over the first week in November, and interest rates on secure assets eased back somewhat over all maturities. But despite this improvement further sharp falls in share prices precipitated a heightened degree of nervousness in certain sections of the financial markets.

The sharp downturn in share prices led to rapid and major reviews by lending institutions of their actual and potential exposures, particularly to the more highly geared companies and to other financial institutions. The heightened uncertainty and nervousness posed some danger of an overly sharp contraction in credit if outstanding loans were to be called in, and of restricted access to liquidity for otherwise viable institutions.

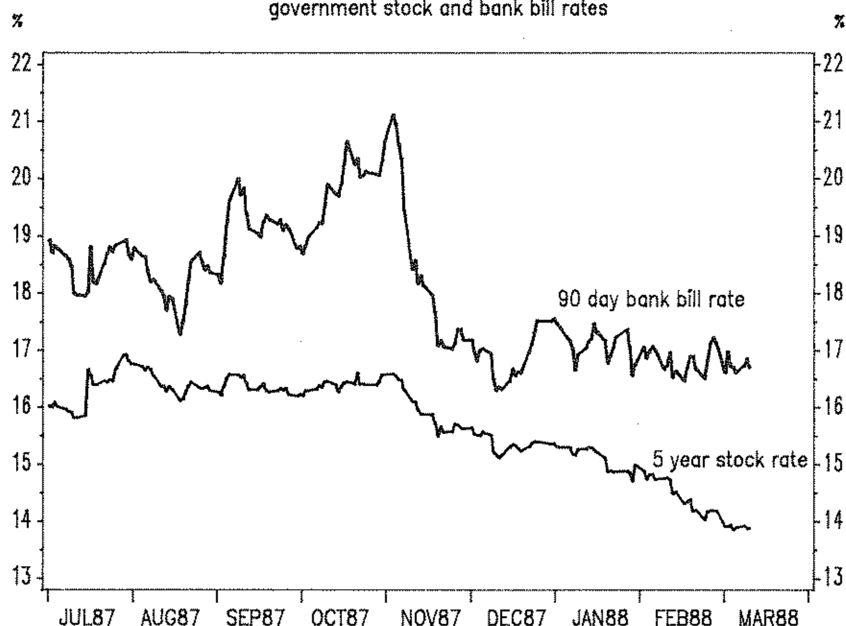
The Reserve Bank sought to counteract some of the impact of the heightened uncertainty in sections of the market by demonstrating its commitment to underpinning the liquidity of the financial system and hence avoiding any unnecessary upward pressure on interest rates. To these ends the Reserve Bank increased the daily settlement cash target from $20 million to $30 million on 6 November. Reports of a substantially lower demand for credit following the sharemarket slump and increased precautionary demands for liquid balances suggested that the increase in the cash target would not be inconsistent with the achievement of the official inflation objectives,and that a lower and somewhat less steep interest rate yield curve would be appropriate.

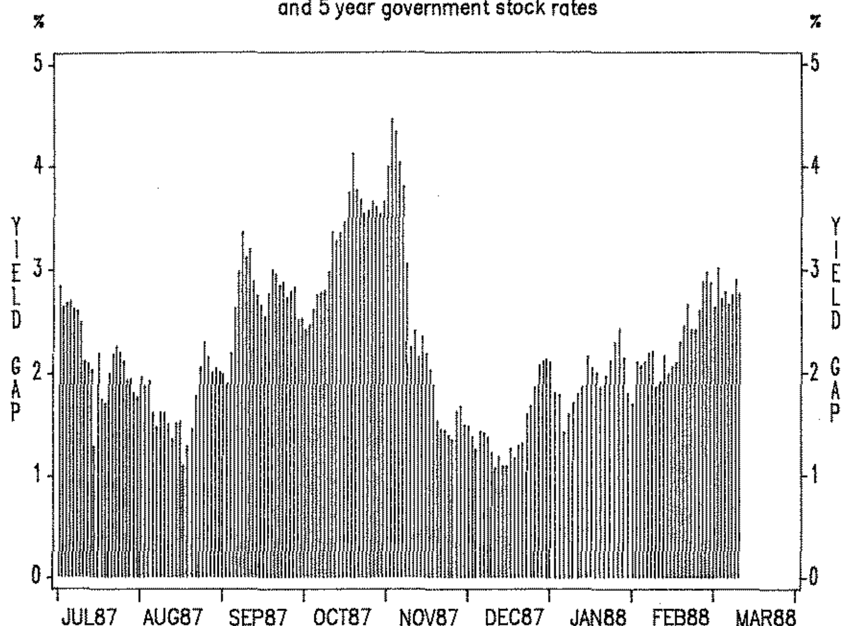
The increase in the cash target triggered a sharp reduction in interest rates, particularly at the short end of the market, through November and early December. The 90 day bank bill rate fell by over 1 percentage point on 6 November and continued to fall fairly steadily over the following month by a total of 4.1 percentage points to a low of 16.2 per cent on 9 December. Call rates also fell sharply, and remained below rates on comparable 30 and 90 day instruments for almost the entire remainder of the review period. Long-term interest rates fell, although to a lesser extent than short rates. 5 year government stock rates fell 1.4 percentage points to reach a low of 15.1 per cent on 10 December before picking up again later in December. This reduction in bond rates appears to have been due primarily to lower short-term funding costs, reinforced by some recovery in offshore buying interest as the exchange rate stabilised and strengthened slightly through to early December, plus an underlying flight to quality assets such as government stock. The outlook for inflation had clearly also improved somewhat. On the other hand, the increase in macroeconomic uncertainty in the wake of the share market developments may have offset some of the downward pressure on longer term rates. As a result of the movements in short and long-term rates the yield gap dropped from 3.8 percentage points on 5 November to a low of 1.1 percentage points on 9 December.

The slope of the yield curve broadly reflects the expected path of future short-term interest rates (and hence of future inflation rates). In general, the steeper the yield curve the more marked and rapid the expected reduction in short-term rates. The fall in both the overall level of the yield curve and its slope following the increase in the cash target was consistent with modest reductions in medium-term inflation expectations, and with the Bank's assessment that, in the aftermath of the crash, somewhat less pressure on real short-term rates would still ensure the achievement of the inflation targets. This assessment was based primarily on developments in the factors other than interest rate and inflation expectations which can influence the relationship between short and long-term interest rates, and was supported by the stability of the exchange rate after the cash target increase. In particular, the increased macroeconomic uncertainty appeared to be reflected in increased preferences on the part of investors to hold relatively shorter overall positions, and on the part of borrowers for more secure longer-term funding. These factors, together with a possible reduction in the degree of speculative activity as institutions became more cautious about their exposures, appear to have accentuated the downward pressure on interest rates at the short end of the market. The sharp reduction in the gap between yields on short and medium-term paper was therefore less of a concern to the Bank than it might have been in more normal circumstances.

Nevertheless, the Bank was concerned to ensure that interest rates did not fall too rapidly, especially if reductions in shorter-term rates were not led by declines in inflation expectations and medium-term bond rates. Despite some claims to the contrary, there was little evidence prior to Christmas that suggested any major reduction in inflation expectations following the crash, and only modest bond rate reductions were observed. In response, the Bank adopted a somewhat more aggressive stance in the daily open market operations from mid-November and this action appeared to have some firming effect on short-term liquidity conditions. A more substantial tightening of liquidity occurred after the second week of December, with movements in both short and medium-term rates offsetting some of the reductions which had occurred in the weeks following the increase in the cash target. Market concerns began to turn to the March quarter, in which very large but still uncertain tax, SOE, and asset sales flows to Government were due. Short-term rates were further un-

Figure 1
Interest Rates
government stock and bank bill rates

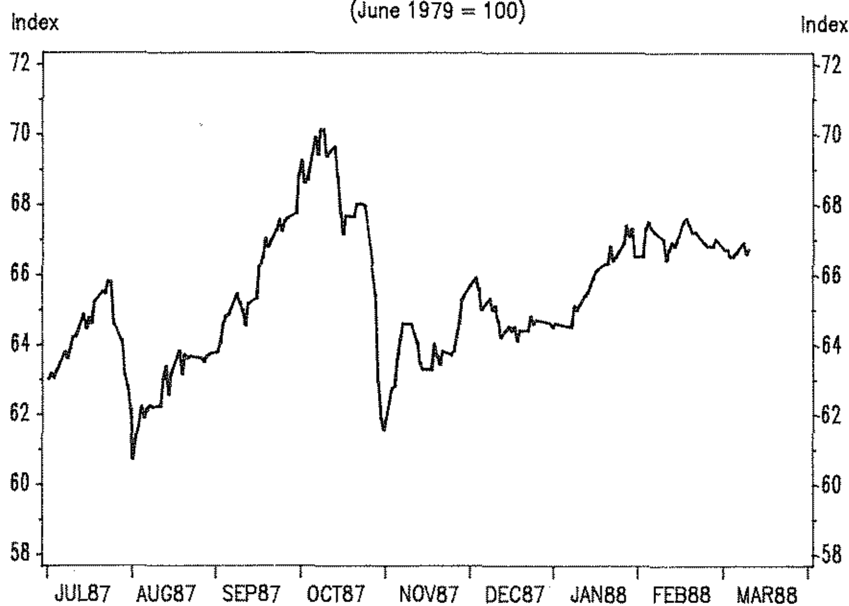




derpinned by the increase in banks' demand for short-term finance over the Christmas period (reflected in an improved supply of bank bills) and a degree of switching from call to 30 and 90 day funding by the corporate sector as operations wound down for the Christmas holiday period.

Although call rates generally remained below rates on 30-90 day bank bills, 90 day bills and 5 year bonds traded as high as 17.5 per cent and 15.4 per cent respectively in the last few days of December. Rates eased slightly in early January but remained above the early December lows until the announcement on 18 January 1988 of a 2.1 per cent increase in the CPI for the December quarter, and a 9.6 per cent inflation rate for the 1987 calendar year. Short-term wholesale interest rates fell by around 0.4 percentage points following the announcement, but the reductions were not sustained. Rates moved up over the following few days, with 90 day bills trading around 17 per cent until late January. The exchange rate remained unusually stable through most of December and early January (between 64 and 65 on the Bank's nominal index), before strengthening over the second half of January to reach a peak of 67.4.

Five year bonds had been trading at around 15.2 per cent prior to the CPI announcement, but subsequently fell to around 14.8 per cent and were traded below 14.6 per cent on 28 January. However, following the Prime Minister's announcement on 28 January of delays in the implementation of the 17 December economic package, bond rates, in particular, rose sharply, and ended January trading at 15 per cent. However, in the first half of February, bond yields resumed their downward trend towards 14 per cent, aided in part by the Government's clarification of tax policy changes. Shorter term rates in general remained reasonably firm at around 17 per cent from late January to mid-February, reflecting underlying uncertainty about liquidity prospects in February and March. As a result, the yield gap rose to over 2 percentage points during the first half of February. The exchange rate eased back slightly after the 28 January announcement, but as a greater degree of political and economic certainty returned the exchange rate remained strong through to mid-February and, in real terms, close to the post-float peak of October 1987.

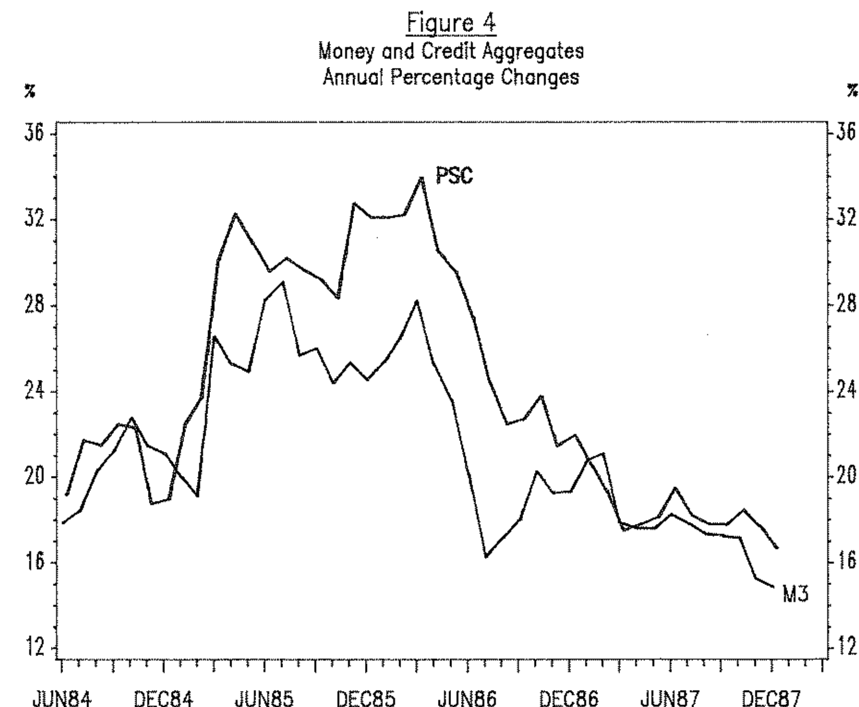


Monetary and Credit Growth

The growth rates of the monetary and credit aggregates in September and October confirm the impressions at the time that the demand for credit was relatively strong in the months prior to the sharemarket slump. In monthly seasonally adjusted terms, private sector credit (PSC) grew by 1.5 and 1.8 per cent in September and October respectively, representing an annualised growth rate of over 20 per cent. The rapid lending growth was driven by the very buoyant residential housing market in the major cities, and the continuing commercial property and sharemarket booms. Liquidity conditions had also been relatively easy until the discount margin change of early October. The lending growth was almost entirely in the registered banks sector; in unadjusted gross terms, bank lending increased by more than 17 per cent between the end of August and the end of October. On a more favourable note, however, total domestic credit had been growing at a somewhat slower rate, reflecting a much slower rate of growth in the net credit extended to Government by financial institutions.

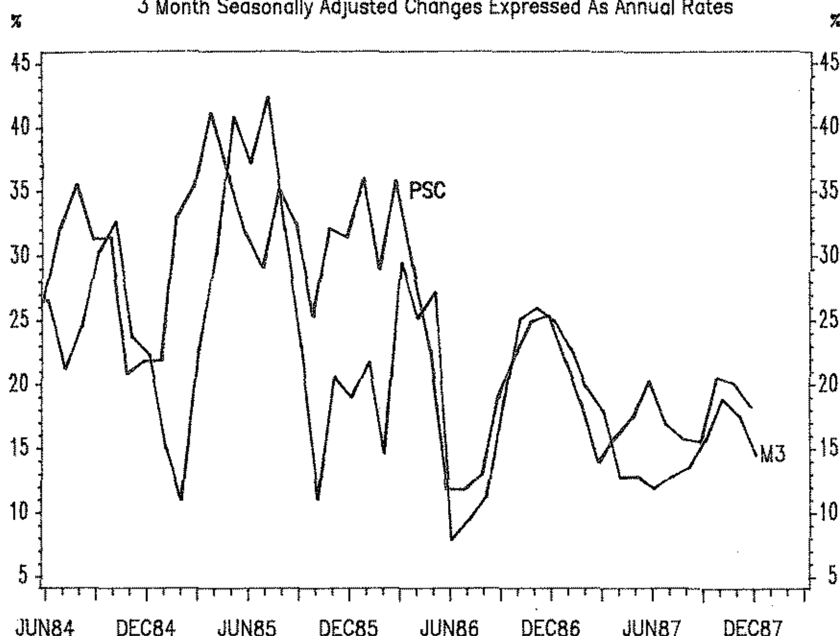
In the weeks following the crash, new credit demand appeared to fall away sharply. The continuing slide in share prices generated a high degree of uncertainty. In the commercial property sector, the crash precipitated reassessments of a range of projects in view of reduced prospects for demand for office space, particularly outside the prime areas of central Auckland and Wellington. The scope for profitable speculative share activity and access to finance for such purposes were severely restricted while, at the top end of the housing market at least, the marked loss of personal wealth and a reassessment of economic prospects appear to have contributed to a marked reduction in prices. With real interest rates remaining high and the perceived opportunities for short-term capital gains diminished, much of the impetus for new credit demand disappeared.

Figure 4
Money and Credit Aggregates
Annual Percentage Changes



On the supply side, as noted earlier, most lending institutions reassessed their major exposures and reviewed limits following the crash. This affected highly geared and often interconnected investment companies most severely. Cuts to unutilised limits appear to have been reasonably common, but reports suggest that in only a few cases have outstanding loans been called in (although a number of firms have been placed in receivership by their creditors). There appears to have been little or no new demand for credit from borrowers in commercial property and investment sectors in recent months, except to consolidate previous short-term fundings. Inter-institutional lending has also been sharply curtailed, with the outstanding level dropping by 28 per cent between September and December.

The November and December monetary and credit aggregates provided some evidence of a slowdown in net money and credit growth, but the slowdown appears to have been considerably less sharp than had been suggested by earlier reports. The monthly seasonally adjusted growth rates of M3 fell to 0.9 per cent in both November and December, with evidence of a slowdown apparent across all institutional groups. However, PSC growth slowed only moderately to 1.1 per cent in November and 1.2 per cent in December, and preliminary gross lending and deposit figures suggest that the key aggregates will continue to show growth in January and February. The apparent inconsistency between widespread reports of little or no demand for new credit other than for housing finance, and the continuing growth in the money and credit aggregates (well above the rate of inflation) may be explained by several factors. First, there is usually some lag between the arrangement of a credit facility and its full utilisation and some project loans arranged prior to the crash will still have been in the drawing down process. Secondly, to the extent that general activity and retail trade have been slowing, involuntary credit growth will be tending to



occur in the short term as overdraft utilisation is increased to finance higher stock levels. Only as the balance between inventories and sales is restored will the slowdown in new credit demand be fully reflected in lending growth statistics. Thirdly, in addition to housing finance, it appears that banks are still meeting some demand for funds for bridging purposes, and from some SOEs.

Inflation and Inflation Expectations

As discussed above, the Bank's concern that inflation expectations remained unduly high, and that annual CPI inflation appeared to be in danger of settling at around 10 per cent, had prompted a tightening of monetary policy in early October. However, the events since mid-October removed much of the pressure from the asset markets (particularly property) and with the subsequent weakening of economic activity the monetary policy environment became considerably more conducive to the achievement of the low inflation objective. Despite some published comment to the contrary, however, inflation and inflation expectations did not simply evaporate following the downturn in the sharemarket. Indeed, persistently high (albeit reduced) inflation expectations are still holding up the interest rate structure at a high level relative to both official and private inflation forecasts.

The Producers Price Index recorded increases for the September quarter of 1.4 per cent for both inputs and outputs. These increases were the smallest since mid-1986, probably reflecting the strength of the exchange rate during the September quarter. The CPI increased by 2.1 per cent in the December quarter, giving an annual rate of CPI inflation of 9.6 per cent. This represented annual single figure inflation for the first time since early 1985, although still only slightly down on the 10.4 per cent annual inflation achieved in June 1986 and well above the inflation rates of most of our major trading partners.

However, recent CPI increases have been dominated by strongly rising urban house prices and increases in mortgage interest rates. By contrast, food prices, for example, have been rising in annual terms at only around 6 per cent per annum. As already noted there is anecdotal evidence that house prices have stabilised in recent months and even fallen at the upper end of the market. Combined with the recently announced reductions in mortgage interest rates this should mean that the housing component of the CPI will cease to exert upward pressure on measured inflation over coming quarters. Significant reductions in the annual rates of inflation should be observed throughout 1988 provided that an appropriately firm monetary policy stance is maintained.

The 1987/88 wage round, underway throughout the review period, afforded much less cause for optimism on inflation, with average settlements of between 7-8 per cent despite the very strong real exchange rate, rising unemployment, and less favourable real prospects following the crash. The high settlements tend to reinforce doubts about the extent of labour market flexibility attained to date and about the degree of effective pressure on some still protected sectors of the economy to change traditional 'cost plus' attitudes.

Inflation expectations appear to have fallen only fairly slowly since October, as reflected in both government secondary market bond yields, and in survey evidence. The Bank's November Survey of Expectations recorded average inflation expectations for the year to September 1988 of 8.9 per cent, falling only slowly to 7.4 per cent in the following year. This was only around 1 percentage point lower than in the previous Survey. The February 1988 Survey (reported elsewhere in this issue) showed expectations for the years to December 1988 and 1989 had fallen by a further percentage point. The National Bank's survey of its retail and manufacturing customers' inflation expectations for the year ahead also points to expectations having fallen by around 1-2

per cent. By early 1988, however, average expectations were still around 11 per cent, consistent with the high inflation rates experienced in New Zealand over the last fifteen years. Similarly, surveys of private households conducted for the Reserve Bank in November and January suggested that household expectations also remain disturbingly high – with almost 40 per cent of respondents still expecting the rate of inflation to increase in the coming year.

The inflation expectations and perceptions of households in particular may have been biased upwards by the inclusion in the reported inflation rate throughout 1987 of the one-off boost to the price level from GST. Most of this impact dropped out of the annual figures in the December CPI. However, at the time of writing no direct evidence was yet available as to the impact on household inflation expectations. If a substantial downward revision in household expectations does occur, this will help ensure that substantial reductions in lending interest rates are possible without the risk of a further housing finance led credit boom.

Although the outlook for inflation is now considerably more favourable than was the case prior to the stock market downturn, inflation at the current annual rate of 9.6 per cent is low only by recent historical New Zealand standards. Our inflation rate remains high relative to the inflation rates of most of our major trading partners, and also relative to the target of low single figure inflation. The continuing need for a consistently firm monetary policy reflects the susceptibility of the inflation rate to a further round of high wage settlements, or to a resurgence in house price inflation, or to a sharp drop in the exchange rate, if interest rates fall too rapidly without substantial corresponding reductions in expectations. As expectations fall, both bond yields and shorter term wholesale rates can be expected to fall, with the yield curve gradually flattening over time, without any particular need for changes in policy settings by the monetary authorities. Such reductions in wholesale rates should be reflected in further significant reductions in retail lending rates, beyond those (of up to 3 percentage points) that had already been announced up to mid-February.

Conclusion

The sharp fall in the sharemarket dominated economic and financial events over the period reviewed in this article. Prior to the crash, a high demand for new credit was supporting a continued high rate of growth in the balance sheets of M3 institutions. Subsequently, however, there has been a significant curtailment in the demand for credit. Economic activity had been showing some resilience prior to the sharemarket downturn, but appears to have slowed somewhat over the review period. There is little likelihood of a rapid recovery in the near future, although economic conditions may begin to pick up in the latter part of 1988/89. While activity has suffered, the crash has nevertheless contributed to an improvement in the outlook for inflation and during the review period single figure inflation was once again achieved. However, the significance of the return to single figure inflation in 1987 must not be overstated. The inflation rate remains vulnerable if real interest rates fall too rapidly, and most evidence suggests that inflation expectations still remain above levels consistent with the goal of low single figure inflation. Furthermore, New Zealand's inflation rate continues to be well above the inflation rates of all our major trading partners and competitors, except Australia. Accordingly, the Reserve Bank must continue to maintain a consistently firm monetary policy to ensure that low inflation is well embedded in low inflation expectations before the disinflationary phase can be concluded. To relax the stance of policy now would be to risk the hard-won gains of the last three years and to raise the prospect of an eventual further bout of painful disinflationary policies.

Postscript

From 29 February, the Reserve Bank's daily cash target was increased from $30 million to $40 million. The move was intended to offset seasonal pressures in the money market that had been building up as a result of uncertainty over end of year tax flows and SOE payments.

The Bank emphasised that the adjustment in the cash target did not imply a change in the underlying monetary policy stance, and that a downward adjustment could be expected once seasonal pressures had passed.

OPEN MARKET OPERATIONS
Period: 6 November 1987 - 18 December 1987

Date 1987/88	*Transaction*	*Maturity*	Volume Offered $m	Volume Bid $m	Total Amount Sold $m	Total Amount Purchased or Advanced $m	Range of Bids Received %	Range of Successful Bids %	Average of Successful Bids %
6 November	Government Stock	15/03/89	85	22		14	18.25-18.5	18.5	18.5
	Sellbacks	23/11/87		149		71	19.03-19.85	19.37-19.85	19.61
9 November	Treasury Bills	12/7/88	25	128	25		18.23-18.8	18.23-18.31	18.28
10 November	Sellbacks	16/11/87	10	30		10	17.7 -18.83	18.83	18.83
11 November	Sellbacks	16/11/87	50	74		20	18.13-18.58	18.56-18.58	18.58
	Treasury Bills	22/04/88		Total Volume 30		5	17.87-18.14	18.03-18.14	18.09
		21/04/88				2			
		7/04/88				7			
		22/04/88				8			
12 November	Sellback	1/12/87	120	242		115	18.08-18.78	18.48-18.78	18.56
13 November	Sellback	1/12/87	40	89		28	17.91-18.61	18.61	18.61
	Government Stock	15/03/89		12		12	17.87-17.95	17.87-17.95	17.94
16 November	Sellback	1/12/87	40	75		40	17.84-18.32	18.22-18.32	18.27
18 November	Treasury Bills	25/7/88	10	56	10		17.05-17.28	17.05-17.09	17.08
20 November	Government Stock	15/3/89	30	32		10	16.61-16.85	16.8 -16.85	16.8
23 November	Treasury Bills	26/7/88	75	199	75		16.94-17.45	16.94-17.09	17.02
24 November	Treasury Bills	20/7/88	10	57	10		17.09-17.25	17.09	17.09
25 November	Sellbacks	1/12/87	20	65		10	16.5 -17.2	17.2	17.2
	Government Stock	15/12/87	20	21		7	16.35-17.1	17.0 -17.1	17.0
26 November	Government Stock	15/12/87	115	9		9	17.20	17.20	17.20
	Sellbacks	3/12/87		295		106	16.65-17.71	17.41-17.71	17.59
27 November	Sellbacks	9/12/87	60	79		39	17.12-17.67	17.22-17.67	17.34
		30/12/87		9		5	16.7 -17.25	17.25	17.25
		15/12/87		5		5	17.1	17.1	17.1
30 November	Treasury Bills	24/12/87	10	10		10	17.0	17.0	17.0
1 December	Treasury Bills	14/12/87	10	6	—	5	16.7 -17.0	17.0	17.0
2 December	Treasury Bills	6/07/88	10	36	20		16.97-17.15	16.97-17.04	17.01
		11/07/88		52	17		17.02-17.31	17.02-17.04	17.03
		12/07/88		50	22		16.97-17.20	16.97-17.04	17.01
		14/07/88		42	18		16.94-17.20	16.94-17.04	17.0
		22/07/88		49	20		16.93-17.20	16.93-17.05	17.0
		26/07/88		42	13		16.98-17.20	16.98-17.05	17.02
3 December	Sellbacks	7/12/87	90	219		54	17.11-17.25	17.11-17.25	17.16
3 December	Treasury Bills	14/12/87		5		5	16.8	16.8	16.8
		15/12/87		5		5	16.9	16.9	16.9
		29/12/87		10		10	16.8	16.8	16.8
		30/12/87		4		4	16.55	16.55	16.55
		31/12/87		12		12	16.55-16.8	16.55-16.8	16.76
4 December	Government Stock	15/09/88	125	24		4	16.5 -16.75	16.75	16.75
		15/03/89		43		5	16.6 -16.76	16.76	16.76
	Sellback	15/12/87		131		95	16.54-16.95	16.58-16.95	16.73
7 December	Treasury Bills	29/01/88	85	118	43		16.47-17.1	16.47-16.6	16.51
		22/04/88		45	13		16.75-17.27	16.75	16.75
		11/07/88		22	11		17.04-17.45	17.04-17.07	17.05
		15/07/88		14	5		17.03-17.39	17.03-17.04	17.04
		25/07/88		30	13		17.02-17.35	17.02-17.05	17.04
8 December	Treasury Bills	31/12/87	10	12		2	15.95-16.45	16.45	16.45
9 December	Treasury Bills	7/04/88	15	54	12		16.08-16.43	16.08-16.19	16.11
		14/07/88		36	3		16.47-16.62	16.47	16.47
10 December	Sellbacks	17/12/87	50	84		30	15.43-16.36	16.36	16.36
	Treasury Bills	31/12/87		10		10	15.95-16.0	15.95-16.0	15.975
11 December	Treasury Bills	18/03/88	15	100	15		15.98-16.47	15.98	15.98
14 December	Treasury Bills	18/03/88	35	54	25		16.07-16.59	16.07-16.14	16.11
		31/03/88		20	5		16.14-16.25	16.14	16.14
		12/07/88		8	3		16.62-16.75	16.62	16.62
		22/07/88		6	2		16.65-16.75	16.65	16.65
15 December	Treasury Bills	18/03/88	75	132	20		16.15-16.81	16.15-16.25	16.20
		31/03/88		153	46		16.08-16.80	16.09-16.26	16.17
		11/04/88		14	4		16.30-17.01	16.30	16.30
		27/04/88		27	5		16.46-16.85	16.46	16.46
16 December	Treasury Bills	18/03/88	165	72	34		16.40-16.97	16.4 -16.5	16.45
		31/03/88		167	79		16.20-16.97	16.2 -16.47	16.34
17 December	Sellback	21/12/87	70				15.00-15.99	15.85-15.99	15.88
	Government Stock	15/09/88		27.5		20.5	16.0 -16.4	16.35-16.40	16.35
		15/03/89		23		2	16.19-16.37	16.37	16.37
18 December	Government Stock	5/09/88	115	29		21	16.05-16.45	16.30-16.45	16.34
		5/03/89					16.00-16.31	16.25-16.31	16.28
	Sellback	5/01/88		235		75	15.65-16.55	16.40-16.55	16.46

OPEN MARKET OPERATIONS
Period: 21 December 1987 - 15 February 1988

Date 1987/88	Transaction	Maturity	Volume Offered $m	Volume Bid $m	Total Amount Sold $m	Total Amount Purchased or Advanced $m	Range of Bids Received %	Range of Successful Bids %	Average of Successful Bids %
21 December	Sellback	31/12/87	60	64		30	15.83-17.15	16.63-17.15	16.87
	Government Stock	5/09/88		20		5	16.27-16.35	16.35	16.35
		5/03/89		9		5	16.19-16.30	16.30	16.30
22 December	Treasury Bills	31/03/88	10	55	10		16.73-16.98	16.73	16.73
23 December	Treasury Bills	31/03/88	50	43	15		16.94-17.39	16.94-17.08	16.98
		13/07/88		32	25		17.2 -17.75	17.2 -17.32	17.25
		26/07/88		3	3		17.1	17.1	17.1
24 December	Sellbacks	24/12/87	170	217		73	16.76-19.90	17.65-19.90	17.77
		5/01/88		110		47	16.00-18.26	18.01-18.20	18.08
		6/01/88		100		50	16.76-18.18	18.04-18.18	18.13
29 December	Sellbacks	18/01/88	120	115		60	16.78-17.75	17.12-17.75	17.38
30 December	Sellbacks	31/12/87	165	170		85	17.12-18.4	18.25-18.4	18.29
		6/01/88		133		65	17.17-18.3	18.05-18.3	19.19
6 January	Sellbacks	11/01/88	20	32		10	15.39-16.16	15.95-16.16	16.01
	Treasury Bills	11/01/88		15		5	15.0 -16.0	16.0	16.0
7 January	Treasury Bills	31/03/88	65	117	35		16.34-16.93	16.34	16.34
		15/07/88		90	30		16.5 -16.98	16.5 -16.65	16.59
11 January	Treasury Bills	21/03/88	30	69	25		16.74-17.19	16.74-16.77	16.752
		14/07/88		35	5		16.93-17.28	16.93	16.93
14 January	Government Stock	5/09/88	25	50.7		25.7	16.35-16.85	16.72-16.85	16.79
15 January	Treasury Bills	29/01/88	25	57	25		16.4 -17.21	16.4	16.4
18 January	Treasury Bills	29/01/88	105	203	27		16.4 -16.97	16.4 -16.5	16.49
		21/03/88		28	10		16.83-17.1	16.83-16.91	16.87
		25/05/88		77	33		16.95-17.48	16.95-17.16	17.01
		3/06/88		49	40		16.9 -17.18	16.9 -17.15	17.0
19 January	Government Stock	15/3/89	30	9		9	16.12-16.17	16.72-16.85	16.79
	Sellbacks	1/02/88		60		15	16.12-16.17	16.12-16.17	16.14
20 January	Government Stock	15/03/89	25	15		5	15.98-16.07	16.04-16.07	16.06
	Sellbacks	1/02/88		50		150	16.65-17.26	16.06	16.06
21 January	Treasury Bills	29/01/88	10	25	6		16.5 -16.93	16.5	16.5
		8/07/88		10	2		16.68-16.95	16.68	16.68
		21/07/88		13	2		16.66-16.95	16.66	16.66
22 January	Government Stock	15/03/89	15	25		15	15.90-16.02	15.98-16.02	16.01
26 January	Sellbacks	1/02/88	385	200		150	16.65-17.26	16.89-17.26	17.18
		2/02/88		50		50	16.94-17.29	16.94-17.29	17.12
		3/02/88		165		110	16.85-17.32	17.26-17.32	17.28
		8/02/88		130	50		16.50-17.36	17.26-17.36	17.29
	Treasury Bills	July Bills		49		8	16.0 -16.77	16.7 -16.77	16.72
28 January	Sellbacks	1/02/88	95	5		5	15.85	15.85	15.85
		15/02/88		49		40	15.76-16.52	16.26-16.52	16.34
	Government Stock	15/03/80		6		3	15.65-15.80	15.73-15.80	15.76
29 January	Sellbacks	1/02/88	260	75		20	15.76-16.40	16.33-16.40	16.35
		15/02/88		425	150		15.76-16.38	16.18-16.38	16.32
	Treasury Bills	July Bills		40		13	16.1 -16.27	16.25-16.27	16.26
3 February	Treasury Bills	21/03/88	15	62	15		16.59-16.9	16.59	16.59
4 February	Sellbacks	15/02/88	30	170		28	15.53-16.77	16.46-16.77	16.55
	Government Stock	15/03/89		13		2	15.75-15.91	15.91	15.91
5 February	Sellbacks	8/02/88	50	60		25	14.9 -15.25	15.25	15.25
	Government Stock	15/02/88		65		13	15.85-16.41	16.31-16.41	16.37
		15/03/89		14		12	15.81-15.90	15.85-15.90	15.85
8 February	Treasury Bills	26/05/88	15	75	15		16.16-16.35	16.16-16.21	16.18
9 February	Treasury Bills	10/02/88	170	104	30		14.7 -16.65	14.7	14.7
		11/02/88		122	36		14.7 -16.55	14.7	14.7
		12/02/88		37	9		14.7 -16.5	14.7	14.7
		31/03/88		144	49		16.17-16.95	16.17-16.35	16.27
	Government Stock	15/02/88		72	46		15.48-16.75	15.48	15.44
10 February	Government Stock	15/03/89	10	2		2	15.8 -15.86	15.86	15.86
11 February	Sellback	22/02/88	15	40		15	15.55-16.37	16.37	16.37
12 February	Sellbacks	23/02/88	125	150		35	16.2 -16.73	16.5 -16.73	16.6
		29/02/88		199		90	16.13-16.56	16.4 -16.56	16.47
15 February	Sellbacks	22/02/88	20	83		20	16.07-16.8	16.8	16.8