PUBLIC DEBT POLICY AND OPEN MARKET OPERATIONS

It is just over a year since the implementation of a number of policy changes which were designed to encourage the development of a market in government securities and to facilitate the conduct of open market operations by the Reserve Bank. Accordingly it is worthwhile to restate the objectives of the policy moves and to review the outcome of the activities of the past year. This article sets out to do that. In so doing, it introduces new tables which will be published regularly in the *Bulletin* in future.

BACKGROUND

Monetary policy has been undergoing a (generally) quiet evolution over the last few years. For a long period up to 1976 the financial system was subject to a wide range of controls and monetary policy was implemented by variations in compulsory government security ratio requirements, changes in controlled interest rates (relating to both borrowing and lending by financial intermediaries), and the use of Reserve Bank qualitative and quantitative directions. Interest rates on government securities were kept at below market levels so that virtually the only subscribers to cash loans were the 'captive' financial institutions, i.e. those institutions subject to compulsory ratios. This had the effect not only of ensuring that there was no real secondary market for government securities but it also meant that security ratios were an income penalty effectively borne by the depositors with or the private sector borrowers from the captive financial enterprises.

In the moves of March 1976 and August 1977, many of the restrictions imposed on the financial system were removed. Substantial freedom in the setting of lending and deposit rates was given or restored to financial institutions, while the very high government securities ratios applied to the private and trustee savings banks were reduced progressively over a period. The Post Office Savings Bank was also given permission to lend funds on mortgage and now has a ratio based on the growth in its deposits.

As was envisaged at the time of the removal or relaxation of the various controls, it was necessary to introduce additional policy tools to those relied on in the past in order to move towards more effective control over the monetary situation. Public debt sales and open market operations are a major element in this new set of policy tools.

PHILOSOPHY OF OPEN MARKET OPERATIONS

Open market operations involve the purchase and sale of financial assets by the Reserve Bank from and to the financial and non-financial private sectors using market mechanisms, i.e. variations in the price to determine (or at least significantly influence) the levels of sales and purchases. These financial assets are usually government securities and treasury bills, but the Reserve Bank of New Zealand has at times dealt in commercial bills, trading bank transferable certificates of deposit (TCDs) and local authority securities. Open market operations can be used to influence the reserve base of the financial system *and* the monetary aggregates, *or* the level of interest rates. That is, the authorities can determine the quantity of securities to be sold (and accept the interest rate consequences thereof), or they can have the interest rate level as the objective (and accept that there is a loss of control over the monetary aggregates). While some intermediate combination of the two objectives — interest rates and the level of debt sales — may be decided upon the two elements of the combination cannot be determined independently.

Open market operations can be used either to expand or contract the monetary aggregates and the reserve base of the financial system (or lower or raise interest rates). For most of the last twelve months the emphasis has been on reducing the rate of expansion of the money and liquid assets holdings of the public and to slow the rate of credit expansion by financial institutions. Open market operations influence the former aim by increasing the yields on government securities so that members of the public will be induced to exchange money or deposits with financial institutions for government securities. The latter aim is influenced by bidding funds away from the financial institutions through savings stock issues and competitive cash loans or by inducing financial intermediaries to hold government securities (over and above reserve requirements) in preference to loans to the private sector.

As government security yields have been increased there have been accompanying increases in the rates of interest offered on competing securities. Some commentators seem to suggest that this means the raising of government security rates does nothing except drive up other interest rates, i.e. real economic activity is unaffected. But a change in the general level of interest rates will have an influence on activity in the economy as a whole as saving generally is encouraged and spending and borrowing are discouraged. There has also been a quantitative as well as an interest rate effect, as increased investment in government securities has been induced by the higher interest rates, as the tables show.

When comparing monetary control exerted through open market techniques with that exerted by direct controls the principal difference is that open market techniques necessarily pervade the whole financial system and, through the responses of financial institutions, the whole economy. Direct controls can result in the attaining of a spurious degree of control unless the controlled institutions are free to react to the controls (which they seldom are). Direct controls seldom alter underlying monetary conditions and economic forces so that these forces generally find ways of circumventing any network of controls. In the financial area the most obvious manifestation of this is the development of fringe markets beyond the network of controls.

PUBLIC DEBT AND PORTFOLIO SALES

The Government's activity in selling new issue debt to the public is inextricably linked with the Bank's open market operations. Over the last twelve months, the aim

has been to increase the public's holdings of government securities in order to reduce the growth of monetary aggregates and the reserve base held by the financial system. This has necessitated increased yields on government securities and treasury bills, and the Bank generally being a reluctant purchaser (as demonstrated by its buying price) of government securities. There was also the introduction of a new instrument, Savings Stock, aimed primarily at the personal sector.

At each government cash loan the Reserve Bank usually subscribes for some of the stock on issue. This stock is held by the Bank 'in portfolio' and, together with any already held by the Bank or brought by the Bank from the market, is then available for subsequent sale to the market. The rates offered at the previous loan have tended to dominate the Bank's selling yield curve although it is envisaged that it could be changed from time to time between loans.

As most of the emphasis has been on selling securities over the past year, it is only natural that there has been little buying by the Bank. To this extent open market operations have been somewhat one-sided. The Bank's buying stance is indicated by the yield differential between the buying and selling price. For a number of years the Bank has had a buying yield one-half of one per cent above the selling yield. This reduces the price being offered, and where a security has a number of years to run to maturity the price reduction can be quite substantial. The Bank could indicate a greater or lesser willingness to buy by lowering or raising the differential between the buying and selling yields.

GOVERNMENT SECURITIES MARKET

Open market operations can only be successful if the private sector is willing and able to invest and to trade readily in government securities. The uncompetitive rates offered for government securities in the past combined with other factors to inhibit growth of an active secondary market. A number of changes have been made with a view to stimulating the government securities market, including:

- abolition of the advance subscription facility to new loans from August 1978. Prior to that time investors could make an advance subscription at any time between loans. When the terms of the next loan were eventually announced the investor could either opt to invest at the new rates from the time of his advance subscription or withdraw the subscription and receive a fairly low return for the period it had been held on advance subscription. Removal of this facility has necessitated entry into the market between cash loans by a number of significant captive buyers.
- recognition of a number of 'specialised dealers in government securities'. There are currently 32 'specialised dealers'. These dealers have been given virtually exclusive right of access to the Reserve Bank's portfolio of government securities, and in return they are expected to actively encourage growth of the market. The principal criteria for initial and continued recognition are a record of trading in securities and an expressed intention, and subsequently proven performance, of actively participating in the development of a market for government securities.
- encouragement of a market for small parcels of stock. Although Savings Stock (which is non-transferable) has diminished the need to stimulate private investment in ordinary government stock, such investment is still worth encouraging. Ready marketability of holdings makes the securities more attractive, but there is little market activity because of a shortage of sellers. Accordingly, the Bank has decided to sell stock from portfolio to specialised dealers in minimum parcels of $10,000 instead of $100,000 which applied for a number of years. As the market develops, increased subscriptions to new cash loans from private subscribers should follow, and the Bank's selling role could then diminish.
- making a conscious effort to reduce the proliferation of new maturities which was resulting from offering holders of each maturing stock three or four new stock options. This reduction has been achieved in a number of ways and acknowledges that institutional investors prefer dealing in large parcels of identical stock rather than a multiplicity of different stocks.

The specialised dealers make weekly returns of all transactions in which they are involved. In the first year (to September 1979) the volume of stock and bills sold (excluding Reserve Bank transactions) was $2,100 million, in 1,620 transactions.

OPERATING PROCEDURES

When the decision was made to place more emphasis on open market operations it was recognised that it would be important to co-ordinate the views of the Reserve Bank and the Treasury. Accordingly it was decided to establish an Open Market Committee comprising representatives of the Bank's Chief Cashier's, Chief Accountant's and Economic Departments, and of the Treasury's Internal Economics and Finance II Divisions. The Committee meets regularly, generally fortnightly, to exchange views on current developments, and to formulate recommendations on future loan issues, interest rates and terms of stocks, buying and selling yields, or any other matter referred to it.

The specific aspects covered by each member of the Committee are as follows:

Chief Cashier's Representative: The Chief Cashier's Department includes the Money Market Operations Office which carries out all buying and selling deals for the Bank's portfolio of securities, and manages that portfolio. If a specialised dealer wishes to buy government securities from the Bank, an enquiry is made of the Money Market Operations Office to see what quantities of stock or bills the Bank has available in its portfolio. If the Bank has what the dealer wants, a price would be given and, if acceptable, a deal made. If the Bank wished to buy securities, (both government or private sector), as it has on one or two occasions, it will telex all specialised dealers and ask them to make offers of the required securities to the Bank. The Money Market Operations Office thus keeps in fairly close touch with the market and this is valuable to the Committee's deliberations.

Chief Accountant's Representative: The Chief Accountant's Department is the Registrar for Government (and Local Authority) securities. This function encompasses processing and registration of new issues, registration of transfers of ownership, issuing of certificates of title and 'marked' transfers, preparation of interest and redemption cheques, and associated administrative matters. With the dramatic expansion in holdings of government securities (from around 24,000 in mid 1978 to over 100,000 by the end of 1979) it has been important to schedule loan issues in line with the ability to process them.

Economic Department Representative: The Economic Department is responsible for advice on the formulation and implementation of monetary policy. As such the Department prepares forecasts of future movements in the principal monetary aggregates and these form part of the input into the process of formulating guidelines for sales of government securities over the coming months. The Department also monitors movements in interest rates offered by financial institutions and these are important considerations when setting rates for cash loans and Savings Stock issues.

Internal Economics Division Representative: The Internal Economics Division of the Treasury is responsible for formulation of policy advice to the Government on short-term economic policy. As such it is heavily involved in preparation of the annual Budget statement, and in the analysis and forecasting of trends in the economy.

Finance II Division Representative: The Finance II Division of Treasury is responsible for the Government's overseas and domestic loan raisings. As such it is concerned about problems of debt scheduling and the general administration of the Government debt.

It can readily be seen that Open Market/Debt Sales activities involve many facets of the operations of both the Reserve Bank and the Treasury and the Open Market Committee has been quite successful in co-ordinating the view of the Departments and Divisions.

It should be noted that the Committee does not make final decisions, only recommendations to the Bank and the Treasury. These recommendations are then considered by senior officials of the two organisations and, where required, a paper is submitted to the Minister of Finance for his final decision.

REVIEW OF THE RESULTS OF THE PAST YEAR

The first year since the adoption of a policy placing greater emphasis on open market operations and market sales of government securities has seen a number of significant new developments. In this part of the article discussion will cover new issues and portfolio sales, market transactions, and the impact of public debt policy and open market operations on the reserves of the banking system.

NEW ISSUE AND PORTFOLIO SALES

The introduction of Savings Stock in October 1978 at a yield of 11 per cent (8 per cent if redeemed before December 1979) was very successful with a total of $294 million being invested in the issue. But its yield was 1.75 per cent higher than the yield for selling one-year ordinary government stock and this caused distortions for existing holders of stock and signalled the intention the ordinary stock rates would rise.

In November 1978, the selling yield curve moved to an inverse pattern, with 10.5 per cent being offered from one-day to two years, and 10 per cent at five and ten years. These yields were still below the Savings Stock rate, and meant that most institutions invested in Treasury bills only.

The inverse pattern was steepened further in January 1979 to peak at 11 per cent at six months. The February cash loan understandably attracted a low level of subscriptions ($16 million) with investment continuing to be concentrated in Treasury bills.

In April 1979 the second loan for the year was floated with a peak rate of 13 per cent for five year stock. This rate change took most people by surprise and resulted in a very successful loan. A substantial volume of the subscriptions came from holders who sold their Treasury bills in order to invest in longer-dated stock. In all, $428 million was subscribed to the loan by other than the Reserve Bank, of which approximately *$200* million represented switches from Treasury bills and other short-term government securities.

The selling yield curve used in the April loan was retained through until the October 1979 cash loan, when the rates up to three years were raised half a percentage point. There were further Savings Stock issues in May/July and November/December. The interest rate remained at 11 per cent for the second issue and was raised to 11.5 per cent for the third issue. Neither repeated the phenomenal success of the first issue.

The following table analyses new issue and Reserve Bank portfolio transactions for the year to 31st March 1979, and for each month of the year ending 31st March 1980. In future it is proposed to update this table on a monthly basis and publish it in the *Bulletin*. Note that new issues to the Reserve Bank are excluded from the table.

Table 1
GOVERNMENT SECURITY TRANSACTIONS

		New Issues and Redemptions					*Reserve Bank Portfolio Transactions*					*Overall Change in Holdings by all Holders other than RB*
		Stock		*Treasury Bills*		*Net*	*Stock*		*Treasury Bills*		*Net*	
		Issues	*Redemps*	*Issues*	*Redemps*	*Issues*	*Sales by RB*	*Purchases by RB*	*Sales by RB*	*Purchases by RB*	*Sales (+) Purchases*	
Year Ended:												
March	1979	631	91	644	488	696	400	309	1,617	1,500	+ 208	+ 904
Month:												
April	1979	218	76	81	107	+ 116	50	35	183	328	— 130	— 14
May	1979	165	25	6	79	+ 67	4	132	193	253	— 188	— 121
June	1979	18	9	32	20	+ 21	9	22	209	182	+ 14	+ 35
July	1979	19	4	94	70	+ 39	6	28	460	279	+ 159	+ 198
Aug.	1979	2	7	38	25	+ 8	74	1	217	219	+ 71	+ 79
Sep.	1979	3	29	39	113	— 100	41	4	194	146	+ 85	— 15
Oct.	1979	122	5	237	104	+ 250	3	1	314	357	— 41	+ 209
Nov.	1979	24	2	58	54	+ 26	9	7	316	415	— 97	— 71
Dec.	1979	11	41	116	22	+ 64	22	—	242	156	+ 108	+ 172
April-Dec. 1979		582	198	701	594	+ 491	218	230	2,328	2,335	— 19	+ 472

IMPACT ON RESERVES OF BANKING SYSTEM

What table 1 does not show is the impact on the reserves of the banking system of the debt sales/open market policy. In order to establish this impact, it is necessary to adjust the figures in table 1 for trading bank purchases on the market. (See table 2.)

Table 2
CHANGES IN HOLDINGS OF OF GOVERNMENT SECURITIES

	Change in Holdings by All Holders other than Reserve Bank	*Actual Change in Trading Bank Holdings of Govt. Securities*	*Net Change in Holdings of Non-Bank Investors**
Year Ended:			
31 March 1978	+ 1,055	+ 720	+ 335
31 March 1979	+ 904	+ 101	+ 803
Period:			
April 1979 — Dec. 1979	+ 472	— 137	+ 335

* Includes savings banks, finance companies, and government corporations, but excludes Reserve Bank and trading banks.

A number of points arise out of this analysis. One of the purposes of policy has been to reduce the capacity of the trading banks to expand their lending by bidding their reserves away from them. The impact of selling debt paper to the non-bank public will be substantially reversed if the banks subsequently purchase securities on the market in exchange for issuing their own liabilities (time deposits, TCDs). Therefore it is necessary to make adjustments for trading bank activity in the market when trying to measure this result of debt policy. The only way the initial impact of sales to the non-bank sector can be maintained is by continuing to offer competitive rates on government securities, so that sellers of stock to the banks will be induced to place their funds back in government stock rather than with the private sector.

The marked change between the years ended March 1978, when 68 per cent of government security borrowings were from trading banks, and March 1979, when only 11 per cent of the increase was funded by the banks, indicates the dramatic effect of both the first issue of Savings Stock and the steady ratio policy applied to non-trading banks in the second year. (There were significant ratio reductions made in the year to March 1978). In the current year, sales have been lower than in the previous two years, but at a sufficient level to ensure that trading bank reserve assets have not risen unduly.

CONCLUSION

Open market operations have added a degree of flexibility to the administration of monetary policy which was not present while excessive reliance was placed on compulsory ratios that required investment in relatively low yielding assets. Maintenance of competitive interest rates on Government securities should both stimulate the market for such securities and remove any penal element which used to be present in compulsory ratios. In future it is to be hoped that monetary policy through a combination of open market operations and ratio controls will work more effectively and efficiently to smooth out the fluctuations in monetary credit flows.