

REVIEW OF MONETARY POLICY AND CONDITIONS

Some easing in liquidity conditions developed through the September quarter, as the financial system gradually adapted to the new liquidity management approach. By early November there were indications that subsequent adjustment made to liquidity management policy settings had reasserted the firm medium-term policy stance.

The Monetary Policy Environment

The intention of the current monetary policy framework is to exert a steady and predictable degree of restraint on monetary conditions over time, so that inflationary pressures are not accommodated. Medium-term restraint is maintained through a stable trend level of primary liquidity, which in turn is achieved by 'fully-funding' all public sector liquidity injections through the year arising from the fiscal deficit, maturing public debt, and Reserve Bank transactions with the private sector. While this approach should be sufficient for achieving monetary stability in the medium-term, from day-to-day and quarter-to-quarter there will be considerable volatility in liquidity arising out of natural timing mismatches of expenditure and revenue, particularly in the government accounts. Liquidity management policy seeks to moderate this volatility in the short-term.

In late 1985 and early 1986 some changes to the method of liquidity management policy were announced. The effect of these changes¹ was a decrease in the amount of volatility in liquidity, particularly in the important cash component, which financial institutions could expect to face. This was brought about by an increase in the activeness with which the Reserve Bank sought to offset short run variability in liquidity conditions.²

This new approach to liquidity management affected the motivation of institutions for holding liquid balances and consequently had implications for the degree of effective restraint implicit in the 'full-funding' strategy. Lack of full knowledge

about likely financial system reactions to the new system necessitated the use of judgment in establishing the initial level of primary liquidity and the level of the cash component of liquidity to be sought in daily liquidity management operations. Indeed, the appropriate base levels for primary liquidity and its cash component must continue to be reviewed on an ongoing basis in order that structural shifts in the demand for liquidity do not inadvertently tighten or loosen the stance of policy. Such shifts are assessed on the basis of a range of indicators of monetary conditions.

Monetary Conditions: Overall Assessment

The current monetary policy approach is a quantity based one, relying on medium-term relationships between financial aggregates and nominal incomes and prices. In principle, therefore, the best medium-term indicators of the degree of pressure being exerted by monetary policy would be the various money and credit measures themselves, making due allowance for the time it takes for monetary policy initiatives to actually impact on those measures.

However, the period under review in this article is not 'normal'. Considerable changes in the structure of the financial system mean that the relevant measures are temporarily distorted to a significant but not easily identifiable degree. Particularly in the short-term, where the behaviour of the quantity measures can be quite unpredictable, a judgment as to the state of monetary conditions must be supplemented by reference to a range of other indicators.

Amongst other such indicators, the behaviour of interest rates and the exchange rate can be quite important. Other things being equal, rises in interest rates (particularly short-term rates) and the exchange rate result from additional monetary policy pressure. But other things are seldom equal. Interest rates (particularly long-term rates) and the exchange rate can change as a result of many other fac-

tors apart from monetary policy pressures. The use of such indicators, therefore, must be undertaken with care, and with reference to as much other relevant information as can be obtained.

Other relevant information includes the background of real economy developments, the financial state of major economic sectors, expectations and confidence factors, developments in foreign capital markets, other overseas developments and structural changes taking place in the financial sector.

Using this set of information, it appeared that the easing in liquidity conditions which had developed during the June quarter was sustained over most of the September quarter. In particular, the exchange rate continued to depreciate, quite sharply from the end of July to late September, and the interest rate yield curve remained relatively flat. While there were other factors, such as the fall in the Australian dollar, which contributed to movements in these indicators, it became increasingly clear that overall monetary conditions had become a little easier than during the first few months of 1986.

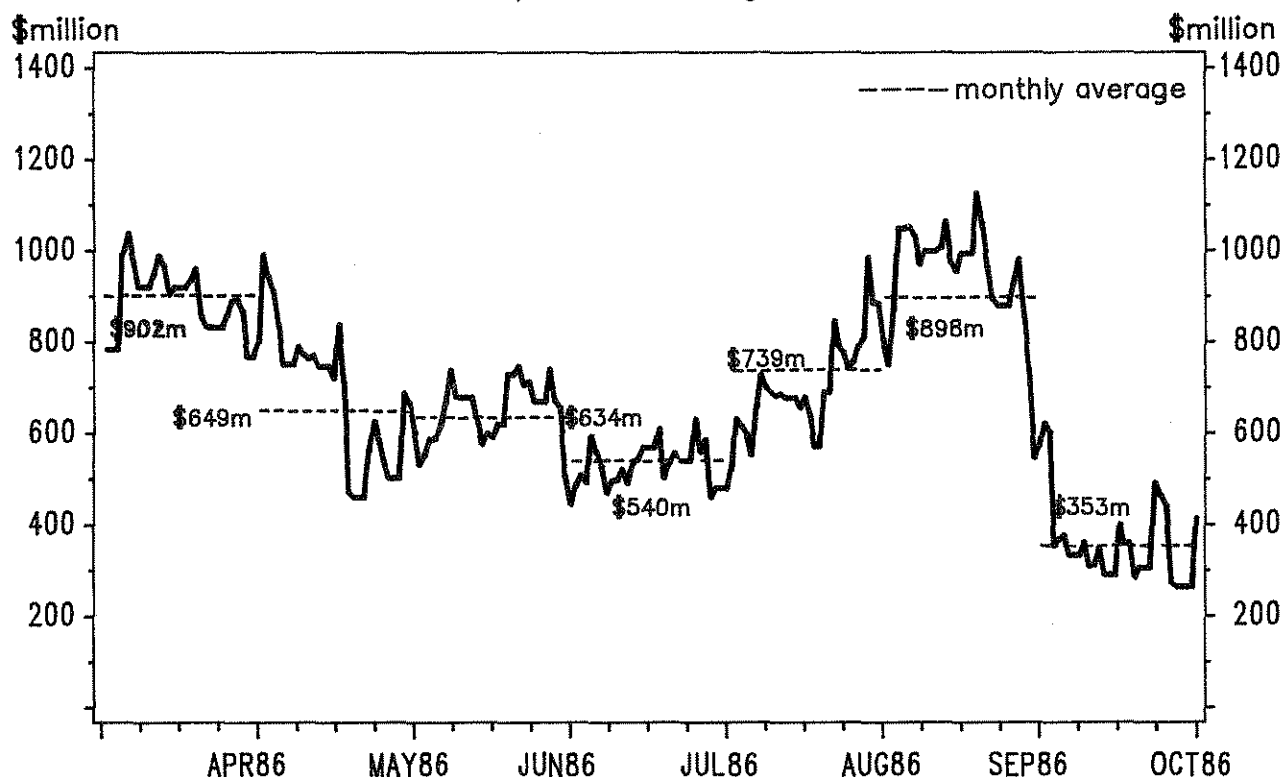
Following the passing of the September tax drain, a process of a gradual firming in liquidity conditions was initiated in order to restore the desired medium-term policy stance. Towards the end of September it was announced that the daily cash target used in liquidity management policy had been reduced from \$50 million to \$40 million and that average primary liquidity (PL) levels would be substantially lower than in the past; average PL levels from October onwards were to be around \$400 million in months other than those immediately preceding tax flows compared with average levels of around \$600 million over past months (see figure 1). It was also indicated at the beginning of October that monetary conditions would remain under close review and that further steps to tighten liquidity would be taken if necessary.

Subsequent movements in the main monetary indicators suggest that liquidity conditions did tighten to

¹ An earlier article (*Bulletin*, May 1985, pages 235-242) describes in detail the liquidity management policy changes referred to.

² A record of liquidity management operations over the review period (essentially the quarter through to end-October) appears as Appendix 1. It can be seen from this record that the frequency of liquidity management operations, and the volume of transactions conducted, were both significant. The selection of frequency and volume for open market operations and Treasury bill tenders relates to the use of a daily settlement cash aiming point as a guide for operations. For a full explanation see *Bulletin* article May 1985 page, 235

Figure 1
Primary Liquidity
 settlement cash plus discountable government securities



some degree over October. The policy pressure was maintained during November. The daily cash target was further reduced to \$30 million on 3 November and it was announced on 4 November that the average level of PL in November was expected to be \$360 million, the same level that was recorded in October.

These developments are examined in more detail in the rest of this article.

Interest Rates

After falling by 3.5 percentage points to 16 per cent over the June quarter, medium-term (5 year government stock) interest rates subsequently fluctuated within a 1 per cent range during the review period (see figure 2).

From the end of June to early August, medium-term interest rates firmed to 16.9 per cent, apparently largely as a result of the announcement in late June of a larger than

expected fiscal deficit and public debt programme, increasing inflation expectations, and the proximity of the September provisional tax flow period. The deteriorating international investor perception of the Australian economy at that time may also have affected investor confidence in the New Zealand economy and placed upward pressure on interest rates.

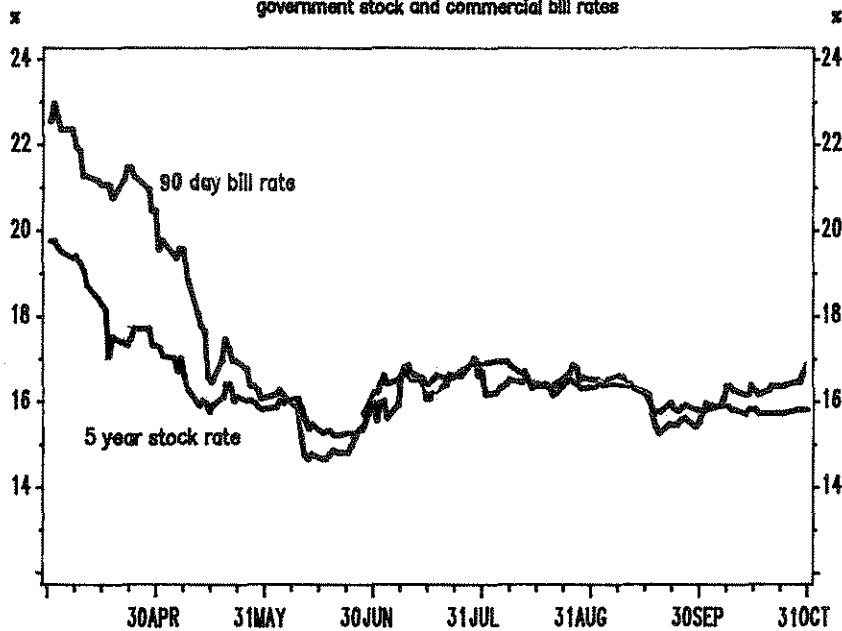
An expansion in the volume of liquidity available from mid-August in preparation for the September tax drain, and growing confidence (within the money markets) in the ability of the Reserve Bank's daily cash management operations to handle the September tax drain without disruption were probably the main factors underlying an easing in medium-term rates to 15.8 per cent by mid-September. Rates continued to fluctuate in a narrow range around this level over the remainder of the review period, easing slightly following the announcement that the 10 year stock would

not be offered in the October government stock tender³ but subsequently firming somewhat in response to the ongoing tightening of liquidity conditions which occurred over October.

Movements in short-term rates (90-day commercial bills) were comparable to medium-term rate movements over much of the review period, although the rate increases which have occurred since late September were more marked (see figure 2). After declining by 6 percentage points to 16 per cent over the June quarter, short-term rates firmed to 16.75 per cent by the end of July before declining to 15.3 per cent by mid-September. The factors underpinning the movements in medium-term rates over this period were also largely responsible for these

³ See table E1 in the statistical section of the quarterly Bulletin for a record of the government stock tenders held during the most recent period. The 10 year maturity was dropped from the tender programme because of concerns about the implied real debt servicing costs.

Figure 2
Interest Rates
government stock and commercial bill rates



interest rate trends. In particular, growing confidence that liquidity levels would be more than adequate to cover the September tax flow contributed to the decline in short-term rates which occurred from early August to mid-September. Short-term rates rose for the remainder of the review period, reaching 17 per cent by the end of October. This later rise in rates was largely due to the measures announced in late September to tighten liquidity.

The essentially flat nature of the interest rate 'yield curve'⁴ at the end of June was largely sustained throughout the review period until early October. Following measures to tighten liquidity announced in late September (see later) short-term rates began rising relative to medium-term rates and the yield curve became increasingly inverted (i.e. negatively sloped) over October. By the end of October,

short-term rates were around 1 per cent higher than medium-term rates. While the yield curve was more negatively sloped at the end of October than it had been since May, the slope was considerably less steep than had been the case over most of 1985/86.

The slope of the yield curve can be a useful indicator of the firmness of monetary conditions. Other things being equal, the tighter monetary conditions are, the more steeply inverted the yield curve should be. An inverted yield curve suggests that while monetary restraint is presently causing short-term interest rates to be high, this restraint is in time expected to lower the rate of inflation and hence future interest rates. Typically, therefore, a disinflationary monetary policy applied following a period of high inflation rates is associated with an inverse interest rate structure.

While the significant flattening in the interest rate structure from May onwards suggested that there was some easing in monetary conditions, this assessment needs to be qualified to the extent that a number of other factors also influenced the shape of the

yield curve over this period. First, perceptions that the decline in the growth rate in economic activity was bottoming out tended to reduce short-term rates relative to expected future rates. Secondly, future inflation may not have been expected to decline as rapidly as it had done over the previous year by some market participants. Thirdly, as a result of a high uncertainty premium built into short rates, the yield curve was probably more steeply inverted prior to the June quarter than was necessary to maintain appropriately firm medium-term monetary conditions.

Exchange Rate

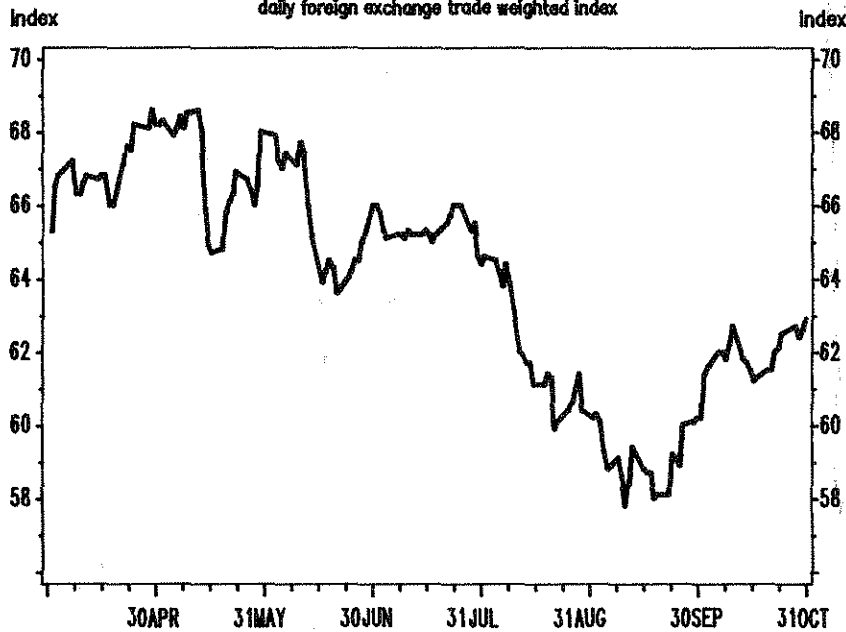
As with the interest rate yield curve, the exchange rate is an indicator of monetary conditions that must be interpreted with caution. Other things being equal, an easing in liquidity conditions tends to be reflected in a weakening exchange rate. Lower short-term interest rates encourage investors to reduce their net holdings of New Zealand dollar assets and acquire foreign currency assets. This activity creates pressure on capital outflows (or reduces the pressure for capital inflows) and tends to depreciate the exchange rate.

However, a host of other factors also influence the exchange rate: interest rate movements in foreign capital markets, fiscal policy, investors' overall confidence in government economic policy, foreign debt levels, expected growth in the economy, and factors, such as the terms of trade, which affect the current account of the balance of payments. In order to assess monetary conditions from exchange rate movements, it is necessary to make allowance for developments in these other influences.

After remaining relatively stable over the first few weeks of July, the New Zealand dollar depreciated sharply until mid-September (see figure 3). Over this period the trade weighted index fell from 66 to 58, a 12 per cent depreciation. An easing in liquidity conditions since May-June, as suggested by the flatter interest rate yield

⁴ The 'yield curve' depicts interest rates or yield levels over the full maturity range of financial instruments. A positively sloped yield curve refers to long-term yields being higher than short-term yields. A negatively or inversely sloped yield curve refers to the opposite situation.

Figure 3
Exchange Rate Index
 daily foreign exchange trade weighted index



curve, seems likely to have been a factor underlying this depreciation of the exchange rate.

Another influence on the exchange rate over this period was the deteriorating Australian economic outlook and the depreciating Australian dollar. Many domestic and foreign investors regard the Australian and New Zealand economies as being closely linked, with the result that the increasingly pessimistic view being taken about the Australian economy during that period tended to spill over into a more negative attitude towards New Zealand dollar investments. Partly as a result of this linkage, the depreciation of the New Zealand dollar against the Australian dollar from the beginning of the review period to mid-September was only 6.8 per cent, a little over half the depreciation against the trade weighted basket of currencies.

Following the moves to tighten liquidity, announced in late September and October and a seasonal build up in export receipts, the downward trend in the exchange rate was broken. The trade weighted index appreciated by 8.3 per cent between late September and the end of

October. Again, the movement against the Australian dollar was less marked (the New Zealand dollar appreciated by 4.5 per cent against the Australian dollar), partly reflecting a coincident move to tighten liquidity conditions in Australia and probably also some recovery of investor confidence in Australasia.

Monetary and Credit Aggregates

As noted, structural changes in the financial sector resulting from financial deregulation in 1984/85 have severely limited the usefulness of the monetary aggregates as an indicator of monetary conditions, especially in the short-term. The removal of interest rate and reserve asset ratio controls has enabled those 'M3' institutions whose business is covered by the monetary statistics to successfully compete away business from 'non-M3' financial intermediaries. This process of adjustment to deregulation, known as reintermediation, contributed to the high monetary growth rates recorded from late 1984 until April this year. The long period since the removal of these controls and the

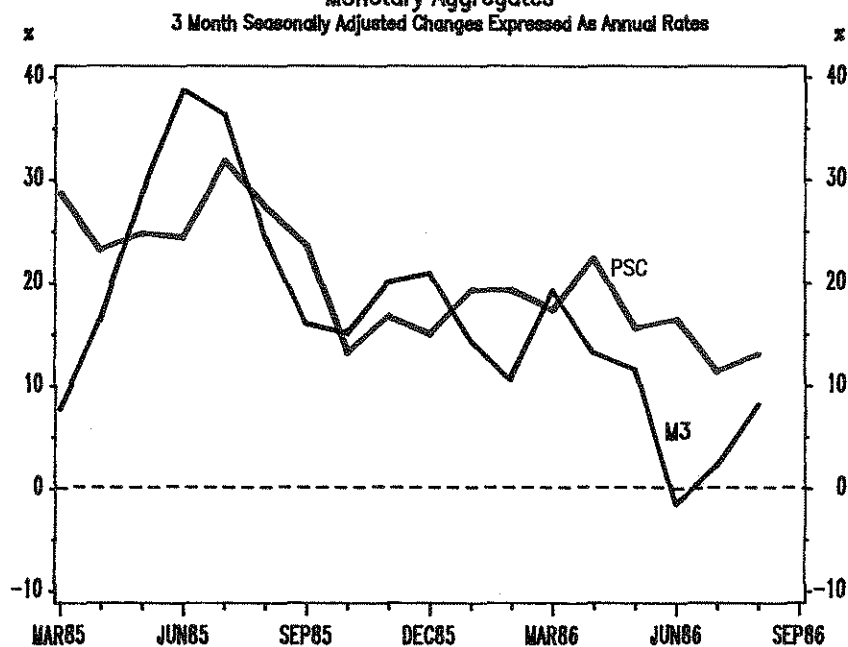
rapid decline in monetary growth since April suggests that this process of reintermediation may now be largely complete. However, the money and credit aggregates continue to be affected by structural adjustments in portfolios between domestic and foreign assets/liabilities, and between commercial paper and deposit instruments. Furthermore, an added complication will occur in 1987 with the advent of new banks.

Available monetary statistics for the review period show that the annual rates of growth of the monetary aggregates continued to decline after June, but that the underlying growth rate may have turned upwards around August/September.

Annual M3 growth declined from 13.2 per cent in the June year to (an estimated) 12.7 per cent in the year to September. Over the same period, PSC growth declined from 18 per cent to 17 per cent. As already indicated, these declines in annual growth rates partly reflected the phasing out of the reintermediation influence. A clearer indication of developing monetary aggregate trends in recent months is given by annualised quarterly (seasonally adjusted) monetary growth rates, as shown in figure 4. These growth rates have the advantage of not being influenced by growth which occurred over previous periods. After peaking in March/April, growth in the aggregates declined and bottomed out in June/July before subsequently rising again in August/September. The dominant factor was no doubt the pre-GST boom in consumption expenditure, combined with an increased demand for mortgage finance and an increasing use of borrowed funds in share market transactions.

While trends in the monetary aggregates can be assessed reasonably well, it is rather more difficult to determine whether or not these actual growth rates are consistent with medium-term inflation objectives. Apart from the fact that a stable or predictable empirical relationship between the monetary aggregates and nominal GDP is not yet evident, there is also the question of interpreting the meaning of differential M3 and PSC

Figure 4
Monetary Aggregates



growth rates. As can be seen in figure 3, PSC growth has been significantly higher than M3 growth for much of the current financial year.

Most of the divergence between PSC and M3 growth in the current financial year can be attributed to slow growth in M3 institutions' lending to government (i.e. their holdings of government securities) relative to their private sector lending; the counterpart to this development has been more rapid growth in non-M3 lending to government relative to their holdings of claims on M3 institutions. A decrease in M3 institutions' net overseas asset holdings over the June quarter also contributed to this divergence. Over time, M3 institutions should adjust their lending to government and net overseas asset holdings to desired proportions of total assets. At that point, given other things being equal, M3 and PSC growth rates are likely to converge. These portfolio adjustments in themselves probably have minimal effects on nominal expenditure and inflation.

Overall, the trends in the monetary aggregates shown in figure 4 tend to confirm the conclusion about monetary conditions drawn from the other

monetary indicators, i.e., that liquidity conditions tended to ease over the September quarter.

Conclusion

The main monetary indicators generally support the view that the easier liquidity conditions which developed in the latter half of the June quarter were sustained over most of the September quarter in the run up to the tax flow period. The interest rate yield curve remained relatively flat throughout the quarter and the exchange rate depreciated quite sharply from the end of July to mid-September. While various factors make monetary aggregate trends difficult to read, the acceleration in the quarterly growth rates of the aggregates (expressed as annual rates in figure 4) since June tends to support the view that liquidity conditions had eased. However, as noted above, any conclusions about monetary conditions based on the monetary aggregates are, in current circumstances, tentative.

Factors other than the easing liquidity situation also contributed to observed movements in the various

monetary indicators. In particular, perceptions that economic activity was bottoming out are likely to have helped to flatten the yield curve while a sharp depreciation of the Australian dollar also depressed the New Zealand dollar.

The main apparent cause of the easing in liquidity was the gradual adaptation of financial institutions to the changes in the techniques of liquidity management that were implemented earlier in the year. Put simply, experience with the changed liquidity management approach made financial institutions feel increasingly comfortable about the Reserve Bank's ability to manage variations in liquidity flows, thus reducing the need for institutions to hold precautionary liquid balances. In order to maintain the consistency of short-term policy with the firm medium-term monetary policy stance, it thus became necessary to reduce the supply of primary liquid assets.

By early November, following two step reductions in the daily cash target and a reduction in the average aiming level for primary liquidity, the indications were that liquidity conditions had firmed and become more consistent with the medium-term aim of monetary policy.

Open Market Operations

1.7.86 — 1.9.86

Date	Transaction	Amount of Offer \$m	Volume of Bids Received \$m	Total Amount Sold \$m	Total Amount Purchased \$m	Range of Bids Received %	Range of Successful Bids %	Average of Successful Bids %
July 1	Government Stock	45	—	—	—	—	—	—
	Sellback	45	77 @ 9/ 7/86	—	45	14.71-15.6	15.26-15.6	15.28
July 2	Government Stock	15	—	—	—	—	—	—
July 3	Sellback	40	120 @ 7/ 7/86	—	40	14.60-15.43	15.33-15.43	15.38
July 4	Sellback	30	20 @ 15/ 7/86	—	20	15.26-15.51	15.26-15.51	15.44
July 7	Sellback	45	45 @ 14/ 7/86	—	25	14.30-15.20	14.75-15.20	14.92
July 8	Sellback	20	77 @ 15/ 7/86	—	20	14.85-15.65	15.56-15.65	15.61
July 14	Treasury Bills	80	27 @ 29/ 7/86	7	—	15.70-16.50	15.70-15.80	15.770
			24 @ 31/ 7/86	—	—	16.14-16.50	—	—
July 15	Treasury Bills	130	49 @ 25/ 7/86	17	—	15.20-15.70	15.20-15.60	15.450
			30 @ 29/ 7/86	—	—	15.83-16.00	—	—
			63 @ 31/ 7/86	21	—	15.55-16.27	15.55-15.60	15.580
July 16	Treasury Bills	80	49 @ 25/ 7/86	35	—	14.65-15.85	15.51-15.54	15.386
			37 @ 29/ 7/86	32	—	15.30-16.04	15.30-15.54	15.399
			63 @ 31/ 7/86	13	—	15.34-16.09	15.34-15.54	15.386
July 17	Sellbacks	70	75 @ 23/ 7/86	—	70	14.60-15.20	14.65-15.20	14.92
July 18	Sellbacks	80	45 @ 23/ 7/86	—	—	14.30-14.75	—	—
			115 @ 4/ 8/86	—	85 ¹	14.36-15.77	14.87-15.77	15.44
July 22	Sellback	25	65 @ 4/ 8/86	—	25	14.60-15.51	15.00-15.51	15.36
July 23	Sellback	70	128 @ 5/ 8/86	—	63	14.86-16.06	15.40-16.06	15.714
July 24	Sellback	45	73 @ 4/ 8/86	—	28	14.78-15.86	15.51-15.86	15.66
July 25	Sellback	175	165 @ 6/ 8/86	—	57	15.50-16.21	15.60-16.21	15.91
			141 @ 12/ 8/86	—	118	15.05-15.95	15.60-15.95	15.77
July 28	Treasury Bills	25	60 @ 25/ 9/86	25	—	15.79-17.00	15.79-15.92	15.840
Aug. 1	Treasury Bills	110	197 @ 28/ 8/86	83	—	15.49-16.06	15.49-15.70	15.590
			82 @ 30/ 9/86	27	—	15.69-16.25	15.69-15.79	15.730
Aug. 4	Sellback	20	57 @ 13/ 8/86	—	20	14.30-15.31	15.31	15.31
Aug. 8	Treasury Bills	40	83 @ 27/ 8/86	—	18	14.55-15.25	14.96-15.25	14.99
			2 @ 28/ 8/86	—	2	15.25	15.25	15.25
			20 @ 1/ 9/86	—	20	15.25-15.30	15.25-15.3	15.28
Aug. 11	Treasury Bills	50	17 @ 26/ 8/86	10	—	15.3 -16.33	15.3	15.3
			51 @ 30/ 9/86	40	—	15.62-16.4	15.62-15.82	15.66
Aug. 12	Treasury Bills	100	51 @ 27/ 8/86	—	26	15.25-15.6	15.35-15.6	15.33
			30 @ 28/ 8/86	—	10	15.35	15.35	15.35
	Sellback	100	79 @ 20/ 8/86	—	64	15.35-16.35	15.35-16.35	16.02
Aug. 13	Treasury Bills	30	10 @ 1/ 9/86	—	10	15.42	15.42	15.42
			22 @ 2/ 9/86	—	20	14.85-15.42	15.42	15.42
Aug. 14	Treasury Bills	30	30 @ 28/ 8/86	—	15	14.6 -15.02	15.02	15.02
Aug. 15	Sellback	130	54 @ 20/ 8/86	—	34	14.75-16.06	15.66-16.06	15.87
			138 @ 1/ 9/86	—	96	15.17-16.3	15.46-16.3	15.7
	Treasury Bills	130	3 @ 2/ 9/86	—	0	15.16-15.25	—	—
Aug. 18	Treasury Bills	80	116 @ 26/ 8/86	40	—	15.75-17.05	15.75-15.98	15.9
Aug. 19	Treasury Bills	30	20 @ 27/ 8/86	—	11	14.6 -15.25	15.05-15.25	15.15
			10 @ 28/ 8/86	—	5	14.85-15.1	15.1	15.1
			3.82 @ 1/ 9/86	—	3.82	15.24	15.24	15.24
			1.18 @ 2/ 9/86	—	1.18	15.24	15.24	15.24
Aug. 20	Treasury Bills	25	58 @ 30/ 9/86	25	—	15.72-16.3	15.72-15.8	15.77
Aug. 21	Government Stock	50	15 @ 15/ 9/86	—	15	15.31-15.45	15.31-15.45	15.36
	Treasury Bills	—	7 @ 1/ 9/86	—	5	15.0 -15.51	15.51	15.51
			5 @ 2/ 9/86	—	5	15.51	15.51	15.51
Aug. 22	Government Stock	75	30 @ 15/ 9/86	—	30	15.37	15.37	15.37
	Treasury Bills	—	2 @ 2/ 9/86	—	2	16.01	16.01	16.01
	Sellback	75	157 @ 3/ 9/86	—	43	15.41-16.35	16.0 -16.35	16.15
Aug. 25	Treasury Bills	20	70 @ 26/ 8/86	20	—	16.45-17.75	16.45	16.45
Aug. 26	Sellback	75	75 @ 1/ 9/86	—	48	15.6 -16.55	16.05-16.55	16.17
			31 @ 2/ 9/86	—	6	15.1 -16.2	16.0 -16.2	16.1
	Government Stock	75	10 @ 15/ 9/86	—	5	15.69	15.69	15.69
Aug. 27	Government Stock	25	5 @ 15/ 9/86	—	—	15.47	—	—
Aug. 29	Treasury Bills	40	169 @ 23/10/86	40	—	15.94-16.5	15.94-16.05	15.99
Sept. 1	Treasury Bills	25	98 @ 18/ 9/86	15	—	15.5 -16.07	15.5 -15.7	15.57
			60 @ 25/ 9/86	10	—	15.59-16.43	15.59-15.63	15.61

Open Market Operations

2.9.86 — 22.10.86

Date	Transaction	Amount of Offer \$m	Volume of Bids Received \$m	Total Amount Sold \$m	Total Amount Purchased \$m	Range of Bids Received %	Range of Successful Bids %	Average of Successful Bids %
Sept. 2	Treasury Bills	105	89 @ 18/ 9/86	45		15.5 -15.98	15.5 -15.63	15.56
			69 @ 25/ 9/86	22		15.54-15.94	15.54-15.74	15.56
			84 @ 26/ 9/86	38		15.54-16.29	15.54-15.74	15.60
Sept. 3	Government Stock	15	10 @ 15/ 9/86		5	14.85-14.95	14.95	14.85
	Sellback	15	16 @ 15/ 9/86		10	14.85-15.4	15.1 -15.4	15.34
Sept. 4	Sellback	80	20 @ 8/ 9/86		10	14.0 -14.85	14.86	14.86
Sept. 5	Sellback	65	92 @ 15/ 9/86		50	15.0 -15.75	15.06-15.75	15.39
	Government Stock	65	5 @ 15/ 9/86		5	14.79	14.79	14.79
			10 @ 29/ 9/86		5	15.16-15.26	15.26	15.26
Sept. 8	Treasury Bills	20	25 @ 18/ 9/86	20		15.84-16.1	15.84-15.87	15.86
Sept. 9	Treasury Bills	40	17 @ 10/ 9/86	10		15.85-16.0	15.85-15.97	15.95
			25 @ 23/10/86	10		16.0 -16.4	16.0 -16.1	16.05
Sept. 10	Treasury Bills	15	10 @ 29/ 9/86		10	15.45-15.55	15.45-15.55	15.5
Sept. 11	Treasury Bills	155	7 @ 26/ 9/86		7	15.4 -15.65	15.4 -15.65	15.58
			5 @ 29/ 9/86		5	15.6	15.6	15.6
	Sellback	155	293 @ 15/ 9/86		143	15.3 -16.3	15.72-16.3	15.9
Sept. 12	Sellback	125	141 @ 15/ 9/86		81	15.25-15.77	15.61-15.77	15.69
Sept. 15	Treasury Bills	200	35 @ 22/ 9/86	24		15.25-15.9	15.25-15.42	15.34
			67 @ 25/ 9/86	43		15.47-15.99	15.47-15.7	15.59
			88 @ 26/ 9/86	45		15.49-15.9	15.49-15.7	15.61
			115 @ 33/10/86	68		15.49-16.1	15.49-15.79	15.74
			131 @ 12/ 3/87	16		15.6 -15.99	15.6 -15.76	15.70
Sept. 16	Treasury Bills	20	79 @ 24/10/86	20		15.37-16.0	15.37-15.44	15.41
Sept. 17	Treasury Bills	110	183 @ 26/11/86	79		15.32-15.78	15.32-15.41	15.35
			66 @ 13/ 3/87	26		15.23-15.60	15.23-15.42	15.30
Sept. 22	Treasury Bills	60	60 @ 27/11/86	27		15.08-15.75	15.08-15.30	15.23
			25 @ 12/ 3/87	15		15.08-15.63	15.08-15.30	15.22
Sept. 23	Treasury Bills	75	118 @ 27/11/86	44		15.16-15.48	15.16-15.18	15.177
			33 @ 12/ 3/87	29		15.29-15.50	15.29-15.40	15.35
Sept. 24	Treasury Bills	60	79 @ 7/ 1/87	34		15.34-15.52	15.34-15.42	15.38
			25 @ 12/ 3/87	20		15.42-15.59	15.42-15.45	15.44
Sept. 26	Treasury Bills	30	90 @ 13/ 3/87	30		15.47-16.03	15.47-15.53	15.49
Sept. 29	Treasury Bills	140	104 @ 8/ 1/87	64		15.39-15.65	15.39-15.43	15.43
			88 @ 12/ 3/87	32		15.29-15.68	15.29-15.68	15.36
			106 @ 13/ 3/87	44		15.29-15.69	15.29-15.69	15.38
Oct. 2	Government Stock	60	80.807 @ 15/11/86		47.1	14.8 -15.60	15.26-15.60	15.42
Oct. 3	Government Stock	60	45.707 @ 15/11/86		2	14.85-15.45	15.45	15.45
Oct. 6	Government Stock	55	38.707 @ 15/11/86		25	15.25-15.47	15.29-15.47	15.35
Oct. 7	Government Stock	30	51 @ 15/11/86		30	15.20-15.51	15.51	15.51
Oct. 8	Government Stock	80	52.207 @ 15/11/86		6.2	15.15-15.61	15.59-15.61	15.60
	Sellback	80	230 @ 14/10/86		60	15.55-17.04	16.81-17.04	16.90
Oct. 9	Government Stock	40	45.2 @ 15/11/86		21.9	15.44-15.61	15.61	15.61
Oct. 10	Government Stock	80	11.3 @ 15/11/86		11.3	15.58-15.63	15.58-15.63	15.60
			6 @ 26/11/86		6	15.56	15.56	15.56
	Sellback	80	119 @ 15/10/86		40	14.75-18.01	16.74-18.01	17.14
Oct. 13	Treasury Bills	150	105 @ 24/10/86	30		14.5 -16.49	14.50	14.50
			45 @ 12/ 3/87	20		15.82-16.40	15.82-15.99	15.90
			87 @ 30/ 3/87	43		15.74-16.32	15.74-15.99	15.95
			101 @ 31/ 3/87	44		15.74-16.32	15.74-15.98	15.85
Oct. 14	Treasury Bills	20	12 @ 26/11/86	6		14.22-16.19	14.22	14.22
			35 @ 12/ 3/87	10		15.90-16.00	15.90-15.95	15.93
Oct. 15	Treasury Bills	90	67 @ 4/ 2/87	31		15.81-16.29	15.81-16.07	15.96
			50 @ 25/ 3/87	28		16.05-16.27	16.05-16.14	16.10
			57 @ 31/ 3/87	31		16.02-16.29	16.02-16.14	16.90
			94 @ 30/ 3/87	25		15.97-16.29	15.97-16.02	16.00
Oct. 17	Treasury Bills	40	77 @ 27/ 3/87	33		15.85-16.10	15.85-16.02	15.97
			33 @ 30/ 3/87	7		15.89-16.07	15.89-15.99	15.92
Oct. 20	Treasury Bills	55	117 @ 5/ 2/87	55		15.98-16.30	15.98-16.05	16.02
Oct. 21	Treasury Bills	40	34 @ 12/ 3/87	8		16.01-16.22	16.01-16.10	16.05
			73 @ 31/ 3/87	32		16.01-16.37	16.01-16.13	16.09
Oct. 22	Government Stock	15	7.157 @ 15/11/86		—	15.00-15.55	—	—

Open Market Operations

23.10.86 — 31.10.86

Date	Transaction	Amount of Offer \$m	Volume of Bids Received \$m	Total Amount Sold \$m	Total Amount Purchased \$m	Range of Bids Received %	Range of Successful Bids %	Average of Successful Bids %
Oct. 23	Government Stock	75	0.45 @ 15/11/86		0.45	15.65	15.65	15.65
	Sellback	75	50 @ 29/10/86		25	15.00-15.91	15.70-15.91	15.85
			111 @ 3/11/86		30	15.52-16.10	15.82-16.10	16.05
Oct. 28	Government Stock	50	5 @ 15/11/86		5	15.80	15.80	15.80
	Sellback		137 @ 3/11/86		30	15.90-16.41	16.41	16.41
Oct. 29	Government Stock	30	5 @ 15/11/86		5	15.75	15.75	15.75
	Sellback		118 @ 5/11/86		20	16.05-16.75	16.51-16.75	16.63
Oct. 30	Government Stock	25	6 @ 15/11/86		5	15.70-15.75	15.75	15.75
	Sellback		152 @ 4/11/86		20	16.23-17.33	17.33	17.33
Oct. 31	Government Stock	75	1 @ 15/11/86		—	15.73	—	—
	Sellback		227 @ 10/11/86		60	16.76-17.71	17.34-17.71	17.52

1 Extra amount allocated due to communications error within Money Market