

# Operation of monetary policy

*This article covers the three months from mid-February to mid-May 1983.*

## Review

The growth rates of the monetary aggregates, which had been subdued during the winter, increased sharply during the three months under review. Other indicators did not, however, support the impression of an easing of monetary conditions conveyed by the aggregates. In particular, the exchange rate appreciated on balance by some  $3\frac{3}{4}\%$  in effective terms, reversing part of the earlier depreciation; the twelve-month rate of retail price inflation continued to fall, reaching 3.7% in May; and real interest rates remained positive.

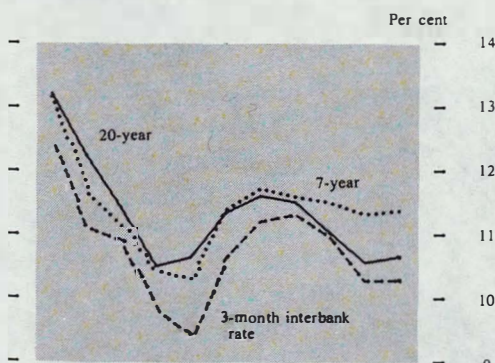
In spite of the increase in monetary growth, all three target aggregates remained within the target range for 1982–83; but they grew very fast over the first three months of the 1983–84 target period. A major counterpart to the more rapid monetary growth was an unexpectedly large increase in the PSBR. Much of the additional public sector borrowing took place in the second half of March, and accounts for the difference between the PSBR forecast for the financial year 1982/83 of £7½ billion made at the time of the Budget and the estimated outturn of over £9 billion. In addition, the continued strength of mortgage lending, mainly by the building societies, contributed to rapid growth in PSL<sub>2</sub>.

In the domestic financial markets, as in the foreign exchange market,<sup>(1)</sup> there was a considerable improvement in sentiment, in spite of these adverse monetary and fiscal developments. The main factor before the general election was announced was a growing prospect for stable oil prices. In addition, a series of more encouraging US money supply figures published late in March and during April, alleviated earlier fears that dollar interest rates might rise, which had been a depressing influence on the money market.

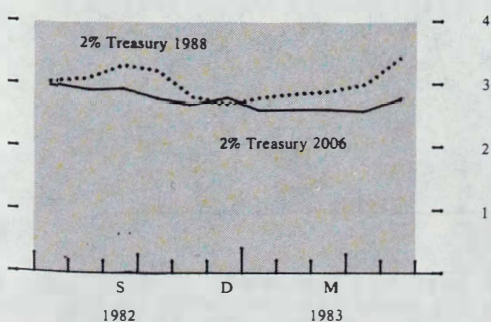
The authorities responded to the pressure on monetary growth that the rise in the PSBR implied by taking advantage of the better conditions in the gilt-edged market to achieve a higher rate of gross official sales of gilt-edged, though substantial maturities restricted net sales. This response did not, however, prevent a fall in longer-term yields.

The improvement in market sentiment led to pressure for lower short-term interest rates, and clearing bank base rates were cut by  $\frac{1}{2}\%$  on 15 March to 10½%. When pressure for a further fall emerged after Easter, the authorities took the view that the underlying monetary and fiscal situation called for caution, so that any immediate fall in rates should be limited in size. Accordingly, the Bank waited until 13–14 April before accepting lower rates in its bill dealings; the clearing banks responded by reducing their base rates to 10%.

### Gross redemption yields on British government stocks<sup>(a)</sup>



### Index-linked stocks



(a) Monthly averages.

(1) Developments in the foreign exchange market are described on page 191.

## Domestic credit expansion

Until 1981, figures for domestic credit expansion (DCE) were published as part of the regular presentation of monetary statistics. For reasons explained in the December 1981 *Bulletin* (page 532), their format was then changed in a way which meant, incidentally, that DCE could no longer be directly calculated. Nevertheless it has since been shown as a memorandum item. But, from this month, this will be discontinued for the reasons set out below.

The 1981 change resulted from a redefinition of the domestic and external asset counterparts to sterling  $M_3$  growth and was made necessary by developments arising from the abolition of exchange control. In addition to the domestic counterparts to money,<sup>(1)</sup> DCE includes sterling lending to overseas residents. This definition was considered appropriate in the late 1960s when such lending was thought largely to comprise lending to non-resident purchasers of UK exports: whether sterling credit was extended to a UK exporter, or to an overseas importer of UK goods, seemed immaterial then from the point of view of its impact on the UK economy—and the figures involved were generally rather small. Following the abolition of exchange controls and the subsequent removal of the supplementary special deposits scheme in June 1980, inclusion of such lending in the definition became much more debatable.

Sterling lending to overseas residents, particularly to banks overseas, rose rapidly. Much of the increased lending was matched by higher sterling deposits placed by banks overseas with banks in the United Kingdom. This growth in the eurosterling market has been viewed largely as an international extension of the London interbank market, carrying no significant implication for expenditure in the United Kingdom. In addition, sterling lending to non-banks overseas can no longer be assumed to be largely confined to the foreign importers of UK exports: since exchange control abolition, there has been greater use of sterling to finance trade between third countries, which again does not directly affect the UK economy.

These considerations, which assumed greater importance with the considerable increase in scale of the flows involved, led to less emphasis being placed on DCE, and to the inclusion of sterling lending to overseas residents among the external and foreign currency counterparts to changes in sterling  $M_3$ .<sup>(2)</sup>

The impact of this change is illustrated in the chart. Although there was little difference between the changes in the domestic counterparts and in DCE until early 1980, since then, with the rapid rise in sterling lending to overseas residents, they have diverged markedly.

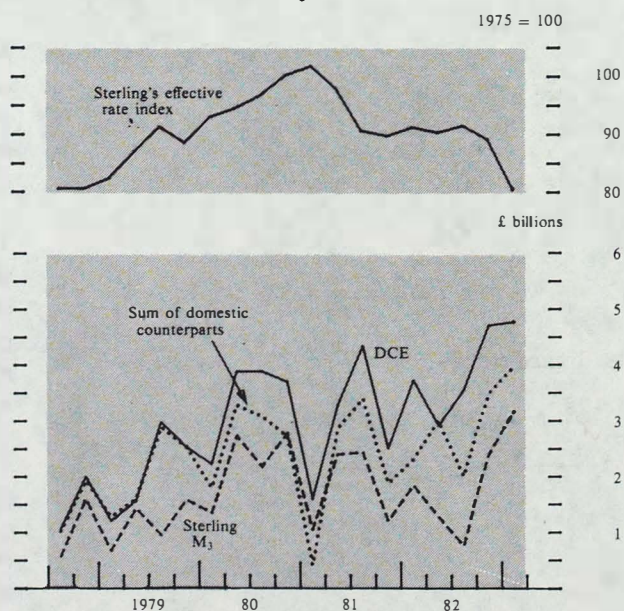
Growth in sterling lending to overseas residents, and the reasons for it, thus cast doubt on the appropriateness of the particular definition of DCE. Moreover, there are a number of wider considerations which suggest that, in current circumstances, the concept is less relevant than when it was introduced. In the fixed exchange rate world of the late 1960s, interpretation of DCE was thought to be fairly straightforward: excessive credit creation, as evidenced by high DCE, would in part reveal itself in the emergence of a balance of payments deficit which would be financed by the authorities' running down the official reserves. This would have a contractionary effect on broad money supply growth

which might then, wrongly, give the appearance of developing satisfactorily: in such circumstances, it was argued, DCE could be a better indicator of the stance of monetary policy than the overall money supply.

In practice, interpretation of DCE in the United Kingdom was always more complicated. In addition to the fixed exchange rate requirement, the theory underlying DCE has always been most relevant to those countries whose residents hold little foreign currency and whose currency is not itself held in significant amounts by non-residents. In such circumstances both balance of payments and monetary data are easier to interpret and their linkages can be more clearly identified. In particular, it is then more justifiable to seek an explanation of increasing balance of payments outflows in domestic monetary ease than in changes in foreign demand for domestic currency. But sterling has always been held in significant amounts by non-residents, even though the size of these sterling balances has fluctuated considerably over time, so that it did not necessarily follow that causation ran from DCE to external flows. In addition, both the change to a floating exchange rate in particular, and the freedom granted in 1979 to residents to hold foreign currency at will, mean that none of the conditions propitious to a straightforward interpretation of DCE hold at present in the United Kingdom.

These changes in the UK financial environment cast doubt on the relevance, in current circumstances, both of the particular definition of DCE and, albeit to a lesser extent, of other definitions of domestic credit, including the sum of the domestic counterparts. It is not therefore surprising that it has not been possible to find firm relationships between domestic monetary developments and the exchange rate,<sup>(3)</sup> and this applies also to DCE and the domestic counterparts. Nevertheless, the monetary aggregates and their domestic and external counterparts will continue to require careful interpretation in the light of all other available indicators of monetary conditions.

### Domestic credit and money



(1) The public sector borrowing requirement less purchases of public sector debt by the non-bank private sector, plus sterling lending to the private sector.

(2) Also, sterling deposits from overseas banks were shown net of sterling lending to these banks, so that DCE could not be calculated from the statistics in Table 11.3 of the statistical annex, although an alternative presentation continued to be published in *Financial Statistics* Table 11.5.

(3) See the article 'A broad look at exchange rate movements in eight currencies, 1972-80', by G Hacche and J C Townend; December 1981 *Bulletin*, pages 489-509.

*A note on the annual revisions to the seasonal adjustments, which have been incorporated in these figures, is on page 256.*

**Table A**  
**Growth of the monetary aggregates**

Percentage increases (annual rates); *seasonally adjusted*

	1982-83 target period(a)	Banking months		
		Sept. 82- Nov. 82	Dec. 82- Feb. 83	Mar. 83- May 83
Wide monetary base (M <sub>0</sub> )	3.6	6.2	5.4	4.7
Non-interest-bearing M <sub>1</sub>	9.6	15.6	4.9	10.6
M <sub>1</sub>	11.8	15.1	11.2	16.2
M <sub>2</sub> (b)	7.6(c)			
Sterling M <sub>3</sub>	11.4	12.4	8.6	15.7
PSL <sub>1</sub>	11.5	9.3	8.0	19.3
PSL <sub>2</sub>	11.6	10.0	11.9	20.3
M <sub>3</sub>	13.6	13.3	13.4	12.7

(a) The fourteen banking months March 1982-April 1983 inclusive.

(b) On the new definition described in the note on page 78 of the March *Bulletin*; not seasonally adjusted.

(c) Change over twelve months to mid-April 1983.

**Table B**  
**Sterling M<sub>3</sub> and its counterparts<sup>(a)</sup>**

£ billions; *seasonally adjusted*

	1982-83 target period(b)	Banking months		
		Sept. 82- Nov. 82	Dec. 82- Feb. 83	Mar. 83- May 83
1 Central government borrowing requirement	+12.8	+3.4	+1.7	+5.9
2 Purchases (-) of central government debt by non-bank private sector	-11.1	-3.1	-2.0	-1.9
of which:				
Gilt-edged stocks	-6.3	-1.5	-0.9	-1.3
National savings	-3.7	-1.1	-1.1	-0.5
3 Other public sector	-2.5	-1.3	-0.4	-1.4
4 Sterling lending by the banking system to the UK private sector	+17.3	+4.7	+3.3	+1.8
5 External and foreign currency counterparts	-1.4	+0.3	-0.3	+0.7
6 Net non-deposit liabilities (increase -)	-3.7	-1.3	-0.5	-1.5
7 Sterling M <sub>3</sub>	+11.4	+2.6	+1.9	+3.4

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.

(a) Components may not add to totals because of rounding.

(b) The fourteen banking months March 1982-April 1983 inclusive.

After the end of the period under review, sentiment in financial markets was heavily influenced by the prospects for the general election, the date of which had been announced on 9 May. During the period of the election campaign, official operations aimed to moderate fluctuations in short-term interest rates and the exchange rate.

### Monetary aggregates

*The figures in this section are seasonally adjusted, unless otherwise stated.*

The growth rates of the main monetary aggregates increased sharply during the three months under review (Table A). In large part this was accounted for by the exceptional figures for banking April, and the annualised growth rates calculated over the three-month period may therefore give a misleading impression of the underlying rates of growth. Over the six months to mid-May, the annualised growth rates of sterling M<sub>3</sub>, PSL<sub>2</sub> and M<sub>1</sub> were 12.1%, 16.0% and 13.7% respectively.

The principal counterpart to the acceleration in sterling M<sub>3</sub> was a sharp rise in the PSBR<sup>(1)</sup> (Table B), which was as high as £4.4 billion, compared with £1.4 billion in the preceding three months. Net purchases of central government debt by the non-bank private sector totalled £1.9 billion: government funding operations are described in the next section.

The rise in the PSBR coincided with a deceleration in sterling lending by the banking system to the private sector. Such lending increased by only £1.8 billion, compared with £3.3 billion in the preceding three months. This lending seems to have been largely to persons (not including unincorporated businesses), much of it on mortgages. Sterling borrowing by the business sector probably increased by less than £½ billion. This lower rate of borrowing in part reflects an improvement in corporate cash flow which became evident in the fourth quarter of last year; in addition, the need to borrow will have been further reduced by the rise in the PSBR.

External influences on sterling M<sub>3</sub> were expansionary by £0.7 billion, having been contractionary by £0.3 billion in the previous three months. The statistics give no clue as to the source of this expansionary pressure: the main financing items were a larger fall in the banks' net spot foreign currency liabilities (£1.3 billion) and a smaller withdrawal of external finance from the public sector (under £0.1 billion), partly offset by a renewed rise in sterling deposits from overseas non-banks (£0.6 billion).

The banks' net non-deposit liabilities rose by £1.5 billion, thus exerting a contractionary influence on sterling M<sub>3</sub>.

Like sterling M<sub>3</sub>, PSL<sub>2</sub> was affected by the rise in the PSBR. Unlike sterling M<sub>3</sub>, however, it was also affected by the continued strength of mortgage lending. The total of mortgage lending from all sources over the three months may have been around £4 billion, so that the rate of net new lending remained at around the peak level reached in the autumn of last year. This occurred despite the clearing banks' decisions in the second half of 1982 to moderate their mortgage lending once it had reached the intended proportion of their total assets. Building societies have increased their lending to fill the gap left by the banks. They have financed that lending

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

**Table C**  
**Accumulation of liquid assets and borrowing,**  
**1982-83**

£ billions; *seasonally adjusted*

	1982			1983
	Q2	Q3	Q4	Q1
<b>Personal sector</b>				
<b>Liquid assets</b>				
Notes and coin	+0.1	+0.1	—	+0.3
Bank deposits	+1.8	+0.5	+0.4	+2.7
Building society shares and deposits	+2.5	+2.6	+2.8	+2.4
National savings(a)	—	+0.2	+0.5	+0.3
<b>Total</b>	<b>+4.4</b>	<b>+3.4</b>	<b>+3.7</b>	<b>+5.7</b>
<b>Borrowing</b>				
From banks	+2.4	+2.9	+2.3	+1.9
<i>of which, for house purchase</i>	<i>+1.3</i>	<i>+1.4</i>	<i>+1.2</i>	<i>+0.9</i>
From building societies	+1.9	+2.0	+2.7	+2.9
From other sources(b)	—	+0.1	+0.3	+0.1(c)
<b>Total</b>	<b>+4.3</b>	<b>+5.0</b>	<b>+5.3</b>	<b>+4.9</b>
<i>of which, for house purchase</i>	<i>+3.5</i>	<i>+3.6</i>	<i>+4.0</i>	<i>+4.0(c)</i>
<b>Industrial and commercial companies</b>				
<b>Liquid assets</b>				
Notes and coin and sterling bank deposits	-0.8	-0.1	+1.1	+0.9
Foreign currency bank deposits(d)	+0.2	+0.4	+0.4	-0.5
Certificates of tax deposit	+0.1	+0.6	+0.2	-0.1
<b>Total</b>	<b>-0.5</b>	<b>+0.9</b>	<b>+1.7</b>	<b>+0.3</b>
<b>Borrowing</b>				
In sterling from banks(e)	+0.7	+1.9	+0.6	-0.1
In foreign currency from banks(d)	+0.3	+0.3	-0.1	—
<b>Total</b>	<b>+1.0</b>	<b>+2.2</b>	<b>+0.5</b>	<b>-0.1</b>

(a) Net acquisition of National Savings Bank deposits, national savings stamps and gift tokens and premium savings bonds.

(b) Not seasonally adjusted.

(c) Estimate.

(d) Excluding estimated valuation changes.

(e) Including purchases of commercial bills by the Bank of England Issue Department.

**Table D**  
**Official transactions in gilt-edged securities<sup>(a)</sup>**

£ billions; *not seasonally adjusted*

Banking months	June 82- Aug. 82	Sept. 82- Nov. 82	Dec. 82- Feb. 83	Mar. 83- May 83
Gross official sales(b)	+3.6	+2.8	+2.3	+3.1
<i>less</i>				
Redemptions and net official purchases of stock within a year of maturity	-1.4	-0.9	-1.5	-1.4
Equals net official sales(c)	+2.2	+1.9	+0.8	+1.7
<i>of which, net purchases by:</i>				
<i>Monetary sector(c)</i>	<i>+0.3</i>	<i>+0.3</i>	<i>-0.6</i>	<i>+0.5</i>
<i>Overseas sector</i>	<i>+0.1</i>	<i>+0.1</i>	<i>+0.5</i>	<i>-0.1</i>
<i>Non-bank private sector</i>	<i>+1.8</i>	<i>+1.5</i>	<i>+0.9</i>	<i>+1.3</i>

Note: Sales are recorded in this table on a payments basis, so that payments on partly-paid stocks are entered when they are made rather than at the time of commitment to make the payment.

(a) Components may not add to totals because of rounding.

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

(c) Apart from transactions under purchase and resale agreements.

not only by continuing to attract new shares and deposits—which in the three months under review were mainly of the kinds which are included in PSL<sub>2</sub>—but also by running down their investments and liquid assets, particularly bank deposits; part of this rundown will have raised PSL<sub>2</sub> relative to sterling M<sub>3</sub>. Moreover there was a sharp increase in another form of private sector liquidity, namely holdings of local authority temporary debt. For all these reasons, therefore, PSL<sub>2</sub> grew faster than sterling M<sub>3</sub> during the period under review.

The faster growth in M<sub>1</sub>, as with sterling M<sub>3</sub> and PSL<sub>2</sub>, no doubt owed something to the surge in the PSBR in this period.

Interest-bearing sight deposits were the fastest-growing element of M<sub>1</sub>, as in the preceding three months, and by mid-May such deposits accounted for 35% of all sight deposits and 25% of M<sub>1</sub>.

#### Liquid assets and borrowing by sector (Table C)

There was a sharp increase in the acquisition of liquid assets by the personal sector in the first quarter of this year; this was an important contribution to the very sharp rise in PSL<sub>2</sub>. Moreover, the rate of personal sector borrowing remained very high at around £5 billion a quarter, of which some 80% was for house purchase. This increase in liquid assets, in combination with the stable though high rate of borrowing by the personal sector, may be a sign that the personal saving ratio turned back up in the first quarter. (It is possible that the conventional treatment of transit items, which rose sharply before Easter, exaggerated the increase in liquid assets, possibly by as much as £½ billion, but even allowing for this a substantial increase remains.) The success of the banks in taking a third or more of the flow of liquid savings in the most recent quarter represents a marked contrast with the second half of last year.

Industrial and commercial companies in aggregate continued to experience a positive cash flow in the first quarter of this year, with their bank deposits increasing by more than their bank borrowings. (Indeed, Table C may understate the positive cash flow, if the increase in personal sector deposits is exaggerated for the reason given above.)

#### Official operations in financial markets

*The figures in this section are not seasonally adjusted unless otherwise stated.*

The nature of the Bank's operations in the financial markets during much of the period under review was largely determined by the unexpectedly sharp rise in the government's borrowing requirement. This at once increased the need for gilt-edged funding (inflows into national savings being subdued), and reduced the need for assistance to the money market.

The size of the government borrowing requirement did not begin to become apparent until the second half of March, after a month in which gilt-edged sales had been modest. Thereafter, however, the authorities took advantage of the better conditions in the gilt-edged market to achieve higher gross gilt-edged sales. In the event, gross sales totalling £3.1 billion over the three months were achieved (Table D), of which £0.2 billion had already been secured at the beginning of the period through the last payment due on an earlier issue. In addition, by the end of the period, substantial receipts had been secured for banking June and banking July through later

instalments due on partly-paid issues sold during the three months under review.

After allowing for redemptions and purchases of stocks near to maturity, which were heavy in the first two of the three banking months under review, net sales of gilt-edged totalled £1.7 billion. The monetary sector bought £0.5 billion net, but the overseas sector made net sales of £0.1 billion. This meant that the non-bank private sector took up some £1.3 billion, compared with £0.9 billion in the preceding three months.

Taking into account sales of all government debt instruments to the non-bank private sector, the PSBR was underfunded by some £2.5 billion (seasonally adjusted) in the three months to mid-May; this offset earlier overfunding so that over the twelve months to mid-May the PSBR was underfunded by £0.4 billion.

In the money market, conditions were mixed. At the beginning of the period the arrangements with the banks for the purchase and resale of gilt-edged securities and the provision of finance against promissory notes related to guaranteed export credit and shipbuilding paper, which were described in the March *Bulletin* (page 22), and which had been used to provide £0.9 billion of assistance to the money market, were still outstanding, but they expired on 21 February. During the course of banking March large cash shortages developed, arising principally from payments of petroleum revenue tax, which were larger than expected. In order to meet these shortages, the authorities reactivated the purchase and resale arrangements with the banks. Some £0.6 billion of assistance was provided under the second arrangement which ran initially from 2 March to 17 March; when flows of funds to the Exchequer seemed likely to continue to be larger than had earlier been expected, the facility was extended for a similar amount from 17 March to 11 April. As in the past, the banks participating in the scheme were asked not to add significantly to their gilt-edged holdings while they had drawings outstanding.

Around the beginning of banking April, however, the CGBR increased very sharply and by more than had been expected. In spite of heavier funding this made it possible for some of the earlier assistance to the money market to be run off.

Over the three months, the total amount of assistance outstanding fell by some £2.9 billion (Table E). Of this, some £0.9 billion was accounted for by the lapse of the purchase and resale arrangements with the banks; in addition, the Bank's holdings of local authority and commercial bills fell by some £1.6 billion; at the end of the period they stood at some £7 $\frac{3}{4}$  billion.

With the increase in the CGBR towards the end of calendar March, the deposit held by the National Loans Fund with the Banking Department ran off on 28 March.

On 17 March, when a particularly large cash shortage was expected, the Bank revived an earlier technique in its bill dealings by inviting an early round of offers of bills from the discount houses at 10 a.m., in addition to the usual rounds before and after lunch. This device proved useful and was employed again subsequently from time to time when large shortages were forecast.

**Table E**  
**Influences on the cash position of the money market<sup>(a)</sup>**

£ billions; not seasonally adjusted  
Increase in the market's cash +

Banking months	June 82- Aug. 82	Sept. 82- Nov. 82	Dec. 82- Feb. 83	Mar. 83- May 83
<b>Factors affecting the market's cash position</b>				
CGBR(+)	3.3	2.9	1.4	6.0
Net sales of central government debt(-)	-3.2	-3.5	-1.6	-2.5
of which:				
Gilt-edged	-2.2	-1.9	-0.8	-1.7
National savings	-0.4	-1.0	-1.1	-0.5
Other	-0.6	-0.5	+0.3	-0.2
Currency circulation (increase -)	-0.4	+0.1	-0.2	-0.3
Other	+0.1	—	-0.9	-0.2
<b>Total(A)</b>	<b>-0.1</b>	<b>-0.5</b>	<b>-1.3</b>	<b>+2.9</b>
<b>Official offsetting operations</b>				
Net increase(+) in Bank's holdings of commercial bills(b)	+0.4	+1.5	-0.3	-1.6
Net increase(-) in Treasury bills in market	-0.1	-0.5	+0.6	-0.3
Securities(c) held under repurchase agreements with banks(+)	—	—	+0.9	-0.9
Other	-0.2	-0.4	—	-0.1
<b>Total(B)</b>	<b>+0.2</b>	<b>+0.6</b>	<b>+1.3</b>	<b>-2.9</b>
Change in bankers' balances at the Bank (= A+B)	—	+0.1	-0.1	—

(a) Components may not add to totals because of rounding.

(b) By the Issue and Banking Departments of the Bank.

(c) Gilt-edged stocks and promissory notes related to guaranteed export credit and shipbuilding paper.

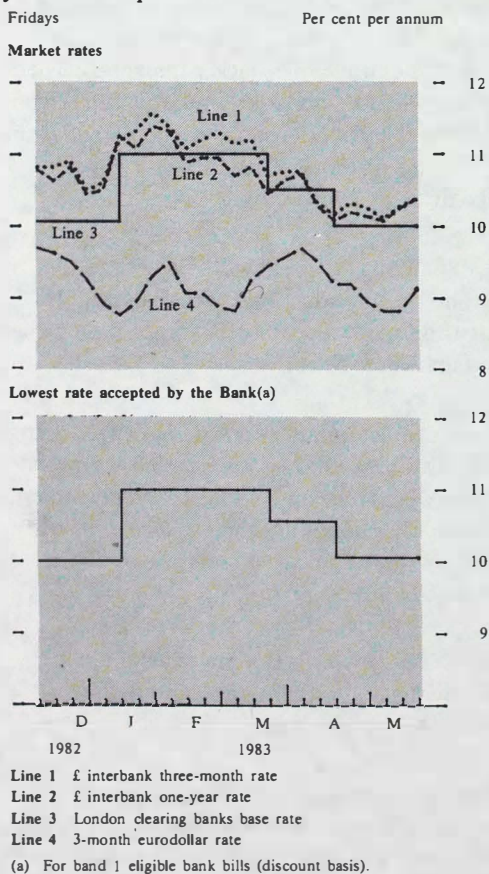
**Public Works Loans Board lending to local authorities**

Throughout the period under review, the Public Works Loans Board (PWLB) continued to attract the local authorities as borrowing customers. If local authorities borrow from the PWLB to replace bank borrowing, the PSBR and sterling  $M_3$  are left unchanged; but the CGBR is increased within the unchanged PSBR and the additional outflow of funds from the central government reduces the need for official assistance to the money market.

In order to encourage local authorities to borrow from the PWLB rather than the banks, the PWLB introduced a new variable rate loan facility in August 1982 (described in the September *Bulletin*, page 353); the terms of this facility were improved in December. During the three months under review, some £0.9 billion was lent under this facility, bringing the total outstanding to £1.5 billion. As well, with the fall in long-term interest rates, the local authorities drew more heavily on the PWLB fixed rate facilities, so that total net borrowing by the local authorities from central government sources over the three months was £1.6 billion.

Over the nine calendar months August 1982 to April 1983 inclusive, local authority borrowing from all sources totalled £1.0 billion (net). There was net borrowing from the PWLB in all forms totalling £3.2 billion, together with net repayments of £2.0 billion to the monetary sector and only £0.1 billion to the non-bank private sector.

**Short-term interest rates in London have fallen in the period under review.**



**The money market**

Early in the period the main factor affecting sentiment in the money market was uncertainty about oil prices and its impact on the exchange rate. As well, there was some anxiety about monetary developments in the United States, particularly after the rapid growth of  $M_1$  there in January and February.

In spite of these factors, the money-market yield curve for maturities from one month to a year remained downward sloping, indicating an expectation that interest rates would fall. The lowest rates that the Bank was accepting in its bill dealings, however, were 11%—on a discount basis—in all maturity bands, implying an upward sloping yield curve. This meant that the Bank's rates were out of line with market rates in the longer maturity bands, so that the Bank was unable to buy much paper in these bands and official outright purchases of bills were concentrated in bands 1 and 2; as well, the Bank entered into purchase and resale agreements. The daily cash shortages were made larger by the more frequent maturing of such shorter-term assistance. It would have been possible for the Bank to accept lower rates for bills in the longer maturity bands to bring its rates into line with market rates, but there was some concern that such a move might have unwelcome repercussions in the foreign exchange market, where sterling was affected by uncertainty about oil prices.

Money-market rates did fall on 14 March when the prospect of stable oil prices became clearer, and on the following day the clearing banks announced reductions of  $\frac{1}{2}\%$  in their base rates to  $10\frac{1}{2}\%$ . The Bank endorsed these moves by accepting lower rates in its bill dealings in all maturity bands.

As part of this change the Bank reverted to accepting lower rates (expressed on a discount basis) for longer-dated bills in line with

the downward-sloping structure of market rates. As a result, it became possible again for the Bank to buy bills in the longer maturity bands. By itself this would have reduced the daily cash shortages, with the effect reinforced by the rise in the CGBR noted above. However, heavier funding and the running-off of the purchase and resale agreements with the banks offset this effect, and the average daily cash shortages did not vary much—in the banking months of March, April and May they were £490 million, £530 million and £470 million respectively.

Around Easter, developments in the oil market suggested a still stronger prospect for stable oil prices. In combination with more encouraging US money supply figures, this led to a marked strengthening of sterling and to falls in longer-maturity interbank rates; the discount houses began offering paper to the Bank at below the lowest rates it had earlier accepted.

The authorities took the view that the underlying monetary situation called for caution so that any immediate fall in short-term interest rates should be limited. In order to convey this message, the Bank did not immediately accept lower rates in its bill dealings, but waited until 13–14 April. The clearing banks reacted by reducing their base rates by a further  $\frac{1}{2}\%$  to  $10\%$  on 14 April.

Money-market conditions were calm for the rest of the period. After the date of the general election was announced longer-term money rates rose a little, and the yield curve from a month out to a year, which had been gently downward sloping, became virtually flat.

Over the period, the one-month interbank rate fell by about  $1\frac{1}{4}\%$  to  $10\frac{5}{16}\%$ , the three-month rate by  $\frac{1}{8}\%$ , also to  $10\frac{5}{16}\%$ , and the twelve-month rate by  $\frac{1}{2}\%$  to  $10\frac{3}{8}\%$ .

#### **Building societies in the wholesale money markets**

The Governor indicated in 1978, in an address to the Building Societies' Association,<sup>(1)</sup> that societies could reasonably consider raising at least a modest proportion of their funds from the wholesale money markets. As a first step, in 1980 several societies began to issue negotiable one-year bonds and by mid-May this year over £400 million of these were in issue.

Under the Finance Act 1983 societies have been given the freedom to pay interest gross of tax on certificates of deposit (CDs) with a maturity of less than one year, and a number of the larger societies have begun issuing CDs. It remains to be seen what demand there is for these new instruments and, therefore, what terms they will command relative to bank CDs, if issues become sizable.<sup>(2)</sup>

Societies' total liabilities rose by about £12 billion in 1982, ie by more than the total stock currently outstanding of bank CDs in sterling (which were first issued in 1968). It is doubtful therefore, even if they wished to use their new freedom extensively, whether societies' increased access to the wholesale money markets would materially raise their aggregate inflow of funds over time.

For statistical purposes, building society CDs held by the non-bank private sector contribute to PSL<sub>2</sub>.

(1) 'The building societies in a changing financial environment', reprinted in the June 1978 *Bulletin*, pages 245–9.

(2) For holders in the monetary sector, bank CDs will—other things being equal—appear slightly more attractive than building society CDs. Only the former can be offset against the holder's liabilities in the calculation of eligible liabilities, thereby effectively reducing the holder's subsequent cash ratio deposits at the Bank.

### The gilt-edged market

By the end of banking February the authorities had secured gilt-edged receipts of some £0.2 billion for banking March through the last payment due on purchases of 2½% Index-Linked Treasury Stock 2016; in the generally difficult market conditions which had persisted during the winter it had not been possible to secure any other future receipts. Against that, 3% Exchequer Stock 1983 was due to mature in banking March. This low-coupon stock was widely held and some £0.6 billion out of £1 billion was left to be redeemed. Moreover, some £0.5 billion of 12% Treasury Stock 1983 was due to be redeemed in banking April.

Altogether, therefore, at the beginning of the period the authorities were committed to net redemptions of stock of £0.9 billion in banking March and banking April; stock to cover this had to be sold before any current funding needs could be met. Moreover, they were committed to buying (at prices of their own choosing) whatever amounts of Variable Rate Treasury Stock 1983 (whose maturity date was 24 May) were offered to them.

Against this background, towards the end of banking February the authorities had taken advantage of encouraging market conditions to announce an issue of short-dated conventional stock—a £700 million tranche of 10½% Exchequer Stock 1987<sup>(1)</sup>—for sale by tender on 17 February, the first day of the period under review. The stock was issued in partly-paid form, with £30 per cent payable on tender and the rest in banking April. A substantial proportion was sold at the tender and the remainder was sold the following day by the Government Broker in the market.

The market was subdued for much of the rest of banking March, both in the conventional and index-linked sectors, and no gilt-edged funding initiatives were possible. Sentiment in the conventional market improved near the end of the banking month on oil price developments and as the Budget approached. This made it possible on 14 March—the day before the Budget—to announce another new issue—£1,000 million of 10½% Exchequer Convertible Stock 1986,<sup>(2)</sup> convertible into 10½% Treasury Stock 1999. The stock was issued directly to the Bank so that it would be available for sale quickly, from 16 March, for settlement on the first day of banking April, should demand emerge after the Budget. The stock was issued to the Bank at a total price of £98.75, but in £25% paid form, with a further £40% due in banking May and £33.75% in banking June. In the event the stock was sold out in the first few minutes of trading at a partly-paid price of £26.

Market conditions became quieter for a period as the new issue was digested. Immediately after Easter, however, demand re-emerged in both the conventional and index-linked sectors as the prospect of stable oil prices grew. These conditions enabled substantial official sales of stock to be made, and the authorities' remaining supplies of 2½% Index-Linked Treasury Stock 2016 were exhausted on 11 April.

In the light of the development of the government's borrowing requirement, it seemed right to take advantage of the continuing firmness of the gilt-edged market to secure more funding. For that

(1) A further £50 million was reserved for the National Debt Commissioners.

(2) A further £100 million was reserved for the National Debt Commissioners.



**Table F**  
**Issues of gilt-edged stock**

Stock	Amounts issued (£ millions)	Date announced	Date issued	Date exhausted	Price per £100 stock (£)	Payable per £100 stock		Redemption yield (per cent)
						On issue (£)	Further instalments (£)	
10½% Exchequer 1987 'A'	750(a)	11/2	17/2	18/2	98.50	30.00	68.50	10.96
10½% Exchequer Convertible 1986(b)	1,100(c)	14/3	14/3	16/3	98.75	25.00	73.75	10.99 (to 1986)
10½% Treasury 1989	1,100(d)	8/4	13/4	4/5	96.00	25.00	71.00	11.41
2½% Index-Linked Treasury Convertible 1999(e)	1,000	28/4	5/5	—	97.50	40.00	57.50	2.71(f)

(a) Of which £50 million was reserved for the National Debt Commissioners.

(b) Holdings may, at the option of the holder, be converted in whole or in part into 10½% Treasury Stock 1999, as on the following dates:

Date of conversion	Nominal amount of 10½% Treasury 1999 per £100 nominal of 10½% Exchequer Convertible 1986	Implied redemption yield (% per annum)
19 May 1984	£97	10.31
19 November 1984	£95	10.10
19 May 1985	£93	9.90
19 November 1985	£91	9.73

(c) Of which £100 million was reserved for the National Debt Commissioners. Issued to the Issue Department of the Bank of England.

(d) Of which £100 million was reserved for the National Debt Commissioners.

(e) Holdings may, at the option of the holder, be converted in whole or in part into 10½% Conversion Stock 1999, on the basis of £100 nominal of conversion stock for £100 nominal of 2½% Index-Linked Treasury Convertible Stock 1999, as on the following dates: 22 November 1983, 22 May 1984, 22 November 1984.

(f) Real yield, calculated on the basis described in footnote (2) on page 180.

reason, a further new issue was announced on 8 April—£1,000 million of 10½% Treasury Stock 1989,<sup>(1)</sup> for sale by tender on 13 April. This issue, too, was made in partly-paid form, with the later instalments payable in banking May and banking June.

A substantial proportion of the issue was sold at the tender at the minimum tender price, and further amounts were sold over the next two days. Prices fell back subsequently, however, and demand for this stock did not reappear until early in banking May.

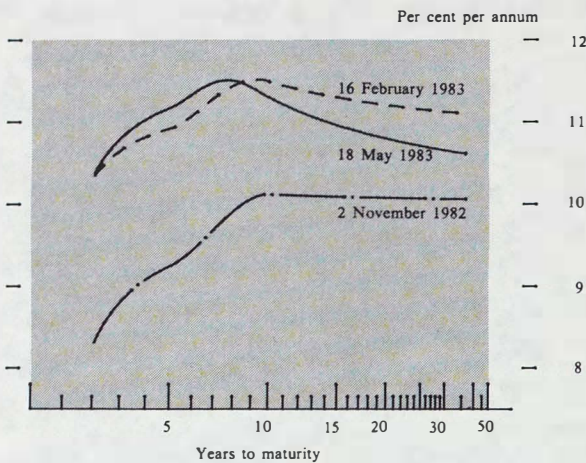
On 28 April the authorities announced the issue of a gilt-edged stock of a new kind—£1,000 million of 2½% Index-Linked Treasury Convertible Stock 1999. The stock was for sale by tender, with no minimum price; and because of the novelty of the stock, a full week was allowed between the announcement and the tender. It is a normal index-linked stock, exactly the same in form as the index-linked stocks already in the market, but with the additional feature that it offers the holder options to convert into a new conventional stock of the same maturity (10¼% Conversion Stock 1999) on any of three conversion dates.

The conversion terms are £100 nominal of conversion stock for £100 nominal of index-linked convertible stock. Though these terms apply at each of the three conversion dates, the implicit nominal yield to maturity is lower for later conversion dates, because holders who convert later receive the lower index-linked coupon payments for longer than those who convert earlier.

The attraction of the stock is that it offers investors the protection against inflation of an index-linked stock with the chance to lock in to a conventional stock at a predetermined overall yield if inflation is low and nominal yields fall. The stock is therefore especially attractive at times of particular uncertainty about future inflation. An issue of this kind had been under discussion for several months;

(1) A further £100 million was reserved for the National Debt Commissioners.

There has been a marked change in the shape of the time/yield curve of British government stocks.



**Table G**  
Number of holdings of index-linked stocks

Maturity	Nominal amount outstanding (£ million)	Number of holdings(a)			
		Early Oct. 82	Mid-Nov. 82	Mid-Feb. 83	Mid-May 83
1988	750(b)	10,800 <i>8,800</i>	13,400 <i>10,700</i>	21,000 <i>15,800</i>	24,900 <i>18,200</i>
1996	1,000	2,100 <i>900</i>	2,300 <i>1,000</i>	3,600 <i>1,900</i>	4,400 <i>2,600</i>
2001	250	(c)	700 <i>500</i>	1,000 <i>700</i>	1,100 <i>800</i>
2003	250	—	(c)	800 <i>500</i>	900 <i>600</i>
2006	1,000	900 <i>300</i>	900 <i>300</i>	1,000 <i>400</i>	1,000 <i>400</i>
2009	400	—	200	400 <i>100</i>	400 <i>100</i>
2011	750	800 <i>200</i>	800 <i>200</i>	800 <i>200</i>	800 <i>300</i>
2016	750	—	—	(d)	900 <i>500</i>

Note: No figures are available for the 1999 convertible stock because it was still in allotment letter form at mid-May.

- (a) The figures in italics show the number of holdings identified as holdings of private funds and private trusts. All figures are rounded to the nearest hundred.  
 (b) The amount of the 1988 stock outstanding was increased to £1,000 million in December 1982.  
 (c) Official holdings not exhausted.  
 (d) No figure quoted because the stock was still in allotment letter form.

**Table H**  
Amounts raised in the capital market

£ millions; not seasonally adjusted  
Net cash raised +

Calendar months	June 82– Aug. 82	Sept. 82– Nov. 82	Dec. 82– Feb. 83	Mar. 83– May 83
<b>UK private sector</b>				
Loan capital and preference shares(a)	+ 67	+110	– 24	+412
Equity capital(a)	+311	+248	+234	+746
Unit trusts	+116	+237	+340	+219(b)
Issues on the unlisted securities market	+ 24	+ 16	+ 16	+ 28
<b>Local authorities</b>				
Stocks	– 67	– 65	– 58	+ 45
Negotiable bonds	+ 42	+ 78	+ 13	+ 23
<b>Overseas</b>	+161	+270	+ 99	+ 46

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) March and April only.

its attraction to the authorities at the time of issue was that it offered a means of pressing ahead with government funding in spite of growing public speculation about the date of the general election.

The stock met good demand at the tender, and all applications at prices of £97.50 and above were met in full. At this price the stock had a real yield to maturity of 2.71% if not converted; this was about 0.1% below the level implied by the yields on other index-linked stocks. The yield of the instrument as a conventional stock, if converted at the first conversion date, was 10.12%; this was some  $\frac{3}{8}\%$  below the then current market level for stocks of similar maturity dates.<sup>(1)</sup> There was significant further demand in early dealings.

Over the three months there was a marked change in the shape of the yield curve (see chart). By the beginning of the period yields had already fallen from their January peak. Longer-term yields continued to fall—for example twenty-year yields fell by some  $\frac{3}{8}\%$  to about  $10\frac{3}{4}\%$ , compared with around 10% at the low point in November 1982. Yields for maturities of around eight years, however, were little changed over the period at around  $11\frac{3}{8}\%$ , and shorter-term yields rose on balance.

Real yields on index-linked stocks rose: the yield of the 1988 stock rose by 0.34% to 3.36%, and on the 2011 stock the yield went up by 0.06% to 2.70%.<sup>(2)</sup> The number of holders of index-linked stocks, particularly personal holders, continued to rise (Table G).

## Other capital markets

### Three months to end-May

Despite the sometimes unsettling influence of the OPEC oil price negotiations, the equity market moved ahead strongly in the first half of March ahead of the Budget. On Budget day the FT-Actuaries all-share index reached a new record level of 421.13, but by then the advance had largely run its course and prices subsequently fell back on profit-taking. Sentiment was unsettled for the rest of March by renewed fears of an oil price war and consequent pressure on sterling, and the all-share index ended the month at 411.94. After Easter, however, the market rallied, encouraged by the prospect of lower interest rates, the CBI's more optimistic view of the economic outlook and buoyancy on Wall Street. The all-share index reached a new peak of 441.52 on 18 April and was again close to this level towards the end of the month.

A more cautious tone developed in early May ahead of the local elections and amid speculation about the date of the general election. On 10 May—the day after the general election was announced—there was a sharp correction as investors took profits, and the mood remained cautious for a few days thereafter with prices drifting lower in very quiet trading. Later in the month the market began to regain confidence, helped by good trading results from some leading companies and the 30-share index closed above 700 for the first time on 25 May while the all-share index ended the month at 437.63 a rise of  $38\frac{1}{4}$  points over the period.

(1) The yield of the stock if converted at the second or third conversion dates is not calculable, since it depends in part on future changes in the retail price index.

(2) The real yields quoted are calculated broadly on the assumption that the retail price index will continue to change in the future at the same rate as over the most recent six months for which figures have been published.

**Table J**  
**Debt issues announced on the London capital**  
**market: March–May 1983<sup>(a)</sup>**

Date of announcement	Issuer	Nominal amount (£ millions)	Coupon	Maturity
<b>Domestic borrowers</b>				
1 March	Hambros Investment Trust	8	6%–17% (rising coupon)	2018
11 March	World Audio Visual Entertainment	4.8	14%	1988/92
11 April	Borough of Sunderland	25	11 $\frac{3}{4}$ %	2008
18 April	City of Bristol	35	11 $\frac{1}{2}$ %	2008
27 April	Brixton Estate	15	11 $\frac{3}{4}$ %	2018
27 April	Securities Trust of Scotland	5	12%	2013
27 April	Trafford Park Estates	3	11 $\frac{3}{4}$ %	2007/10
9 May	Newcastle and Gateshead Water Company	5	11 $\frac{1}{2}$ %	2004
17 May	Watney Mann and Truman Holdings	50	12 $\frac{5}{8}$ %	2008
<b>Overseas borrowers</b>				
17 March	Credit National	11	13 $\frac{1}{2}$ %	1993
25 April	New Zealand	100	11 $\frac{1}{4}$ %	2008
5 May	Credit National	17.6	13 $\frac{1}{2}$ %	1989/93
24 May	Iceland	15	14 $\frac{1}{2}$ %	2016

(a) All these issues were placed except those for Borough of Sunderland, City of Bristol and New Zealand which were offered for sale. Issues of convertible loan stock and issues of less than £3 million are not included.

The strength of the equity market during most of the period encouraged substantially greater recourse by companies to it for finance (Table H). Among the companies to announce large new rights issues were Standard Chartered Bank in March (£101 million), GKN in April (£80 million) and Courtaulds in May (£71 million).

The *fixed-interest* market was more active than in the three preceding months, reflecting the easier trend in long-term interest rates. Among the new *corporate* issues to be announced (Table J) was a debenture placing by Watney Mann, the first industrial company to come to the market since October 1982. The market in *local authority* new issues revived with offers for sale by the Borough of Sunderland and the City of Bristol. No droplocks were triggered during the period. Droplock arrangements outstanding at end-May are shown in the table on page 182.

Two *overseas borrowers* announced issues in the domestic fixed interest market (there was only one in the previous three months), although Credit National also issued some further £29 million of 1989 and 1993 loan stock pursuant to an earlier banking credit arranged in 1981. An offer for sale of £100 million by New Zealand was oversubscribed, while Iceland placed a further tranche of a stock first issued in January 1981.

Activity in the *eurosterling* market was stepped up with five issues raising a total of £205 million. Three of these, including one of £50 million by BOC, were launched in April with coupons ranging from 11 $\frac{1}{2}$ %–11 $\frac{3}{4}$ %. Two subsequent issues by Finance for Industry and by a French state agency incorporated special features and are described in more detail in the following supplementary note on innovations in the capital markets. The note also describes a eurodollar issue of \$100 million by ICI, which carries a sterling option along with warrants to subscribe for shares in the company.

## A note on recent innovations in the capital markets

Recent sterling issues in both the domestic and the eurobond markets have displayed innovations in a number of respects. These new features extend the range of options available to borrowers and investors alike and can be expected to encourage the growth of the sterling capital markets. Some of the current possibilities are described in this note.

### Deep discounted stocks

Continuing interest has been displayed in sterling issues on a deep discount basis. Such stocks carry coupons below the full market rate at time of issue (or zero coupons) and consequently are issued at a discount, which may be substantial, to their redemption value. Because of the saving on coupon payments they may be particularly appropriate for firms with current cash-flow constraints or for firms undertaking long-term investment projects which will not produce a return for a number of years. The tax treatment of such stocks under existing law was clarified by the Inland Revenue in June 1982 and new rules were proposed at the time of this year's Budget although it did not prove possible to introduce these in the abbreviated Finance Act passed before the general election. Guidance as to the arrangements for such issues, including the procedure for obtaining timing consent under the Control of Borrowing Order, was provided in the Bank of England's notice of 19 July 1982 (see the September 1982 *Bulletin* page 354). This notice indicated that, in order to help promote the development of the corporate bond market, issues of deep-discounted stocks (including those with zero coupons) would be confined to private sector companies; and that consent for issues of this type by public sector bodies would not be forthcoming.

### Indexed stocks

The tax treatment of corporate index-linked stocks, which again are only available to private sector companies, was also clarified in June 1982. The position, which was restated at the time of this year's Budget, is that indexed stocks may be structured in either of two broad ways.

*Indexation of capital*, where the uplift on the principal, to take account of inflation, is subject only to capital gains tax in the investor's hands but may not be claimed by the borrower as a deduction against profits for corporation tax. The interest payable is taxable as income in the hands of the investor and allowable against the borrower's profits. Corporate issues structured in this way would be similar in form to index-linked gilt-edged stocks.

*Indexation of interest* only, which may be rolled up over the years and paid out as a lump sum on redemption. Such interest is given the same tax treatment as non-indexed

interest, ie it is taxable as income in the hands of the investor and is allowable against the borrower's profits for corporation tax.

### Droplock issues

The droplock technique was described in the June 1981 *Bulletin* (page 178) and in the December 1981 *Bulletin* (page 477) where the Bank's arrangements for timing consent for such facilities were further elaborated. Briefly, droplock agreements provide for fixed interest stock to be placed with a group of institutions, automatically on the operation of a droplock trigger when interest rates have fallen to a certain level; such arrangements sometimes also give the borrower the option over a given time period to create and place the stock at a specified margin over one or more gilt-edged stocks, subject to timing consent being obtained from the Bank of England before the option is exercised.

Although interest in the droplock technique has been displayed by corporate borrowers from time to time, its use in the domestic market has so far been mainly confined to local authorities. Its effectiveness as a funding instrument was demonstrated last autumn when the fall in interest rates triggered eleven droplocks, amounting to £133.5 million in all. Droplock arrangements currently outstanding are shown below.

### Outstanding droplock arrangements

Trigger levels(a)	Amount committed as at end-May 1983 (£ millions)
10½% up to 11%	7
10% up to 10½%	45
9½% up to 10%	81
9% up to 9½%	20
8½% up to 9%	20
No specified level	26

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

### Other developments

Other innovative features have been carried by a number of recent issues in both the domestic and eurobond markets.

*Rising coupon issues.* Three such issues of stepped interest debenture stock in the domestic market have been launched since October of last year by investment trusts. In such issues the coupon increases over time. For example, in the first issue, by Scottish Mortgage and Trust, the coupon was set at 8% for the first year, rising by 1 percentage point for each of the subsequent six years and thereafter remaining fixed at 14% until final redemption in 2020. Such issues allow borrowers to vary the profile of their cash payments to suit their particular circumstances.

*Currency conversions and warrants.* An issue which combined both these features was ICI's issue in May of \$100 million of  $9\frac{3}{4}\%$  dollar eurobonds, due 1990. The issue carries the option for investors to convert their holdings at any time into identical sterling bonds at a fixed exchange rate of \$1.5773, thus providing a measure of protection against relative movements in both exchange rates and interest rates. In addition, each bond has five warrants attached, each of which gives the option to purchase 117 ICI shares at 540p per share. Another variation on this theme was provided by the issue later in May of £35 million of sterling eurobonds by a French state agency, convertible during the first five years into dollar floating rate notes.

*Tranche issues.* A recent issue by Finance for Industry (FFI) of up to £40 million of  $10\frac{1}{2}\%$  sterling eurobonds, due 1990, is noteworthy in that it will be sold in tranches: the initial tranche of £20 million (ie half of the total principal amount) was issued in May at a price of  $\pounds 95\frac{1}{2}$ , a relatively deep discount for such a maturity. The remaining £20 million may be sold over the year to May 1984 in

tranches of a minimum of £5 million (and one such tranche of £5 million was issued at the beginning of June). The FFI issue was in the eurobond market, where tranche issues are already an established feature of the dollar sector. The technique may, however, have useful application for sterling issues in the domestic market in London, enabling borrowers to average issue costs over a period of time so that the level of interest rates on the occasion of each tranche is less critical, as well as increasing the marketability of individual stocks as their size is built up. The Bank of England welcomes the use of the tranche system for these reasons, with the proviso that to maintain orderly conditions in the market, timing consent will need to be obtained prior to the issue of each tranche and additionally that a place should be free in the queue of borrowers for the day in question. While the Bank, as part of its policy of operating the queueing system as flexibly as possible, is prepared to accommodate new issues and further tranches at very short notice when there is space in the queue, fairness demands that issues already booked in the queue for the day in question should be given priority.