

Reserve Bank Bulletin

QUARTERLY REVIEW OF MONETARY CONDITIONS¹

Prior to the start of the 1986/87 year the Government announced that it intended to maintain a firm monetary policy stance, with the stock tender programme continuing to be based on fully funding net public sector liquidity injections. The substantial flattening in the interest rate yield curve which occurred over the quarter suggested that liquidity conditions eased somewhat over this period. Neither the exchange rate nor the monetary aggregates were especially helpful in interpreting monetary conditions over the quarter; the exchange rate was significantly influenced by a sharp decline in the Australian dollar, while the monetary aggregates were affected by base period distortions and by the continuing structural changes taking place in the financial sector.

Introduction

The significant flattening of the interest rate yield curve which occurred over the quarter suggests that liquidity conditions eased over this period. The other main features of the quarter were:

- a large decline in interest rates for all maturities;
- a significant decline in the growth rate of the broad money supply, M3, but a somewhat smaller reduction in private sector credit (PSC) growth;
- a weakening in the exchange rate against several of the major overseas currencies, other than the Australian dollar.

This article briefly examines these developments.

Monetary Policy Strategy

The monetary policy strategy followed in 1985/86 is again being pursued in 1986/87; namely, fully funding net public sector liquidity injections through the stock tender programme. The 1986/87 public debt programme is based on fully funding injections into primary liquidity based on the current 30 day definition rather than the 6 month definition of primary liquidity which was in operation during most of 1985/86.²

The 30 day primary liquidity definition (PL1) came into effect for the first time during the June quarter, requiring the authorities to reassess the appropriate level of primary liquidity balances. In making this judgment, the intention has been to maintain the firm policy stance which existed in 1985/86. Initial assessments prior to the start of the year suggested that an underlying PL1 level of \$400–\$500 million would be consistent with the PL6 trough level during 1985/86 of \$600 million. As with the previous 6 month definition it was expected that primary liquidity would fluctuate about this target level (though to a lesser extent) and, in particular, would rise prior to March and September tax drains. It was also recognised that there may be a need to modify the PL1 target once more experience is gained with operating under the new liquidity management framework.

The Government was only part way through its review of expenditure and taxation policies for 1986/87 in March and so it was not possible to announce a full year borrowing programme for 1986/87 at that time. Rather, a June quarter borrowing programme of \$1,500 million (face value) was announced, to be raised in three tenders. This was in addition to the \$350 million tender which had been held in early April and which also forms part of the 1986/87 borrowing programme.

Towards the end of June, a tentative indication was given of the Government's expected borrowing programme for the rest of 1986/87. It was intended to hold three tenders of \$500 million each during the September quarter and, based on present information, three further \$500 million tenders were tentatively scheduled for the December quarter. No tenders were scheduled for the March 1986 quarter. This implied a full year borrowing programme of around \$4,500 million.

¹ All monthly and quarterly growth rates given in this article are seasonally adjusted unless otherwise stated.

² For details of the main changes to liquidity management policy announced on 3 December the reader is referred to the March 1986 *Bulletin* (page 118).

Primary Liquidity

Table 1 compares the actual liquidity influences for the June quarter (using the 30 day definition for PL) with projections, released in late March, which formed the basis of the June quarter debt programme.

Actual net public sector injections (NPSI) before stock tender sales and liquidity management operations (LMOs) exceeded forecast injections by around \$800 million, largely due to the net fiscal influence which was \$440 million higher than had been projected. Reserve Bank influences were also \$210 million higher than expected, of which \$176 million resulted from the drawdown of the Dairy Board's credit balances at the Reserve Bank during the quarter.

The difference between forecast and actual stock tender sales reflects the subsequent inclusion of Stock Tender No. 29, held on 3 April, in the 1986/87 debt programme³. Note that government stock settlements (\$1,673 million) during the June quarter were less than gross sales (\$1,850 million) due to the fact that most of the June stock tender was not settled until July.

The stronger than expected liquidity injections (after stock tender settlements) during the quarter did not result in a substantial build-up of PL1 because Reserve

3 For further details see pages 267-269 of the June 1986 *Bulletin*.

TABLE 1
INFLUENCES ON PRIMARY LIQUIDITY¹
OVER THE JUNE QUARTER 1986
(*\$ million*)

	Total June Quarter	Projected June Quarter
<i>Government Influences</i>		
Fiscal Deficit	1528	1350
Other ²	260	—
<i>Reserve Bank Influences</i>	255	60
<i>Public Debt Influences</i>		
Government Stock Entering PL	639	660
Retail Debt	69	50
Other ³	— 72	— 110
Residual	113	—
Net Injections Before Liquidity Management Operations and Stock Sales	2792	2010
<i>Liquidity Management Operations</i>		
Open Market Operations ⁴	— 553	— 460
Treasury Bill Tenders ⁵	— 1505	— 110
Treasury Bills Entering PL	1020	—
Net Public Sector Injections Before Stock Sales	1754	1440
Stock Tender Sales ⁶	— 1673	— 1340
Change in Primary Liquidity	+ 81	+ 100
Primary Liquidity Level	491	510

Notes:

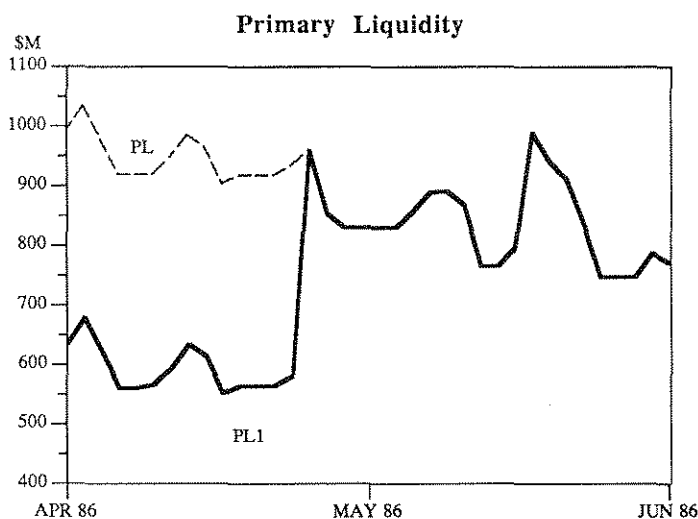
- For the purposes of this table, primary liquidity is defined as total private sector holdings of government securities with thirty or less days to maturity (not including retail securities) plus settlement balances held at the Reserve Bank by the trading banks and Post Office Savings Bank.
- Includes additional liquidity impact of the Government's transactions which are not captured in the fiscal deficit due to timing factors.
- Includes Earthquakes and War Damage Commission Influences.
- Includes the negative influence associated with the maturity of commercial bill, Transferable Certificates of Deposit (TCD) and contracts totalling \$446 million, which were Government stock held by the Reserve Bank as at 31 March 1986.
- Tenders of Treasury bills with greater than thirty days to maturity only.
- Settlements received during quarter.

Bank liquidity management operations were carried out to largely offset these injections. These operations involved mainly the sale of longer-dated treasury bills, which have the effect of transferring the timing of cash injections to coincide with expected liquidity drains later in the year.

The profile of primary liquidity over the June quarter reflected both the effect of the May securities which were officially discountable over the first half of the quarter and the authorities' desire to allow PL1 to fluctuate around the target of \$400-\$500 million. Operations were undertaken during the quarter to reduce the level of PL1 towards target as opportunities arose.

As can be seen in figure 1, the total of settlement balances and discountable securities (shown by the broken line) remained at relatively high, albeit declining, levels until mid-May — fluctuating in the range of \$710-\$1,040 million and averaging \$860 million. Over the same period, PL1 fluctuated in a range \$560-\$960 million and averaged \$745 million.

An opportunity arose in mid-May to substantially lower PL1 by the sale of \$450 million of Treasury bills with maturities greater than 30 days. PL1 fell from more than \$800 million to less than \$500 million within one week. During the remainder of May and until the penultimate week in June, PL1 fluctuated around an upward trend and ranged from \$470 million in mid-May to \$750 million in mid-June. However, PL1 subsequently fell to around \$490 million at the end of the quarter.



Government Stock Tenders

Four government stock tenders were held during the quarter; the early April tender for \$350 million and three subsequent tenders each for \$500 million. Bidding was heavy in all tenders, especially the 17 April tender for \$500 million, where total valid bids amounted to five and a half times the amount on offer. The other tenders were between two and a half and three and a half times covered.

Average interest rates accepted in the early April tender (held on 3 April) were 20.4 per cent for the September 1989 stock, 19.7 per cent for the June 1991 stock and 18.8 per cent for the July 1994 stock. These rates were broadly similar to rates accepted in the three tenders of the previous quarter.

TABLE 2
NEW ZEALAND GOVERNMENT STOCK SALES BY TENDER

Tender number	Date held	Stock offered	Maturity date	Total amount offered \$m	Total bids submitted \$m	Over-subscriptions accepted \$m	Total successful bids \$m	Allotment Yield % p.a.
29.	3/4/86	N.Z. Govt Stock	15.09.89	100.0	300.1	—	100.0	20.4
			15.06.91	150.0	639.7	—	150.0	19.7
			15.07.94	100.0	386.8	—	100.0	18.8
30.	17/4/86	N.Z. Govt. Stock	15.09.89	150.0	1,152.6	—	150.0	18.6
			15.06.91	200.0	1,042.9	—	200.0	17.9
			15.07.94	150.0	560.4	—	150.0	17.3
31.	15/5/86	N.Z. Govt. Stock	15.09.89	200.0	542.6	—	200.0	16.0
			15.09.91	200.0	632.6	—	200.0	15.7
			15.10.94	100.0	356.3	—	100.0	15.1
32.	12/6/86	N.Z. Govt. Stock	15.11.89	200.0	534.7	—	200.0	15.2
			15.09.91	200.0	496.3	—	200.0	15.2
			15.10.95	100.0	285.7	—	100.0	14.8

Note:

¹ Over-subscriptions of up to 20% of the amount offered in any maturity may be accepted subject to the overall amount accepted not exceeding the amount of stock offered in the tender (this facility was announced on 2 February, 1984 and was covered on page 18 of the January/February 1984 *Bulletin* (Vol 47)).

² The weighted average yield under the yield bid system.

Over the following three tenders interest rates on all maturities fell sharply, in line with the decline in secondary market rates over the same period (discussed below). Average rates on the 1989 stock declined by around 5.2 per cent (a November maturity was substituted for the September stock in the June tender), while rates on the longer-term (1994 and 1995) maturities dropped by approximately four percentage points over the same period.

Interest Rates

The June quarter stock tender results were broadly in line with developments in secondary market rates for government stock. Secondary market rates declined sharply during the first half of the quarter, falling from 18.8 — 21 per cent at the beginning of April to 15.5 — 16.5 per cent by mid-May. The major factors underlying this decline appear to have been a general reduction in inflation expectations (following the announcement of the favourable March quarter CPI outcome in particular), a delayed reaction to the decline in foreign interest rates earlier this year and the slowing in the domestic economy. The fall also coincided with a substantial decline in short-term interest rates, suggesting that lower short-term funding costs also contributed to the decline in government stock rates.

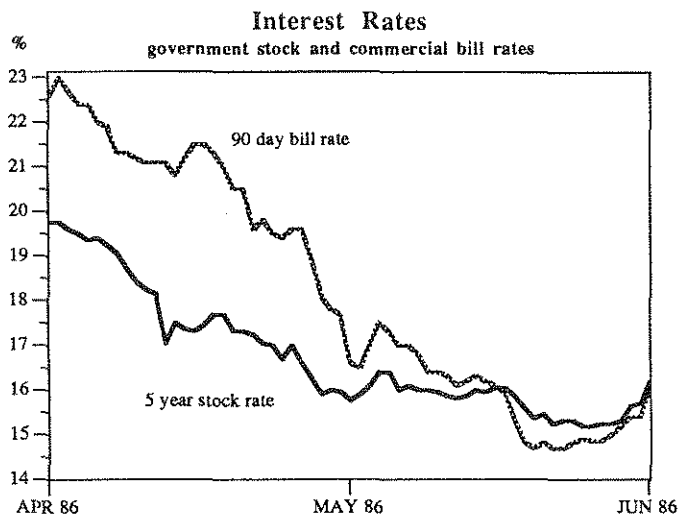
These factors continued to influence government stock rates during the second half of the quarter, resulting in a further, albeit more moderate decline in rates. Government stock rates reached their lowest levels so far this year in late June, falling to around 14.9 — 15.2 per cent. However, following the announcement on 27 June of a tentative borrowing programme for 1986/87 which was somewhat higher than the market had been expecting, secondary market rates jumped by 0.5 — 1.2 percentage points. At the end of June, 2, 5 and 10 year government stock rates were 16.6 per cent, 16.2 per cent and 15.4 per cent respectively, still around 3.4 — 4.4 percentage points lower than at the beginning of the quarter.

Short-term (30–90 day commercial bill) interest rates declined even more sharply over the first half of the quarter, from around 22.5 per cent at the beginning of April to approximately 16.5 per cent in mid-May. This

appeared to reflect a general easing in liquidity conditions over this period, although the passing of the March tax drain also contributed to the fall in rates. Primary liquidity was at relatively comfortable levels over the first half of the quarter in particular and the Reserve Bank's policy of targeting \$50 million in daily settlement account balances, which had been introduced in March, seemed to be generating growing confidence amongst market participants about the adequacy of liquidity levels to meet prospective flows to Government. This confidence was reflected in less aggressive trading for short-term funds on the wholesale money market.

There was some tightening in liquidity in mid-May when the Bank sold \$450 million of Treasury bills (with maturities greater than 30 days), and short-term interest rates temporarily firmed by around one percentage point. Rates subsequently eased back again by around two and a half percentage points over the month to mid-June, before firming slightly following the announcement of the 1986/87 public debt programme. As at the end of June, short-term interest rates had settled at around the 16 per cent level.

The larger decline in short-term than longer term interest rates over the June quarter meant that the yield curve flattened considerably. As can be seen in figure 2,

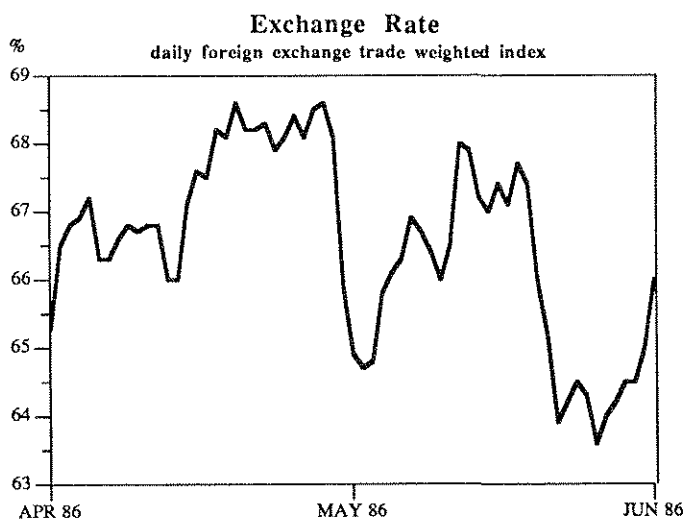


which shows 90 day commercial bill and 5 year government stock interest rates over the quarter, the 2-4 percentage point gap between short and long rates evident during the first half of the quarter was virtually closed by the end of the quarter.

The implications of the flattening in the yield curve for the overall stance of monetary policy are difficult to judge with any certainty. A fall in short relative to longer term rates would have been expected as the overall interest rate structure declined and also as economic activity weakened. Seasonal factors associated with the passing of March may also have been a factor. Though a negatively sloped yield curve would normally be expected during the transition to a low inflation environment, it appears that the market is still highly uncertain regarding the future path of inflation and this is tending to hold longer term rates up at present. Despite the flattening in the yield curve the judgment of the authorities was that monetary conditions were still sufficiently firm to achieve the objective of a steady reduction in the underlying rate of inflation over time.

Exchange Rates

The quarter began with the Reserve Bank's trade weighted exchange rate index at 65.3, compared with the pre-float level of 62.7. The index subsequently firmed to a peak of 68.6 in early May after which a downward trend appears to have developed. By the end of the quarter the index had eased to 66, about 1



percentage point higher than at the beginning of the quarter.

A significant complicating factor over the quarter was the weakening of the Australian dollar. Because this currency has a large weighting in New Zealand's exchange rate index (22 per cent) the index firmed over the quarter even though the New Zealand dollar was moderately weak against some of the other currencies that make up the index; for instance the New Zealand dollar depreciated by 6 per cent against the yen, 5 per cent against the deutschmark and 3 per cent against sterling. Had the Australian dollar been more stable, it is likely that the exchange rate index would have declined over the quarter.

Monetary and Credit Aggregates

The annual rate of growth in the broad money supply (M3) declined sharply during the June quarter from a growth rate of 23.3 per cent in the year to March to an estimated 13.2 per cent in the year ended June. However, this fall overstates the reduction in the underlying rate of monetary growth over the quarter as the March figure was inflated by the unusually low M3 level in March last year. The monthly seasonally adjusted figures show a more moderate slowing from an average 1.4 per cent during the March quarter to -0.1 per cent over the June quarter (see table 3). Taking the March and June quarters together, the monthly seasonally adjusted estimates suggest that the underlying rate of monetary growth for the June half year was probably in the order of 10 per cent per annum, compared with around 17 per cent for the second half of 1985.

Private sector credit (PSC) growth eased only marginally over the June quarter, declining from a growth rate of 20 per cent in the year to March to 18.2 per cent in the year ended June. Monthly seasonally adjusted PSC was also little changed during the June quarter, averaging 1.3 per cent compared with 1.4 per cent during the previous quarter.

Although the reduced rate of money and credit growth would appear to be consistent with the Government's firm monetary policy stance, movements in the aggregates should continue to be interpreted with considerable caution. It is not clear to what extent the aggregates are still being distorted by the effect of the reintermediation and, in addition, institutional and portfolio changes are likely to continue to affect the aggregates for sometime to come.

TABLE 3
MONETARY AND CREDIT AGGREGATES¹

		1986						
		Dec.	Jan.	Feb.	Mar.	Apr.	May	June
M3	- Annual % Change	20.4	20.1	20.7	23.3	18.7	15.5	13.2
	- Monthly % Change	1.7	0.1	0.9	3.4	-1.5	0.3	0.8
	- Quarterly % Change	5.0			3.2			1.6
PSC	- Annual % Change	22.8	21.7	22.0	20.0	21.1	20.1	18.2
	- Monthly % Change	0.9	1.4	2.2	0.5	2.1	1.2	0.6
	- Quarterly % Change	4.2			4.3			3.2

1. All monthly and quarterly percentage changes are seasonally adjusted.

Lending and Deposits by Institution

Trading bank lending slowed significantly over the June quarter, averaging 1 per cent on a monthly basis, compared with average monthly growth of 2.1 per cent during the March quarter. POSB and building societies' lending growth also fell significantly over this period. However, finance companies and, to a lesser extent, trustee banks recorded an increase in credit growth.

Deposit growth for trading banks also slowed markedly over the quarter, declining from a monthly average rate of 1.8 per cent in the March quarter to 0.4 per cent over the June quarter. Building societies and trustee banks, on the other hand, experienced some acceleration in deposit growth, though the annual growth rate remains relatively low for the latter group. Most other institutional groups' deposits grew at a similar rate in the June as in the March quarter, with slower average growth rates than for the six months to December 1985.

Liquidity Management Operations

Active use of liquidity management operations to smooth the path of daily settlement balances⁴ — a practice which began during the March tax drain period — was continued throughout the June quarter. The main objective of this policy is to make the Bank's day-to-day operations in the short-term money market more transparent and predictable, thereby removing one source of short-term interest rate volatility. The target level for daily settlement balances has remained unchanged at \$50 million since late March. In practice,

4 Settlement balances are the demand deposits of the trading banks and the POSB at the Reserve Bank, and are used by these institutions to settle with each other and with the Reserve Bank.

settlement balances tend to vary around this target level on a day-to-day basis, due both to errors in the daily forecasts of liquidity influences and also to the fact that market participants may choose not to participate in the daily operations (but rather to accept fluctuations in cash balances or to discount short-dated securities).

Discounting of government securities during the quarter totalled \$250 million, less than half the volume discounted during the June 1985 quarter. This reduction largely reflects the policy of more actively targeting daily settlement balances. Discounting occurred predominantly in May (\$143 million), though significant quantities of securities were also discounted in June (\$80 million).

Thirteen Treasury bill tenders, for a total of \$1.6 billion, were held during the quarter. Two of the 13 tenders held near the middle and end of April were nil tenders because net cash withdrawals were forecast to take place during the respective settlement weeks. Approximately three-quarters of the \$1.6 billion of bills sold during the quarter had maturities greater than 30 days, and this contributed to the reduction in the level of primary liquidity over the second half of the quarter. There was a large tender for \$150 million of 'short-dated' bills and \$450 million of 'long-dated' bills (i.e. greater than 30 days) on 13 May, with a further \$650 million of 'long bills' being sold in the last three tenders of the quarter. A large proportion of these long-dated bills will mature during the September tax drain period.

Open market operations involving \$1,865 million were conducted over the June quarter, compared with \$1,758 million carried out during the March quarter. In both quarters, most of the market operations were directed at smoothing daily settlement balances, and therefore largely involved purchases and sales of short-dated government securities (or alternatively short-term cash injections secured by way of sell-back arrangements).

TABLE 4
MONTHLY LENDING AND DEPOSIT GROWTH¹
(in percent)

	LENDING				DEPOSITS			
	Average Mar Qtr.	Apr.	May.	June	Average Mar Qtr.	Apr.	May	June
Trading Banks²								
— Monthly	+ 2.1	+ 2.9	+ 0.4	- 0.2	+ 1.8	+ 1.5	+ 1.4	- 1.6
— Annual	+ 19.4	+ 20.3	+ 16.5	+ 17.0	+ 33.7	+ 29.0	+ 25.1	+ 20.6
Finance Coys								
— Monthly	+ 0.1	+ 1.2	+ 2.9	...	+ 0.8	- 2.2	+ 2.0	...
— Annual	+ 23.0	+ 18.3	+ 19.0	...	+ 27.7	+ 25.8	+ 25.0	...
Trustee Banks								
— Monthly	+ 0.6	+ 0.5	+ 0.9	+ 1.6	+ 1.1	+ 0.2	+ 2.2	+ 2.5
— Annual	+ 6.5	+ 5.2	+ 5.5	+ 6.5	+ 11.3	+ 8.5	+ 10.3	+ 12.4
Private Savings Banks								
— Monthly	- 1.6	- 2.1	- 1.1	- 1.5	- 0.8	- 2.7	- 2.0	- 0.3
— Annual	- 17.4	- 18.1	- 17.4	- 17.2	- 15.8	- 17.3	- 17.1	- 15.8
POSB								
— Monthly	+ 2.0	+ 1.3	+ 0.8	- 1.0	+ 0.4	- 2.6	+ 1.7	+ 1.8
— Annual	+ 85.8	+ 80.3	+ 68.7	+ 48.1	+ 8.9	+ 5.2	+ 5.9	+ 7.2
Building Societies								
— Monthly	+ 2.2	+ 0.1	+ 0.1	- 0.2	+ 0.2	+ 1.7	+ 4.5	+ 2.6
— Annual	+ 7.7	+ 8.8	+ 8.1	+ 9.4	+ 11.2	+ 14.9	+ 20.7	+ 21.4

¹ Monthly figures are seasonally adjusted, except for building societies whose lending displays no stable seasonal pattern and deposits of finance companies which display no stable seasonal pattern.

² Weekly averages.

Retail Stock Transactions

Redemptions exceeded subscriptions during the quarter by \$68 million, up significantly on the net redemptions of \$6 million during the March quarter. The lower March figure, however, was unusual and mainly reflected the high level of Kiwi Bond sales to institutional investors in that quarter.

Kiwi Bonds were the only retail instrument on offer over the June quarter. Rates on this instrument are kept under review in light of movements in rates for wholesale government stock, and new issues are opened from time to time in order to maintain rates at a level in line with, but slightly below, the yields on government stock with comparable maturities. Consequently, the fall in yields for 2 and 5 year government stock of around 4 percentage points during the quarter led to closure of the existing Kiwi Bond issue and replacement with a new issue on three occasions: 17 April, 5 May and 13 June (further information on the opening and closure dates and interest rates on recent Kiwi Bond issues can be found in table 5).

Conclusion

The significant flattening in the interest rate yield curve over the June quarter suggests that liquidity conditions eased over the quarter. This flattening is likely to have largely reflected the passing of the March tax flow period, financial market participants' growing confidence that the policy of targeting daily settlement balances at \$50 million would ensure adequate liquidity for settlement requirements and the maintenance of comfortable levels of primary liquidity. The value of the other main indicators of monetary conditions, namely the exchange rate and monetary aggregates, was impaired through other developments; a weakening Australian dollar made the exchange rate difficult to interpret while the monetary aggregates continued to be affected by base period distortion by structural changes in the financial sector. Nevertheless, the authorities' judgment was that monetary conditions remained sufficiently firm to achieve the objective of a steady reduction in the underlying rate of inflation.

TABLE 5
RETAIL DEBT TRANSACTIONS
Subscriptions (+) / Redemptions (-)

	<i>Date Opened</i>	<i>Date Closed</i>	<i>Interest Rate (%)</i>	<i>September 1985 (\$m)</i>	<i>Quarters Ending December 1985 (\$m)</i>	<i>March 1986 (\$m)</i>	<i>June 1986 (\$m)</i>
Inflation Adjusted Savings Bonds	10.10.77	8.11.84	2.0 ¹	-15.5	-16.9	-16.3	-22.6
Our New Zealand Bonds	5. 6.84	2.11.84	5.0 ²	-21.9	-3.3	-5.3	-8.4
Government Premium Stock	18.11.81	18. 3.83	12.0 ³	-1.9	-104.7	-62.2	-29.3
Kiwi Savings Stock (I-V)	21. 3.83	5.11.85		-62.3	-42.4	-29.6	-21.9
Kiwi Bonds (I-IV)	25.11.85	26. 2.86		—	+133.9	+103.0	-0.1
Kiwi Bonds V	7. 3.86	17. 4.86	18.5, 17.5	—	—	+5.3	+7.1
Kiwi Bonds VI	24. 4.86	5. 5.86	17.5, 17.0	—	—	—	+4.1
Kiwi Bonds VII	22. 5.86	13. 6.86	15.0, 14.5	—	—	—	+2.4
Kiwi Bonds VIII	20. 6.86	—	14.0, 14.0	—	—	—	+0.9
Total				-101.6	-33.4	-5.5	-67.8

- Notes:
- 1 In addition to an interest rate of 2% per annum a non-taxable premium is payable on redemption of Inflation Adjusted Savings Bonds. The amount of the premium is based on the movement in the Consumer Price Index over the period during which the Bonds have been held.
 - 2 The interest rate on Our New Zealand Bonds is 5% per annum plus a cost of living adjustment.
 - 3 In addition to an interest rate of 12% per annum a premium of 4% of the value of stock was paid after two years and a second premium of 10% is paid after four years.