The Bank of England's operations in the sterling money markets

On 3 March the Bank introduced reforms[1] to its daily operations in the sterling money markets, through which it implements monetary policy. The changes relate to the mechanics of its day-to-day operations in the money markets; they do not alter its basic approach to implementing monetary policy, which remains to manage short-term interest rates through open market operations.

The Bank made changes in three areas: it extended the range of instruments in which it conducts its daily open market operations to include gilt repo; it broadened the range of counterparties able to participate directly in these operations, to include market participants active in either or both of the gilt repo and bill markets; and it made some consequential changes to the arrangements through which it provides liquidity at the end of the trading day to adjust for any late imbalance in the market. This article describes the arrangements for the Bank's money-market operations, including those aspects which have not been changed.

The primary aim of the Bank's operations in the sterling money markets is to steer short-term market interest rates to the levels required to implement monetary policy. Subject to meeting that aim, it operates so as to help the banking system to manage its liquidity effectively. The Bank also seeks to foster the development of efficient and competitive sterling markets, given their importance in the wider financial system.

The Bank's approach is broadly similar to that of central banks in many other countries with developed financial systems. In its money-market operations the Bank satisfies the marginal liquidity demand of the banking system as a whole, through open market operations conducted on a transparent basis in prime-quality market instruments. The price at which it supplies liquidity in these operations constitutes the level of official interest rates and exerts a powerful influence on short-term market rates, steering them to a level consistent with official monetary policy.

The structural position of the money market

The market's need for refinancing from the Bank depends on transactions between three sets of players—(i) the Bank itself, (ii) the central government, whose main bank accounts are held at the Bank, and (iii) all other players, including the commercial banks and their customers. The main liability on the Bank's balance sheet is the note issue. In addition, banks and others hold deposits at the Bank.[2] Any increase in notes held by banks or their customers has to be paid for; unless deposits at the Bank can be run down, the market will have to seek refinancing from the Bank for this purpose.

Because the Bank is the central government's main banker, government transactions also affect flows between the Bank and the market. Government expenditure involves payments from the government's accounts at the Bank; tax receipts and the proceeds of government borrowing in the market mean payments to the government's account at the Bank. From year to year the government aims to finance its borrowing requirement from the market (by issuing gilt-edged securities and National Savings instruments), so that these flows even out. But at any particular time during a year, government receipts may exceed government payments, draining money from the market into the government's account at the Bank. At such times the market has additional need of refinancing from the Bank. By the same token, at such times the government is able to repay borrowing from the Bank (the 'Ways & Means advances').

The Bank manages its balance sheet in such a way that the market is normally obliged to come to it for refinancing. The assets the Bank acquires in its money-market operations are short-term claims, and a proportion mature each day in the Bank's hands. Except for maturing Treasury bills, the market is then obliged to redeem these claims, and, other things being equal, has to look to the Bank for further refinancing to be able to do so. In this way the Bank turns over the assets acquired in its money-market operations, and has a repeated opportunity day by day to determine the level of interest rates.

The fulcrum of the system is the 'maintenance requirement' on the settlement banks. These are the banks that hold settlement accounts at the Bank, on which they have to maintain positive balances at the end of each day. (In practice they target their end-of-day balances to be slightly greater than the bare minimum in order to cover themselves against uncertainties in their daily cash flows.) Although

(1) The reforms are described in the Bank's February 1997 paper, *Reform of the Bank of England's operations in the sterling money markets*.
(2) Including balances on settlement accounts (used to settle payments between banks and their customers) and Cash Ratio Deposits (non-interest-bearing deposits which banks in the United Kingdom accept an obligation to hold, and which provide income to the Bank).

the Bank holds accounts for some other banks, the vast majority of banks in the United Kingdom hold accounts with the settlement banks; final daily cash settlement within the commercial banking system, and between the banking system and the Bank of England, occurs over the settlement accounts of these banks at the Bank of England. In its money-market operations the Bank, by providing the liquidity needed by the market, enables the settlement banks to achieve the required positive end-of-day balances on these accounts. In this way it is the marginal supplier of liquidity to the banking system.

To ensure that there is a steady demand from the market for liquidity, the Bank drains liquidity from the market by issuing Treasury bills each week. Whether the bills are bought by the banks or their customers, payment ultimately involves a transfer from the settlement banks' accounts at the Bank to the government's account. The size of the weekly Treasury bill tender may vary depending on the official forecast of the autonomous influences on the prospective money-market position over the period ahead.

Each morning at 9.45 am the Bank publishes the official forecast of the daily shortage on its pages on the wire services. The forecast gives details of the main influences affecting the position of the money market, including government transactions, changes in the note issue, the amount of maturing refinance that has to be repaid to the Bank, and the deviation from target of the settlement banks' balances on their accounts at the Bank. This forecast is kept up to date throughout the day and, where necessary, updates are published before the Bank's noon and 2.30 pm rounds of operations, and before the time at which its late repo facility for settlement banks may be made available (3.50 pm). The Bank publishes more information on the market's demand for liquidity than virtually any other central bank. Publication of the daily forecast and updates, together with publication of the amount of liquidity supplied in each of its operations (see below), helps promote the transparency of the sterling money markets, by ensuring that market participants are aware of the official estimate of the banking system's liquidity position throughout the trading day.

Open market operations

The Bank aims to meet the banking system's marginal liquidity needs each day via its open market operations. In principle it need not use open market operations: the Bank's ability to influence market interest rates depends on it supplying the marginal liquidity demanded by the market, rather than on the way in which liquidity is supplied. But the Bank uses open market operations because it wishes to foster the development of private sector markets in high-quality assets and to give banks an incentive to use these markets to manage their liquidity. Typically the market's position is one of a shortage of liquidity, which the Bank generally relieves via open market operations conducted at a fixed official interest rate.(1)

The Bank conducts its open market operations in short-term money-market instruments. These instruments need to fulfil certain requirements. They need to be of prime credit quality; actively traded in a continuous, liquid market; held widely across the financial system for the management of its sterling liquidity; and available in adequate supply. Accordingly, the Bank undertakes open market operations through repo of gilts, marketable HM Government foreign currency debt, and eligible bills (Treasury bills and eligible local authority and eligible bank bills), and through outright purchase of these bills.

The Bank conducts its daily(2) open market operations at 12.00 noon and at 2.30 pm, with an additional early round of operations undertaken at 9.45 am if the forecast size of the daily shortage warrants it. By holding up to three rounds of open market operations, the Bank manages the pace at which it provides money-market liquidity during the day. The 2.30 pm round in particular is designed to be as late in the day as possible, consistent with the timetable of the relevant settlement systems, to ensure that the Bank can remain the marginal supplier of liquidity to the market up to the end of the trading day and make use of later and more accurate forecasts of the market's liquidity needs. The Bank publishes the aggregate amount of liquidity supplied in each of its open market operations on its pages on the wire services shortly after the conclusion of each round.

The maturity of the Bank's dealing operations in repo is around two weeks, with minor variations on occasion to smooth the future pattern of forecast daily shortages/surpluses. In addition, in each of its operations, the Bank is prepared to buy outright bills with a residual maturity up to the longest-dated repo invited. In steering market interest rates at a maturity of around two weeks, the Bank is able to exercise its influence over the range of short to medium-term rates that are its focus in implementing monetary policy. These include one to three-month money-market rates, and rates such as the commercial banks' base rates, and bank and building society mortgage rates. Other factors, including competitive pressures in the mortgage and retail deposit markets, may influence the level of such rates, but the actual level and the expected path of the Bank's repo rate should be the most significant consideration.

The techniques described above are employed when the banking system is forecast to be short of liquidity on a particular day. On days when a surplus of liquidity is forecast the Bank will 'mop' the surplus, by inviting counterparties to its open market operations to bid for outright purchase of short-dated Treasury bills of one or more specified maturities.

(1) The Bank may choose to operate on a variable-rate basis through a tender, although it has not yet done so. If the Bank were to conduct a variable-rate tender, the form of the tender would be announced at the time or in advance.
(2) The Bank also has available a twice-monthly gilt repo facility to supply liquidity to the market at maturities of up to about one month, in order to reduce the amount of liquidity which would otherwise need to be supplied in the daily operations. The facility was introduced on a formal basis in January 1994, and was in operation until April 1997, when the liquidity provided through the facility was allowed to run off. The facility is retained in abeyance for use if necessary.

Counterparties

The Bank stands ready to deal in its daily operations with a wide range of financial institutions active in the gilt repo and/or bill markets, provided that they satisfy a number of functional criteria which are designed to ensure both that the Bank's operations function efficiently and that the liquidity supplied is available as smoothly as possible to all market participants. The Bank is prepared to sign legal agreements and accept as counterparties banks, building societies and securities firms that satisfy the Bank that they are subject to appropriate prudential supervision and that:

- have the technical capability to respond quickly and efficiently to the Bank's operations;
- maintain an active presence in the gilt repo and/or bill markets, thus contributing to the distribution of liquidity around the system;
- participate regularly in the Bank's operations; and
- provide the Bank with useful information on market conditions and developments.

The Bank does not consider it necessary to impose a formal underwriting commitment, but looks to its counterparties to participate actively in the weekly Treasury bill tender, given the importance of the tender in the management of the money market.

The Bank expects the functional requirements to be met on a continuous basis, and monitors compliance with them by its counterparties. The Bank reserves the right to cease dealing, temporarily or for longer periods, with any counterparty at its own discretion. The Bank is prepared to take on new counterparties at any time provided that they fulfil the functional criteria.(1)

Late repo facility for settlement banks

In its open market operations the Bank aims to supply the net amount of liquidity needed by the market (ie the official forecast of the daily shortage) by the end of its 2.30 pm round, and expects its counterparties to manage their individual liquidity needs sufficiently closely to enable it to meet this aim. Nonetheless, liquidity may need to be provided later, either because of a late change in the official money-market forecast or because of unforeseen variations in market participants' positions. For this reason the Bank is prepared to make available a late repo facility to the settlement banks which provide wholesale payments services to the rest of the market and which need to balance their settlement accounts at the Bank at the end of each day, to meet late changes in the market's net liquidity requirement. The late repo facility provides overnight liquidity against the same paper which is eligible for use in the Bank's open market operations.

Shortly before 3.50 pm each day the Bank publishes its last forecast of the day's shortage, and whether the settlement bank facility is to be made available. If so, the settlement banks may apply for liquidity between 3.50 pm and 3.55 pm. The Bank is prepared to supply liquidity to any settlement bank, normally up to the amount of any late increase in the banking system's need for liquidity that has been identified since the 2.30 pm forecast update. The Bank publishes the total amount of liquidity supplied via the facility on its pages on the wire services shortly after 3.55 pm.

An individual settlement bank is not permitted to apply for more than the total of the forecast shortage remaining at that stage, but the Bank does not place any other predetermined limits on individual banks' access to the facility. The Bank pro-rates bids for funds from the settlement banks if they exceed the amount it considers necessary to provide. It is intended that the facility will normally be used only for shortages unforeseen at the time of the 2.30 pm open market operation and arising unexpectedly thereafter. The Bank is prepared to withdraw the facility from any settlement bank that seeks to use it other than for its intended purpose, in which case the charge on any resulting shortfall in that bank's settlement account at the Bank at the close of business would be more heavily penal.

For a maximum of two years from March 1997, the Bank also offers a late repo facility for those discount houses (specialist money-market banks which were the Bank's main counterparties under the previous operating structure) that are subject to the transitional provisions which have been made available to them while they restructure their businesses. The discount house facility is broadly similar to the late lending arrangements that were available to them under the previous system. Between the announcement of the result of the last open market operation at 2.45 pm and 3.20 pm, these discount houses may apply for late liquidity, by way of repo, in amounts up to twice their capital and at a rate $^1/_4$% or more above the repo rate applied in the open market operations. The Bank has complete discretion on how to respond to such applications, and does not normally supply more than its estimate of any remaining liquidity shortage in the market as a whole.

By extending the range of instruments in which it deals and broadening the range of its counterparties, the Bank has used the opportunity presented by the successful introduction of the gilt repo market to undertake a substantial development of its money-market operations. The Bank believes that the new arrangements enhance the scope for banks and other sterling market participants to manage their day-to-day liquidity. They should also promote further use of gilt repo as a high-quality secured money-market instrument and, more generally, help develop efficient and competitive sterling markets. The new

(1) Institutions which are interested in becoming counterparties should contact the Head of Gilt-Edged & Money Markets Division, Bank of England, Threadneedle Street, London, EC2R 8AH.

arrangements are consistent with the direction and spirit of the preparatory work for monetary union published by the European Monetary Institute in January,[1] which is relevant to any further development of the Bank's operations, whether or not the United Kingdom participates in monetary union.

The Bank is monitoring the working of the new arrangements carefully, and is keeping under review the possible need for further adaptation. Any such changes will be announced in published Market Notices, and described in the 'Operation of monetary policy' article in future *Quarterly Bulletins*.

(1) 'The Single Monetary Policy in Stage Three: specification of the operational framework'. The proposals are discussed in an article, 'Monetary policy implementation in EMU: a Bank of England perspective on the EMI's proposals', on pages 57–62 of the February 1997 *Bulletin*.