Reserve Bank Bulletin

QUARTERLY REVIEW OF MONETARY CONDITIONS[1]

The major indicators of monetary conditions were strongly influenced by seasonal factors over the December quarter. After an initial period of tightness following the September tax drain, conditions eased somewhat as liquidity built up in preparation for the March tax flow. A number of additional factors contributed to a decline in nominal interest rates from the middle of October, and a sharp fall in the exchange rate in December. Growth in the broad monetary aggregates remained relatively high over the quarter, although it appears that lending growth slowed significantly. On 3 December, changes were made to liquidity management policy in order to make its operation easier for the market to understand and interpret. However, the overall stance of monetary policy remained unchanged, and the stock tender programme continued to be based on fully funding net public sector liquidity injections.

Introduction

Although the overall stance of monetary policy remained firm over the December quarter, the major indicators of monetary conditions reflected the influence of a variety of seasonal and other factors. The main features of the quarter were:

— a seasonal build up in primary liquidity[2] prior to the March tax drain;

— initial firmness in wholesale interest rates, followed by a sharp fall in rates from the middle of October;

— a sharp fall in the exchange rate in mid-December following significant fluctuations earlier in the quarter;

— continued steady growth in the broad monetary aggregates and a slowing in private sector credit growth.

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

2 The primary liquidity definition used for operational purposes up until December 1985 consisted of the cash deposits of the financial system at the Reserve Bank and private sector holdings of discountable government securities (both stock and Treasury bills) with six months or less to maturity.

Following the modifications to liquidity management policy announced on 3 December 1985 and subsequent modification announced on 29 January 1986, the definition of primary liquidity will be changed progressively through to 15 April 1986. The revised definition of primary liquidity applicable from 15 April is the cash deposits of the financial system at the Reserve Bank plus private sector holdings of discountable government securities with one month or less to maturity.

During the tax period, no securities maturing after 15 May will be included in primary liquidity (prior to 29 January no securities maturing after 30 April were included).

This article details the background to these developments and describes the changes announced in liquidity management policy during the quarter.

Monetary Policy Stance

The policy stance adopted in March 1985 was to fully fund expected net public sector injections into primary liquidity over 1985/86 by selling medium to long-term debt through the stock tenders. In order to maintain this stance, the borrowing programme was reviewed early in November to take account of an increase in the forecast Budget deficit from $1.3 billion to $1.55–$1.6 billion. This change brought the borrowing programme for the nine months to December to around $2,200 million, which was within the $2,000–$2,200 million range announced in September. Near the beginning of December, a full year borrowing programme of $2,500 million was announced which incorporated both an allowance for the possibility that the Dairy Industry Reserve Account would be transferred to the private sector and a government deficit of $1,600 million.

The debt programme for 1985/86 was not affected by the changes to liquidity management policy announced early in December. Although these changes had the effect of shortening the period to maturity of stock included in the definition of primary liquidity (see section on liquidity management policy below), the tender programme continued to be based on the previous definition of PL. Thus, the overall stance of monetary policy was not altered. Had the tender programme from December onwards instead been based on the new definition of PL a lower level of debt sales would have been required to fully fund net public sector injections to primary liquidity in 1985/86 (i.e. the debt sales programme would not have taken into account government securities maturing between May and September 1986). While the level of PL would not have increased over the year to 31 March 1986, the assets comprising PL would have been more liquid than in March 1985. Thus, the liquidity of the financial system would have increased.

A second reason for adhering to the original tender programme was to achieve a relatively smooth profile of government stock tenders. If the tender programme for the remainder of this financial year had been altered in line with the new definition of PL, the reduction in stock offered for 1985/86 would have been followed by correspondingly higher tenders in 1986/87, as these would have been required to offset the maturities into the shorter definition of PL when they subsequently occurred. This potential problem has been avoided by maintaining the tender programme on the existing basis, and using open market operations to 'switch' some longer-dated government securities into the shorter definitions of PL in the March quarter of 1986.

Primary Liquidity

Table 1 shows the influences on primary liquidity (PL) over the December quarter. PL increased by $665 million over the quarter, due mainly to the seasonal nature of the fiscal deficit. With fairly even liquidity withdrawals through stock tendering over the year, PL tends to build up over the June and December quarters, prior to the large tax flows in September and, more particularly, in March.

TABLE 1
INFLUENCES ON PRIMARY LIQUIDITY[1]
OVER THE DECEMBER QUARTER 1985
($ million)

	Total December Qtr
Government Influence	
Fiscal Deficit	1,571
Other[2]	33
Reserve Bank Influences	
Open Market Operations	10
Other[3]	-145
Public Debt Transactions	
Treasury Bill Tenders[4]	—
Stock Tenders	-804
EQWD Stock Take Up	-140
Securities Approaching Maturity[5]	55
Retail Debt	37
Residual	48
Changes in Primary Liquidity	+665

1 For the purposes of this table, primary liquidity is defined as total private sector holdings of discountable government securities (not including retail securities) plus settlement balances held at the Reserve Bank by the trading banks and Post Office Savings Bank. Prior to 4 December, discountable securities were those with six months or less to maturity. Over the remainder of December, only securities maturing on or before 30 April were discountable.

2 Includes additional liquidity impact of the Government's transactions which are not captured in the fiscal deficit due to timing factors.

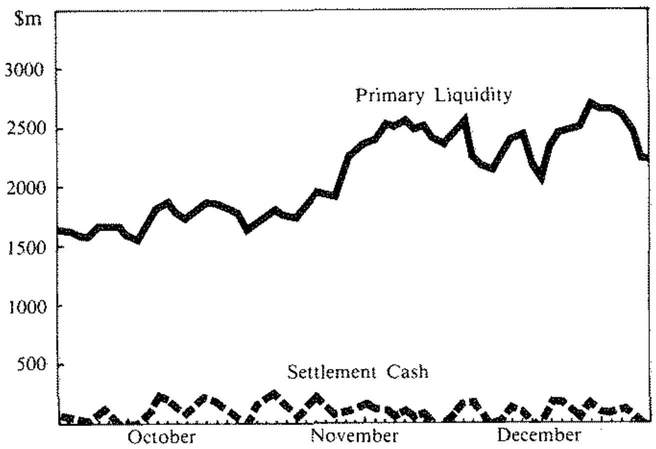
3 Includes changes in producer board account balances, notes in circulation, interest received on Reserve Bank government security holdings, plus Reserve Bank purchases of foreign exchange on behalf of Government.

4 The liquidity impact of selling Treasury bills greater than six months to maturity differs from the nominal value sold as the bills are sold at a discount.

5 Given the definition of primary liquidity, government securities approaching maturity are counted when they become discountable on demand with the Reserve Bank, rather than when they actually mature.

Seasonality in the government liquidity influence was also largely responsible for the profile of PL over the quarter. During the quarter the average daily level of PL increased steadily from around $1,693 million over October, to $2,098 million over November and to $2,397 million over December (see figure 1). The corresponding government liquidity influences were $365 million, $470 million and $770 million respectively. Other major liquidity influences during the quarter included government stock coming into the PL definition amounting to $55 million and $370 million in October and November and $370 million of stock being excluded from redefined PL in December. Another significant influence was the withdrawal of $140 million in October due to unusually large note purchases by the trading banks as a result of the bank strike in late October.

Figure 1
Primary Liquidity and Settlement Cash



Government Stock Tenders

Three tenders offering $300 million each were offered during the December quarter. The October tender was most heavily subscribed, with bids totalling approximately four times the amount on offer. The November and December tenders were both approximately three time oversubscribed.

The amount ultimately raised in the tenders was reduced to $800 million (nominal value) as a result of a default by a successful bidder for nearly $100 million of stock. In order to make up the shortfall, the stock involved was subsequently reoffered in a special tender of $100 million, held on 30 January.

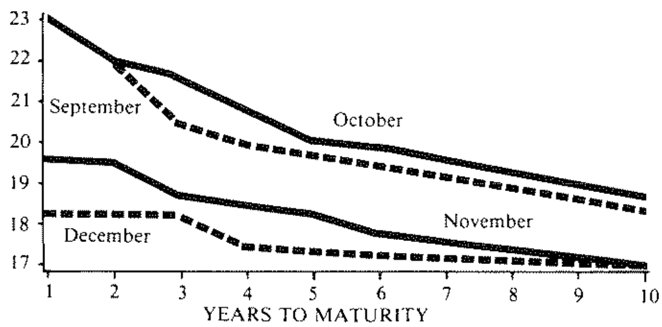
The interest rates accepted in the October tender were 20 per cent for the six year stock and 19.6 per cent for the eight year stock, which represented an increase of around 0.4 — 0.7 percentage points from the rates in the previous tender. However, the results in the November and December tenders reflected a change in market sentiment during the quarter. Rates in the November tender were around 2.2 — 2.4 percentage points lower than they were in the October tender. In the December tender, rates fell further by around 1.1 percentage points for the six year stock and 0.4 of a point for the eight year stock. No four year stock was offered in the November tender, but the rates accepted for this stock in the December tender were around 1.1 percentage points lower than secondary market rates at the time of the November tender. The larger fall in short-term rates had the effect of flattening the yield curve for government stock (see figure 2).

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* [1]	*Total successful bids $m*	*Allotment Yield % p.a.* [2]
19.	16/5/85	N.Z. Govt. Stock	15.03.87	75.0	153.3	—	75.0	21.85
			15.10.90	100.0	180.9	—	100.0	20.39
			15.04.95	75.0	153.7	—	75.0	19.18
20.	20/6/85	N.Z. Govt. Stock	15.03.87	50.0	198.3	—	50.0	19.60
			15.03.91	150.0	642.6	—	150.0	18.15
			15.04.95	100.0	287.7	—	100.0	17.33
21.	18/7/85	N.Z. Govt. Stock	15.03.91	150.0	735.6	—	150.0	18.18
			15.04.95	150.0	484.1	—	150.0	17.86
22.	19/9/85	N.Z. Govt. Stock	15.03.87	50.0	162.6	—	50.0	22.22
			15.03.91	150.0	437.5	—	150.0	19.59
			15.08.93	100.0	264.7	—	100.0	18.84
23.	17/10/85	N.Z. Govt. Stock	15.10.91	150.0	768.7	—	50.0	19.96
			15.08.93	150.0	408.8	—	150.0	19.55
24.	14/11/85	N.Z. Govt. Stock	15.10.91	200.0	476.6	—	200.0	17.78
			15.08.93	100.0	391.9	—	100.0	17.20
25.	12/12/85	N.Z. Govt. Stock	15.09.89	100.0	316.2	—	100.0	17.36
			15.10.91[3]	100.0	450.2	—	—	—
			15.08.93	100.0	323.3	—	100.0	16.85
26.	23/1/86	N.Z. Govt Stock	15.09.89	150.0	168.0	—	100.0	19.97
			15.10.91	150.0	397.6	30.0	180.0	19.42
			15.07.94	100.0	396.9	20.0	120.0	18.76

Note:
[1] As from the fifth tender 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.
[3] The successful competitive bid for this stock was $99.966m at an interest rate of 16.690%. However, the successful tenderer subsequently advised the Reserve Bank that it would be unable to uplift the stock, (see Economic Notes in January 1986 *Bulletin* for further details). The stock was offered again in Tender No. 27 on 13 February 1986.

Figure 2
Government stock yield curves
as at the end of September, October, November and December 1985



Interest Rates

Short-term interest rates remained high over the beginning of October as a result of tight liquidity conditions following the September tax drain. However, a seasonal build-up in liquidity and a policy of leaving a higher level of cash balances in the system over the December quarter (see the section on liquidity management operations below) saw short-term rates decline over the remainder of the quarter, before firming slightly again near the end of December (see figure 3).

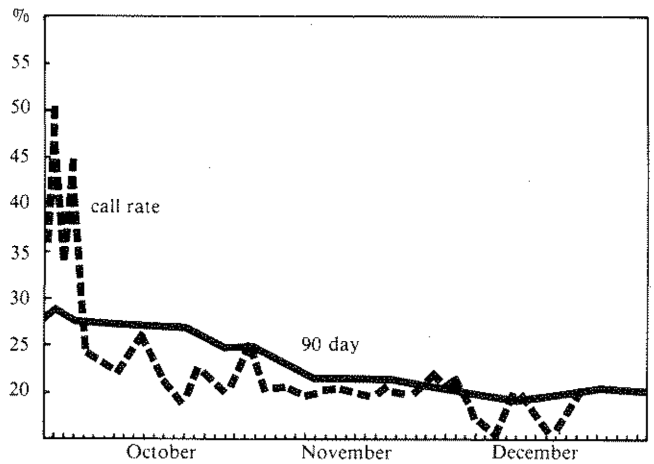
Movements in long-term rates in the stock tenders were broadly in line with movements in secondary market rates for government stock during the quarter. The fall in rates from the middle of October was probably due in part to the decline in short-term rates associated with an easing in liquidity conditions over this period, although other factors which are likely to have had a significant influence include:

— a possible downward revision in inflationary expectations, following the release of the October Food Price Index and more favourable inflation forecasts for 1986;

— some slowing in the demand for credit and a growing perception that the economy was beginning to turn down;

— the announcement of a smaller increase in the projected fiscal deficit and borrowing programme for 1985/86 than the market may have been expecting.

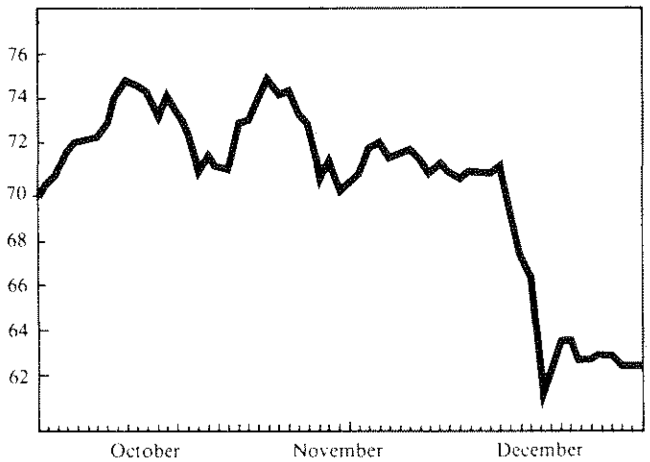
Figure 3
Daily 30, 90 day commercial bill rates
and call rates
over the December quarter



Exchange Rates

A relatively sharp fall in the exchange rate in the month of November was a major feature of the December quarter. Up until mid-December fluctuations in the trade-weighted index were within a fairly wide range of 75.5 — 70.6 (see figure 4). The index subsequently fell sharply in the period 10 to 17 December by almost 9.5 percentage points to reach a low of 61.9. At this level the exchange rate index was lower than at the time of the float, and at its lowest level since April 1985. The reduction in domestic interest rates during the quarter relative to overseas rates was undoubtedly a major factor contributing to the fall in the exchange rate. In addition, the fall may have reflected a perception (incorrect as it turned out) by market participants that the stance of monetary policy had been eased. The exchange rate index subsequently firmed slightly, so that by the end of the quarter the index stood at the pre-float level of 62.7.

Figure 4
Exchange Rate Index
(Base 1979 = 100)



Monetary and Credit Aggregates

The broad money aggregate, M3, grew by an estimated 4.3 per cent during the December quarter, up slightly on the 3.2 per cent growth recorded in the previous quarter. Over the December 1985 year, M3 is estimated to have increased by 20.1 per cent, up slightly from 19.3 per cent recorded in the year to September 1985.

Private sector credit is estimated to have increased by 2.4 per cent during the quarter, following increases of 4.9 per cent in the September quarter and 5.7 per cent in the June quarter. This trend suggests that relatively high interest rates are beginning to have an effect on the demand for credit. In addition, the reduction in credit demand may also reflect growing perceptions that the real economy will turn down in 1986.

Both the monetary and credit aggregates should be interpreted with some caution, however, as they continue to be distorted by the effects of recent deregulation and innovation in the financial sector. In particular, deposit growth of M3 institutions, which were previously more heavily controlled by regulations than other financial institutions, is likely to have been inflated by these factors. As it is impossible to determine the extent to which M3 has been affected by these factors, the usefulness of this aggregate as an indicator of monetary conditions has been temporarily reduced.

Lending and Deposits by Institution

The lending growth of most institutional groups during the December quarter was broadly consistent with the downward trend in private sector credit growth (see table 3). Although still comparatively strong, POSB lending growth fell sharply during the quarter, mainly reflecting a reduction in the rate of growth of housing loan approvals. Growth in trading bank lending declined from a monthly average of 1.8 per cent in the September quarter to 0.4 per cent in the December quarter. Finance company lending was static in the December quarter after growing by 3.3 per cent in the September quarter. Of the institutional groups, only the private savings banks and the building societies experienced an increase in lending growth during the December quarter.

Trading bank deposit growth eased to a monthly average of 1.8 per cent during the December quarter, down from 2.5 per cent in the September quarter and 3.3 per cent in the June quarter. Nevertheless, this growth was still high relative to the other institutional groups. The only institutional groups not to record an increase in the rate of deposit growth during the December quarter was the trustee savings banks.

Liquidity Management Policy

Although the policy of fully funding net public sector injections ensures stability in the level of primary liquidity over the medium-term, seasonal fluctuations in liquidity injections result in large month-to-month variations in the level of primary liquidity and its components. These variations, and the procedures used by the Reserve Bank to manage them, have at times been difficult for the market to understand and interpret. Accordingly, a number of changes to liquidity management policy were introduced on 3 December which were designed to make the policy more transparent, while at the same time leaving the overall stance of monetary policy unchanged.

The main modification was a change in the maximum term to maturity of government securities which the Reserve Bank is prepared to discount on demand, with a corresponding change in the definition of primary liquidity. Previously government stock and Treasury bills with up to six months to maturity were eligible for discounting, but from 15 April 1986 only government stock and Treasury Bills with up to one month to maturity will be eligible. During the transition, a 'phase down' was planned so that no securities maturing after 30 April 1986 would be discountable. (This date was subsequently extended to 15 May 1986 to allow some $350 million of government stock maturing in May to be available as a buffer for the March tax drain.) The discount margin applied over and above the Bank's assessment of market yields remained unchanged at 1 per cent.

The Reserve Bank also undertook to manage more actively the level of primary liquidity and its components, particularly settlement balances. It was announced that the level of settlement balances permitted in the system would be increased, and that there would be an associated increase in the interest rate paid on those balances. The rate was initially increased to 65 per cent of 7 day market rates, but it was indicated that if considered appropriate, this percentage would be further adjusted.

TABLE 3
MONTHLY LENDING AND DEPOSIT GROWTH[1]
(in percent)

	LENDING				*DEPOSITS*			
	Average Sept Qtr.	*Oct.*	*Nov.*	*Dec.*	*Average Sept Qtr.*	*Oct.*	*Nov.*	*Dec.*
Trading Banks[2]								
— Monthly	+ 1.8	+ 0.4	+ 1.5	− 0.7	+ 2.5	+ 3.1	+ 3.5	− 1.1
— Annual	+28.1	+23.5	+27.4	+23.9	+33.7	+27.6	+31.6	+34.5
Finance Coys								
— Monthly	+ 3.3	− 0.9	+ 0.3	+ 0.7 (P)	+ 1.5	+ 2.6	+ 3.1	+ 4.8(P)
— Annual	+28.4	+28.9	+26.7	+25.6 (P)	+28.2	+23.4	+23.6	+25.5(P)
Trustee Savings Banks								
— Monthly	+ 0.3	+ 0.4	+ 0.9	− 0.4	+ 0.5	+ 0.8	+ 0.1	+ 0.6
— Annual	+11.3	+ 9.4	+ 9.1	+ 7.4	+13.8	+13.1	+11.0	+10.3
Private Savings Banks								
— Monthly	− 1.7	− 1.2	− 1.1	− 1.3	− 1.8	− 1.2	− 1.5	− 1.4
— Annual	−15.4	−15.8	−16.5	−16.8	−15.4	−14.8	−15.8	−15.9
POSB								
— Monthly	+ 9.6	+ 2.8	+ 2.4	+ 1.8	+ 0.5	− 0.1	+ 2.2	+ 0.9
— Annual	+94.9	+98.8	+97.6	+ 96.1	+ 8.3	+ 8.7	+11.1	+ 9.0
Building Societies								
— Monthly	+ 0.2	+ 2.1	− 0.1	− 0.0	+ 1.2	+ 1.0	+ 1.3	+ 4.1
— Annual	+ 8.2	+ 8.8	+ 8.9	+ 8.2	+ 7.8	+ 8.0	+ 7.9	+10.1

[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.
(P) Provisional.

Liquidity Management Operations

Liquidity conditions remained relatively tight at the beginning of the December quarter. This tightness was reflected in the short-term interest rate structure which remained almost unchanged from the levels which existed during the September tax drain. In order to ease liquidity conditions, liquidity management operations were modified to leave a higher level of cash balances in the system. Settlement balances during October and November averaged $83 million and $114 million respectively, compared with an average of $68 million for September. The initial effect of the increase in liquidity was a decrease in Treasury bill rates, followed in mid-October by a decline in the rate structure more generally.

Following the announcement of the new liquidity management arrangements at the beginning of December, the level of cash balances in the system was further increased. The increase in the interest rate paid on settlement balances under the new arrangements was expected to lead to an increase in the demand for cash. However, it subsequently became apparent that the increased demand for cash was not sufficient to match the increase in the quantity of cash supplied to the system, and short-term interest rates fell further. As a result of this fall in rates, the cash level was adjusted downwards, although the average level of cash for the month as a whole remained relatively high at $91 million.

Of the twelve Treasury bill tenders held over the December quarter, two were nil tenders. The first, Tender 39 scheduled for 22 October, was set at zero in response to forecast liquidity withdrawals associated with normal end-of-month reserve flows to government. The subsequent uncertainty induced by the trading bank strike in early November, which hampered the daily settlement process, caused the one-week settlement period for Tender 40 to be extended by three days and largely because of this it was decided that Tender 41 would be a nil tender.

Two tenders during the December quarter were undersubscribed. Tender 29, in late October, was only 89 per cent filled even after the oversubscription facility had been applied, while Tender 47, the last in the quarter, was only 72 per cent subscribed. In three tenders the Reserve Bank used the oversubscription facility to fill tenders where the market's relative preference for bill maturities differed from those offered.

At the beginning of October, Treasury bill rates were about four percentage points lower than rates for commercial bills with comparable maturities. This unusually large margin reflected aggressive competition in Treasury bill tenders as banks sought to augment their holdings of PL assets with maturities of between one and four months. As banks obtained Treasury bills with the desired maturities, this margin eroded. During November and December Treasury bill rates were only around one percentage point below commercial bill rates for comparable maturities.

Over the December quarter open market operations involving $1,180 million were conducted, a substantial increase on the $260 million conducted in the previous quarter. Almost all of the operations were sales of Treasury bills out of the Reserve Bank's portfolio, and therefore had the effect of temporarily withdrawing cash from the system. The majority of the operations (65 per cent) were in short-dated bills, with maturities generally scheduled to coincide with end-of-month flows and stock tender settlements. The remainder of the operations transferred liquidity forward into the March tax drain period.

Discounting of government securities totalled around \$579 million during the quarter, which was almost half the level of the September quarter. The average term to maturity of the discounted securities was also considerably shorter, reducing the cost to banks of discounting. The majority of the discounting occurred in mid-October (\$158 million), when there were strong revenue flows to government, and mid-December (\$190 million), when heavy retail debt sales coincided with the final settlement of subscriptions from Stock Tender 24. The remainder of the discounting occurred mainly around the end of each month in the quarter.

Retail Stock Transactions

Redemptions of retail debt instruments exceeded new subscriptions by \$33 million over the December quarter, compared with net redemptions of \$102 million in the previous quarter (see table 4). The reduction in the rate of net redemptions was primarily due to some large subscriptions to the first issue of Kiwi Bonds by institutional investors.

On 4 November the fifth issue of Kiwi Savings Stock was closed and the first issue of Kiwi Bonds was opened. Kiwi Bonds differ from Kiwi Savings Stock in that issues are opened and closed more frequently so as to keep the interest rates offered in line with, albeit slightly below, the yields on government stock with comparable maturities. The first Kiwi Bonds issue offered an interest rate of 18.5 per cent for a two year term and 17.5 per cent for a four year term. This issue raised \$133 million before it was closed on 12 December 1985. The second issue of Kiwi Bonds was subsequently opened on 18 December, offering 16.5 per cent for both the two and four year stocks, in line with the lower interest rate structure prevailing in the secondary market for government stock at the time.

Redemptions of Kiwi Savings Stock continued to decline during the December quarter. However, this reduction was more than offset by the increase in redemptions of other savings stock, due to stock maturities. In the December quarter redemptions of other savings stock totalled \$105 million, which compares with redemptions of only \$2 million in the September quarter. Further large redemptions of other savings stock are expected in the March quarter as more stock matures.

Conclusion

The major indicators of monetary conditions were strongly influenced by seasonal factors over the December quarter. Following a period of firmness in the September quarter, liquidity built up over the December quarter in anticipation of the March tax flow. Easier liquidity conditions, combined with a number of factors influencing market expectations contributed to a fall in nominal interest rates from the middle of October, and a sharp fall in the exchange rate in December. Early in December a number of modifications were made to liquidity management policy, but these did not alter the overall stance of monetary policy.

Growth in the broad money and credit aggregates remained high over the December quarter, although the downward trend in lending growth which became apparent in the September quarter continued during the December quarter. The fall in lending growth primarily reflected the impact of the relatively high level of interest rates on the demand for credit, together with a growing perception by market participants that the real economy would weaken in coming months. As the effects of deregulation and financial innovation continue to distort the monetary and credit aggregates, these statistics should be interpreted with caution.

TABLE 4
SUBSCRIPTIONS AND REDEMPTIONS OF RETAIL DEBT INSTRUMENTS: COMPARISON OF SEPTEMBER AND DECEMBER QUARTERS 1985

	September 1985			*December 1985*		
	Subscriptions (\$m)	*Redemptions (\$m)*	*Net (\$m)*	*Subscriptions (\$m)*	*Redemptions (\$m)*	*Net (\$m)*
Inflation Adjusted Bonds	...	− 15.5	− 15.5	...	− 16.9	− 16.9
Kiwi Savings Stock I	...	− 72.7	− 72.7	...	− 39.7	− 39.7
Kiwi Savings Stock II	...	− 5.3	− 5.3	...	− 3.9	− 3.9
Kiwi Savings Stock III	...	− 3.7	− 3.7	...	− 3.2	− 3.2
Kiwi Savings Stock IV	+ 1.7	...	+ 1.7	...	...	...
Kiwi Savings Stock V	+ 17.7	...	+ 17.7	+ 4.4	...	+ 4.4
Kiwi Bonds I				+ 133.3	...	+ 133.3
Kiwi Bonds II				+ 0.6	...	+ 0.6
Our New Zealand Bonds	...	− 21.9	− 21.9	...	− 3.3	− 3.3
Other Savings Stock	...	− 1.9	− 1.9	...	− 104.7	− 104.7
Total	**+ 19.4**	**− 121.0**	**− 101.6**	**+ 138.3**	**− 171.7**	**− 33.4**