## Official transactions in the gilt-edged market

The management of the national debt is a central part of monetary management and at the same time a branch of Exchequer financing; as the Radcliffe Committee observed, it now consists of much more than a search for the cheapest way of dealing with a nuisance. The reconciliation of the diverse and often conflicting aims involved, and the methods and tactics adopted in pursuing them, are as much issues of monetary policy as of good house-keeping for the Government, though clearly they are not the whole of either.

This article is not a comprehensive review of the management of public sector debt in all its forms. It deals only with the nature of the market for gilt-edged stocks (government stocks and stocks of the nationalised industries carrying government guarantees), and with the purposes, tactics, and limitations of stock issues and official transactions in this market.

Debt management First, management of the as an instrument gilt-edged market and Bank of policy rate are together the principal means of executing interest rate policy. Almost all fixed rates for government borrowing and lending, such as the rates for national savings certificates, national development bonds, tax reserve certificates, and Exchequer loans to the nationalised industries, are fixed from time to time by reference to the current yields on gilt-edged stocks. The structure of these yields therefore has a strong influence on the structure of prime rates generally; and the authorities can pursue their aims for interest rates throughout the economy by seeking to influence the behaviour of prices and yields in the gilt-edged market. Secondly, management of the gilt-edged market, and the outcome in terms both of prices and of the net amounts of

stock sold or bought in official dealings, have a considerable bearing on credit policy and the liquidity of the banks and others, creating conditions that may help or hinder policy in this field. Neither interest rate policy nor credit policy, however, is the dominant long-term consideration in debt management; this is rather to ensure so far as possible that suitable finance for the Exchequer is available, and will continue to be available in the future, so that there need be no excessive recourse to short-term borrowing from the banks on Treasury bills and accompanying increase in the money supply.

The total of British The Government's need for government and governlong-term finance ment guaranteed marketable stocks outstanding is about £19,500 million (nominal); of this total £16,000 million is in stocks which have to be redeemed by fixed dates, and some £3,500 million in stocks, such as  $3\frac{1}{2}\%$  War Loan, with no final redemption dates. The fact that the dated stocks, of which about £11,500 million is currently in the hands of the general public, will have to be repaid by the final date given in the prospectus is one certain element in the Government's future need for finance. Moreover, about a third of the total amount of dated stocks falls due for repayment over the next five years, with an average amount of more than £1,000 million reaching its final date each year; these magnitudes are likely to be at least maintained while the patterns of demand in the gilt-edged market continue as they are.

The certain need to provide for debt redemption year after year on such a scale is a suitable point from which to begin a statement of purposes in debt management. This, however, is not the only need for finance to be borne in mind: it is almost as certain that the Government will also need to raise new funds each year for capital requirements, and will thereby also add to the redemption problem in the future. It is not that the central government's own capital expenditure requires financing in this way; on the contrary, their revenue has been more than enough, over recent years, to provide for all their expenditure, both on capital and on current account. But the central government also provide substantial sums for the capital programmes of the nationalised industries and, through the Public Works Loan Board, for those of the local authorities. In the five years from March 1960 to March 1965 the central government have financed capital investment other than their own to the extent of nearly £3,000 million.

The need to refinance maturing debt together with the need to borrow to finance new capital investment, and the certain prospect for many years to come that these pressing needs will both persist, enable the chief purpose of debt management to be stated simply; it is to maintain market conditions that will maximise, both now and in the future, the desire of investors at home and abroad to hold British government debt.

Demand for The turnover of stocks in gilt-edged stocks the gilt-edged market is large and varies quite considerably from time to time; the figures published by the London stock exchange for 1965, a year in which activity was somewhat below the recent average, show that, including official dealings, the amount of stock passing from one investor to another during the year was about half the total of £19,500 million outstanding.(1) Much the greater part (in money terms) represents the business of the large financial institutions, sometimes investing new funds, more often switching between stocks. These institutions the banks, discount houses, insurance companies and pension funds—and the large industrial and commercial companies with substantial sums which they need to invest in highly marketable securities hold between them something like half of the gilt-edged

stocks in the hands of the general public. The banks and discount houses hold mainly the shorter-dated stocks; the insurance companies and pension funds mainly the medium and longer-dated. Most of them have large individual holdings and expect to be able to buy or sell, or to switch between stocks, in amounts of several million pounds at a time. This ability to deal freely at all times is highly important for them; although an institution may not often wish to deal in such amounts, yet if it thought that there was a risk of its not being able to do so at any time that it wished, it would feel that its liquidity and its freedom of manœuvre were becoming impaired and would become increasingly reluctant to maintain its investment in gilt-edged stocks.

Alternative investments for the financial institutions are the stocks of local authorities and industrial debentures, many of which offer unquestionable security with a somewhat higher yield than is to be had on gilt-edged stocks. But these alternatives are not so readily marketable in large amounts that the institutions can feel sure of being able to sell at once whenever they choose; it is the assured and, for practical purposes, limitless marketability of gilt-edged stocks that gives them their chief advantage over the best alternatives, and their greatest appeal for the institutions.

The institutions have for many years taken the unrestricted marketability of gilt-edged stocks for granted. Their investment decisions in the gilt-edged market have in consequence come to be governed principally by their expectations of future movements in prices; not surprisingly there is often a substantial consensus of view among such investors, and there is therefore likely to be, at any one time, a preponderance either of buyers, or of sellers, in the market.

The aggregate of the resources that the jobbers in gilt-edged stocks are able to commit, however, is small in relation to the volume of trading; unsupported, they might not be able, even with the help of wide swings in prices, to absorb the kind of pressures that build up when sentiment in the market veers sharply one way or the other. It has therefore become a prime consideration in official dealings to keep the pressures on the jobbers within

<sup>(1)</sup> Table 15 of the statistical annex.

supportable limits, and so contain the risk that a holder of government debt might find it impossible to deal either way in the market for whatever amount of stock he wished—subject only, if he is a buyer, to the particular stock he wants being available.

Official Official dealings in the giltdealings edged market comprise those of the National Debt Commissioners and those of the Issue Department of the Bank of England. The National Debt Commissioners are responsible for the management of the National Insurance Funds, the funds of the Post Office Savings Bank and the trustee savings banks, and many smaller funds of an official nature. The timing and extent of their operations are matters in the first instance for the National Debt Office to decide in the light of the needs of those funds; and, except when the National Debt Office are buying or selling large amounts of stock, the Government Broker will usually be able to deal for them in the market on normal terms. If, however, any of their operations is likely to have a significant effect on prices inimical to debt management policy at the time, it may be preferable to keep the transaction wholly within the official group; the deal will then be done between the National Debt Office and the Bank, at current market prices but without effect in the market. In this way the National Debt Office are at all normal times able to manage the funds for which they are responsible without subordinating their decisions to tactical considerations of debt management. But they also stand ready to vary holdings in the interests of debt management policy, where to do so is not prejudicial to their other interests.

The Issue Department has resources of nearly £3,000 million invested in government securities, a large part of which is invested in marketable gilt-edged stocks; this provides the means for dealing in the market in whatever way seems most likely to help achieve the current aims of debt management. With such a masse de manœuvre in their hands, it would be possible for the Bank to intervene vigorously in the market, taking the initiative in dealing and instructing the Government Broker to sell or buy specific amounts of stocks at the best prices he could get. In normal official dealings, however, the Bank leave it to the jobbers in

the market to take the initiative; the Bank offer stock—when they have it to offer—in response to bids made by the jobbers to the Government Broker, and bid for stock, if conditions justify doing so, when it is offered by the jobbers through the Government Broker. In this way they stand behind the jobbers in the gilt-edged market—acting as the jobbers' jobber, or a jobber of last resort. Though the Bank give no formal commitment to buy or sell when asked, they are in fact normally willing to do so at prices of their own choosing. They thereby give the market a very much greater capacity to meet the needs of investors than the jobbers' own books would provide. The choice of this method of dealing rests on a judgment that it broadens the market, increases its activity, enhances its appeal to institutions with large sums to invest, and in the long run increases their desire to hold government stocks, and that the alternative method would strike investors as being more arbitrary and capricious and would therefore make them reluctant to commit themselves to the same extent in the gilt-edged market.

The Bank's role in these dealings is nevertheless not a passive one. Although they deal in the market only in response to offers originating there, they pursue an active policy in the great majority of cases through their choice of the prices at which they are prepared to respond. Moreover, the Bank's continuous presence in the market, not seeking business but normally willing to deal at prices reflecting official policy, and in practice dealing almost every day and often in substantial quantities, provides ample opportunity for seeking to influence prices, even on the minority of days when supply of stock is roughly in balance with demand. This close involvement in the daily turnover of an active market both enables the Bank to pursue their aims continuously and without undue attention being drawn to individual transactions and gives the Bank a useful degree of flexibility when they are seeking occasions for implementing a shift of policy on prices. It is worth mentioning that not only is the identity of the Government Broker well known throughout the market, but all official bargains are done by him and there is seldom any doubt as to whether or not he is dealing for one or other of the official funds. The prices he bids in response to an offer are

therefore seen as the expression of the Bank's current policy, and are closely watched by the jobbers for any sign of a change of emphasis in the policy, such as might lead the market to expect new movements in prices.

New Because the gilt-edged mariccure ket is so largely made by the financial institutions, and because these institutions fall into fairly homogeneous groups with broadly similar investment preferences, new issues do not need to be made in great variety. There are at present just under fifty gilt-edged stocks for investors to choose from: new interest in the market and increased demand from the institutions can usually be encouraged, and can then be satisfied, by making a small number of relatively large new issues, which in each case will probably be sufficient to meet the demand from investors for some months to come. These are the 'tap' stocks which the Issue Department, having taken up the unsubscribed balance at the time of issue, gradually sells as public demand develops. When a new stock is issued, and becomes available on tap, many investors who have had their funds invested in other stocks will decide, because the price is attractive or for some other reason, that the new stock is more suitable for their portfolios, and they will therefore wish to switch out of other stocks into the new one. The jobbers will probably be able to facilitate many of the switches, by taking the stocks offered on to their own books until they are able to resell them. Where these are shorterdated than the tap stock for which they are being exchanged, the Bank will generally be willing to facilitate the switch by themselves taking the shorter-dated stocks from the jobbers, if the jobbers so wish, in exchange for the tap stock; in this way the Bank may ease the pressure on the jobbers' stock holdings that is caused when large-scale switching is taking place into a stock available through the tap.

Redemptions The redemption of maturing stocks, if they were always firmly held by investors to the last, would be likely to cause considerable disturbance, both in the money market—as most of the cash paid out sought employment—and in particular in the giltedged market as the investors receiving the money took steps to reinvest it. Fortunately, not

all investors are equally attracted by the prospect of being repaid in cash on the redemption date. The Bank therefore stand ready, as a stock approaches maturity, to buy it in when it is offered, usually at a price that gives, over the remaining life of the stock, the current rate on Treasury bills. This is a widely known practice; and many large investors find it convenient to sell their holdings on these terms, so that they can reinvest at times of their own choosing, rather than wait for the redemption proceeds at a time when many others may be moving in the same direction. It is quite usual for the Bank to acquire in this way threequarters or more of the maturing stock; and most of these purchases will be matched one way or another by sales of other stocks by the Bank. The investor who sells the maturing stock may reinvest his money in a stock which the Bank do not at that time hold; but his purchase will bring a seller into the market and may initiate a sequence of switches, perhaps involving a number of investors and jobbers, and leading eventually to a purchase of a stock that can be met by a sale by the Bank. This is a very common form of switching which both appeals to the investors and suits the Bank.

Switching Between these two special kinds of switching—into the new tap stocks or out of the next maturing stock—which together may amount to several hundred million pounds of stock over a period of a few months, there will be a variety of individually matched purchases and sales attractive to particular investors. An institutional holder of gilt-edged stocks, except where the lives of his assets are already closely matched to his liabilities, is likely to pursue a regular policy of exchanging shorter-dated for longer-dated stocks in order to push on the average life of his portfolio and offset the continual shortening that occurs with time. This alone gives rise to many substantial switches; and the Bank can often help this process along, with advantage to their own position, by being prepared to sell the longerdated stocks, when the Issue Department has them to sell, against purchases of shorter-dated.

There are occasions, of course, when some investors are switching, not into longer-dated stocks, but into shorter-dated. This may be because a new stock with a shorter life than the one already held is seen by the investor to have

greater attractions for him, such as, perhaps, a higher coupon, giving a higher running yield, or because he expects prices to move in a way that would make it advantageous to be invested for a time in shorter-dated stocks. Such switches are seldom much help to the Bank in managing the debt; on the contrary, if the counterpart is provided by the Bank, they would-unless later reversed—increase the weight of maturities for which refinance would have to be provided sooner rather than later. The Bank therefore normally do little or nothing to facilitate them; but if the pressure from investors is more than the jobbers between them can well support, so that there is a real risk of dealings becoming difficult, or if it appears likely that intervention will rapidly restore conditions more favourable to the execution of current policy, then the Bank may step in, but normally only at prices fully reflecting the disadvantage for the authorities of switches of this type.

Other switches are made attractive to particular investors by the differences in their liability to tax and the different effects of the tax laws as between one stock and another. A recent and particularly striking example of this has been the extensive switching provoked by the provision in the Finance Act 1965 that, as regards gilt-edged stocks issued before the Budget in 1965, capital gains taxes would not apply to gains or losses caused by price movements within the range between the lowest issue price and the redemption price.(1) Some giltedged stocks now outstanding were issued at or near par, and others were issued well below par; under the new provision this difference brings a new and quite significant factor into the calculation of yields.

Normally the Bank will provide a counterpart to switches of any of the kinds described where the investor is moving into longer-dated stocks than he already holds. These transactions will ordinarily be done at current market prices and will leave those prices unaffected. As already mentioned, the price at which the Bank will buy the next maturity is usually kept in line, in terms of yield, with the average price of Treasury bills at the tender. A new stock is issued at a price that is closely in line with market prices of other stocks; when it is put on sale by the Bank on the first day of deal-

ings it is generally offered at a price fractionally above the issue price, so as not to undermine the position of those who applied for the stock at the time of issue. As demand for the stock grows and sales through the tap increase, and provided that other prices in the market are firm, the price of the tap stock can be moved upwards in steps; the steps are typically  $\frac{1}{32}$ % in a short-dated stock and \{\frac{1}{2}\%\} in a medium or long-dated stock. But, if the market suffers a general weakening and prices of other stocks fall so far that the Bank's price for the tap stock becomes out of line with other prices, the tap price will not ordinarily be lowered immediately lest to do so should depress the market further. It is allowed to remain out of line until it seems that demand is capable of being restimulated, and is then reduced in a single step to bring it back into line with other prices.

The aims of debt The chief purpose of manmanagement agement of the gilt-edged market was stated above to be to strengthen the demand for government stocks. It is not immediately concerned with the day to day finance of the Exchequer's payments: as an earlier article has explained, (2) the machinery of the money market ensures that enough government debt is always taken up to provide for residual needs, and the Bank's techniques for managing that market smooth out the day to day irregularities. In the gilt-edged market the principal concern is to encourage the widest possible variety of investors, other than the banks, to increase their holdings, and to hold longer rather than shorter-dated stocks. These are essentially long-term aims; in the long run success will depend on investors' confidence in the market and this in turn will rest decisively on their experience of dealing in it.

The tactics used to attract and hold the interest of investors have already been described: to issue new stocks that are tailored to the current demands of large investors; to ensure that dealings do not become seriously inhibited by the absence of buyers to match sellers, or that the market does not become too volatile due to a preponderance of buyers unable to satisfy their demands for stock; to

<sup>(1)</sup> September 1965 Bulletin, page 221.

<sup>(2) &</sup>quot;The management of money day by day"; March 1963 Bulletin, page 15.

spread the impact of the issue and redemption of large blocks of securities, and in particular to minimise the fortuitous disturbances, always less than welcome, that these give rise to in the market and in the banking system; and generally to slow down and moderate violent movements in the market unless there is likely to be a particular advantage in a rapid adjustment, as in the case of a change in Bank rate.

Other aims of debt management become important from time to time; and to keep down the cost of the Government's borrowing is important at all times. Of these additional aims the principal ones are, in normal times:

- to assist economic policy by promoting or sustaining the most appropriate pattern of interest rates; and
- (ii) to assist credit policy, usually by increasing sales of government debt, so that the Government's needs can be met with less recourse to the banks, less addition to their liquid assets, and less scope, in consequence, for them to increase their lending.

These short-term aims are not, of course, alternatives but usually present themselves in combination. The actions on prices that they suggest can at times conflict, either between themselves or with actions that seem necessary to preserve the attractions of government stocks in the long run; and they cannot be pursued without regard to the danger of causing damage in the long run to the health and capacity of the market—a limitation that may sometimes preclude all but a fairly narrow choice of policies in the short term.

This can well be illustrated by the problems which arise when policy is judged to require interest rates to move upwards. Circumstances may sometimes allow an adjustment to be easily and smoothly achieved. A number of investors may read the economic scene as pointing towards higher interest rates. They may therefore enter the market as sellers and an insufficiency of buyers then leads to offerings of stock to the Bank which allow the Bank, by bidding at successively lower levels, to secure a drop in market prices of broadly the dimensions thought desirable. This drop may then prove sufficient to discourage other investors from selling, so that the market stabilises itself naturally at the new level.

At other times the process may be more difficult to achieve smoothly. The economic scene may not be read in such a way that a preponderance of sellers appears. Or, while there may be sellers, a first small downward movement in prices may be enough to cause them to hold off and the selling movement to come to an early end. In different circumstances a downward movement, once started, may feed upon itself and threaten to go much further than the authorities would desire, perhaps even to the extent of risking serious demoralisation of the market. Another possibility is that, perhaps because of outside circumstances or because investors take alarm at the pace of the adjustment, signs of demoralisation may appear at an early stage. In all these circumstances the Bank may, because of their overriding concern for the long-term health of the market, have to modify their tactics.

It is sometimes argued that in such circumstances the desired results could more often or more nearly be attained if the Bank regularly adopted a more positive line in their market dealings. For instance, they could take steps to initiate a downward movement in prices by themselves entering the market as determined sellers; or, if there were sellers already in the market, an adjustment to a desired new level of prices could be made more quickly, and so with the prospect of quicker recovery and an earlier reappearance of buyers in the market, if the Bank were to decline to buy stock until the level of prices was reached at which they hoped to see it settle.

One of the problems of applying such techniques is that of judging where this new level should be established. This can seldom, if ever, be clearly discerned at the outset, not least because it depends in substantial part on the reactions of investors as the market movement gets under way and on other changing circumstances and expectations. By remaining in the market the Bank can better judge, from market reactions to their offers, when a stabilising move should be developed. Another important consideration is that the pace of a decline in prices can build up very rapidly once expectations that it will continue have taken hold; if such expectations are further strengthened by the visible withdrawal of the Bank from the market, to arrest or retard the

fall may in the end require a disproportionate amount of official support. Not only will additional liquidity then accrue to the banks, despite the probable desire at the time to restrain credit, but the authorities may also be led, in order to get the movement under control, to adopt so definite a stand as will seriously restrict their freedom of manœuvre in the period ahead. Finally, a market in which downward movements of prices is too abruptly initiated by selling by the Bank or, if originating elsewhere, is generally left unmoderated and then as abruptly halted by official intervention at some predetermined level, may come to be viewed by investors as arbitrary and unpredictable in its behaviour; there is then a danger that they would be seriously discouraged from investing their The likely consequence would funds in it. be that the capacity of the market would be permanently reduced and with it the ability of the Government to borrow at long term.

A change in Bank rate might at first sight appear to be in contradiction to this approach. But even here the change to a new basis of gilt-edged yields is substantially influenced both by the guidance given by the Bank in announcing the new Bank rate and by the new prices that the Bank subsequently quote for the tap stocks, or bid for any stock that may be offered to them.

The opposite case, in which policy aims to encourage a rise in prices and a fall in interest rates, can present almost as many problems. It is more obviously true in this case that an attempt by the Bank to induce a movement is unlikely to succeed, without inordinate expenditure on the purchase of stock, unless investors generally hold the view that the movement is justified by the state of the economy, or by some development such as a substantial reduction in the amount of borrowing in prospect for the Exchequer. But it is also true that the Bank can, when conditions are right, stimulate the market's appetite for stock by selling at gently rising prices; and once the market has come to expect an upward movement, it may absorb very considerable quantities of stock and yet bid prices further upward in the market. In this case, too, it is important that the movement should not gather too much momentum or go too far, because once a rise is judged to have become excessive the reaction

of the market is likely to be abrupt and damaging to investors' portfolios, and in the end is probably harmful to their confidence in the giltedged market. But if the Bank are to moderate a rise in prices which the market is convinced, at least for the moment, will go further, they must sell stock to meet the demand, whatever level it may reach; and these heavy sales could be as little in tune with credit policy at the time as the purchase of stock is at times of credit restriction.

Conclusion The examples given above by no means exhaust the possible variations, in policy and in market behaviour, with which debt management may be faced. The market is dominated for most of the time by its own expectations of future movements in prices, or occasionally by its uncertainty and nervousness about the future. The market's expectations about the prices that the Bank will quote in future official dealings are an important factor in its assessment, but not one that in the end carries greater weight than the balance of supply and demand among the holders of the £14,500 million of stock in the hands of the general public. This is a market in which, however, total supply is highly elastic and responsive even in the short run, both because there are normally tap stocks available for purchase by the market, and because the Bank are normally willing bidders, even if only at prices that discourage the sellers, when stock is offered. Variations in demand in the market are therefore likely to lead to variations in supply at unchanged or only slowly changing prices, rather than to immediate variations in prices big enough to bring demand back into balance at nearly the same level of supply. Policy on interest rates can, and in all the circumstances must, concentrate largely on fostering demand, in the future as well as in the present.

With the demand for gilt-edged stocks so fully satisfied, a shift in the holders' expectations can quickly give rise to a strong tide in dealings that may owe nothing to any stimulus from the Bank, for there are many other factors contributing to the market's views and expectations, or causing it to be uncertain. It is hardly surprising therefore that the business of debt management is less often a matter of stimulating a movement than of retarding one that is

gathering momentum, or moderating the more exaggerated day to day fluctuations that occur when markets are thin or nervous. And even in this limited field of action, the fundamental forces of the market are usually too strong to be contained or diverted for long. Thus the

daily concern of debt management is usually to steady the market without opposing it too rigidly, but always within the context of its aims for interest rate and credit policy and for the maximisation of demand for British government debt.