Operation of monetary policy

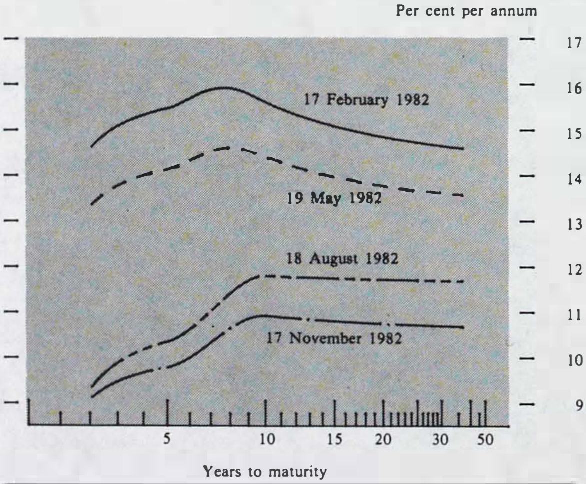
This article covers the three months from mid-August to mid-November.

Review

All three target monetary aggregates— sterling M_3, PSL_2 and M_1 —rose within but remained inside the target range during the three months under review. After an apparent acceleration in monetary growth during the summer, the rate of growth of the broader aggregates seemed to stabilise at a rate of growth in the upper half of the target range. Almost throughout the period the exchange rate remained firm, beginning to weaken only in the third week of November; and the prospect for lower inflation continued to improve. Despite a marked pick-up in domestic expenditure, particularly consumer spending, output remained depressed in the third quarter as stocks were run down. On balance, these various considerations continued to point to lower interest rates.

Market sentiment remained generally optimistic about future interest rate developments, encouraged by the domestic developments noted above and by declining interest rates abroad. Central bank discount rates fell in the United States, Canada, West Germany, France, Italy, the Netherlands and Belgium. Moreover, in the United States, the Federal Reserve made it clear that they would take more account of factors other than M_1 in conducting monetary policy; this led to a sharp fall in US bond yields.

The **time/yield curve** *of British government stocks has fallen steadily.*



Against this background UK short-term interest rates fell further. The lowest rates at which the Bank bought short-term bills fell by a further 2%–2⅛% over the period, and London clearing bank base rates fell by 2% to 9%. The building societies, after their meeting on 12 November, announced a reduction of 2% in their mortgage rates to 10%, effective from 1 December. In spite of the reduction in inflationary expectations, it appears that real interest rates fell modestly.[(1)]

In these generally favourable market conditions, it was possible for the UK authorities to sustain adequate momentum in the funding programme without preventing a further decline in yields. Net sales of central government debt to the non-bank private sector totalled £3¼ billion, compared with a seasonally adjusted PSBR[(2)] of £2¼ billion. National savings raised £1 billion and certificates of tax deposit £½ billion; net sales of gilt-edged stocks to the non-bank private sector were £1½ billion.

Yields on conventional gilt-edged stocks fell further, by up to 1%, to 11% or less at the long end and to around 10% at the short end. In contrast to the experience of the preceding three months, index-linked yields also fell. As noted in the September *Bulletin,* the fall in conventional yields led to signs of a revival in the corporate loan stock market, where new issues announced by UK

(1) See the note on page 483.

(2) Strictly, the PSBR less net purchases of local authority and public corporation debt by the non-bank private sector.

See the commentary on foreign exchange markets on page 498 for a fuller account.

Table A
Growth of the monetary aggregates
Percentage increases (annual rates); *seasonally adjusted*

Banking months	Mar. 82– May 82	June 82– Aug. 82	Sept. 82– Nov. 82	Mar. 82– Nov. 82
Wide monetary base (M_0)	− 7.3	0.7	14.9	2.4
Non-interest-bearing M_1	0.3	15.2	15.3	10.0
M_1	− 0.1	17.7	17.3	11.3
Sterling M_3	9.8	12.5	12.0	11.4
M_3	14.5	13.5	12.7	13.6
PSL_1	11.2	9.5	8.6	9.8
PSL_2	9.9	6.6	10.4	9.0

Table B
Sterling M_3 and its counterparts
£ billions; *seasonally adjusted*

Banking months	Dec. 81– Feb. 82	Mar. 82– May 82	June 82– Aug. 82	Sept. 82– Nov. 82
1 Central government borrowing requirement	−0.1	−0.1	+3.2	+3.4
2 Purchases(-) of central government debt by non-bank private sector	−2.5	−2.4	−2.4	−3.1
of which:				
Gilt-edged stocks	*−0.8*	*−1.7*	*−1.8*	*−1.5*
National savings	*−1.1*	*−0.8*	*−0.4*	*−1.0*
3 Other public sector	—	+0.9	−0.8	−1.4
4 Sterling lending to UK private sector	+4.6	+5.2	+3.9	+5.1
5 External and foreign currency counterparts	−0.3	−0.8	−1.1	−0.4
6 Net non-deposit liabilities (increase-)	−0.2	−0.8	−0.2	−1.0
7 **Sterling M_3**	**+1.5**	**+2.0**	**+2.6**	**+2.6**

Note: The sum of lines 1 and 3 is the PSBR, less net purchases of local authority and public corporation debt by the non-bank private sector.

Table C
House mortgage lending
£ billions

	1981 H2	1982 H1	Q3	October
Building societies(a)	2.8	3.2	2.0	0.8
Monetary sector(b)	1.5	2.3	1.3	..
Other lenders(c)	0.6	0.6	0.3(d)	..
Total house mortgage lending	4.9	6.1	3.6	..

.. not available.

(a) Seasonally adjusted.

(b) Seasonally adjusted. Up to end-1981, trustee savings banks are included in 'other lenders'.

(c) Not seasonally adjusted.

(d) Rough estimate.

listed companies amounted to £635 million in the three months to end-November.

During the last three days of the period sterling came under pressure in the foreign exchange market; this unsettled sentiment in the domestic markets and led to a marked rise especially in longer-term yields. The Bank responded initially by allowing market pressures to be reflected in a modest upward movement in its dealing rates for longer-maturity bills. Subsequently, after the end of the period, money-market rates rose sharply, and on the morning of 26 November one clearing bank raised its base rate by 1% and the Bank raised its bill dealing rates by $\frac{7}{8}$%–1$\frac{1}{4}$% (to 10%) in all maturity bands. The other clearing bank base rates were later increased by 1%–1$\frac{1}{4}$% (to 10%–10$\frac{1}{4}$%).

Monetary aggregates and credit

There was no further general acceleration, and the rates of monetary growth seen in the summer continued during the three months to mid-November. The growth rate of sterling M_3 (12% per annum) was nearly the same as in the preceding three months. PSL_2 (10$\frac{1}{2}$% per annum) did grow faster, partly reflecting an increased rate of inflow of funds into building society shares, and partly because those building society shares that are included in PSL_2 became more attractive in relation to those that are outside it. In spite of the continued fall in short-term interest rates, there was no further acceleration of M_1, though its rapid growth rate (17$\frac{1}{4}$% per annum) persisted.

Among the credit counterparts to the rise in sterling M_3 the PSBR was much the same as in the preceding three months. Net sales of central government debt to the non-bank private sector were £$\frac{3}{4}$ billion larger, however, owing to higher inflows into national savings and certificates of tax deposit; although the CGBR was larger than the PSBR, central government debt sales in particular were sufficiently heavy that the pressure on the cash position of the banking system intensified.

Bank lending in sterling to the private sector accelerated to some £5 billion in the three months under review (Table B). The acceleration appears to have been mainly in lending to the business sector (companies and unincorporated businesses), which increased by around £3 billion, compared with £1$\frac{3}{4}$ billion in the preceding three months. This may have reflected further strain on business finances. Lending to persons other than on house mortgages may also have accelerated slightly, no doubt in part stimulated by the removal of controls on hire-purchase terms.

The pace of bank lending on house mortgages increased in the third calendar quarter (Table C), but it may now stabilise following the decisions by most London clearing banks to moderate their house mortgage lending. Building society lending, however, continues to accelerate. The total of mortgage lending from all sources was around £3$\frac{1}{2}$ billion in the third quarter compared with £3 billion a quarter in the first half of the year. Whilst this lending is used in the first instance for house purchase or home improvements, some of the funds pass along the chain of sellers to final sellers of property who use them for other purposes;(1) and the increase in the rate of mortgage lending, in combination with the smaller increase in non-mortgage personal

(1) See the article in the September 1982 *Bulletin*, pages 390–8.

lending, will have been an important source of support for the £½ billion increase in the volume of consumer spending in the third quarter.

The banking figures imply that the private sector ran a balance of payments deficit of some £1 billion on current and capital accounts combined in the three months under review, that is, slightly less than in the three preceding months. Only about half of this directly affected sterling M_3 on which there was a smaller contractionary external influence than in the preceding three months, the remainder being financed in foreign currencies.

The quarterly banking figures to end-September do not reflect the monetary acceleration during the summer shown by the banking monthly figures; they are, however, more erratic than the monthly figures, being affected by special end-quarter influences. Nevertheless they do provide a sectoral breakdown of bank deposits. This shows that, of the increase of £1.3 billion (1.4%) in sterling M_3 in the third calendar quarter, some £0.7 billion consisted of bank deposits held by non-bank financial institutions. It is likely that a large part of this relates to building societies, where heavy share inflows outstripped even their increased rate of mortgage lending (Table D). Personal sector bank deposits (including unincorporated businesses) went up by £0.5 billion, and holdings of building society shares by £2.5 billion. Industrial and commercial companies' sterling bank deposits fell by £0.2 billion, but total holdings of certificates of tax deposit by the non-bank private sector increased by £0.6 billion in the third calendar quarter.

Table D
Building societies
Seasonally adjusted

	Net receipts (including interest credited) *£ billions*	Net advances *£ billions*	Liquidity ratio (end-period) *percentages*
1981 4th quarter	1.4	1.3	18.6
1982 1st quarter	2.2	1.3	19.0
2nd quarter	2.4	1.9	19.5
3rd quarter	2.5	2.0	20.0
October	1.0	0.8	20.2

Official operations in financial markets

Net sales of central government debt to the non-bank private sector totalled about £3 billion during the three months under review compared with £2½ billion in the preceding three. The national savings contribution picked up to £1 billion—more than double the figure for the preceding three months: this was mainly attributable to the introduction of the new Income Bond, and to the fall in short-term interest rates which made the 24th issue of conventional savings certificates more attractive. Net sales of certificates of tax deposit raised £½ billion, seasonally adjusted, relatively few CTDs being surrendered to pay oil-related taxes early in September.

The gilt-edged market was generally strong, in both the conventional and index-linked sectors. Substantial gross sales of stock,(1) totalling £2.8 billion, were made (Table E); these contributed both to immediate funding needs and to finance the redemption of 9¼% Exchequer Stock 1982 and the buying-in of some of the £3.3 billion of stock due to mature in the first quarter of 1983. The monetary sector bought £0.3 billion net, and the overseas sector £0.1 billion, so that net purchases of gilt-edged by the non-bank private sector were £1½ billion, rather less than in the preceding three months. These figures are transactions for cash; in addition, gilt-edged receipts totalling £1.6 billion were secured for the future through further calls on partly-paid issues.

Table E
Official transactions in gilt-edged securities
£ billions; *not seasonally adjusted*

Banking months	Dec. 81– Feb. 82	Mar. 82– May 82	June 82– Aug. 82	Sept. 82– Nov. 82
Gross official sales	+1.9	+1.9	+3.6	+2.8
less				
Redemptions and official purchases of stocks within a year of maturity	−1.3	−0.7	−1.4	−0.9
Equals net official sales	+0.6	+1.2	+2.2	+1.9
of which, net purchases by:				
monetary sector	*−0.4*	*−0.3*	*+0.3*	*+0.3*
overseas sector	*+0.2*	*−0.1*	*+0.1*	*+0.1*
non-bank private sector	*+0.8*	*+1.7*	*+1.8*	*+1.5*

In the prevailing favourable market conditions it was possible to sell the necessary amount of gilt-edged in the form of indexed and

(1) Gross sales of gilt-edged stocks are defined as net official sales of stocks over one year to maturity apart from transactions under purchase and resale agreements.

Table F
Maturities of new issues of gilt-edged securities

£ millions

Banking months	Up to 10 years	Over 10 years	Indexed stocks
Dec. 1980– Feb. 1981	3,000(a)	2,300	—
Mar. 1981– May 1981	2,500	—	1,000
June 1981– Aug. 1981	500	1,250	1,000
Sept. 1981– Nov. 1981	250	1,500	—
Dec. 1981– Feb. 1982	2,500	500	750
Mar. 1982– May 1982	—	500	750
June 1982– Aug. 1982	2,150(b)	900	—
Sept. 1982– Nov. 1982	3,550(a)	—	900

(a) Of which 1,000 convertible into an over-10 year stock.
(b) Of which 750 convertible into an over-10 year stock.

Table G
Influences on the cash position of the banking system

£ billions; *not seasonally adjusted*
Increase in banks' cash +

Banking months	Dec. 81– Feb. 82	Mar. 82– May 82	June 82– Aug. 82	Sept. 82– Nov. 82
Money market influences				
CGBR	−1.3	+1.1	+3.2	+2.9
All other(a)	−2.1	−2.8	−3.3	−3.4
Total	−3.4	−1.7	−0.1	−0.5
Official operations affecting cash				
Net increase (+) in Bank's holdings of eligible bank bills(b)	+2.9	+1.3	+0.4	+1.5
Net increase (−) of Treasury bills in the market	+0.1	+0.2	−0.1	−0.5
All other(c)	+0.4	+0.2	−0.2	−0.4
Increase (+) in banks' balances at the Bank	—	—	—	+0.1

(a) Change in note circulation, sales of government debt, change in the official reserves, etc.
(b) By the Issue and Banking Departments of the Bank.
(c) Changes in official holdings of local authority bills, discount window lending, etc.

short-dated conventional stocks, without resort to the long-term conventional market. This left the long-term market for private borrowers, at a time when yields had fallen far enough for there to be a real prospect of such borrowers coming forward. There were large official sales of conventional stocks maturing in 1987 and 1988, especially to building societies, and of a short-dated stock convertible into a conventional long at a yield considerably below the contemporary market level. In addition, market demand for index-linked stocks strengthened in October and the Government issued two new longer-dated stocks of this kind. The pattern of new gilt-edged issues as between shorter and longer maturity conventional stocks and index-linked stocks, over the last two years is shown in Table F. In recent quarters new issues of conventional stocks have been concentrated at shorter maturities.

New borrowing facilities have recently been made available to local authorities and public corporations by the Public Works Loans Board (PWLB) and the National Loans Fund respectively (see page 353 in the September 1982 *Bulletin*). The main objective in introducing these new facilities was to induce these borrowers to draw more heavily on the central government and less heavily on market sources, thus alleviating the chronic shortages of funds in the money market. In the event local authorities switched borrowing from the market to central government sources, and the CGBR rose in relation to the PSBR (Table B), though the PWLB's fixed rate facilities proved more attractive than its new variable rate facility in the light of the fall in longer-term interest rates.

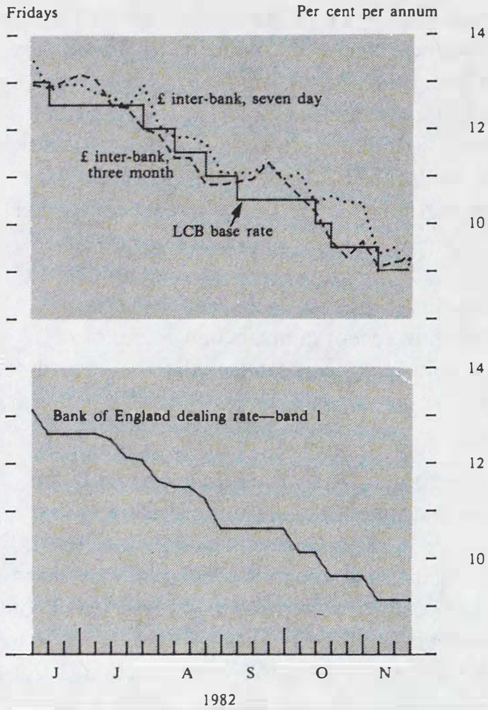
Cash shortages persisted in the money market, however, averaging £500 million a day. In large part this reflected the maturity of past market assistance, but the expansionary influence of the CGBR was more than offset by other influences on the money market, principally government debt sales (Table G). This maintained the pressure on the cash position of the banking system and a net increase over the three months in the amount of market assistance was needed.

The Bank continued to meet these shortages as far as possible through outright purchases of bills. But at times, when the supplies of paper in the market available for outright sale to the Bank were attenuated, or when market rates for bills fell to a level at which the Bank was unwilling to deal, outright purchases were not sufficient and the Bank entered into repurchase agreements with the discount houses.[1] Beginning in September, the Bank at times offered the houses repurchase agreements at somewhat longer maturities than hitherto; the longest maturities extended beyond thirty-three days—ie into band 3.

Over the three months, the Bank's total holdings of commercial bills rose by £1.5 billion; part of this increase was matched by a rise in market holdings of Treasury bills. On 26 October the Government repaid all its Ways and Means advances from the Issue Department of the Bank, and for the first time the National Loans Fund held a balance with the Banking Department of the Bank under the arrangements introduced in the 1982 Finance Act. Though Ways and Means advances were re-created soon after this, National Loans Fund balances have since re-appeared at times.

(1) Certain bills not eligible for outright purchase by the Bank are nevertheless eligible for use in repurchase agreements.

Short-term interest rates *in London continued to fall.*



Money markets and interest rates

Over the three months interest rates fell further. Inter-bank rates fell by some $2\frac{1}{2}\%$ to around $9\frac{1}{4}\%$ at both the seven-day and three-month maturities, and the lowest rates at which the Bank bought bills fell by 2%–$2\frac{1}{8}\%$. The London clearing banks reduced their base rates by a further 2%, to 9%.

The period began on Thursday 19 August in an atmosphere heavily conditioned by falling interest rates and bond yields in the United States: earlier in the week the Bank's lowest dealing rates had fallen (by a total of $\frac{1}{4}\%$) in all maturity bands; the clearing banks had announced reductions of $\frac{1}{2}\%$ in base rates; but on 18 August the Bank had acted to moderate the pace of the decline in rates by obliging the discount market to borrow from the Bank for seven days at $11\frac{1}{4}\%$, the Bank's dealing rate for band 1 bills.

The Bank maintained its dealing rates unchanged for three days but by 24 August substantial market pressure for lower interest rates had again emerged, stimulated by the encouraging US money supply figures. With the underlying monetary situation generally satisfactory, the Bank responded to the market pressure and lowered its dealing rates by $\frac{1}{8}\%$ on that day and by a further $\frac{3}{8}\%$–$\frac{1}{2}\%$ over the remainder of the week, during which central bank discount rates fell in the United States, Canada, West Germany, the Netherlands and Switzerland. The London clearing banks announced another reduction of $\frac{1}{2}\%$ in their base rates (to $10\frac{1}{2}\%$) on 27 August.

Inter-bank rates fell only modestly during this part of banking September. The seven-day rate fell by $\frac{7}{16}\%$ to reach $11\frac{3}{16}\%$ on 27 August, but the one-month rate fell by only $\frac{3}{16}\%$ (to 11%), and the longer rates were unchanged.

After the Federal Reserve had announced a cut in its discount rate on 26 August, the markets saw no immediate prospect of a further fall in US interest rates and concern there about money supply growth and the fiscal position re-emerged. This expectation about interest rates was transmitted to the United Kingdom, and the atmosphere in financial markets became more subdued. Against this background, the Bank met the shortages in the money market at unchanged dealing rates; inter-bank rates at longer maturities, however, tended to drift upwards.

Sentiment improved in the light of the retail price index for August, published on Friday 17 September, and the Chancellor's forecast that the rate of inflation would be down to $6\frac{1}{2}\%$ by the end of the year. Inter-bank rates fell during the following week—by $\frac{3}{16}\%$ at seven-day and twelve-month maturities—but except at the short maturities this fall still left them higher than on 27 August. Against the background of falling inflation and a firm exchange rate, the Bank reduced its rate for repurchase agreements by $\frac{1}{16}\%$ on Friday 24 September, and cut its dealing rates for outright bill purchases by $\frac{3}{8}\% - \frac{1}{2}\%$ between 27 and 30 September. Inter-bank rates did not immediately fall in parallel, perhaps partly because the US dollar remained strong against all currencies, including sterling, despite a reduction of $\frac{1}{2}\%$ in a leading US bank's prime rate announced on 28 September. Moreover disappointing US money supply figures announced on 1 October, and the reaction of eurodollar rates, delayed the fall in inter-bank rates further. Easier day-to-day money conditions the following week did, however, bring inter-bank rates down and the clearing banks announced reductions of $\frac{1}{2}\%$ (to 10%) in base rates on 6 October.

Real interest rates

In times of inflation, *nominal* interest rates will generally tend to be an imperfect and potentially misleading indicator of the stance of monetary policy. At such times it is useful to try to measure the level of *real* interest rates—that is to say interest rates adjusted for the effects of expected changes in the price level. The result may give a better impression of the expected returns to saving and the expected cost of borrowing in inflationary times than does the level of nominal rates.

Measuring real interest rates is problematical for a number of reasons. First, it is difficult to measure inflationary expectations. Second, there is the question of which price index to use. Third, the calculation depends on exactly which nominal interest rate is relevant for the purpose, and indeed also on the tax status of the person or company in question. And fourth, there is maturity: real interest rates are normally discussed in a short-term context, because it is very difficult to identify long-run inflationary expectations.

Some of these difficulties can be avoided by reference to the market measures of real interest rates which are now readily available in the form of yields on index-linked gilt-edged securities: the gross redemption yield on 2% Index-Linked Treasury Stock 1996 is shown as **line 5** on the chart.(1) As yet, however, the market for index-linked debt is a specialised one, in which only a limited number of securities is available, all of them liabilities of the Government.

For these reasons, there is no single measure of the level of real interest rates. Moreover there is substantial imprecision in all estimates. The chart also shows four alternative measures of real interest rates. In each case the estimate of inflationary expectations needed for the calculation is derived from contemporary private sector forecasts of the rise in retail prices over the following year.

The alternative measures shown in the chart are as follows:

Line 1 One year inter-bank deposit rate *minus* the expected rate of retail price inflation. This is an estimate of real interest rates in the money market.

Line 2 The London clearing banks' base rate *plus* 1% *minus* the expected rate of price inflation. This measures roughly the expected cost of borrowing for prime private sector industrial borrowers, not allowing for corporation tax. Of course, not all industrial borrowers are able to borrow at base rate *plus* 1%; for others the expected real cost of borrowing is correspondingly higher.

Line 3 As line 2, but with adjustments made in order to allow roughly for the deductibility of interest payments for corporation tax purposes, and for taxation of corporate income.

Line 4 The building society ordinary share rate, net of tax, *minus* the expected rate of price inflation. This is an indication of the expected real returns to this form of personal saving, except for higher rate taxpayers.

Personal borrowing is conducted on a wide variety of terms. Credit card borrowing and other consumer borrowing from banks is normally at annual percentage rates well above base rate. Moreover, as some consumer borrowing rates are adjusted infrequently when market conditions change, some may have risen in real terms as inflationary expectations have subsided this year. Borrowing on mortgage, however, is relatively cheap, especially for loans under £25,000 on which tax relief is available for interest payments.

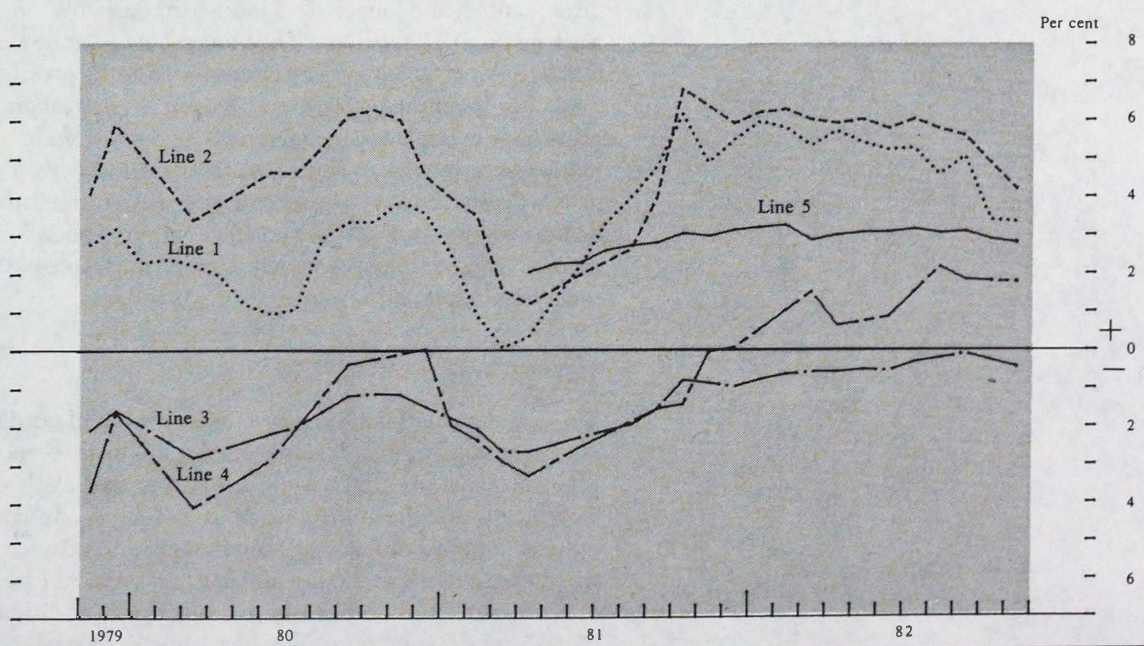
The two real interest rate measures which are gross of tax (lines 1 and 2) have been positive throughout the last three years. They reached a peak in the autumn of 1981, when clearing bank base rates were as high as 16% and inflationary expectations for the following year were around 10%; since then they have fallen.

The two net-of-tax measures, (lines 3 and 4) have of course stood well below the gross-of-tax measures throughout the period. Indeed, the real cost of borrowing net of corporation tax (line 3) has at no stage been positive. Expected real returns to savers in building society ordinary share accounts (line 4) have been positive since late 1981. Both of these net-of-tax measures have fallen since the summer of this year; real building society interest rates will have fallen further with the reduction in their nominal interest rates that took effect on 1 December.

The convergence of the gross-of-tax and net-of-tax measures during the course of 1982 illustrates how the distortions in the economy caused by the interaction of inflation and the tax system are being reduced as inflation subsides.

(1) The fall in the yield in March 1982 was largely attributable to the removal of earlier restrictions on eligibility to hold index-linked gilt-edged announced in the Budget.

Real interest rates



The influence of events in the United States changed direction sharply as rumours developed that the Federal Open Market Committee had decided, at its meeting on 5 October, to tolerate overshooting of the M_1 target. On 8 October the Federal Reserve announced a cut of $\frac{1}{2}$% (to 9$\frac{1}{2}$%) in its discount rate, and over that weekend the Chairman commented that the target for M_1 was being de-emphasised, at least for the time being.

This development immediately led to expectations of further reductions in interest rates in the United Kingdom; these expectations were reinforced by the announcement on 11 October of the wholesale price index for September. The Bank moved its dealing rates down by $\frac{1}{2}$% in the early part of that week. This move was made more quickly than in earlier episodes because it had proved difficult at times in the past to secure sufficient offers of bills to meet the cash shortages during periods when the Bank's dealing rates had entered a phase of gradual reduction and when there were very confident expectations that they had further to fall. Inter-bank rates generally moved in parallel with the Bank's dealing rates on this occasion and the clearing banks announced another $\frac{1}{2}$% cut in their base rates (to 9$\frac{1}{2}$%) on 13 October.

Conditions then became quieter for a period, with three-month inter-bank rates and longer-term bill rates edging lower. The fall in bill rates opened a gap between the Bank's dealing rates and market rates for bills in the longer bands; accordingly on 25 October the Bank reduced its rates for bills in bands 3 and 4 by $\frac{1}{16}$% and $\frac{1}{8}$% respectively to restore a declining pattern of dealing rates with a differential of $\frac{1}{8}$% between successive bands.

Following encouraging news of domestic industrial relations and the announcement on 29 October of a fall in US money supply, the Bank reduced its dealing rates by a total of $\frac{1}{2}$% in all the maturity bands on 1 and 2 November. This was followed by a lowering in inter-bank rates, and the clearing banks announced a further $\frac{1}{2}$% reduction in their base rates (to 9%) on 4 November.

Market conditions for the remainder of the period were dominated by events in the foreign exchange markets, which were linked with uncertainty about US monetary conditions. Expectations of a further reduction in the Federal Reserve discount rate were disappointed, and longer-term inter-bank rates rose slightly in the week ending 12 November. The movement continued early in the following week when sterling came under heavy pressure in the foreign exchange markets. On 17 November, in response to that pressure, the Bank confined its morning operations in the bill market to purchases of bills in bands 1 and 2, leaving a substantial proportion of the day's shortage in the market. In its afternoon operations the Bank accepted offers of bills in bands 3 and 4 at rates up to $\frac{1}{4}$% higher than previously, though it accepted other offers in those bands at its earlier rates.

The funding programme

Receipts from national savings and certificates of tax deposit rose to £1.5 billion, seasonally adjusted, during the three months under review compared with £0.6 billion in the preceding three months. This meant that the immediate pressure for gilt-edged funding was reduced, but the authorities thought it right to take advantage of the strength of the market to make provision for the heavy maturities of stock in the early part of 1983. In addition to the official stock transactions shown in Table E, £1.6 billion of gilt-edged receipts were secured for future banking months through partly-paid issues.

Gilt-edged market

The week in which the period began saw very sharp price rises in the gilt-edged market. In the first three days, prices rose by £3¾ for conventional short-dated stocks and by up to £6½ for longs; on the Monday the issue had been announced of £800 million 10½% Exchequer Stock 1987, 40% paid, for sale on Thursday 19 August, the first day of banking September. The market was quieter that day, and prices fell back somewhat. In view of the rise in the market which had nevertheless occurred since the issue was announced, the Bank accepted tenders at a £2 premium above the minimum tender price to produce a gross redemption yield of 10.84%, which was in line with the market.

The market advanced strongly again on Friday 20 August, and the remaining official supplies of 10½% Exchequer Stock 1987 were quickly sold out. Prices rose further during the day, by up to £3 at the long end, and a period of consolidation seemed likely. In these circumstances, the Bank did not supply further conventional stock to the market, which at that time might have made the consolidation more difficult. Instead it announced, after the close of business, the offer for sale of £250 million of 2½% Index-Linked Treasury Stock 2001, to replenish its supplies of this form of stock.

Conditions became much quieter while the market consolidated the lower yields that had been established. The authorities were concerned not to obstruct this process by pressing stock on the market, though there were significant official sales early in calendar September when the US bond market improved.

Substantial demand for stock re-emerged in the week beginning 20 September; this followed the announcement that the retail price index had not risen in August, and the Chancellor's forecast that inflation would be down to 6.5% by the end of the year. The demand was reinforced by the successful US Treasury debt auctions that week, and there were considerable official sales of conventional stock. At the end of the week the offer for sale of a new shorter-dated conventional stock was announced—£1,250 million of 10½% Exchequer Stock 1988, of which £250 million was

Table H
Issues of gilt-edged stock

Stock	Amounts issued (£ millions)	Date announced	Date issued	Date exhausted	Price per £100 stock (£)	Payable per £100 stock: On issue (£)	Payable per £100 stock: Further instalments (£)	Redemption yield (per cent)
10½% Exchequer 1987	800	16/8	19/8	20/8	98.75	40.00	58.75	10.84
2½% Index-linked Treasury 2001	250	20/8	26/8	14/10	94.00	94.00	—	2.91
10½% Exchequer 1988	1,250(a)	24/9	29/9	29/9	97.00	20.00	77.00	11.24
9½% Treasury 1988	750	11/10	11/10	19/10	96.25	20.00	76.25	10.36
2½% Index-linked Treasury 2009	400	19/10	19/10	21/10	98.50	98.50	—	2.58
2½% Index-linked Treasury 2003	250	22/10	27/10	—	98.00	98.00	—	2.63
8¾% Treasury Convertible 1985(b)	1,000	1/11	4/11	4/11	100.25	25.00	75.25	8.61 (to 1985)

(a) Of which, £250 million was reserved for the National Debt Commissioners.

(b) Holdings may, at the option of holders, be converted in whole or in part into 9% Conversion Stock 2000, as on the following dates:

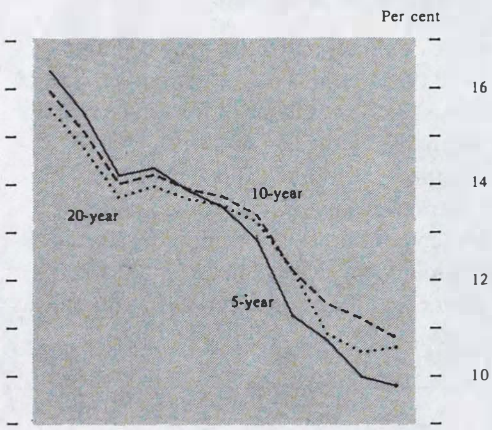
Date of conversion	Nominal amount of 9% Conversion 2000 per £100 nominal of 8¾% Treasury Convertible 1985	Implied redemption yield (% pa)
3 September 1983	£104	9.49
3 March 1984	£102	9.26
3 September 1984	£100	9.04
3 March 1985	£98	8.83

reserved for the National Debt Commissioners. The issue was partly paid: there was no urgent need for immediate heavy funding in banking October and the opportunity was therefore taken to secure funding for the banking months of November and December, with only £20 paid in banking October. The issue also helped underpin the fall in yields that took place during the week.

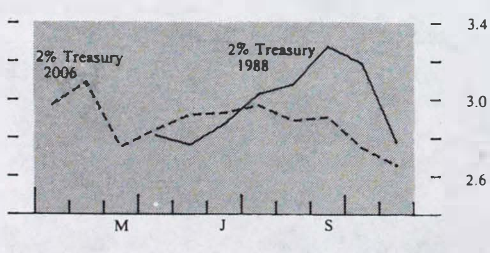
Sentiment improved further early the following week after the fall in the Bank's money-market dealing rates; the new issue was fully subscribed at the public offering on 29 September, at a price £1 higher than the minimum tender price. Unsettled conditions in US financial markets were the prevailing influence for a few days thereafter, but on 5 October the provisional UK money figures for banking September were published—these were better than some commentators had expected and helped sentiment. Later that week there were rumours of an easing of US monetary policy; on Friday 8 October, the Federal Reserve cut its discount rate by ½% (to 9½%) and over the weekend it became clear that the Federal Reserve intended to de-emphasise its target for M_1.

These developments led to a sharp fall in US bond yields and to heavy demand for gilt-edged stock in the United Kingdom. In this atmosphere the authorities announced on Monday 11 October the issue of a new shorter-dated conventional stock—£750 million of 9½% Treasury Stock 1988. The announcement was made on Monday rather than the preceding Friday in order to avoid the uncertainties surrounding the weekly publication of US money supply figures after the close of the London market on Fridays. The authorities wished to have the stock available for sale quickly in order to consolidate the fall in yields, and for that reason it was issued direct to the Issue Department of the Bank rather than being offered directly to the public; dealings in it began on Wednesday 13 October when there was strong demand. As with the preceding issue, this stock was issued in partly-paid form, with the later instalments falling due in banking December and banking January.

Yields on conventional government stocks *continued to fall . . .*



. . . and yields on **index-linked stocks** *started to fall too.*



The market remained strong for the remainder of banking October, encouraged by the reductions in the Bank's money-market dealing rates on 11 and 12 October, by the announcement on 15 October that the retail price index had fallen slightly in September and by the better than expected US M_1 figure announced on the same day. Official supplies of 9½% Treasury Stock 1988 were exhausted on 19 October.

A particular feature of this period was the performance of index-linked stocks. Until early October, the yields on indexed stocks had tended to drift upwards while conventional yields fell. Thereafter, however, indexed yields fell: the real yield on the 1988 stock, which had reached a high point of 3.49% on 4 October, was down to 2.75% by the end of the period; the yield on the 2011 stock fell from 2.90% to 2.62%. It is possible that some of the demand for indexed stocks that emerged in the latter part of the period resulted from a re-appraisal by investors of the relative attractiveness of index-linked and conventional stocks following the steep fall in conventional yields. This may have applied especially to low-coupon conventionals, which, like indexed stocks, appeal particularly to those subject to higher rates of income tax who prefer capital gains. Investors who had held conventional stocks for more than a year, and could therefore sell them without incurring any liability to capital gains tax on the profits, may have seen indexed stocks as a suitable re-investment medium.

The fall in index-linked yields was accompanied by some widening in the market for these stocks. The range of investors who hold them is as yet narrower than in the case of conventional stocks; this is particularly true in the longer-dated stocks, where pension funds are the main holders. The 1988 stock has a much larger number of holders than the others, and the number increased by 25% during the fall in yields. This suggests that a considerable part of the demand for that stock came from investors who had not held it previously.

Substantial official sales of indexed stocks were made in October. Supplies of the 2001 stock were exhausted on 14 October and on 19 October £400 million of $2\frac{1}{2}$% Index-Linked Treasury Stock 2009 was announced. Again, this stock was issued directly to the Bank to enable the authorities to take advantage of the strength of the market quickly, and the Bank exhausted its holding on the first day of dealings. Much of the demand was from investors wishing to switch out of conventional stocks, and the Bank accommodated some of this by buying conventional stocks in exchange. On the following day, 22 October, a further indexed stock—£250 million of $2\frac{1}{2}$% Index-Linked Treasury Stock 2003—was announced for issue by tender on 27 October. At the tender the stock was allotted at a price implying a real yield of 2.63%. These two new issues continued the policy of providing relatively small indexed stocks with a range of maturities, rather than concentrating issues on a more restricted range of larger stocks.

Following a period when prices had tended to drift while the market consolidated recent gains, the conventional market strengthened on 1 November, influenced by expectations about the result of the mineworkers' strike ballot. On that day, the Bank announced the offer for sale on 4 November of £1,000 million of $8\frac{3}{4}$% Treasury Convertible Stock 1985, convertible into 9% Conversion Stock 2000. This stock, like the two preceding conventional issues, was issued in partly-paid form, for the same reasons as the earlier conventional issues.

At the tender, the new stock was oversubscribed, and was fully allotted at a price of £$100\frac{1}{4}$—that is, £1 above the minimum tender price. At the allotment price the overall gross redemption yield implicit in the first conversion option was 9.49% and in the last conversion option 8.83%. These may be compared with the yield on 13% Treasury Stock 2000 which at the time was around $10\frac{1}{2}$%. As a short-dated stock, the new issue carried an allotment yield of 8.61%, somewhat below the yield on straight short-dated stocks of comparable maturity.

Prices in the conventional market were stable for a period while the indexed stocks remained strong, but the market weakened in the week beginning 15 November when sterling came under heavy selling pressure in the foreign exchange market. Prices fell most sharply in the conventional sector; index-linked prices were more lightly affected.

Other capital markets

Three months to end-November

The *equity* market, although subdued at times, has recorded significant advances over the three months. The FT Actuaries All-Share Index reached a level of 389.24 on 15 November, some 12% higher than on 20 August. On 30 November the index closed at 375.42.

Table J
Amounts raised in the capital market

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

Calendar months	Dec. 81– Feb. 82	Mar. 82– May 82	June 82– Aug. 82	Sept. 82– Nov. 82
UK private sector				
Loan capital and preference shares(a)	—	+ 72	+ 67	+110
Equity capital(a)	+595(b)	+193	+311	+248
Unit trusts	+ 88	+107	+116	+ 78(c)
Local authorities				
Stocks	—	− 96	− 67	− 65
Negotiable bonds	− 27	− 14	+ 42	+ 78
Overseas	+ 26	+113	+161	+270

Note: This table shows amounts paid over in respect of capital issues: amounts paid in respect of partly paid issues are shown as they are paid over, not at the time the issue is announced.

(a) Net issues by listed UK public companies.

(b) Includes some £350 million in respect of the final instalment on a BP rights issue.

(c) September and October only.

Table K
Private and local authority fixed-interest debt issues announced on the London capital market, September–November 1982

Date of announcement	Issuer	Nominal amount (£ millions)	Coupon	Maturity
Domestic borrowers(a)				
9 September	The BOC Group	100	$12\frac{1}{4}$%	2012/17
14 September	MEPC	30	12%	2017
22 September	Standard Chartered Bank	100	$12\frac{7}{8}$%	2002/07
29 September	Paternoster Stores	75	14%	1987/89
5 October	Seagram Distillers	50	$12\frac{3}{8}$%	2012
7 October	Scottish Mortgage and Trust	20	8–14% (rising coupon)	2020
8 October	Vaux Breweries	10	$11\frac{3}{4}$%	2010
18 October	City of Newcastle	12	$11\frac{1}{2}$%	2017
20 October	Barclays Bank	150	12%	2010
25 October	City of Birmingham	100	$11\frac{1}{2}$%	2012
1 November	London Borough of Merton	12	$11\frac{1}{4}$%	2017
24 November	National Westminster Bank	100	$12\frac{1}{2}$%	2004
Overseas borrowers				
6 September	Hydro-Quebec	50	$12\frac{3}{4}$%	2015
11 October	European Investment Bank	75	11%	2002
4 November	Credit National	28.6	$13\frac{1}{2}$%	1989/93
30 November	Inter-American Development Bank	75	$12\frac{1}{2}$%	2003

(a) All these issues, except the City of Birmingham's which was an offer for sale, were placings. The list excludes stock issued under earlier droplock arrangements.

Table L
Outstanding droplock arrangements

Trigger levels(a)	Amount committed as at end-November (£ millions)
$10\frac{1}{2}$% up to 11%	7
10% up to $10\frac{1}{2}$%	45
$9\frac{1}{2}$% up to 10%	81
9% up to $9\frac{1}{2}$%	20
$8\frac{1}{2}$% up to 9%	20
No specified level	26

(a) Usually set with reference to the yield on high coupon, long-dated gilt-edged stocks.

During September, generally firm conditions were maintained. Although the bullish influence of Wall Street tended to dominate trading, some disquiet about the domestic economic situation subdued sentiment on occasions. Despite more erratic price movements on Wall Street later in the month, interest rate optimism started to re-emerge and the FT 30-Share Index moved through 600 for the first time on 8 October. Hopes of a continuing fall in interest rates pushed prices higher later in October, and although concern about the UK industrial situation brought a setback at the end of the month, news that the miners would not be striking and a further surge on Wall Street lifted prices. New peak levels were achieved in the FT Indices at the beginning of November. The market advanced again in the middle of the month before falling back during the second half of November as sterling weakened.

New equity issues remained at a fairly modest level with the feature of the period being the sale on behalf of the Secretary of State for Energy of some 51% of the shares in Britoil p.l.c. This was announced on 10 November, for tender on 19 November, at a minimum price of 215 pence per share to raise £548 million. Some 70% of this issue had to be taken up by the sub-underwriters.

New *fixed-interest* issues rose substantially compared with the previous three months (Table K lists the issues announced). The decline in interest rates encouraged a continuing flow of domestic issues in the wake of the successful placing in September of £100 million of Unsecured Loan Stock, maturing in 2012/17, by BOC, which was noted in the September 1982 *Bulletin*. This was quickly followed by an issue of debenture stock by MEPC maturing in 2017 and, in total, nine issues amounting to £635 million were brought during the period. Over half of this total was accounted for by three issues; by Standard Chartered Bank and National Westminster Bank, for £100 million each, and by Barclays Bank for £150 million; but, apart from BOC, there were also two issues by industrial companies (both in the food and drink sector).

In the *local authority* market, the fall in interest rates triggered eleven droplocks, amounting to £133.5 million in all. This total includes the £75 million Birmingham issue which was already present in the market in variable rate form. Droplock arrangements still outstanding are shown in Table L. The triggering of these issues has stimulated renewed interest in the use that might be made of the droplock technique by corporate borrowers. There were also three conventional long-dated local authority stocks, the first since April 1981. Newcastle raised £12 million of $11\frac{1}{2}$% Stock 2017 on 18 October on terms giving a gross redemption yield of 11.52%, roughly 1.4% above an equivalent gilt-edged stock. Birmingham's £100 million issue of $11\frac{1}{2}$% Stock 2012, issued on a yield of 11.57%, achieved a margin of around 1.2% over gilt-edged, and the London Borough of Merton also raised £12 million of $11\frac{1}{4}$% Stock 2017 on 1 November at a margin of 1.2% over gilt-edged.

There have been three new issues for *overseas borrowers* in the domestic market in the period, although Credit National has also issued some £45 million of 1989 and 1993 loan stock pursuant to an earlier banking credit arranged in 1981. Hydro-Quebec (£50 million at $12\frac{3}{4}$% maturing in 2015), the European Investment

Bank (£75 million at 11% maturing in 2002) and the Inter-American Development Bank (£75 million at $12\frac{1}{2}$% maturing in 2003) were the borrowers.

As well as these operations in the domestic market, seven *eurosterling issues* emerged, including two for UK borrowers, two for French-guaranteed names and two for international bodies. The total amount raised in this way over the three months was £220 million, with maturities ranging from 1988 to 1992 and coupons from 11% to $12\frac{5}{8}$%.