

Reserve Bank Bulletin

QUARTERLY REVIEW OF MONETARY CONDITIONS¹

Monetary conditions appeared to tighten over the September quarter, with a firming in nominal interest rates, a marked strengthening of the New Zealand dollar and a decline in the growth of the broad monetary and credit aggregates. The main instrument of monetary policy, the stock tender programme, continued to be based on fully-funding net public sector liquidity injections.

Introduction

Although the transitional effects of operating within a new policy environment were still an important influence during the September quarter, the available indicators provided a more consistent picture of monetary developments than had been the case over the June quarter. Most indicators showed the effects of the Government's firm monetary policy stance with:

- a rise in both short and long-term interest rates;
- a significant firming in the exchange rate over the quarter; and
- a slowing in growth of the broad monetary and credit aggregates.

This article briefly examines these developments.

Monetary Policy Stance

The policy stance adopted in March 1985 was to fully fund expected net public sector injections into primary liquidity² over 1985/86 by selling medium to long-term

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 transferable government securities (both stock and Treasury bills) with six months or less to maturity.

Following the modifications to liquidity management policy announced in December 1985, the definition of primary liquidity will be changed progressively through to 1 April 1986. The revised definition of primary liquidity applicable from 1 April is the cash deposits of the financial system at the Reserve Bank plus private sector holdings of transferable government securities with one month or less to maturity.

debt through the stock tenders. This stance was reviewed in June and considered to be still appropriate, though the borrowing programme for the year was reduced from the \$2,700 million announced in March to \$2,000 million following the downward revision in the Budget deficit. Around \$500 million (settlement value) was intended to be raised in two tenders scheduled for July and September.

Over the course of the September quarter, it became apparent that:

- fiscal injections were continuing to run above expectations, with the result that primary liquidity was at a higher level than may have been consistent with the underlying stance of monetary policy; and
- the September tax flow period would be handled comfortably by the system.

As a result the authorities sold around \$420 million of March 1986 Treasury bills over the period 9 July to 27 August, through a combination of Treasury bill tenders and open market operations. This had the effect of temporarily reducing primary liquidity and shifting bill maturities to coincide with the next major seasonal liquidity drain.

Towards the end of the quarter, a review of the debt programme indicated that the full year net borrowing requirement would possibly need to be raised above the \$2,000 million projected in June. This was the result of several factors, including:

- net redemptions of retail stock continuing at a high level;
- an apparent shortfall in fringe benefits tax receipts; and
- government expenditure running above forecast in some areas.

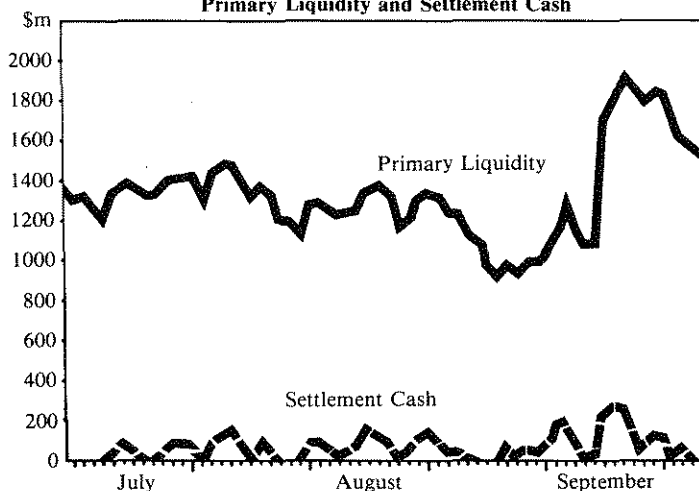
As a result the size of the September stock tender was increased slightly to \$300 million, and the Government announced that the amount to be raised over the first three quarters of the year was now expected to be between \$2,000–\$2,200 million, compared with the previous projection of \$2,000 million for the year as a whole. The underlying stance of monetary policy, as reflected in the commitment to fully fund expected liquidity injections, remained unchanged.

Primary Liquidity

Table 1 shows the actual influences on primary liquidity (PL) over the September quarter compared with projections made at the beginning of the quarter. PL increased by \$169 million over the quarter, compared with the forecast fall of \$110 million. This was mainly accounted for by the higher than anticipated net government injections which totalled \$621 million, compared with the forecast of \$410 million.

The sale of March 1986 Treasury bills over the quarter accounts for a large part of the combined negative influence of \$569 million from 'open market operations' and 'Treasury bill tenders'. The March Treasury bills sold over this period subsequently re-entered PL in September (refer footnote 6 of table 1), though they were still relatively illiquid at that point given the high capital loss associated with discounting longer dated securities.

Figure 1
Primary Liquidity and Settlement Cash



Source: Reserve Bank of New Zealand

The average daily level of PL was around \$1,350 million in July, largely unchanged from the previous month. However, end-of-month payments to Government and maturing sell-backs resulted in significant liquidity withdrawals at the end of August, reducing the average daily level of PL for that month to \$1,220 million. From a trough level of \$915 million in the last week of August, PL rose to about \$1,280 million on 10 September, before declining over the September tax drain period by about \$200 million. There was a

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TABLE 1
INFLUENCES ON PRIMARY LIQUIDITY¹
OVER THE SEPTEMBER QUARTER 1985
(\$ million)

	Total September Qtr	Projected ⁷ September Qtr
Government Influence		
Fiscal Deficit	782	+ 410
Other ²	- 161	—
Reserve Bank Influences		
Open Market Operations	- 262	- 220
Other ³	- 198	- 120
Public Debt Transactions		
Treasury Bill Tenders ⁴	- 307	—
Stock Tenders ⁵	- 589	- 630
EQWD Stock Take Up	- 57	—
Securities Approaching Maturity ⁶	+ 781	+ 360
Retail Debt.	+ 98	+ 90
Residual	+ 82	—
Changes in Primary Liquidity	+ 169	- 110

Notes

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. Discountable securities are those with six months or less to maturity.

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 due as the bills are sold at a discount.

⁵ The liquidity impact of government stock sold in the quarter was greater than that sold as delays in tender settlements meant that a significant part of the June tender was settled in July, whilst a smaller proportion of the September tender was not settled until October.

⁶ 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.

⁷ From press release dated 10 July 1985.

sharp increase in PL on 16 September, due to the cash injection of interest payments on government securities combining with the effect of March 1986 securities re-entering PL. This was followed by a further fall in cash and PL at the end of September although the average daily PL level still increased slightly to \$1,420 million for September as a whole.

Government Stock Tenders

Only two government stock tenders were held during the September quarter, in view of the large tax flow to Government expected in early September. The July and September tenders each offered \$300 million (nominal value) of stock, raising between them a total of \$565 million (settlement value).

The results of the two tenders reflected something of a change in market sentiment over the quarter. Interest rates on medium to longer term government stock had fallen quite sharply following the announcement of a lower fiscal deficit in the June Budget, and the results of the July tender were in line with this. Total bids were approximately four times the volume of stock on offer,

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.
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
			15.08.93	100.0	264.7	—	100.0	18.84
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
			15.10.91	200.0	476.6	—	200.0	17.78
24.	14/11/85	N.Z. Govt. Stock	15.08.93	100.0	391.9	—	100.0	17.20

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.

while rates remained essentially unchanged from the previous month's tender (held soon after the June Budget). However, interest in the September tender was significantly lower, with total subscriptions falling to about three times the volume of stock on offer and longer term rates increasing by around 1.0-1.5 percentage points relative to the July tender.

Interest Rates

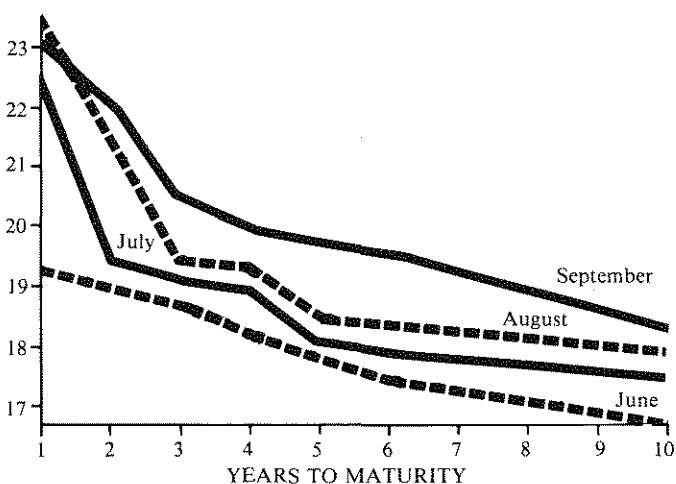
The September stock tender results were in line with earlier developments in secondary market rates on longer term government stock. The firming in these rates over the quarter, after the decline in June, reflected the influence of several factors, namely:

- the September announcement of an increase in the borrowing programme;
- the firming in short-term money market rates over the quarter (see below), which would have increased the short run funding costs for investors in government stock; and
- the possible adverse effect of the Higher Salaries Commission determinations on the wage round and hence inflationary expectations.

The firming in secondary market rates was most pronounced on shorter term government stocks (one to two years) and, as a result, the slope of the yield curve for government stock became more steeply negative as the quarter progressed (see figure 2).

A further feature of the September quarter was the firming in short-term money market rates, which peaked just prior to the September provisional tax flow and then eased slightly. Market nervousness associated with the tax drain was probably one of the major influences on short-term rates over this period. Wholesale 30 and 90 day commercial bill rates rose from

Figure 2
Government stock yield curves
as at the end of June, July, August and September 1985

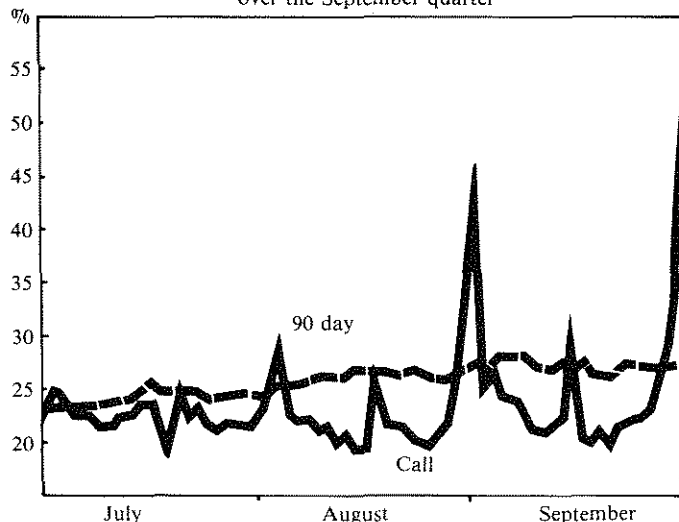


Source: Reserve Bank of New Zealand.

around 23 per cent at the end of June to 30 and 28 per cent respectively, by 5 September (see figure 3). By mid-September, rates had fallen some 2 — 3 percentage points, reflecting the relatively comfortable liquidity conditions over the tax drain period. In the final week of the quarter, however, rates firmed again by between 1 — 1.5 percentage points in response to strong end-of-month flows to Government.

Although the call rate remained between 19 and 23 per cent for most of the quarter, there was a rise at the end of each month as financial institutions had to discount short-dated government securities to meet seasonal flows to Government. This was most pronounced at the end of September. The September tax flow itself had very little effect on call rates, in marked contrast to the extremely high rates recorded in March.

Figure 3
Daily 90 day commercial bill rates
and call rates
over the September quarter



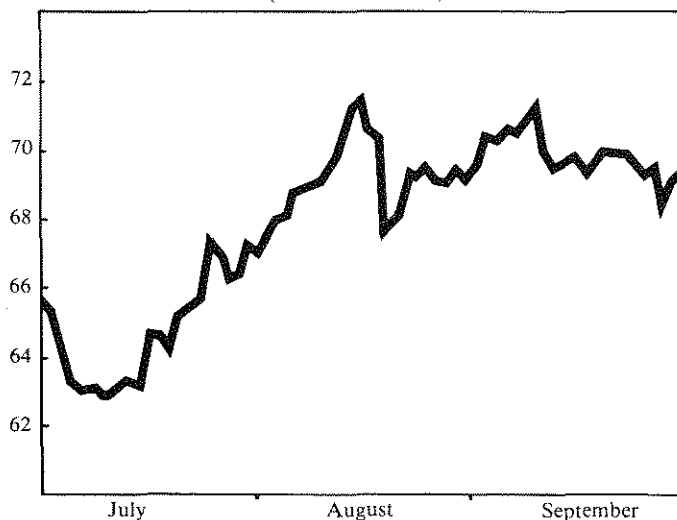
Source: Reserve Bank of New Zealand.

Exchange Rates

The second major feature of the September quarter was a marked rise in the New Zealand dollar exchange rate. The Reserve Bank's trade-weighted exchange rate index firmed on average by around 170 basis points per week between mid-July and mid-August, moving from a low of 62.7 to a peak of 71.3. During the remainder of the September quarter the exchange rate index remained relatively steady, averaging 69.6 and fluctuating within a narrow band of between 67.6 and 71.1 (see figure 4).

Although several factors may have accounted for the upward movement in the exchange rate over this period, relatively high domestic interest rates were undoubtedly a major influence.

Figure 4
Exchange Rate Index
(Base 1979 = 100)



Source: Reserve Bank of New Zealand.

Monetary and Credit Aggregates

The broad monetary aggregate, M3, grew by an estimated 3 per cent during the September quarter, a marked reduction from the 9.8 per cent increase recorded over the June quarter. However, this comparison overstates the reduction in the underlying

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rate of monetary growth, because movements in the June quarter were affected by the delayed effect of Reserve Bank purchases of private sector securities in March. (See page 506 of the September 1985 *Bulletin*.) A better basis for comparison is the average quarterly increase recorded over the March and June quarters combined, which was around 5 per cent.

Growth in lending to the private sector by M3 institutions also showed signs of slowing over the September quarter. Private sector credit increased by 4.1 per cent over the quarter, following rises of 6.5 and 5.9 per cent in the March and June quarters respectively. The monthly growth rates declined steadily from a peak of 2.9 per cent in July to 1.6 per cent in August and 0.7 per cent in September. This is the first indication that the high nominal interest rates may be having an effect on the demand for credit.

However, both the monetary and credit aggregates continue to be distorted by the effects of deregulation and financial innovation, and should therefore be treated with caution. In addition, the quarterly seasonally adjusted private sector credit series probably understated underlying credit growth earlier in the year. (The monetary and credit aggregates are reported in table D.2, D.3 and D.4 of this *Bulletin*.)

Lending and Deposits by Institution

The apparent downward trend in lending growth over the September quarter was by no means even across institutional groups. For the second successive quarter, lending growth by the Post Office Savings Bank was by far the strongest in percentage terms, reflecting the very high level of housing loan approvals recorded over 1985 to date. Average monthly trading bank lending growth over the September quarter was 1.5 per cent, up slightly from the previous quarter's average of 1.3 per cent. Average monthly lending growth by finance companies also remained relatively strong while lending by the trustee savings banks, building societies and private savings banks remained relatively static (refer table 3).

Growth in trading bank deposits declined slightly over the September quarter to a monthly average of 2.5 per cent compared with an average of 3.3 per cent during the previous quarter. However, this was still high by historical standards and the trading banks continued to improve their market share of total deposits over the September quarter. Finance company deposit growth also declined over the quarter, although it remained higher than for the trustee savings banks and the POSB. Building societies experienced a recovery in deposit growth over the quarter, with a net increase of 1.2 per cent following a fall of 0.3 per cent in the March quarter and a rise of only 0.2 per cent in the June quarter.

Liquidity Management Operations

Liquidity management policy is mainly concerned with the management of short-term flows in the financial system in a manner which is consistent with the underlying stance of monetary policy. The main instruments of liquidity management policy are the Treasury bill tenders and open market operations.³

³ Treasury bill sales by tender are reported in table E3 in the *Bulletin*. In addition the Economic Notes section of the August, September and October *Bulletins* review both Treasury bill tendering and open market operations over the previous month.

December, 1985

TABLE 3
MONTHLY LENDING AND DEPOSIT GROWTH¹
(in percent)

	<i>LENDING</i>				<i>DEPOSITS</i>			
	<i>Average June Qtr.</i>	<i>July</i>	<i>Aug.</i>	<i>Sept.</i>	<i>Average June Qtr.</i>	<i>July</i>	<i>Aug.</i>	<i>Sept.</i>
Trading Banks²								
— Monthly	+ 1.3	+ 2.8	+ 0.4	+ 1.4	+ 3.3	+ 4.0	+ 1.6	+ 1.9
— Annual	+ 27.3	+ 25.7	+ 31.0	+ 27.6	+ 31.0	+ 40.0	+ 32.8	+ 28.3
Finance Coys								
— Monthly	+ 2.3	+ 1.8	+ 5.1	+ 3.4 (P)	+ 3.0	+ 3.6	+ 2.2	- 1.6 (P)
— Annual	+ 24.1	+ 24.6	+ 28.9	+ 32.4 (P)	+ 22.4	+ 35.8	+ 25.9	+ 23.6 (P)
Trustee Savings Banks								
— Monthly	+ 0.8	+ 0.1	+ 0.5	+ 0.1	+ 1.3	+ 0.2	+ 0.7	+ 0.1
— Annual	+ 13.3	+ 11.9	+ 11.3	+ 10.7	+ 14.8	+ 14.3	+ 13.9	+ 13.2
Private Savings Banks								
— Monthly	- 1.9	- 2.4	- 1.6	- 2.8	- 1.7	- 2.6	- 2.1	- 1.3
— Annual	- 12.3	- 14.9	- 15.5	- 17.3	- 16.3	- 16.6	- 15.6	- 13.9
POSB								
— Monthly	+ 8.3	+ 16.2	+ 8.9	+ 4.5 (P)	+ 0.8	+ 0.2	+ 1.5	- 0.4
— Annual	+ 59.4	+ 88.1	+ 97.8	+ 100.1 (P)	+ 8.5	+ 8.3	+ 8.5	+ 8.0
Building Societies								
— Monthly	- 0.1	- 0.7	- 0.8	+ 2.0	+ 0.2	+ 1.5	+ 0.1	+ 2.0
— Annual	+ 13.6	+ 10.2	+ 7.8	+ 6.7	+ 6.6	+ 8.0	+ 7.7	+ 7.8

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

² Weekly averages.

(P) Provisional.

Of the thirteen Treasury bill tenders held over the September quarter, there were three nil tenders (one in July and two in September) in response to anticipated liquidity withdrawals associated with end-of-month flows to government and the September tax drain. As mentioned earlier, the strategy adopted between early July and the end of August was to reduce the level of cash and short-term securities in the system by selling March 1986 Treasury bills. Over the rest of the quarter, the bill tenders were more neutral with only shorter dated bills being offered.

All tenders held during the quarter were fully subscribed. However, in Tenders 28 and 29, the Reserve Bank rejected some bids on certain maturities because they were judged to be significantly out of line with comparable market rates; in these cases the oversubscription facility was used to fill the tenders.

Treasury bill rates remained at a margin of around 1 percentage point below private paper rates for most of the September quarter, in contrast to the situation early in the June quarter when the gap widened to as much as 5 percentage points. This reflected the fact that bill tender amounts were set with a view to maintaining a low level of cash over much of the quarter.⁴

The only exception was during the second and third weeks of September, when cash balances rose and the margin increased to between 2 — 3 percentage points.

Discounting of government securities at the Reserve Bank occurred mainly at the beginning of the quarter and at the end of each month within the quarter. In the first week of July strong liquidity withdrawals, reflecting the normal flow of sales tax and customs receipts to government, resulted in \$213 million of

securities being discounted. Further end-of-month discounting totalling around \$90 million, \$290 million and \$250 million occurred in July, August and September, respectively. In addition, \$74 million was discounted in mid-August in conjunction with the final settlement of subscriptions from Stock Tender 21. Over the September tax drain itself, only \$98 million of securities were discounted.

Open market operations conducted by the Bank over the September quarter were fairly limited, and in all cases were in response to larger than anticipated cash injections. In the early part of the quarter, open market operations were used to support the sale of March 1986 bills through the tenders. On two consecutive days in mid-July the Bank sold \$22 million of March bills, while another \$18 million of the same maturity were sold in early August. In the second half of the quarter, open market operations were confined to short-dated paper. On 22 August the Bank sold \$24 million of October Treasury bills, while during the third week of September, \$150 million of October Treasury bills were sold in order to absorb a strong cash injection from maturing government securities and government stock interest payments.

Retail Stock Transactions

Redemptions of retail debt instruments exceeded new subscriptions by \$102 million over the September quarter, in large part reflecting the higher market interest rate structure relative to the interest rate on Kiwi Savings Stock fifth issue (see table 4). Redemptions of Kiwi Savings Stock first issue remained high, though the total for the quarter was less than half that for the June quarter. Redemptions of the two inflation-indexed

⁴ The relationship between cash levels and Treasury bill rates was discussed in more detail on page 507 of the September *Bulletin*.

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

	<i>June 1985</i>		<i>Net (\$m)</i>	<i>September 1985</i>		<i>Net (\$m)</i>
	<i>Subscriptions (\$m)</i>	<i>Redemptions (\$m)</i>		<i>Subscriptions (\$m)</i>	<i>Redemptions (\$m)</i>	
Inflation Adjusted Bonds	...	- 13.6	- 13.6	...	- 15.5	- 15.5
Kiwi Savings Stock I	...	-165.7	-165.7	...	- 72.7	- 72.7
Kiwi Savings Stock II	...	- 11.8	- 11.8	...	- 5.3	- 5.3
Kiwi Savings Stock III	...	...	...	...	- 3.7	- 3.7
Kiwi Savings Stock IV	+ 25.5	...	+ 25.5	+ 1.7	...	+ 1.7
Kiwi Savings Stock V	...	...	...	+ 17.7	...	+ 17.7
Our New Zealand Bonds	...	- 5.4	- 5.4	...	- 21.9	- 21.9
Other Savings Stock	...	- 7.0	- 7.0	...	- 1.9	- 1.9
Total	+ 25.5	- 203.5	- 178.0	+ 19.4	- 121.0	- 101.6

stocks, Inflation Adjusted Bonds and Our New Zealand Bonds, were up slightly on the previous quarter, possibly reflecting the higher effective real rates available on alternative investments in the private sector.

A total of \$20 million of new issue savings stock was sold during the quarter, compared with \$26 million in the June quarter and \$46 million in the March quarter. Kiwi Savings Stock fifth issue remained open at the end of the quarter at interest rates of 17 per cent for both two and four years.

Conclusion

Monetary conditions appeared to tighten over the September quarter, with a firming in nominal interest rates, a marked strengthening of the New Zealand dollar and a decline in the growth of the broad monetary and credit aggregates.

The firm monetary policy stance was sustained during the quarter, with the public debt programme being

adjusted to offset revised estimates of net public sector injections into primary liquidity, thus reaffirming the full-funding principle.

Although interest rates firmed throughout most of the quarter, the extreme short-term rates experienced over the March tax period were not repeated in September. The tax flow was handled with relative ease even though it was the first time for several years that a compensatory deposit scheme had not been operated to smooth the seasonal flow to government. The net drain from the system over this period was more modest than anticipated, however, with the tax revenues being largely offset by on-going government spending. Periods of seasonal tightness during the quarter were mainly concentrated around the end-of-month flows to government.

The outlook over the December quarter was for a significant net injection of primary liquidity, reflecting a seasonal build-up prior to the March 1986 tax flow. The stock tender programme continued to be based on restricting the trend growth in primary liquidity over the year as a whole.