Operation of monetary policy

- *Financial markets—for much of the time dominated by developments in the United States—were unusually volatile in the three months to mid-November (the period with which this review is principally concerned).*

- *A sharp rise in short-term interest rates in September was prompted by both external and domestic considerations. After an uneasy period, confidence revived in November, helped by a significant fall in US interest rates.*

- *The monetary aggregates remained heavily distorted by the effects of the Civil Service dispute, but there was further evidence of a sharp underlying rise in bank lending to the private sector.*

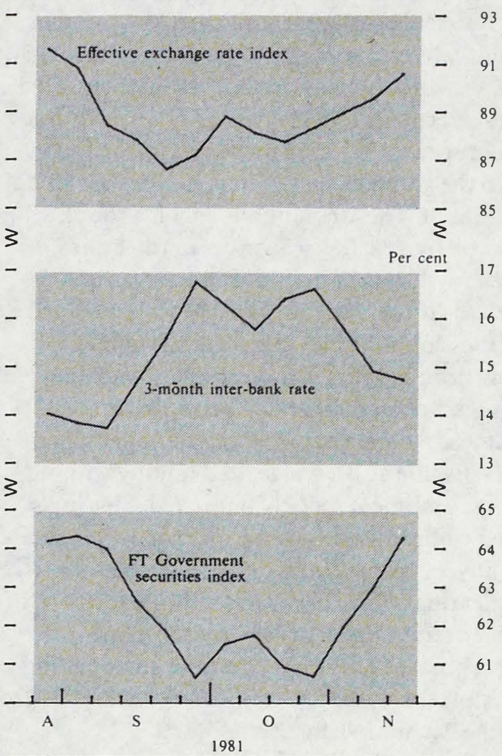
- *Official influence on interest rates was exercised through the operation of the new monetary control arrangements, which worked satisfactorily.*

- *Without official action, there would have been a large cash drain from the banking system to the Exchequer this autumn. Much of the effect of the unwinding of the Civil Service dispute on the cash position of the banking system has yet to occur.*

- *Developments on the foreign exchanges and in the United States dominated sentiment in the gilt-edged market. Large official sales became possible early in October and again in the first half of November.*

- *Equity prices fell heavily in September as interest rates rose. This may have delayed the announcement of some new equity issues; but the total of net equity capital raised this year is still likely to be nearly double that of 1980, and will be the highest in real terms since 1976.*

Background to monetary developments



Background

On 20 August, the first day of banking September,[1] sterling's effective exchange rate stood at 92.4 (1975 = 100). Short-term interest rates ranged from around 13% for seven-day funds to $14\frac{1}{4}$% for three-month money, while long-term gilt-edged stocks yielded $15\frac{1}{4}$%–$15\frac{1}{2}$%; the FT All-Share Index stood just below its record level. Within six weeks, however, the effective exchange rate had fallen by some 5%, and there had been two sharp rises in short-term interest rates: meanwhile banks' base rates had risen from 12% to 16%, the price of long-dated gilt-edged stocks had fallen by up to 5%, and equity prices by over 15%.

In October, more stable conditions prevailed, helped by falling interest rates in the United States and on the Continent. By mid-month, short-term rates had eased sufficiently for the banks to reduce their base rates by $\frac{1}{2}$%, and large official sales of gilt-edged stocks were achieved. Markets remained nervous, however, and for the rest of October short-term interest rates once again edged upwards under the influence largely of an apparent halt in the decline of American interest rates, the growing threat of a major strike at BL, and doubts about the prospects for public expenditure in 1982/83.

Only when renewed and extensive declines in American rates began at the end of October and a widespread strike at BL was resolved early in November did sentiment improve markedly. By mid-November, sterling's effective rate had recovered more than half of its loss since mid-August; heavy downward pressure on short-term interest rates had driven all except the shortest rates back towards their mid-August levels; base rates had fallen by a further $\frac{1}{2}$%, and gilt-edged yields had also fallen back substantially, despite very large official sales.

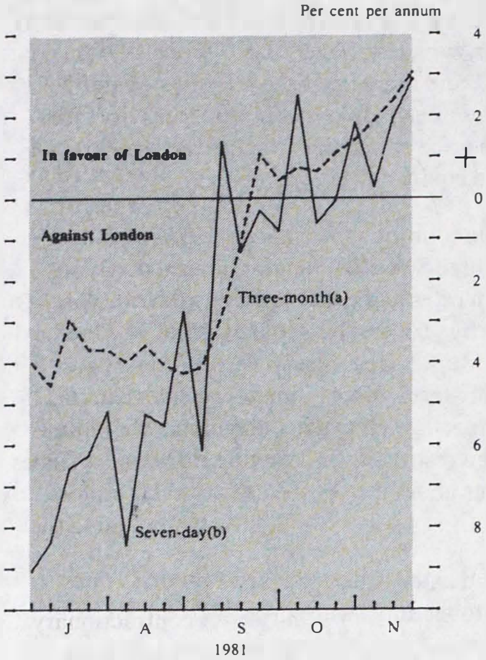
External considerations were a major influence on markets throughout the three-month period. Sterling came under heavy downward pressure on a number of occasions in September and October before recovering. But even when there was no significant activity on the foreign exchanges, the money and gilt-edged markets remained sensitive to financial developments in the United States.

Given the decline that had already taken place earlier in the year, the authorities were concerned that a further sharp fall in the exchange rate would have serious adverse implications for inflation. A failure to respond rapidly to downward pressure on sterling appeared likely to risk accelerating the fall, and it seemed necessary for increases in the general level of short-term interest rates to be a major element in their response to pressure. Moreover, while the domestic situation produced conflicting evidence, the growth of the money supply—though increasingly obscured by the Civil Service dispute—gave signs of accelerating. The evidence suggested in particular that underlying bank lending to the private sector had risen markedly. Lending to persons had been growing for some months and the statistics for banking August suggested a rise in underlying corporate demand for bank credit as well.

Consequently, on 14 September, the authorities moved to raise short-term interest rates. Part of this rise had already been discounted by longer market interest rates, but not by the banks' base rates, which rose by 2% shortly afterwards, to 14%. Sterling

(1) Unless otherwise stated, all subsequent references are to calendar months.

Differential between UK and US short-term interest rates



(a) Three-month London inter-bank rate *minus* three-month New York CD rate.
(b) Seven-day London inter-bank rate *minus* overnight Federal funds rate.

recovered briefly, but markets in the United States responded unfavourably to new fiscal proposals by President Reagan and hopes of a sustained fall in US interest rates were again deferred. Sterling fell once more and the financial markets began to expect a further rise in interest rates. Equity prices declined sharply, and gilt-edged prices fell, while interest rates in the money markets moved up. The authorities did not seek to resist the rise in rates and the clearing banks again raised their base rates, to 16%, on 1 October. For the first time since November 1980, UK short-term rates for maturities up to three months were above comparable rates in the United States.

After a few days of further upward pressure on interest rates, to which the authorities did not respond, external influences became more favourable. Currencies in the exchange rate mechanism of the European Monetary System (EMS) were realigned on 4 October, and this led to generally calmer conditions in the foreign exchange market. Interest rates abroad also began to fall, first in the United States and later in West Germany and France. Sterling recovered strongly and this encouraged longer money market rates to ease and buyers to return to the gilt-edged market in greater force than at anytime since mid-March. These conditions enabled the clearing banks to reduce base rates by ½%. Subsequently, market rates again moved up, on renewed fears of higher interest rates in the United States and with the threat (already noted) of a major strike at BL. But the authorities continued to operate in the money market at their existing dealing rates. This helped to check the extent of the upward pressure on rates and, when a strong downward move in American interest rates became apparent late in October and the pay dispute at BL was settled rapidly without major wage concessions, sentiment quickly improved. Sterling's effective rate recovered while interest rates in the money markets declined sharply and buyers again returned to the gilt-edged market in force. The clearing banks' base rates fell by a further ½% , to 15%, and longer-term money market rates declined considerably more. But because of the uncertainties surrounding the domestic monetary prospect, the authorities were concerned to moderate the pace of the decline in short-term rates.

Monetary aggregates

Between mid-February and mid-August—the first six months of the current target period—sterling M_3 grew at an annual rate of 17½% (Table A). But, like all other monetary aggregates apart from the monetary base, it was significantly distorted during the summer by the civil servants' dispute. The effect of the dispute on the central government borrowing requirement (CGBR) could be estimated and, although the extent to which this inflated deposits rather than reduced bank lending could not be known at all precisely, it appeared, up to mid-August, that the underlying rate of growth of sterling M_3 was probably within the target range.

Table A
Growth of the monetary aggregates[(a)]

Percentage increases (annual rates); *seasonally adjusted*

Banking months	Mar. 80–Feb. 81	Mar. 81–Aug. 81	Sept. 81–Nov. 81(b)
Wide monetary base	5.9	2.0	½
M_1	8.8	11.0	8
Sterling M_3	18.6	17.6	18
M_3	20.5	25.7	19
PSL_1	15.3	16.2	14
PSL_2	13.5	14.9	12

(a) For definitions, see tables and notes in the statistical annex, as follows: wide monetary base, Table 2; M_1, sterling M_3 and M_3 , Tables 11.1–11.3; PSL_1 and PSL_2, Table 12.
(b) Provisional, partly estimated, and rounded.

After the dispute ended, it became harder to judge how the monetary aggregates were being distorted, and by early September the authorities had ceased to comment on the underlying rate of growth of sterling M_3. The problem of interpretation has not materially eased since then. Although the distortions may have built up in a fairly uniform way, they seem to have unwound unevenly. Further, because of the priority given to making VAT repayments, it was not until banking November that there were large net repayments of delayed tax. Indeed, the net amount of tax

Table B
Sterling M_3 and its counterparts
£ millions (rounded); *seasonally adjusted*

Banking months	Mar. 80–Feb. 81 (quarterly average)	Mar. 81–May 81	June 81–Aug. 81	Sept. 81–Nov. 81(a)
Central government borrowing requirement	+2,600	+4,800	+4,300	+1,100
of which, effect of Civil Service dispute(b)	—	*+2,400*	*+2,000*	*+ 100*
Purchases(–) of central government debt by UK private sector (other than banks)	–2,300	–4,000	–2,500	–2,800
of which:				
Gilt-edged stocks	*–1,800*	*–2,700*	*–1,900*	*–2,300*
National savings	*– 400*	*–1,500*	*– 700*	*– 600*
Other public sector(c)	+ 300	+ 800	– 100	+ 500
Sterling lending to UK private sector	+2,400	+1,500	+1,900	+4,600
External and foreign currency factors(d)	– 100	+ 100	– 400	– 500
Non-deposit liabilities (increase–)	– 300	– 100	– 700	+ 200
Sterling M_3	**+2,600**	**+3,100**	**+2,600**	**+3,100**

(a) Provisional and partly estimated.
(b) Based on Treasury estimates; excludes additional debt interest paid because of the delay to receipts.
(c) The contribution to the public sector borrowing requirement of public corporations and local authorities, *less* their borrowing from the non-bank private sector.
(d) Includes bank lending in sterling to overseas.

outstanding may have risen marginally between mid-August and mid-November. Despite the difficulties of interpretation, it appears that the underlying annual rate of growth of sterling M_3 is likely to have risen in the three months to banking November.

An analysis of the counterparts to sterling M_3 strongly suggests that the main expansionary impetus was a further rise in the underlying rate of lending to the private sector. A significant part of this acceleration no doubt followed from the unusually low CGBR in the period, which, at just over £1 billion, was some £3 billion lower than in the previous three months (Table B). This improvement in the Government's position must have sharply increased companies' need for cash. Even so, it seems that corporate demand for bank credit rose markedly in underlying terms during the autumn, while the rate of personal borrowing remained high.

The public sector, in contrast, did not borrow from the banking system. The CGBR was very low, while the funding programme maintained considerable impetus. Over the three months, net sales of central government debt to the UK non-bank private sector exceeded the CGBR (both in underlying terms and including the effects of the dispute) by perhaps £1¾ billion.

External influences on sterling M_3 were modestly contractionary over the period. The non-bank overseas sector borrowed large amounts of sterling, which may then have been switched into foreign currencies in the expectation of a fall in the exchange rate. The expansionary effect of this was, however, offset by the public sector's external operations, including intervention to smooth fluctuations in the exchange rate.

The main monetary aggregates other than sterling M_3 continued to grow at widely different rates during the period. As during the summer, the narrow aggregates showed the lowest rates of increase, with the wide monetary base rising at an annual rate of less than 1% and M_1 at 8%. Of the broader aggregates, PSL_2 grew most slowly, reflecting a significant slowdown in building society receipts (particularly after the sharp rise in money market interest rates during September). Total M_3 again recorded the most rapid growth, as UK residents' foreign currency deposits with UK banks continued to rise at a faster rate than their sterling deposits.

Money markets and interest rates

The new arrangements

Since coming fully into effect on 20 August, the new monetary control arrangements[1] have generally worked well, despite frequently nervous and volatile markets and the particular difficulties of forecasting accurately—either during a day or for a period ahead—the net cash flows to the Exchequer while the effects of the Civil Service dispute continued to unwind.[2] The Bank has continued to exercise influence over very short-term interest rates, while giving market forces a greater role than previously in determining the level of longer rates.

(1) See recent issues of the *Bulletin*, especially September, pages 333–4 and 347–50.
(2) It should be noted that it is not possible to estimate the CGBR directly from the daily information provided by the Bank on the factors affecting the market's cash position. The Bank gives a daily figure for net 'Exchequer transactions', but this includes items contributing to the CGBR, many of the items financing it (notably net receipts from sales of gilt-edged stocks, national savings, certificates of tax deposit), and net foreign exchange transactions by the Exchange Equalisation Account.

The addition of forty-four, mostly foreign, names to the list of eligible banks has had the intended effect of increasing substantially the potential supply of eligible bank bills which the Bank can buy to offset a cash drain from the market. The supply has risen because eligible bills generally command a relatively attractive rate, and so these 'new names' will have sought to replace ineligible with eligible bills; in addition, some of their customers may have switched existing borrowing in the form of advances into bills. The extension of eligibility has not of itself caused a significant increase in the total of bank lending to either domestic or foreign borrowers. To be eligible, bills drawn for acceptable commercial purposes by a foreign borrower must meet the same criteria as the bills of a domestic borrower.

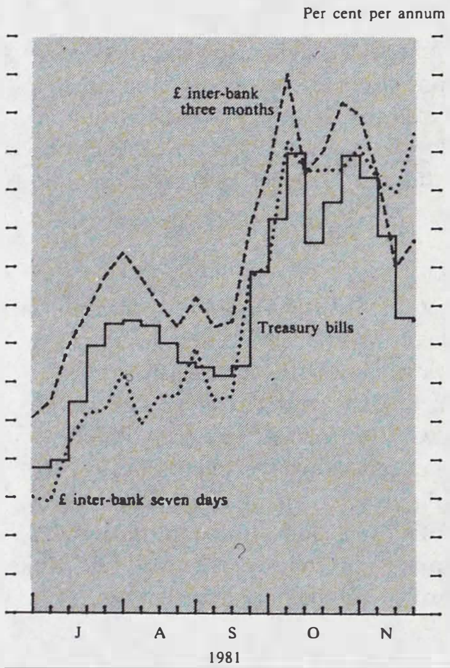
Interest rates and Bank operations

This section discusses in detail the material presented earlier on page 464. The Bank's operations are summarised in the table on page 479.

Banking September

From 20–28 August, interest rates showed no clear trend, although the expectation of money market tightness on and immediately after 1 September (when very large payments of petroleum revenue tax and supplementary petroleum duty were due) caused some rise in short rates. The Bank gave assistance almost every day, buying bills in bands 2–3[1] at discount rates between $12\frac{1}{2}\%$ and $12\frac{3}{4}\%$ or entering repurchase agreements covering a few days at a rate of interest of $12\frac{1}{8}\%$.

Short-term interest rates in London



In the event, no assistance was necessary on 1 September, largely because of the earlier sale of special Treasury bills which matured on that day[2] (and thus provided the market with cash) and because rather more of the tax payment than had been forecast was met by surrenders of certificates of tax deposit. This helped rates to ease for a few days. But from 7 September, with sterling coming under downward pressure as US interest rates firmed, longer-term money market rates began to edge up.

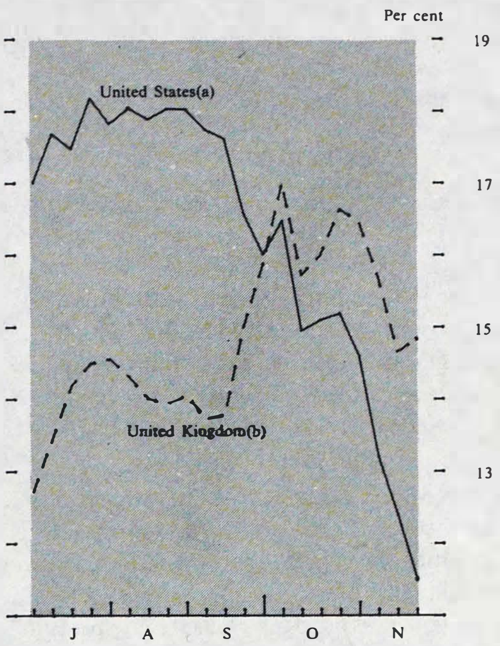
On 14 September, as pressure on sterling increased and with growing concern at the pace of bank lending to the private sector, the authorities concluded that a rise in interest rates could not be avoided. The discount market was only modestly short of cash that day and did not offer bills to the Bank at rates consistent with the authorities' revised interest rate objective. Consequently, the Bank declined to buy bills, and instead lent £79 million overnight through the discount window at $13\frac{3}{4}\%$, roughly 1% above its previous rate.[3] Market rates responded immediately, with three-month rates up about 1% to $14\frac{3}{4}\%$. The clearing banks' base rates rose by 2% on 16 September.

Banking October

Sterling strengthened briefly after the rise in market rates but then fell back, and by 18 September three-month inter-bank rates had edged up further, above 15%, as operators began to anticipate the need for further action to support sterling. In the following week there was continuing pressure on sterling. Interest rates again moved up and, despite continued Bank intervention to relieve market shortages at rates offered by the market, one-week inter-bank rates reached 15% by 28 September, and three-month rates $16\frac{3}{4}\%$.

(1) For the definition of these various bands, see the footnotes to the table on page 479.
(2) See the September *Bulletin*, page 332.
(3) This can only be an approximate calculation, as it requires comparison of an overnight loan with somewhat longer-term transactions involving bills.

UK and US interest rates



(a) Three-month New York CD rate.
(b) Three-month London inter-bank rate.

On 29 September, £300 million special Treasury bills maturing on 21 October were offered for tender. These had been announced a week earlier; they were intended to help offset cash flows to the market which were thought likely to arise during banking October because VAT refunds (of up to £2 billion) delayed by the dispute seemed likely to be made before deferred receipts came in. With market confidence weak, the top rate of discount paid for these bills, 15¾%, was about ½% above previous comparable market rates.[1] On 30 September, the discount houses faced a large prospective cash shortage and in their eagerness to obtain cash they offered bills to the Bank at rates ½%–1% higher than previously. With sterling still weak, the money market clearly looking for higher short-term rates, and with opportunities for round-tripping opening up, the authorities did not seek to resist this further rise. In the readjustment of rates which followed, the clearing banks' base rates rose by a further 2%, to 16%, on 1 October.

For the next few days, markets continued very nervous, and on 5 October the three-month rate touched 17%. But the Bank's own dealing rates (assistance was necessary on most days) did not rise significantly above those prevailing on 30 September, and this reassurance, together with falls in short-term interest rates abroad (first in the United States and then in West Germany) and a recovery in sterling, brought an improvement in sentiment. On 6 October, when a further £100 million special Treasury bills (maturing on 2 November) were auctioned, the average rate of discount approached 16⅛%; at the weekly tender three days later, for the usually higher-yielding 91-day bills, the average rate had fallen below 15%.

Conditions then became briefly more stable and by 13 and 14 October the clearing banks judged that a ½% reduction in base rates was consistent with the rates prevailing in the market. The Bank provided cash to the market every day on terms intended to encourage the consolidation of the rate structure and, judging that the market's holdings of band 1 and 2 bills were running low, its purchases included band 3 bills for the first time since late August.

Banking November

Thereafter sterling weakened again and, with at least a temporary halt to the decline in American interest rates and growing fears over future levels of public spending and of a strike at BL, longer rates edged back up. By 23 October, the average rate of discount for 91-day Treasury bills had returned to just under 16%. Again, the Bank's own dealing rates on shorter bills did not follow the market upwards.

From late October onwards, sentiment began to improve. US prime rates fell by 1% in the week to 5 November and market rates there declined even further. Also, even before the strike at BL began on 31 October, there were hopes of an early settlement without major wage concessions. Sterling strengthened, and interest rates for periods of one month and longer began to fall sharply, with the three-month inter-bank rate down 1¼% by the opening on 9 November. There were shortages of cash in the money market every day during this period, which the Bank continued to relieve at rates similar to those which it had accepted in the second half of October; consequently, very short rates did not decline significantly.[2]

(1) Again, this can only be an approximate calculation.

(2) On 30 October, the Bank—for technical reasons—lent £121 million over the weekend through the discount window, because a heavy oversubscription for shares in Cable and Wireless had left the cash position in the money markets more than usually uncertain.

In the second week of November, there were further falls in US prime rates and sterling again strengthened. On 9 November the banks cut their base rates by a further $\frac{1}{2}$%, to 15%. The money markets remained short of cash (indeed on both 10 and 13 November, partly because of large sales of gilt-edged stocks, the shortage was £700 million or more); and the Bank, in providing cash, accepted a modest decline in its dealing rates of around $\frac{1}{2}$% to $14\frac{5}{8}$%. But on 13 November, when sterling reached its highest point against the US dollar since June, the downward pressure on rates intensified.

The authorities judged at this point that, in relation to the domestic monetary prospect, the fall in rates was threatening to become too rapid. Faced with further downward pressure on 16 November, the Bank therefore declined to lower its dealing rates and instead lent overnight through the discount window at $15\frac{1}{8}$%. This action, together with the very large cash shortages which followed in the rest of the week, was sufficient to check the downward pressure temporarily.

By the end of banking November, rates for three-month periods and longer were back to within $\frac{1}{2}$%–$\frac{3}{4}$% of their mid-August levels. One-month money was almost 2% higher than at mid-August and very short rates higher still, reflecting the change in market expectations from the nervousness as to interest rate prospects in mid-August to the optimism evident by mid-November.

Cash and liquidity

As explained in the September *Bulletin* (page 329), the Civil Service dispute greatly added to the cash flowing from the Exchequer to the markets in the six months to mid-August.

In the next three months, the initial net effect of the unwinding of the dispute was to add a further £100 million or so of cash to the system (Table C). Excluding this strike effect, however, the CGBR (not seasonally adjusted) was in small surplus in this period, benefiting in particular from the massive oil-related half-year tax payments on 1 September. Other factors—especially the large sales of gilt-edged stocks—drained nearly £3 billion of cash from the markets in the same period, and the authorities consequently needed to put some £$2\frac{3}{4}$ billion (net) of cash into the system by way of open market operations in the three months to mid-November—much of it in the last month. As when faced with the same position early in 1981, the authorities' main response was to buy in Treasury bills and eligible bank bills.

With perhaps £$4\frac{1}{2}$ billion of net receipts still to come (at mid-November) from the unwinding of the Civil Service dispute, the main tax revenue season starting in January, and the prospective receipt of a large amount of oil-related taxes on 1 March, it seems likely that the cash pressure on the banking system which became evident during banking November will intensify in the early months of 1982. It may well exceed, possibly by a sizable margin, the pressures during the same period in 1981. Under such circumstances, the greater flexibility provided by the developments over the last year in the Bank's operating techniques in the money markets and the increase in the supply of eligible bank bills generated by the new monetary control arrangements will be particularly important.

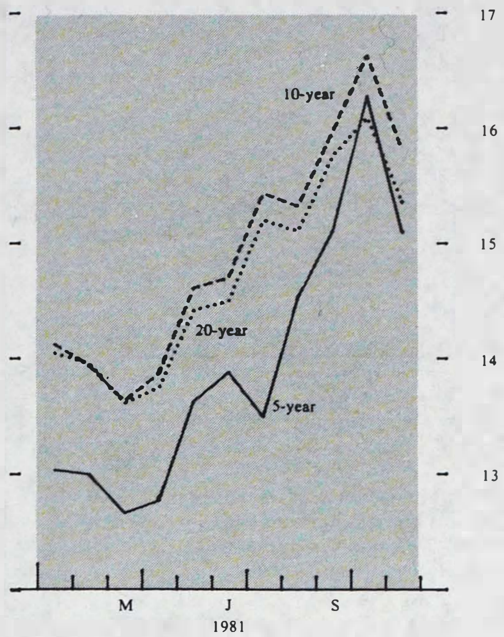
Table C
Influences on the cash position of the banking system

£ millions (rounded); *not seasonally adjusted*
Increase in banks' cash +

Banking months	Jan. 81– Mar. 81	Apr. 81– May 81	June 81– Aug. 81	Sept. 81– Nov. 81
Money market influences				
CGBR excluding strike effect	+ 100	+2,600	+2,900	− 100
CGBR strike effect(a)	+ 200	+2,200	+2,000	+ 100
All other(b)	−4,100	−3,300	−3,100	−2,900
Total	−3,800	+1,600	+1,800	−2,900
Official operations affecting cash				
Net increase (+) in Bank's holdings of eligible bank bills(c)	+2,400	−1,700	—	+1,600
Net increase (−) of Treasury bills in issue	+1,200	+ 100	−1,400	+1,000
All other(d)	+ 200	—	− 200	+ 100
Increase (+) in banks' balances at the Bank	+ 100	− 100	+ 100	− 100

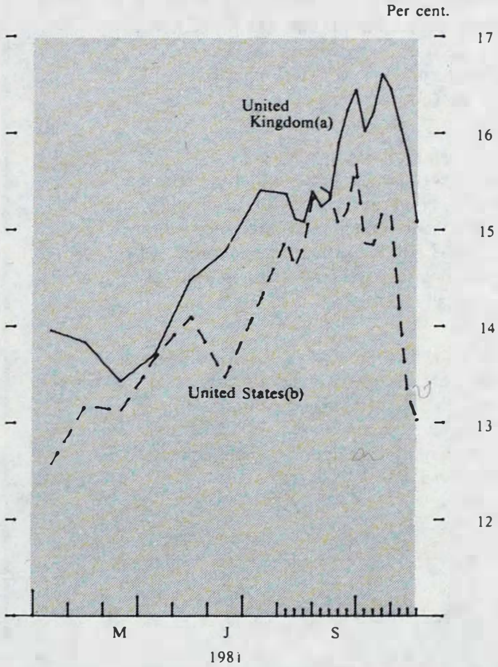
(a) Based on Treasury estimates; excludes additional debt interest paid because of the delay in receipts.
(b) Change in note circulation, sales of Government debt, change in the official reserves, etc.
(c) By the Issue and Banking Departments of the Bank.
(d) Changes in official holdings of local authority bills, discount window lending, etc.

Gross redemption yields on British government stocks[a]



(a) Based on the yields of particular representative stocks.

UK and US longer-term yields



(a) Calculated redemption yields on ten-year Government stocks.
(b) US Treasury ten-year bonds, constant maturities.

The funding programme

Throughout September, confidence in the gilt-edged market was at a low ebb, as indeed was the case in the major long-term debt markets abroad; yields on long-term debt in the United States, West Germany and the United Kingdom all rose sharply in this period, to offer what many judged to be unusually high real yields to investors. When US interest rates began to fall early in October, sentiment in the United Kingdom recovered, permitting large official sales of gilt-edged stocks. Renewed uncertainty about the trend of domestic and international interest rates, together with fears over future levels of public expenditure and of a major dispute at BL, then caused another setback. But when US interest rates fell sharply at the end of October and the BL dispute was quickly resolved, further heavy demand appeared for gilt-edged stocks and very large official sales were made. With a continuing contribution from national savings (on terms which were adjusted to keep them competitive), net sales of central government debt as a whole to UK non-banks remained high and, for the third successive quarter, were substantially higher than the underlying CGBR (ie excluding the effects of the Civil Service dispute).

The gilt-edged market

Developments in the United States and on the foreign exchange market heavily influenced sentiment in the gilt-edged market throughout the period. Initially, trading was often light with prices tending to drift downwards; but as sterling came under pressure in September and short-term rates rose, gilt-edged prices declined more precipitously. After a volatile period in October, there was a general recovery in November.

After very modest sales in banking September, the authorities made gross sales exceeding £$1\frac{1}{4}$ billion in both banking October and November. Redemptions and buying-in of next maturities offset nearly one third of gross sales in the three months as a whole and, with the holdings of the banking and overseas sectors on balance little changed, net sales to non-bank UK residents were somewhat higher than in the previous three months.

Yields on gilt-edged stocks fluctuated sharply over the period. Up to end-September and again in the second half of October, yields on short-dated stocks rose particularly fast and reached record levels towards the end of October at around $16\frac{1}{2}$%, 2% higher than in mid-August; by the end of banking November, these yields had fallen back to $15\frac{1}{4}$%. Yields on longer-dated stocks were less volatile. At their highest, in October, they were around $16\frac{1}{4}$% (for a 20-year stock), well below the record levels of $17\frac{1}{2}$% set in 1975 but still more than 1% higher than in mid-August; by mid-November, these yields too had fallen back, to around $15\frac{1}{2}$%.

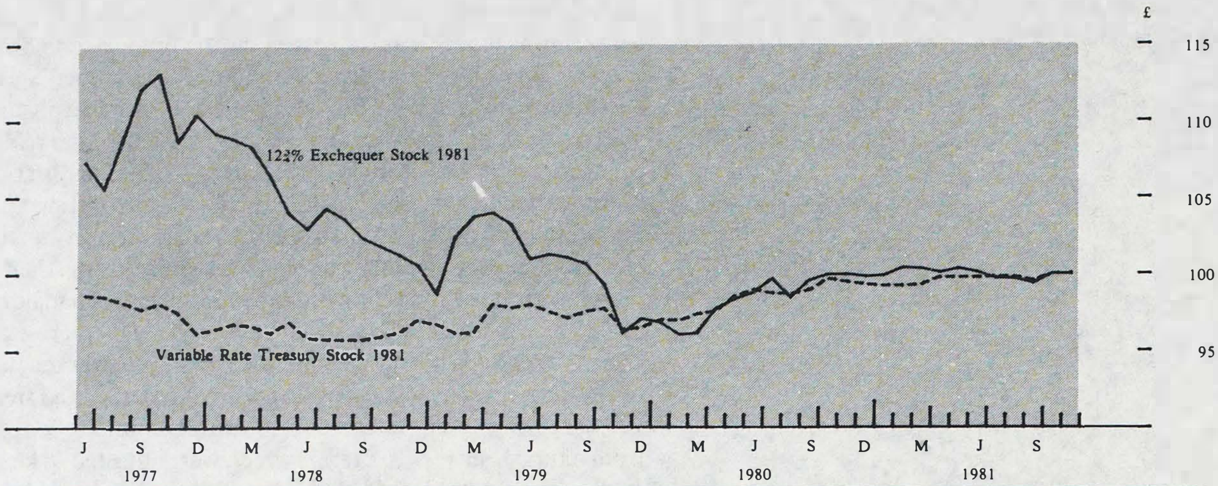
Banking September

At the start of banking September, the authorities were already assured of receipts of some £260 million from the balance due on the second index-linked stock to offset partially the redemption, on 21 August, of 3% Exchequer 1981 (£360 million of which remained in market hands). Stocks available for sale included the $11\frac{1}{2}$% Treasury 1985 tap stock (issued soon after the Budget but still not fully sold) and what remained of the tranches issued direct to the Bank on 24 July (low coupon) and 31 July (medium and long-dated).[1]

The market was initially quietly firm and, against the background of sterling strengthening against the dollar and hopes of an

(1) See the September *Bulletin*, page 335.

Variable rate gilt-edged stocks



Three Treasury Variable Rate Stocks (TVRS) have been issued: in May 1977 (to mature in November 1981), July 1977 (maturing in June 1982); and January 1979 (March 1983). Each was for £400 million with interest payable half-yearly, at an annual rate ½% above the daily average of the rate of discount on 91-day Treasury bills over a previous six-month period.

The main aim of the authorities with these stocks was to offer an instrument whose income would quickly reflect changes in short-term interest rates and whose capital value would therefore be more stable than that of a conventional fixed rate stock. It was thought that a range of investors would find this an attractive complement to existing stocks, particularly when the future path of yields seemed highly uncertain—conditions in which the authorities often found it difficult to sell conventional stocks.

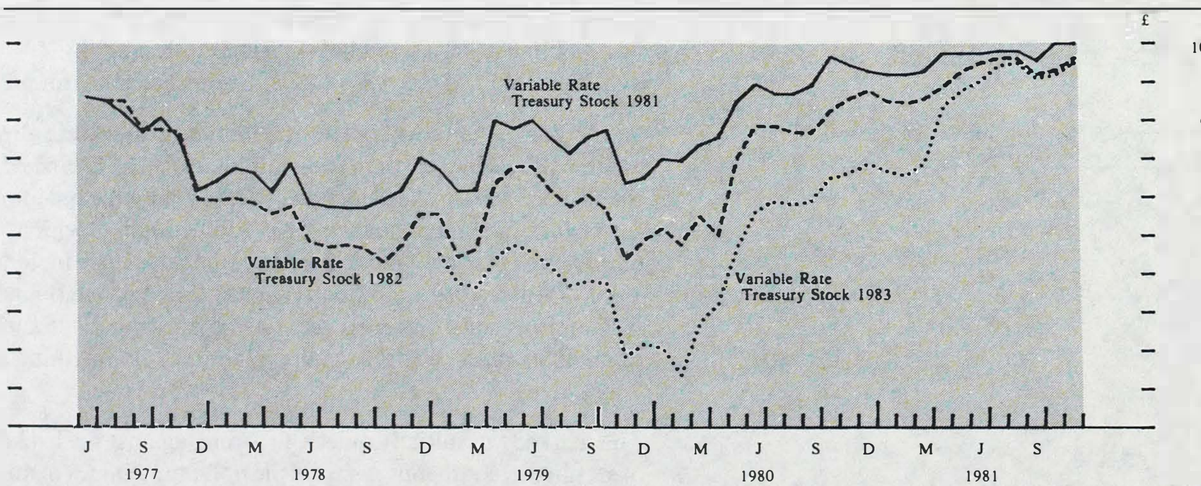
The first TVRS matured on 17 November 1981. Over its four and a half years, it demonstrated considerable price stability relative to fixed rate gilt-edged stocks of a comparable maturity (top chart). For most of the first three years, the price fluctuated between £96.50 and £98.50; after that, the price moved between £98.50 and £100.

Over its life as a whole, the first TVRS also yielded a highly competitive rate of return, compared with a fixed rate stock. Thus, an investor who bought it in May 1977 for £98.00 (the price at which it was first sold to the public) and held it to maturity would have received 11.8% per annum compared with 10.6% per annum on 12¾% Exchequer 1981, which matured six days after the first TVRS. Over shorter periods, the relative performance of these two stocks naturally depended heavily upon the movement of short-term interest rates. For example, between September 1977 and December 1978 (when interest rates rose sharply) the total return on the TVRS was 17.5% per annum, while that on 12¾% Exchequer 1981 was −3.1%. Conversely, when interest rates fell, the fixed rate stock performed relatively better.

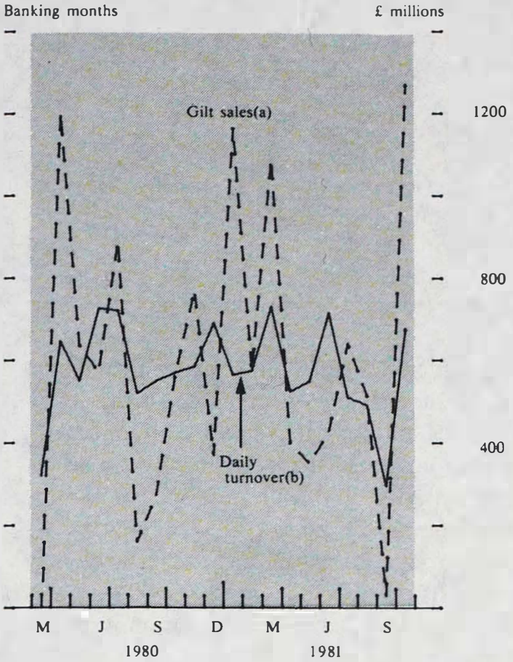
Despite relative price stability and a comparatively good return, none of the TVRS has attracted non-bank holders on a regular, substantial basis, even when interest rates seemed likely to rise. The value of these stocks in helping to restrain the growth of sterling M_3 has therefore been modest. Banks and discount houses, on the other hand, have found them attractive, no doubt because they have provided a relatively risk-free but profitable way of employing short-term funds. Indeed, overall demand has been such since mid-1980 as to bring the price of even the longer-dated TVRS sharply up towards par (bottom chart).

The form of the TVRS has not been widely copied by non-government borrowers. Local authorities have issued a number of variable rate bonds and stocks, but have tended to fix the half-yearly return in advance and in relation to the London inter-bank offered rate (LIBOR), rather than currently or retrospectively to the Treasury bill rate. These issues, too, appear to have been taken up largely by the banking system.

The volume of local authority issues of this type is declining, in part no doubt because of the increased use of droplocks which have features of both a variable rate and fixed rate issue. Only £800 million of TVRS remain in issue. Nevertheless, the scope for expanding the role of variable rate debt in the public sector will remain under active review.



Turnover and official sales in the gilt-edged market



(a) Gross official sales of gilt-edged stocks (excluding calls on stocks sold in earlier banking months).

(b) Daily average value of Stock Exchange transactions in British government securities.

imminent fall in US interest rates, modest sales of the 1985 tap stock were possible on 21 August. Shortly afterwards, however, US bond yields rose again, and with sterling losing the gains of the previous few days, gilt-edged prices—particularly for medium and long-dated stocks—fell back by up to £2.

Prices then drifted, in the absence of any clear trend in US interest rates. Turnover was generally lower than at any time since early 1980 (see chart), and in such thin trading the Bank did not seek to press stock on to the market; it did, however, meet some reinvestment demand for low-coupon stocks following the maturity of 3% Exchequer 1981.

When sterling came under pressure early in September, sentiment in the gilt-edged market was not immediately affected; in the week to 11 September, sterling's effective rate fell sharply, but the price of most medium and long-dated stocks rose. When the Bank raised its money market rates on 14 September, however, there was a sharp reaction in the gilt-edged market, short-dated stocks falling that day by about £$\frac{7}{8}$ and long-dated by about £1$\frac{1}{4}$. By noon the next day similar falls had again occurred (taking yields on medium and long-dated stocks towards 16%), before an improvement in sterling and widespread reductions in US prime rates encouraged a tentative rally. Even so, the market ended banking September close to its lowest overall level since January 1977 and, over the month as a whole, the authorities made net purchases of stock for the first time since January 1980.

Banking October

The authorities began banking October with no funds assured for the month, while the market was apprehensive that an early funding initiative would be necessary. The full money supply figures for August (published on 17 September) provided temporary encouragement, and prices rallied modestly on 22 September following a 1% reduction in the Federal Reserve discount rate surcharge and a further $\frac{1}{2}$% prime rate cut (to 19$\frac{1}{2}$%) by several US banks. Sentiment improved sufficiently for moderate official (non-tap) sales to be made. Later in the same week, however, sterling came under renewed pressure and confidence was also undermined by Wall Street's adverse reaction on 25 September to President Reagan's package of spending cuts and by Federal Reserve intervention apparently aimed at halting the fall in US short-term interest rates. Against a background of rising domestic interest rates, prices of gilt-edged stocks again fell back sharply and by 28 September yields on some medium-dated issues had risen close to 16$\frac{3}{4}$%.

The underlying tone remained nervous for the rest of the week, with the index-linked stocks coming under particular pressure on 30 September on speculation that the authorities might launch a new initiative in this area. But the market reacted calmly to the rise in clearing bank base rates to 16% on 1 October and there was renewed optimism after the weekend—encouraged by the latest US money supply figures and further prime rate cuts (to 19%)—that US interest rates might be on the way down. There were also hopes that sterling would be more stable, following the realignment of the EMS currencies. There was widespread demand for stock on 5 October and the 1985 tap was reactivated at £86$\frac{3}{4}$ (£4$\frac{1}{2}$ lower than its previous price) and then at £86$\frac{7}{8}$; large amounts were sold, along with other stocks in the Issue Department portfolio. On 6 October, the 1985 tap was exhausted (at £87) and, although the market was unsettled later in the day by the provisional estimate of a 2% rise in

Table D
Issues of gilt-edged stock

Stock	Amount issued (£ millions)	Date announced	Date issued	Date exhausted	Minimum price per £100 stock (£)	Payable per £100 stock: On tender (£)	Payable per £100 stock: Second instalment (£)	Redemption yield (per cent)
12% Treasury Stock 1987	250	6/10	6/10	—	—	—	—	—
12¾% Treasury Loan 1992	250	6/10	6/10	—	—	—	—	—
14% Treasury Stock 1998/2001	250	6/10	6/10	—	—	—	—	—
15% Exchequer Stock 1997	1,000	9/10	14/10	9/11	95.50	25	70.50	15.77
14% Exchequer Stock 1986	1,000	13/11	19/11	—	95.75	40	55.75	15.27

sterling M_3 in banking September and by the news of President Sadat's assassination, the underlying tone remained firm. Additional tranches of £250 million each of two medium-dated (1987 and 1992) and one long-dated stock (1998/2001) were therefore issued to the Bank (for sale to the market from 8 October onwards), to take advantage of this recovery in sentiment (Table D). In the next two days, falling US and domestic interest rates encouraged further strong demand, and heavy official sales of stock were made (including, on 8 October, large amounts of the longer-dated tranches).

With the market, particularly for longer-dated stocks, continuing to move ahead despite these sales, but with secondary market activity in the two existing index-linked stocks continuing at a low level, it was decided to announce a new conventional long-dated stock—the first since January 1981—on 9 October. The stock (15% Exchequer 1997) was priced to give a yield modestly below that on similar stocks already in the market, on the view that gilt-edged prices in the near future would depend primarily upon developments in the United States and that the recent rise in prices should not be halted by the authorities' pricing of the new stock. Given the funding already achieved in banking October, only £25 was payable on tender, with the balance in banking November. Response to the issue in after-hours' trading on 9 October and in initial dealings on 12 October, when substantial amounts of the recently issued tranche of 1987 stock were sold, was encouraging. But a fall in sterling during 12 October, together with a pessimistic forecast about the outlook for US interest rates, brought the rally to a sudden halt and there were few subscriptions at the tender on 14 October.

Banking November

During the following week, prices fell back as the market digested the recent heavy sales. Confidence was affected by further weakness in sterling on 16 and 20 October and by renewed upward pressure on short-term interest rates; doubts about the prospects for public expenditure in 1982/83 and the situation at BL were also unsettling influences. Yields on short-dated stocks rose to record levels.

When US interest rates resumed their fall at the end of October and sterling strengthened, the gilt-edged market quickly revived, and modest sales of (non-tap) stocks were possible in the last three days of October. On 2 November, substantial demand appeared for the 1997 tap stock, which was activated at £22¾ (£25 paid); but, for the rest of that week, news of the end of the BL strike was offset by concern over the prospect for US bond yields ahead of the US Treasury's quarterly funding announcement. In the event, this funding proceeded smoothly and US bond markets rose very sharply on Friday 6 November in response. This strength carried over to the gilt-edged market on 9 November and, with the additional encouragement of banks' base rates coming down by $\frac{1}{2}$%, the remaining £730 million of the 1997 tap was rapidly exhausted at prices up to £23$\frac{1}{2}$. After only a brief pause for consolidation, the market moved further ahead, encouraged by the strength of sterling, and further official sales were made of a range of stocks, including the low-coupon tranches issued on 24 July. A new short-dated stock was announced on 13 November; because of the size of sales in banking November, the new stock was offered for tender on the first day of banking December in partly-paid form, with the main call postponed to banking January.

National savings

National savings receipts provided around £175 million (net) a month during the period, rather less than in the summer. Index-linked certificates again accounted for the bulk of the inflow, aided by the abolition on 7 September of all age restrictions; there was also a rise from £3,000 to £5,000 in the limit on individual holdings with effect from 19 October. For conventional certificates, redemptions exceeded new sales, as the return on the twenty-first issue became increasingly uncompetitive; a new issue was made towards the end of the period (on 9 November), offering a record 10.51% per annum over five years, net of tax, against 9.02% on the previous issue. The rate of interest on National Savings Bank investment accounts was also raised (in two stages) from 13% at end-October to 15% on 1 December. By these means, the authorities sought to continue the impetus necessary to achieve net receipts of £3,500 million in the current financial year.

Other capital markets

Equity prices fell by over 15% in September, largely in response to the rise in short-term interest rates (and also perhaps reflecting the world-wide loss of confidence which caused prices to fall in nearly all the main stock markets). Although conditions then stabilised and prices subsequently recovered part of the September fall, the total value of new issues announced in October (excluding the special case of Cable and Wireless[1]) was the lowest for some months. Even so, the amount of equity capital raised in the three months to end-October remained high (Table E), and the total for 1981 as a whole is likely to be nearly double the figure for 1980 and the highest in real terms since 1976.

Table E
Other capital markets

£ millions; *not seasonally adjusted*
Net cash raised +

Calendar months	Nov. 80–Jan. 81	Feb. 81–Apr. 81	May 81–July 81	Aug. 81–Oct. 81
Local authorities				
Stocks	− 84	− 8	+ 3	− 84
Negotiable bonds	+ 16	− 39	− 18	− 39
UK private sector				
Loan capital and preference shares(a)	− 75	− 25	+ 34	+ 51
Equity capital(a)	+439	+215	+636(b)	+362
Unit trusts	+ 80	+175	+144	+ 91
Overseas sector				
'Bulldog' issues	+ 3	+101	+172	+ 53

(a) Net issues by listed UK public companies.
(b) Includes some £285 million in respect of a BP rights issue.

In the fixed-interest markets, conditions were generally difficult in the three months to end-October, with few borrowers prepared to pay the high nominal rates needed to ensure a successful issue. There were no major domestic issues after Birmingham City Council's £75 million droplock stock in August[2] but two foreign borrowers (the United Mexican States and the Province of Nova Scotia) entered the domestic 'bulldog' market (in September and October respectively). Local authorities, no doubt influenced by the high level of interest rates, made significant net redemptions of negotiable bonds and stocks.

Droplocks

The procedure for obtaining timing consent for droplock transactions under the Control of Borrowing Order was described in the June 1981 *Bulletin* (page 178). In response to enquiries from

(1) This 'issue', involving the sale of 50% of a company previously wholly-owned by the Government, took place at the end of October. Although the sale raised over £200 million, only £35 million represented 'new' money for the company and thus counted in the new issues series.
(2) See the September *Bulletin*, page 338. The stock was 40% paid in August, with the balance due in November.

the market, the Bank has confirmed that there is no objection to the inclusion in droplock agreements of borrower's option clauses, which give the borrower an option to effect a placing of stock at any time during the life of the droplock agreement. The typical size of droplock facilities has, however, shown signs of increasing, and this adds to the risk that the exercise of borrower's options without warning could disturb the conventional new issues market. The Bank has therefore indicated that, in respect of these options, borrowers will be required in future to seek timing consent before the option is exercised, under the normal procedures applied to new issues; the borrower will then be assigned a date as early as possible in the new issues queue on which he can exercise the option. Timing consent for stock to be placed automatically on the operation of a droplock trigger, as distinct from at the borrower's option, will continue to be given at the outset, before the facility is signed.

Official operations in the money markets[a]

Amounts in £ millions in italics; rates(b) per cent

	Outright purchases							Purchase and resale agreements(d)		
	Band(c)	Treasury bills		Local authority bills		Bank bills				
		Amount	Rates	Amount	Rates	Amount	Rates	Amount	Rates	Resale dates
Aug. 20								*56*	$12\frac{1}{8}$	Sept. 8
" 21	2			*35*	$12\frac{3}{4}$	*63*	$12\frac{11}{16}-\frac{3}{4}$			
	3					*20*	$13\frac{1}{8}$			
" 24	2	*22*	$12\frac{5}{8}-\frac{11}{16}$	*2*	$12\frac{11}{16}$	*239*	$12\frac{11}{16}-\frac{3}{4}$	*103*	$12\frac{1}{8}$	Sept. 10
	3	*14*	$12\frac{15}{16}$			*43*	13			
" 25	2	*3*	$12\frac{3}{4}$	*19*	$12\frac{11}{16}$	*50*	$12\frac{11}{16}-\frac{3}{4}$			
	3	*29*	$12\frac{7}{8}-\frac{15}{16}$	*4*	$12\frac{15}{16}$	*10*	13			
" 26	2	*5*	$12\frac{5}{8}$	*1*	$12\frac{11}{16}$	*101*	$12\frac{11}{16}-\frac{3}{4}$			
" 28	2	*18*	$12\frac{5}{8}$	*16*	$12\frac{11}{16}$	*77*	$12\frac{11}{16}-\frac{3}{4}$			
Sept. 4	1					*5*	$12\frac{11}{16}$			
	2	*4*	$12\frac{5}{8}$	*29*	$12\frac{11}{16}$	*152*	$12\frac{11}{16}-\frac{3}{4}$			
" 8	1	*10*	$12\frac{11}{16}$	*40*	$12\frac{11}{16}$	*154*	$12\frac{11}{16}$			
	2	*9*	$12\frac{5}{8}$	*9*	$12\frac{11}{16}$	*86*	$12\frac{11}{16}-\frac{3}{4}$			
" 9	1	*2*	$12\frac{11}{16}$			*83*	$12\frac{11}{16}$			
	2	*4*	$12\frac{5}{8}$	*2*	$12\frac{11}{16}$	*67*	$12\frac{11}{16}$			
" 11	2	*14*	$12\frac{5}{8}$	*45*	$12\frac{11}{16}$			*255*	$12\frac{1}{2}$	Sept. 21 & 28
" 15	1					*118*	$13\frac{15}{16}-14\frac{1}{16}$			
	2	*3*	$13\frac{7}{8}$			*58*	$13\frac{7}{8}-14$			
" 18	1					*20*	$14\frac{1}{16}-\frac{1}{8}$			
	2	*26*	14			*66*	$14\frac{1}{16}-\frac{1}{4}$			
" 21								*403*	$14\frac{1}{8}-\frac{1}{4}$	Sept. 22
" 23	1					*131*	$14\frac{1}{4}-\frac{3}{8}$			
	2	*25*	$14\frac{1}{4}$	*11*	$14\frac{1}{4}$	*150*	$14\frac{1}{4}-\frac{7}{16}$			
" 25	1					*26*	$14\frac{1}{2}$			
	2	*44*	$14\frac{5}{8}-\frac{3}{4}$	*39*	$14\frac{5}{8}-\frac{11}{16}$	*55*	$14\frac{5}{8}-\frac{7}{8}$			
" 28	1	– *5*(e)	$14\frac{5}{8}$							
" 29								*60*	$14\frac{1}{8}-\frac{1}{4}$	Sept. 30
" 30	1	*3*	$14\frac{3}{4}$	*30*	$14\frac{3}{4}-15\frac{1}{4}$	*136*	$14\frac{3}{4}-15\frac{1}{2}$			
	2	*7*	$15\frac{1}{8}$			*108*	$15-15\frac{3}{4}$			
Oct. 1	1	*13*	$15\frac{1}{4}$	*1*	$15\frac{1}{4}$	*113*	$15-15\frac{3}{4}$			
" 5	1	*23*	$15\frac{3}{8}-\frac{1}{2}$			*100*	$15\frac{1}{4}-\frac{3}{4}$			
" 6	1	*32*	$15\frac{1}{4}-\frac{5}{16}$	*12*	$15\frac{1}{4}-\frac{5}{16}$	*95*	$15\frac{1}{4}-\frac{1}{2}$	*130*	$15\frac{1}{4}-\frac{1}{2}$	Oct. 8
	2	*29*	$15\frac{5}{8}-\frac{3}{4}$	*16*	$15\frac{5}{8}-\frac{3}{4}$	*65*	$15\frac{3}{4}-\frac{7}{8}$			
" 8	1	*100*	$15\frac{1}{4}-\frac{3}{8}$			*124*	$15\frac{1}{8}-\frac{3}{8}$			
	2	*1*	$15\frac{5}{8}$			*54*	$15\frac{1}{2}-\frac{3}{4}$			
" 9	1	*104*	$15-15\frac{1}{8}$	*9*	$15-15\frac{1}{8}$	*75*	$15-15\frac{1}{4}$			
	2	*83*	$15\frac{1}{4}-\frac{3}{8}$	*9*	$15\frac{3}{8}$	*161*	$15\frac{1}{4}-\frac{1}{2}$			
" 12	1	*17*	15	*1*	15	*100*	15			
	2			*25*	$15\frac{1}{4}$	*179*	$15\frac{1}{4}$			
" 13	1	*39*	$15-15\frac{1}{8}$	*3*	15	*9*	15			
	2	*28*	$15\frac{1}{4}$	*25*	$15\frac{1}{4}$	*60*	$15\frac{1}{4}$			
	3					*35*	$15\frac{1}{4}$			
" 14	1	*32*	15	*10*	15	*56*	15			
	2	*5*	$15\frac{1}{4}$			*69*	$15\frac{1}{4}$			
	3					*21*	$15\frac{1}{4}$			
" 15								*101*	$15-15\frac{3}{8}$	Oct. 23
" 16								*127*	$15-15\frac{1}{4}$	Oct. 23
								185	$15\frac{1}{8}-\frac{1}{4}$	Oct. 26
" 19								*180*	$15-15\frac{1}{4}$	Oct. 20
" 20								*120*	$15\frac{1}{8}-\frac{1}{2}$	Oct. 28
" 21	1	*60*	15	*15*	$15-15\frac{1}{8}$	*103*	$15-15\frac{3}{8}$			
	2	*65*	$15\frac{1}{4}$	*27*	$15\frac{1}{4}$	*128*	$15\frac{1}{4}-\frac{1}{2}$			

	Outright purchases							Purchase and resale agreements(d)		
	Band(c)	Treasury bills		Local authority bills		Bank bills				
		Amount	Rates	Amount	Rates	Amount	Rates	Amount	Rates	Resale dates
Oct. 22	1	*7*	$15\frac{1}{16}$	*7*	15	*25*	$15-15\frac{1}{16}$			
	2			*8*	$15\frac{1}{4}-\frac{3}{8}$	*102*	$15\frac{1}{4}-\frac{3}{8}$			
	3	*52*	$15\frac{3}{8}-\frac{7}{16}$	*57*	$15\frac{3}{8}$	*68*	$15\frac{3}{8}-\frac{1}{2}$			
" 23								*216*	$15-15\frac{1}{8}$	Oct. 27 & 29
" 26								*213*	$15\frac{1}{8}-\frac{1}{4}$	Nov. 3 & 4
" 27								*63*	$15\frac{1}{4}$	Nov. 3
" 28	1	*7*	$15\frac{1}{8}$	*5*	$15\frac{1}{8}$	*49*	$15\frac{1}{8}-\frac{1}{4}$			
	2	*36*	$15\frac{1}{4}$	*10*	$15\frac{1}{4}$	*154*	$15\frac{1}{4}-\frac{1}{2}$			
" 29	1	*1*	$15\frac{1}{8}$	*7*	$15\frac{1}{8}$	*37*	$15\frac{1}{8}-\frac{1}{4}$			
	2	*1*	$15\frac{1}{4}$	*6*	$15\frac{1}{4}$	*146*	$15\frac{1}{4}-\frac{3}{8}$			
" 30	1	*6*	$15\frac{1}{8}$	*11*	$15\frac{1}{8}$	*59*	$15\frac{1}{8}-\frac{3}{16}$			
	2	*6*	$15\frac{1}{4}$	*51*	$15\frac{1}{4}$	*155*	$15\frac{1}{4}-\frac{5}{16}$			
Nov. 2	1					*83*	$15\frac{1}{8}-\frac{3}{16}$			
	2			*4*	$15\frac{1}{4}$	*63*	$15\frac{1}{4}-\frac{5}{16}$			
" 3	1	*10*	$15\frac{1}{8}$			*115*	$15\frac{1}{8}$			
	2	*26*	$15\frac{1}{4}$	*17*	$15\frac{1}{4}$					
" 4	1	*5*	$15\frac{1}{8}$			*36*	$15\frac{1}{8}$			
	2	*16*	$15\frac{1}{4}$			*63*	$15\frac{1}{4}-\frac{9}{32}$			
" 5	1					*45*	$15\frac{1}{8}-\frac{3}{16}$			
	2					*70*	$15\frac{1}{4}$			
" 6	1					*120*	$15\frac{1}{16}-\frac{1}{8}$			
	2	*3*	$15\frac{3}{16}$	*5*	$15\frac{3}{16}$	*158*	$15\frac{3}{16}-\frac{1}{4}$			
" 9	1					*28*	$14\frac{5}{8}-\frac{3}{4}$			
	2			*10*	$14\frac{5}{8}$	*21*	$14\frac{5}{8}$			
" 10	1	*7*	$14\frac{5}{8}$	*1*	$14\frac{5}{8}$	*150*	$14\frac{5}{8}$	*79*	$14\frac{3}{4}$	Nov. 17 & 18
	2			*5*	$14\frac{5}{8}$	*395*	$14\frac{5}{8}$			
" 11	2					*37*	$14\frac{5}{8}$			
" 12	1					*63*	$14\frac{5}{8}$			
	2	*48*	$14\frac{5}{8}$	*20*	$14\frac{5}{8}$	*229*	$14\frac{5}{8}$			
	3	*10*	$14\frac{5}{8}$	*19*	$14\frac{17}{32}-\frac{9}{16}$	*24*	$14\frac{5}{8}$			
" 13	1	*6*	$14\frac{5}{8}$	*7*	$14\frac{5}{8}$	*22*	$14\frac{5}{8}$	*200*	$14\frac{7}{8}-15$	Nov. 17
	2	*10*	$14\frac{5}{8}$	*20*	$14\frac{5}{8}$	*187*	$14\frac{5}{8}$	*370*	$14\frac{7}{8}-15$	Nov. 23
	3			*12*	$14\frac{17}{32}$	*17*	$14\frac{9}{16}$			
" 16	1					*35*	$14\frac{5}{8}$			
	2			*10*	$14\frac{5}{8}$	*30*	$14\frac{5}{8}$			
" 17	1	*3*	$14\frac{5}{8}$	*7*	$14\frac{5}{8}-\frac{11}{16}$	*91*	$14\frac{5}{8}-\frac{11}{16}$			
	2	*5*	$14\frac{5}{8}$	*20*	$14\frac{5}{8}$	*340*	$14\frac{5}{8}$			
	3	*17*	$14\frac{1}{2}$			*53*	$14\frac{1}{2}-\frac{9}{16}$			
" 18	1					*13*	$14\frac{5}{8}$			
	2	*6*	$14\frac{9}{16}$	*1*	$14\frac{5}{8}$	*78*	$14\frac{9}{16}-\frac{5}{8}$			
	3	*5*	$14\frac{1}{2}$	*2*	$14\frac{1}{2}$	*33*	$14\frac{7}{16}-\frac{1}{2}$			

Lending

	Amount	Rates	Repayment dates
Sept. 14	*79*	$13\frac{3}{4}$	Sept. 15
Oct. 30	*121*	$15\frac{1}{2}$	Nov. 2
Nov. 16	*115*	$15\frac{1}{8}$	Nov. 17

(a) The figures in this table may differ slightly from those released each day.
(b) Lowest and highest rates quoted, expressed as a rate of discount, except for purchase and resale agreements and lending where the rate of interest is quoted.
(c) Maturity bands of outright purchases are: band 1 = up to 14 days; band 2 = 15 to 33 days; band 3 = 34 to 63 days; band 4 = 64 to 91 days.
(d) Purchase and resale agreements, unless otherwise specified, involve a combination of any of the following: Treasury bills, local authority bills or eligible bank bills.
(e) A sale of Treasury bills to the market to absorb surplus funds.