Operation of monetary policy

This article covers the three months April–June 1989.

Review

During the period under review, economic indicators continued to show the economy adjusting following last year's tightening of monetary policy. But policy had to take account of market impatience with the pace of adjustment which, combined with the side-effects of the world-wide strength of the dollar, led to recurrent periods of downward pressure on the sterling exchange rate and upward pressure on sterling interest rates. In the middle of the period, such pressure on sterling led the authorities to raise interest rates by a futher 1% to prevent the stance of policy from being undermined.

Table A
Growth rates of the monetary aggregates[a]

Percentages; *seasonally adjusted (financial year constrained)*

	12 months to end-Mar. 89	12 months to end-June 89	1989 Q1	1989 Q2
M0(b)	+ 6.2	+ 5.9	−0.9	+2.1
Non-interest-bearing M1	+ 2.9	− 3.2	−3.2	−4.8
M1	+13.9	+13.7	+4.8	+3.9
M2	+15.2	+12.6	+2.6	+2.2
M3	+21.3	+22.1	+4.7	+5.2
M3c	+20.7	+23.2	+4.9	+6.8
M4	+18.4	+19.2	+4.5	+4.3
M5	+17.4	+18.6	+4.4	+4.5

(a) See the statistical annex to the February 1989 *Bulletin* for definitions.
(b) Data are based on end-month figures, except M0, which is a weekly average for each month.

The shape of the adjustment to last year's policy tightening became clearer during the period under review. As had been expected, the main effect was on the personal sector, with the initial impact on the housing market. The slowdown in house prices and in turnover has spread well out from the South East, and has now reached most parts of the country. Indeed house price levels have fallen recently in much of the South. Moreover, housing starts have been weak for the last three months. Consumer demand more generally has shown signs of slowing down: initially the main effect was on spending on durable goods, which was lower in the first quarter than in the third quarter of 1988; the growth rate of non-durable spending has also declined this year. Although retail sales have been volatile in recent months, the trend rate of growth has decreased significantly.

Weaker growth in personal sector demand is reflected in distinctly lower growth in borrowing by households, particularly on mortgage, than had prevailed for much of 1988. M0, too, has slowed down, no doubt reflecting the more moderate growth of retail sales, and the aggregate's twelve-month growth rate moved down closer to the top of its 1%–5% target range during the period under review.

Revised figures show that investment spending in 1988 was much stronger than had earlier been thought, though there was apparently only a small further increase in the first quarter of this year. Stock accumulation continued in the first quarter, after the sharp rise at the end of last year, some of it no doubt unintentional as demand has decelerated. The need to finance high levels of investment and stocks may help to explain the continued rapid rate of corporate borrowing, both from banks and from the bond market.

Output growth has decelerated over the last six months, even allowing for the effect of accidents on North Sea oil production. Nevertheless, the levelling-out of the current account balance of payments deficit suggests that there has been a greater

Twelve-month growth rates of M3, M4 and M5

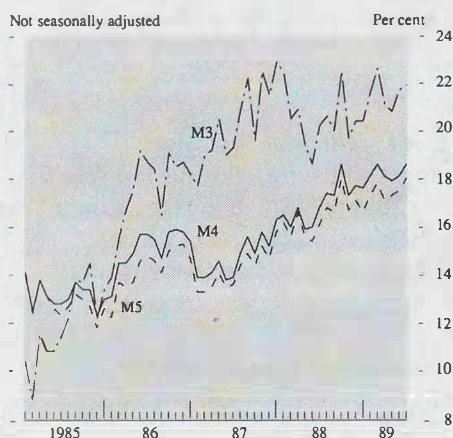


Table B
Composition of changes in the money stock[(a)]
£ billions; *seasonally adjusted (financial year constrained)*

		1989 Q1	1989 Q2	Level outstanding at end-June 89
1	Non-interest-bearing M1	− 1.6	− 2.3	46.1
2	Interest-bearing sight deposits	+ 6.7	+ 6.6	67.5
3	**M1 (=1+2)**	**+ 5.0**	**+ 4.2**	**113.6**
4	M3 private sector holdings of time deposits with banks and bank CDs	+ 5.5	+ 8.0	131.9
5	**M3 (=3+4)**	**+10.6**	**+12.2**	**245.5**
6	Building society holdings of M3	+ 0.6	+ 1.0	19.9
	M4 private sector holdings of:			
7	Building society shares and deposits	+ 5.8	+ 4.7	160.8
8	Building society £CDs and time deposits	+ 0.4	+ 0.3	3.6
9	**M4 (=5−6+7+8)**	**+16.1**	**+16.2**	**389.9**
10	M4 private sector holdings of money-market instruments and national savings in M5	+ 0.2	+ 1.1	16.4
11	**M5 (=9+10)**	**+16.3**	**+17.3**	**406.3**

(a) See the statistical annex to the February 1989 *Bulletin* for definitions. The M3 private sector comprises all UK residents other than the public sector and banks. The M4 private sector further excludes building societies.

deceleration in domestic demand to a rate of growth, if anything, below that of output.

During the early part of the period under review, price and cost indicators (apart from house prices) tended to be higher than expected, as they had been during the first quarter. The twelve-month rates of increase of retail and producer input prices rose further. More recently, there have been signs of some levelling out: the rise in producer input prices was particularly low in June and, throughout the quarter, the underlying twelve-month increase in whole-economy average earnings remained at 9¼%. However, in June and July there was strong upward pressure on pay settlements.

In financial markets, the period was marked by the world-wide strength of the dollar, and monetary policy was tightened in a number of other countries in response to inflationary pressures which were partly the result of that strength. Moreover, the degree of slowdown in the UK economy indicated by the emerging economic data inevitably fluctuated over time, and markets periodically became impatient at the pace of the adjustment. As a result, there were recurrent periods of downward market pressure on the sterling exchange rate and upward pressure on sterling interest rates. The Bank resisted these pressures for some time. However, the unexpectedly large rise in the retail price index in April, announced on 19 May, led to a sharp weakening in sterling against other currencies as well as the dollar. The authorities were not prepared to allow this depreciation to undermine the stance of policy, and accordingly interest rates were increased by 1% to 14% on 24 May.

With the dollar continuing to strengthen world-wide, sterling once again began to weaken sharply against all currencies early in June, apparently largely for reasons unconnected with the economic fundamentals. In these conditions, the authorities judged it right to resist the associated upward pressure on interest rates. Sterling, however, began to recover after the announcement of the May trade figures near the end of the quarter, and its upward movement was assisted by the retreat of the dollar and the easing of US monetary policy at the beginning of July.

Sterling's exchange rate index fell from 95.5 to 90.2 during the period under review, although it subsequently rebounded to 93.3 by the end of July. Banks' base rates rose by 1% to 14% during the second quarter and the three-month interbank rate rose by 1⅛% to 14$\frac{5}{32}$%. (It subsequently fell back below 14% as sterling recovered.) The yield on 20-year gilt-edged stocks increased by ⅜% to 9$\frac{9}{16}$%; this may partly have reflected the effect on inflation expectations of the higher-than-expected price and cost indicators which emerged during the quarter. The yield on long-term index-linked stocks increased by $\frac{3}{16}$% to 3$\frac{19}{32}$%.

Monetary aggregates and credit

The figures in this section are seasonally adjusted.

The twelve-month growth rate of M0 continued to decline during the second quarter (see Table A). By the end of June, it stood at 5.9%, with the effects of the progressive tightening of policy, and in particular lower retail sales growth, no doubt a

major contributory factor behind the slowdown from 7%–8% in the second half of last year. The fall in the twelve-month growth rate of M0 took place aganst the background of a series of volatile recent monthly figures, which led to a decline in M0 during the first quarter, followed by a relatively robust rise in the second.

Although M1 grew quite strongly in the second quarter, its twelve-month growth rate declined a little further. With the introduction of various interest-bearing current accounts at the turn of the year, the interest-bearing component of M1 increased by over £6½ billion (10.8%) in the second quarter (see Table B), and is now 24.4% higher than at the end of 1988. Meanwhile, non-interest-bearing M1 fell by over £2 billion (4.8%) in the second quarter, and is 7.9% lower than at end-1988, indicating that part of the growth in interest-bearing M1 represented switching from non-interest-bearing accounts.

Broad money continued to grow rapidly in the quarter, with M4 rising by 4.3%; this took its twelve-month growth rate up to 19.2%. Within M4, retail inflows were a little weaker in the second quarter than the recent average at £7.0 billion (2.8%), compared with £8.7 billion (3.6%) in the first quarter and an average of £8.7 billion for the previous four quarters; both the banks and the building societies were affected by this decline. Wholesale deposits, by contrast, were again very strong, rising by 8.3% (£9.0 billion) to stand 32.3% higher than a year earlier. Some of this strength is likely to reflect the downward-sloping yield curve, which enhances the attractiveness of bank deposits relative to longer-term investments. The percentage growth of corporate deposits was distinctly stronger than that of personal sector deposits.

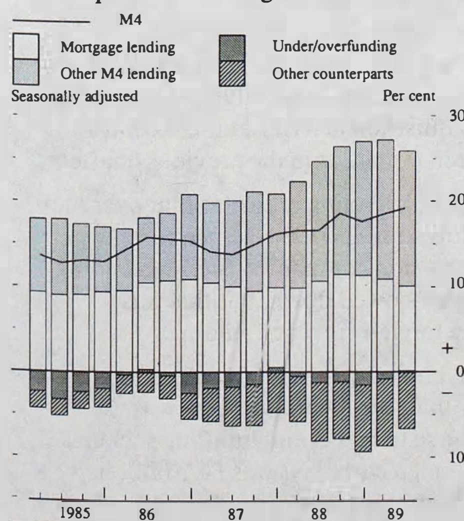
Table C
Counterparts to changes in M3, M4 and M5[(a)]

£ billions; *seasonally adjusted figures (financial year constrained)*

	Counterparts to M4			Counter-parts to M3	Counter-parts to M5
	1989		12 months to end-June 89	12 months to end-June 89	12 months to end-June 89
	Q1	Q2			
1 PSDR (–)	– 4.3	– 1.1	–12.7	–12.7	–12.7
2 Net purchases (–) of central government debt by the 'private' sector(b)(c)	+ 4.9	+ 3.0	+11.6	+12.6	+12.5
3 Net purchases (–) of other public sector debt by the 'private' sector(b)(c)	—	—	+ 0.6	+ 1.8	+ 0.8
4 External and foreign currency finance (–) of the public sector	—	– 0.8	+ 1.1	+ 1.1	+ 1.1
5 Public sector contribution (= 1+2+3+4)	+ 0.6	+ 1.1	+ 0.5	+ 2.7	+ 1.6
6 Sterling lending to the 'private' sector(b)(d)	+21.3	+20.7	+84.1	+56.2	+84.1
7 Other counterparts(e)	– 5.7	– 5.6	–22.0	–14.5	–22.0
8 Total (= 5+6+7) = change in the aggregate	**+16.1**	**+16.2**	**+62.7**	**+44.5**	**+63.8**

(a) See the statistical annex to the February 1989 *Bulletin* for definitions.
(b) For M3 counterparts, the 'private' sector excludes banks; for M4 and M5 counterparts it also excludes building societies.
(c) Transactions in public sector debt instruments included in M5 are necessarily excluded from the M5 counterparts.
(d) Includes changes in Issue Department's holdings of private sector commercial bills and of promissory notes relating to shipbuilding paper guaranteed by the Department of Trade and Industry. The M5 counterpart includes 'private' sector holdings of commercial bills.
(e) External and foreign currency transactions and increases (–) in net non-deposit liabilities.

Counterparts to annual growth of M4



Among the counterparts to M4, sterling lending to the private sector grew by under £21 billion in the quarter (see Table C): at 4.7% this represents the lowest quarterly percentage increase since the end of 1987, and the twelve-month growth rate thus eased to 22.5%. The deceleration was concentrated in banks' lending. Repurchases and redemptions of public sector debt more than offset the PSDR of £1.1 billion and the contractionary influence of public sector external transactions, so that the public sector was modestly underfunded for the second successive quarter. The net external transactions of banks and building societies were contractionary, as in earlier quarters, as were sterling net non-deposit liabilities.

Personal sector M4 borrowing grew by 3.8% in the second quarter, the lowest rate since 1980 (see Table D). Its twelve-month growth rate fell to 19.5%, compared with 21.3% at the end of March and a peak of 22.2% at the end of September last year. Within the total of bank borrowing by the personal sector, borrowing for house purchase in particular was weaker than in the recent past, increasing by only 2.2% (£1.0 billion), the smallest percentage rise since the third quarter of 1984. But building society lending for house purchase rose by 3.8% (£6.0 billion), compared with 3.5% in the first quarter. Total M4 lending to persons for house purchase remained subdued, with the smallest quarterly percentage increase since mid-1980, lowering the twelve-month growth rate to 17.6%. This compares with a recent peak of 21.0% in the third quarter last year. The decline in M4

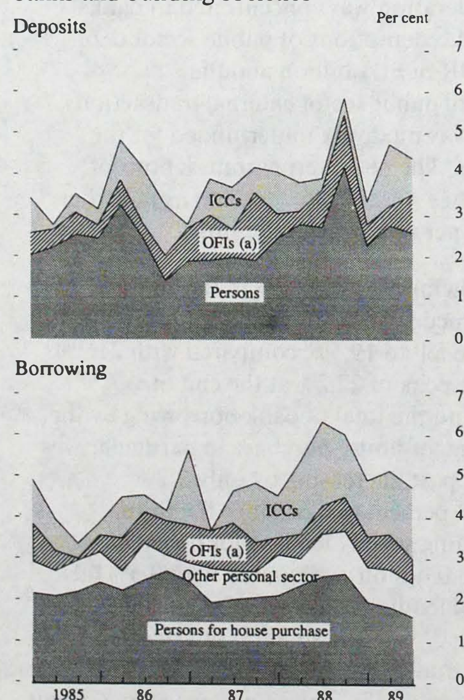
Table D
Sectoral analysis of deposits with, and borrowing from, banks and building societies

£ billions; *seasonally adjusted (financial year constrained)*

		1988				1989	
		Q1	Q2	Q3	Q4	Q1	Q2
	Personal sector						
1	Deposits	8.3	8.2	13.4	7.3	9.4	9.4
	of which:						
	Banks	3.6	2.8	7.7	2.9	3.6	4.7
	Building societies	4.6	5.4	5.7	4.5	5.8	4.7
2	Borrowing	10.0	12.7	13.8	11.0	11.4	10.6
	of which:						
	Mortgage	7.8	9.0	9.8	7.8	7.6	7.0
	Non-mortgage	1.4	1.6	1.7	1.0	1.5	1.6
	Unincorporated businesses	0.7	2.0	2.2	2.3	2.4	2.0
3	**Net recourse (=2–1)**	**1.7**	**4.5**	**0.4**	**3.7**	**2.0**	**1.2**
	ICCs						
4	Deposits	2.4	- 0.1	2.0	2.3	4.3	5.2
	of which:						
	Sterling	2.3	0.6	1.4	2.1	5.4	3.5
	Foreign currency	0.1	- 0.7	0.6	0.2	- 1.0	1.7
5	Borrowing	7.9	9.2	7.9	7.5	8.8	9.5
	of which:						
	Sterling(a)(b)	5.8	7.1	5.6	5.7	6.3	7.5
	Foreign currency	2.1	2.1	2.3	1.9	2.5	1.9
6	**Net recourse (=5–4)**	**5.5**	**9.3**	**5.9**	**5.2**	**4.4**	**4.2**
	of which:						
	Sterling	3.5	6.5	4.2	3.6	0.9	4.0
	Foreign currency	2.0	2.8	1.7	1.7	3.6	0.2
	OFIs						
7	Deposits	0.8	2.8	4.3	4.1	2.7	4.7
	of which:						
	Sterling	0.7	2.6	4.0	2.1	1.4	3.3
	Foreign currency	—	0.1	0.4	1.9	1.3	1.5
8	Borrowing	1.8	1.9	3.7	4.0	7.5	3.1
	of which:						
	Sterling(a)	2.0	2.4	3.1	3.0	3.6	2.6
	Foreign currency	- 0.1	- 0.5	0.6	1.0	4.0	0.5
9	**Net recourse (=8–7)**	**1.1**	**- 0.9**	**- 0.6**	**- 0.1**	**4.9**	**- 1.6**
	of which:						
	Sterling	1.2	- 0.2	- 0.9	0.8	2.2	- 0.7
	Foreign currency	- 0.2	- 0.7	0.3	- 0.9	2.7	- 1.0

(a) Includes Issue Department take-up of commercial bills.
(b) Includes Issue Department take-up of guaranteed shipbuilding paper.

Sectoral contributions to quarterly growth of deposits with, and borrowing from, banks and building societies



(a) OFIs denotes financial institutions other than banks and building societies.

mortgage lending may be reflected in the mortgage market as a whole: it is possible that, as in the first quarter, lending by other mortgagors (including the public sector, insurance companies and non-bank subsidiaries of banks as well as independent 'centralised' mortgage lenders) has been subdued in comparison with last year.

The rise in non-mortgage M4 lending to persons, of 4.5% (£1.6 billion), was slightly higher than in the first quarter although, for the third successive quarter, the twelve-month growth rate declined. Given the slowdown in the growth of consumer spending, it is not clear why borrowing in this form should have accelerated, although there may have been substantial borrowing to finance the purchase of cars.

With personal sector deposit growth remaining strong (although marginally down on the first quarter), and total borrowing subdued, the personal sector's sterling net recourse to banks and building societies in the second quarter was just over £1 billion. This represents a fall from net recourse of £2.0 billion in the first quarter, itself significantly down on the last quarter of 1988. These figures may provide some tentative support for the view that the personal sector saving ratio has increased.

Nearly one fifth of personal sector borrowing in the quarter was by unincorporated businesses, which have been borrowing substantially from the banking system in recent quarters. However, the percentage rise in their M4 borrowing in the second quarter was lower than at any time in the previous year, and thus the twelve-month growth rate fell slightly, to 32.5%. Unincorporated businesses' deposits grew by 7.4% in the quarter (their deposits data are not seasonaly adjusted), leaving their net recourse to the banking system virtually zero during the period.

Despite high levels of capital issues, industrial and commercial companies (ICCs) also borrowed heavily from banks and building societies in the second quarter, £7.5 billion in sterling and £1.9 billion in foreign currency. Continued investment by medium-sized companies, which are more reliant on the banking system for finance than large companies, may provide part of the explanation for the high levels of bank borrowing seen in the first six months of this year. The strength of capital issues may represent efforts by larger companies to rebuild their liquidity, or possibly to raise funds for future acquisitions. Acquisition activity in the second quarter appears to have been muted, as in the previous quarter.

The industrial analysis of bank lending indicates that over half of the rise in sterling lending to ICCs in the March to May period was to property and construction companies. Sterling lending to manufacturing companies slowed down, but this was counterbalanced by strong foreign currency lending.

Companies' deposits were buoyant during the quarter, although they rose by less than the record increase witnessed in the first quarter. Net recourse to banks and building societies by ICCs (in sterling and foreign currency) was £4.2 billion, which was slightly down from the first quarter (a figure which had, unusually, been mainly in foreign currency), and well below the levels recorded last year. Nevertheless, companies probably continued to run down their net liquidity, which has fallen significantly since the stock market crash.

After unexpectedly low growth in the first quarter, the sterling deposits of financial institutions (other than banks and building societies) rebounded in the second quarter, rising £3.3 billion, an increase of nearly 7%. Their foreign currency deposits also grew rapidly. This may have represented the accumulation of funds for investment which the institutions preferred to hold in money-market instruments, especially in the light of the downward-sloping UK yield curve.

Net external transactions of banks and building societies were contractionary by £0.5 billion over the quarter, compared with an average of £3.3 billion per quarter in the financial year 1988/89. This may reflect a preference for placing funds in the domestic money market rather than investing abroad, given the relatively high level of UK short-term interest rates; in addition, the net flow of funds for cross-border acquisitions seems to have been close to zero, compared with an average outflow of over £1 billion per quarter during the last three years.

Official operations in financial markets

The figures in this section are not seasonally adjusted.

Money-market operations

During the period under review, there were large flows of funds into the money market, arising mainly from a seasonal excess of central government expenditure over revenue, and from redemptions and official purchases of gilt-edged stock (see Table E). These flows were large enough, given the sharp decline in the stock of money-market assistance in recent years,[1] to require a substantially enlarged Treasury bill issue, which by the end of the quarter was at its highest level this decade; in addition, certain other changes were made to the Bank's operating techniques.

Table E
Influences on the cash position of the money market
£ billions; *not seasonally adjusted*
Increases in the market's cash (+)

	1988	1989		12 months to end-June 89
	Q2	Q1	Q2	
Factors affecting the market's cash position				
CGBR (+)	+0.1	−4.4	+2.0	− 5.0
of which, on-lending to local authorities and public corporations	*+1.6*	*+1.7*	*+1.1*	*+ 5.4*
Net sales (−) of central government debt(a)	+1.2	+6.9	+5.6	+17.7
of which: Gilt-edged	*+1.4*	*+6.6*	*+5.6*	*+17.4*
National savings	*−0.4*	*+0.1*	*+0.1*	*− 0.1*
CTDs	*+0.2*	*+0.2*	*−0.1*	*+ 0.4*
Currency circulation (increase −)	+0.2	+0.8	−0.2	− 1.3
Reserves etc	+0.6	−1.0	−2.1	− 1.2
Other	−0.9	−0.5	−1.5	− 1.4
Total (A)	**+1.3**	**+1.9**	**+3.8**	**+ 8.8**
Official offsetting operations				
Net increase (+) in Bank's commercial bills(b)	−1.0	−3.7	−1.4	− 6.1
Net increase (−) in Treasury bills in market	−0.3	+1.9	−2.6	− 2.8
Securities(c) acquired (+) under sale and repurchase agreements with banks	—	—	—	—
Other	+0.2	—	+0.2	+ 0.1
Total (B)	**−1.1**	**−1.8**	**−3.9**	**− 8.9**
Changes in bankers' operational balances at the Bank (= A + B)	+0.2	+0.1	−0.1	− 0.1

(a) Other than Treasury bills.
(b) By the Issue and Banking Departments of the Bank of England.
(c) Gilt-edged stocks and promissory notes related to guaranteed export credit and shipbuilding paper.

With the stock of money-market assistance having declined by the end of March to £4.1 billion, a substantial part of which consisted of longer-dated bills bought by the Bank in periods of market nervousness about the possibility of higher interest rates, daily amounts of maturing assistance in April were light, averaging no more than £200 million a day. The net fall in the stock of assistance during April was only £0.3 billion (to £3.8 billion), but there were more days of surplus than of shortage in the money market (the average position was a shortage of only £25 million) and forecasts indicated that there were likely to be further net flows of funds into the money market, particularly in the coming few months.

The Bank reacted to this development initially by lengthening the maturity of the Treasury bills it sold to absorb surpluses of cash in the money market. In addition, on 5 May it announced certain changes in its money-market operations intended to prevent these developments from generating persistent day-to-day surpluses of cash in the money market. First the Bank announced that the amount of bills on offer at the weekly Treasury bill tender would be increased from the customary £100 million, and that at a later stage Treasury bills with a maturity longer than three months might be offered for sale at the weekly tenders. The initial increase in the Treasury bill

(1) The longer-run background to this development is explained in the May *Bulletin*, pages 212-13.

Recent developments in the commercial bill market

The note on recent developments in money-market assistance in the May *Bulletin* (pages 212–13) described the sharp fall in the Bank's holdings of commercial bills in recent years. This note describes how the bill market has thus far adjusted to this fall.

The Bank's holding of eligible commercial bills rose from £600 million in July 1981 to a peak of £14.3 billion in February 1985. Since then it has diminished: over the year to end-June 1989, it fell from £8.8 billion to £2.5 billion. In the first half of the decade the Bank's accumulation of bills was a powerful stimulus to the growth of the market as a whole: total bank-accepted commercial bills outstanding rose from around £5 billion in 1981 to £21 billion at the end of 1986, a much faster rate of growth than banks' total lending. However, the falling back in the Bank's holding of bills has not been matched by a comparable decline in the total outstanding, which at the end of June 1989 was some £18.2 billion—only £1.5 billion less than a year earlier, having reached a new peak of £22.0 billion in January this year. The decline over the latest year was concentrated on bills drawn by overseas entities, which fell by nearly 50%.

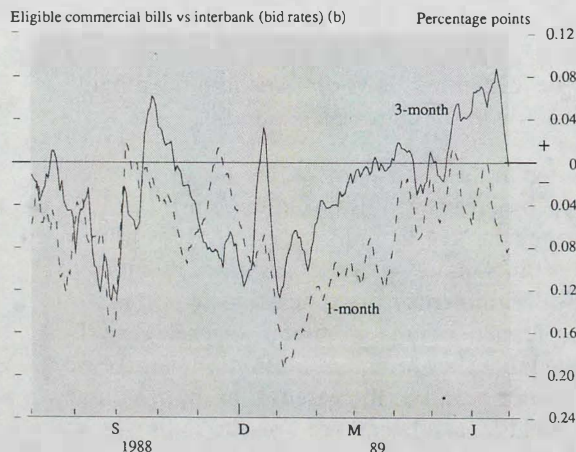
Sectoral holdings of commercial bills

£ billions; *not seasonally adjusted*

	1988			1989		Change over twelve months
End-period	Q2	Q3	Q4	Q1	Q2	to end-June 89
Bank of England	8.5	6.6	7.5	3.8	2.4	-6.1
Discount market	3.5	4.0	3.8	6.2	4.2	+0.7
Other banks	5.6	5.3	5.8	7.3	7.9	+2.4
Building societies	1.2	1.1	1.0	2.1	2.8	+1.6
Others	1.0	1.2	0.7	0.7	0.9	-0.1
Total outstanding	**19.8**	**18.2**	**18.7**	**20.1**	**18.2**	**-1.5**

The table above shows how the fall in the Bank's holding of bills during the past year has been largely offset by net purchases by other groups of holders. The main increase has been in commercial banks' holdings: this may represent both increases in liquid asset holdings needed to support growing balance sheets and anticipation of the introduction of supervisory liquidity requirements, for which purpose the Bank has proposed that eligible bills qualify as tier 1 sterling liquid assets. Building societies have also increased their holdings sharply, likewise no doubt mainly for liquidity purposes.

Chart 1
Yield differential [(a)]



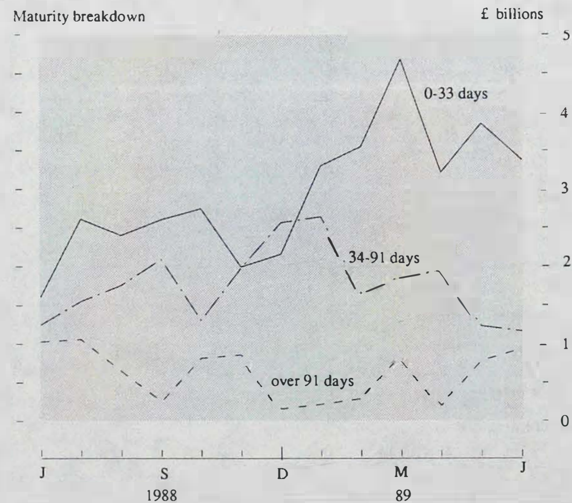
(a) Seven-day moving average.
(b) Yield equivalents of quoted discount rates on bills.

These increased market holdings of eligible commercial bills also reflect changed interest rate differentials between bills and other money-market instruments, as shown by Chart 1.

At the three-month maturity, eligible bank bill yields clearly rose relatively to interbank rates over the year to end-June 1989, with the rise being concentrated in the second half of that period. The change will have reflected two factors. First, as the scale of daily cash shortages in the money market diminished during the spring of 1989, and as surpluses became more frequent, the scale of the Bank's bill purchases diminished. The Bank's practice, when the volume of bill offerings exceeds the day's estimated shortage, is to accept offers of shorter-dated rather than longer-dated bills, other things being equal, so that the effect of the smaller scale of bill purchases will have been greatest at the three-month maturity. This effect will have been reinforced by the Bank's announcement on 5 May that it would in due course change to a practice of normally inviting offers of bills only in the shorter maturity bands when relieving cash shortages in the money market, and by the putting into effect of this change on 25 May. Second, the increased supply of Treasury bills, largely brought about through an increase in the amount of three-month Treasury bills on offer at the weekly tenders, may have put further upward pressure on three-month bill rates generally.

At the one-month maturity, by contrast, there is little sign in Chart 1 of any lasting change in the spread between bill yields and interbank deposit rates. This may reflect the facts that the Bank has continued normally to invite offers of bills with maturities up to a month when relieving cash shortages in the money market, and that, although the Treasury bill issue has been enlarged, the quantity of Treasury bills with maturities of around a month had not changed much by the end of June.

Chart 2
Purchases from acceptor or issuer



There have been corresponding changes in the maturity pattern of bill drawings. Complete information on this pattern is not available, but Chart 2, which shows the maturity distribution of eligible commercial bills bought by the discount market direct from the acceptor or issuer (these bills comprise a substantial amount of the total bills drawn), indicates that the proportion of these bills drawn with a maturity of one month or less has increased quite sharply since the beginning of 1989.

tender was to £300 million on 12 May; but on 19 May the tender was further increased to £500 million of three-month bills and £100 million of six-month bills (this was the first issue of Treasury bills with a maturity of longer than three months). This pattern of offerings at Treasury bill tenders was maintained for the remainder of the period under review.

The Bank also announced on 5 May that it would in due course revert to its earlier practice of normally relieving shortages of cash in the money market by purchases of bills in the shorter maturity bands only, though it might also invite offers of longer bills at its discretion. The purpose of this change was to increase the daily amounts of maturing assistance by shortening the average maturity of outstanding assistance, as a means of helping to prevent persistent market surpluses from developing; and it meant that the Bank was no longer prepared as a matter of routine to invite offers of bills at all maturities up to three months on days of market shortage. The change took effect on 25 May. A note on page 342 describes some of the features of the bill market's adjustment so far to the fall in the Bank's holdings of commercial bills and the changes in its operating techniques.

During May and June the stock of assistance fell further, to £2.9 billion at the end of June (official assistance fell to £1.3 billion, its lowest level since 1981, on 22 June), despite an increase of £2.7 billion in the Treasury bill issue,[1] but day-to-day money-market conditions were tighter, with the average daily position a shortage of £230 million in both May and June. In particular, the daily amounts of maturing assistance were larger than in April, partly because of the shortening in the normal maximum maturity of bills purchased by the Bank mentioned above.

Over the period as a whole the CGBR was £2.0 billion, of which £1.1 billion represented lending by the central government to other parts of the public sector. The proceeds of these loans are largely reflected either in repayments of debt to, or in higher deposits with, banks and building societies. Since to this extent they affect neither the PSDR nor the amount of public sector debt held outside the bank and building society sectors, they are not offset by variations in the funding programme and therefore have an enduring effect on money-market liquidity. Redemptions and official purchases of gilt-edged stock injected a further £5.6 billion into the money market. A reduction in reserves etc drained £2.1 billion from the market and other factors drained a further £1.7 billion. The net injection of cash was offset by an increase in Treasury bills in market hands of £2.6 billion and by a fall of £1.2 billion in official assistance to £2.9 billion.

Gilt-edged operations

The objective of 'fully funding',[2] in the context of a public sector debt repayment for 1989/90 which was forecast in the Budget to be £14 billion, and of a £2.2 billion overfund carried forward from the previous two financial years, led to continued substantial purchases of gilt-edged stock by the Bank during

(1) Other than Treasury bills held by the Bank, Bank customers and Government accounts.

(2) The 'full fund' policy is to fund the total of maturing public sector debt, the PSBR and any underlying change in the foreign exchange reserves by sales (or, if necessary, purchases) of debt outside the bank and building society sectors.

Table F
Financing of the public sector

£ billions; *seasonally adjusted (financial year constrained)*

	1988	1989		12 months to end-
	Q4	Q1	Q2	June 89
1 Central government borrowing on own account	−3.0	−4.1	−0.8	−10.6
2 Other public sector borrowing(a)	−1.0	−0.2	−0.3	− 2.1
3 PSDR (−)(=1+2)	**−4.0**	**−4.3**	**−1.1**	**−12.7**
4 Net sales (−) of central government debt to the M4 private sector	+2.5	+4.9	+3.0	+11.6
of which: Gilt-edged stocks	*+2.4*	*+4.7*	*+3.7*	*+12.2*
National savings	—	*+0.1*	*+0.1*	—
CTDs	*+0.4*	*−0.1*	*−0.1*	—
5 Net sales (−) of local authorities' and public corporations' debt to the M4 private sector	+0.3	—	—	+ 0.6
6 External and foreign currency finance (−) of the public sector	+0.8	—	−0.8	+ 1.1
of which, gilt-edged stocks	+0.1	+0.2	+1.2	+ 1.5
7 Total financing (−) of the public sector from the M4 private and overseas sectors (=4+5+6)	**+3.6**	**+4.9**	**+2.2**	**+13.3**

(a) Includes on-lending from central government to local authorities and public corporations.

Table G
Reverse auctions of gilt-edged stock

Stock	Amount purchased (£ millions)	Total applications received (£ millions)	Date announced	Method of purchase	Date purchased	Price paid (£) per £100 nominal of stock(a)		Redemption yield (per cent) at purchase	
						Highest	Average	Lowest	Average
15½% Treasury Loan 1998	68	190	5/4	Auction, offer basis price	5/5	130-19	130-16	10.32	10.33
14% Treasury Stock 1998-2001	174	312	5/4	Auction, offer basis price	5/5	120-19	120-16	10.42	10.44
12% Exchequer Stock 1999-2002	258	516	5/4	Auction, offer basis price	5/5	110-11	110-09	10.29	10.30
8½% Treasury Stock 1994	196	505	30/5	Auction, offer basis price	30/6	91-11	91-10	10.94	10.95
12½% Exchequer Stock 1994	136	453	30/5	Auction, offer basis price	30/6	105-28	105-27	10.97	10.98
12¾% Treasury Loan 1995	68	224	30/5	Auction, offer basis price	30/6	109-01	109-00	10.73	10.74

(a) Prices are quoted in pounds and one thirty-second 'ticks', e g 130-19 denotes £130 $\frac{19}{32}$.

Table H
Official transactions in gilt-edged stocks

£ billions; *not seasonally adjusted*

	1988 Q2	Q3	Q4	1989 Q1	Q2
Gross official sales(a)	+0.9	-0.1	-1.7	-3.8	-3.0
less					
Redemptions and net official purchases of stock within a year of maturity	-2.3	-1.5	-1.9	-2.9	-2.6
Equals net official sales(b)	-1.4	-1.5	-3.7	-6.6	-5.6
of which, net purchases by:					
Monetary sector(b)	*-1.5*	*-0.5*	*-1.1*	*-0.5*	*-0.1*
Building societies	*+0.4*	*+0.4*	—	*-1.2*	*-0.6*
Overseas sector	*+0.5*	—	*-0.1*	*-0.2*	*-1.2*
M4 private sector	*-0.8*	*-1.4*	*-2.4*	*-4.7*	*-3.7*

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

(a) Gross official 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.

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

Table J
Changes in UK official reserves

$ millions

	1989 Apr.	May	June
Changes in reserves	**+ 325**	**- 1,169**	**- 2,422**
of which:			
Net borrowing (+)/payment (-) of public debt	- 68	- 430	- 186
Valuation change on roll-over of EMCF swap	+ 178	—	—
Underlying change in reserves	+ 215	- 739	- 2,236
Level of reserves (end of period)	47,256	46,087	43,665

the period under review (see Tables F and H). Weakness in gilt-edged prices during the quarter meant that market conditions were conducive to official purchases of stock in the secondary market, and purchases (net of sales) of stock with more than one year to maturity totalled £3.0 billion; this included £0.6 billion bought at a reverse auction. Redemptions of stock and net official purchases of stock with under one year to maturity amounted to £2.6 billion, and so the amount of stock outstanding in market hands declined by £5.6 billion, or about 4% of the total amount. These figures include a modest quantity of net sales of index-linked stock during the quarter, which took place despite the large net purchases of conventional stock.

During the quarter the gilt holdings of the private sector other than banks and building societies fell by £3.7 billion and those of the overseas sector, which had changed little in 1988/89, fell by £1.2 billion. So the period's gilt-edged operations contributed £4.9 billion towards the financial year's target reduction in holdings of public sector debt outside the bank and building society sectors.

Following the successful experience with the first reverse auction on 13 January, the Bank indicated that it would employ the technique from time to time during 1989/90. The Bank conducted two further reverse auctions during the period under review, on 5 May and 30 June. Whereas the January auction had been for stocks with under a year to maturity, the later auctions were for stocks around the ten-year and five-year maturities respectively. (Details of the results of the auctions are shown in Table G.) Both auctions were successfully accomplished: they were well covered and stock was offered in a narrow price range. In the ten-year auction in May, the average accepted price was around ½ point higher (compared with stocks of a similar maturity) than market prices prevailing immediately before the details of the auction were announced; in the shorter-dated five-year auction in June, the increment was somewhat less, at ¼ point. The £580 million purchased at the May reverse auction is included in the figures for official purchases during the quarter, but settlement of the June reverse auction did not take place until 3 July, and the amount purchased then is not included in the quarter's figures.

Official reserves

The official reserves decreased by $3.3 billion over the three months to end-June (see Table J). The fall was $2.8 billion in underlying terms, ie excluding changes arising from net foreign

borrowing and debt repayment. After a modest rise in April, the reserves decreased in May and more steeply in June as the exchange rate came under pressure.

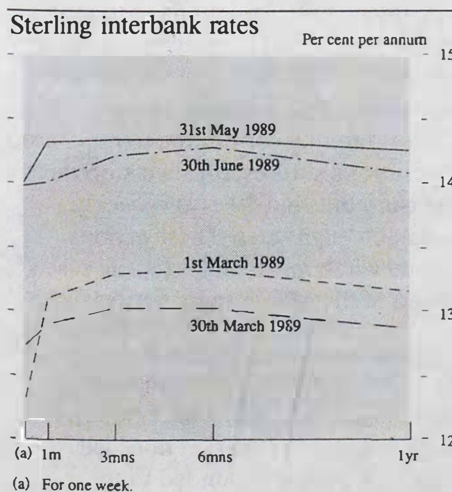
ECU Treasury bills

At the latest three tenders of ECU Treasury bills on 9 May, 13 June and 11 July the Bank allotted a total of ECU 2,400 million of bills. Since January the monthly tenders have each consisted of ECU 300 million of one-month bills, ECU 300 million of three-month bills and ECU 200 million of six-month bills. In addition, a total of ECU 175 million of bills were allotted directly to the Bank at the three tenders, to be available for lending to the market in order to facilitate settlement of secondary market transactions, and the Bank now holds bills for lending at all outstanding maturity dates. As at 14 July, ECU 2,400 million of bills were outstanding, excluding the additional bills allotted to the Bank.

Tenders during the latest three months have been covered on average 3.0 times, and the margin by which the average accepted yield has been below the bid rate for ECU-denominated bank deposits has widened from $\frac{3}{16}$% to $\frac{1}{4}$% in recent months. Monthly turnover in the secondary market during the period amounted to ECU 4,170 million, up 16% from the previous quarter. Turnover was particularly strong in April, at ECU 5,800 million.

Market developments

The period under review was marked by repeated bouts of downward market pressure on the sterling exchange rate and upward market pressure on sterling interest rates, which persisted for some time even after a 1% rise in official interest rates in the middle of the period. The pressure reflected not only concern about the adjustment of the domestic economy but also the side-effects of the strength of the dollar world-wide, which began to abate towards the end of the period under review.



Sterling interbank rates

(a) For one week.

The period began with both sterling and the domestic money markets having stabilised, following a period ahead of the release of the February trade figures on 29 March when the pound had tended to be weak in foreign exchange markets and money-market interest rates and gilt yields had firmed slightly. Money-market rates had in fact changed little for several months, with base rates having remained at 13% since 25 November 1988. At the end of March, interbank interest rates at all maturities from a month onwards were close to 13%, indicating that no imminent change in the level of rates was expected (see Table K). Gilt yields had also moved little in the previous few months, with the yield curve sharply downward sloping. Sterling, meanwhile, had declined somewhat over the period since mid-February, more steeply against the strengthening dollar than against continental European currencies.

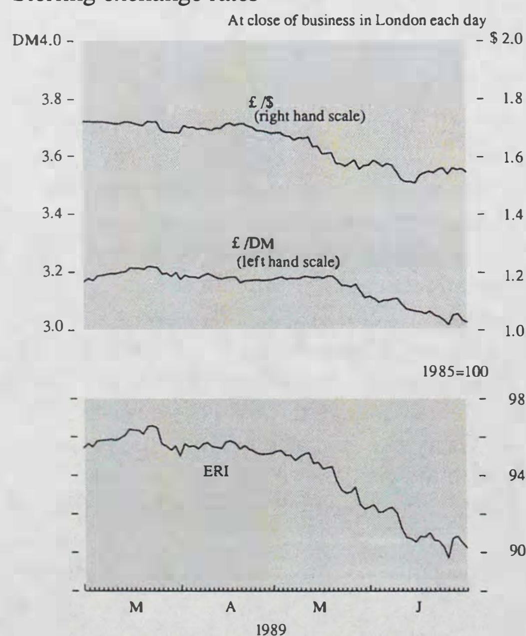
Sterling dipped briefly at the very start of April, as sentiment over the longer-term outlook for the currency deteriorated further. The authorities sought to resist this pressure, and the Chancellor expressed a willingness to see interest rates higher if exchange rate movements made that necessary. This prompted

Table K
Sterling interest rates, gilt yields and exchange rates

	Interbank interest rates (per cent per annum)				Gilt yields (per cent per annum)				Exchange rates		
					Conventionals			Index-linked			
Date	1 month	3 months	6 months	12 months	Short	Medium	Long	Long	ERI	£/$	£/DM
31 March (close)	$12\frac{7}{8}$	$13\frac{1}{32}$	$13\frac{1}{32}$	$12\frac{29}{32}$	$10\frac{3}{8}$	$10\frac{3}{32}$	$9\frac{7}{16}$	$3\frac{15}{32}$	95.5	1.6855	3.2008
10 April (close)	$12\frac{21}{32}$	$13\frac{1}{4}$	$13\frac{1}{4}$	$13\frac{1}{4}$	$10\frac{9}{16}$	$10\frac{7}{32}$	$9\frac{11}{32}$	$3\frac{15}{32}$	95.6	1.6995	3.1908
18 April (close)	$12\frac{11}{16}$	$12\frac{15}{16}$	$12\frac{15}{16}$	$12\frac{7}{8}$	$10\frac{9}{16}$	$10\frac{1}{8}$	$9\frac{9}{32}$	$3\frac{1}{2}$	95.8	1.7185	3.1852
20 April (close)	$12\frac{15}{16}$	$13\frac{9}{32}$	$13\frac{3}{8}$	$13\frac{3}{8}$	$10\frac{3}{4}$	$10\frac{5}{16}$	$9\frac{13}{32}$	$3\frac{1}{2}$	95.4	1.7150	3.1659
26 April (close)	$12\frac{13}{16}$	13	13	$12\frac{31}{32}$	$10\frac{9}{16}$	$10\frac{3}{16}$	$9\frac{9}{32}$	$3\frac{1}{2}$	95.1	1.6917	3.1748
8 May (close)	$12\frac{15}{32}$	$12\frac{25}{32}$	$12\frac{15}{16}$	$12\frac{3}{4}$	$10\frac{1}{2}$	$10\frac{5}{32}$	$9\frac{1}{4}$	$3\frac{7}{16}$	95.1	1.6730	3.1804
18 May (close)	$12\frac{9}{16}$	$12\frac{27}{32}$	$12\frac{27}{32}$	$12\frac{7}{8}$	$10\frac{9}{16}$	$10\frac{7}{32}$	$9\frac{9}{32}$	$3\frac{15}{32}$	94.4	1.6135	3.1883

an immediate recovery in the pound and also caused longer-term interbank rates to drift up over the next few days. Meanwhile, an upward revision to the February retail sales figure was received badly by the gilt market, which was also depressed by the announcements of several sterling bond issues. The publication on 10 April of a larger-than-expected rise in producer input prices and news of a forthcoming dock strike ballot heightened market concern about inflationary pressures, and the rise in interbank rates was accompanied by a further increase in gilt yields. There was widespread market concern that the March retail price index to be released on 14 April would show that the twelve-month increase had gone up to 8%, and the announcement that the figure was in fact 7.9%, quickly followed by news of unchanged retail sales for the same month, led to an easing of money-market rates and gilt yields, helped by reduced fears of a tightening of US monetary policy. Yields on shorter-term index-linked stocks, which had been rising from mid-March onwards as speculation of a tightening in policy had increased, fell back sharply as well.

Sterling exchange rates



On 20 April, the Bundesbank's announcement of a ½% rise in its discount and Lombard rates took UK markets, like those in other countries, by surprise. Sterling fell by two pfennigs against the deutschemark on the day of the German move and there was market concern that UK interest rates might have to move up also. News of a comparatively large M4 lending figure for March added to the concern. The authorities however did not judge a rise in UK rates appropriate and the Bank resisted this upward pressure on interest rates by continuing to purchase bills in its money-market operations at its established stop rates and by declining to allot Treasury bills bid for at the weekly tender on 21 April at unacceptably high rates. These actions calmed the money market somewhat; meanwhile sterling eased on market apprehension ahead of the March trade figures to be published on 26 April.

The domestic markets were greatly relieved by the sharply lower March current account deficit and, with a base rate rise no longer thought to be imminent, money-market rates fell back again to around 13% and gilt prices rebounded to the levels prevailing before the Bundesbank move. Sterling, however, took less comfort from the figure, since it removed the possibility of a widening of interest rate differentials in its favour.

As May began, the markets entered a quieter phase, with three-month interbank rates consistently under 13% and the

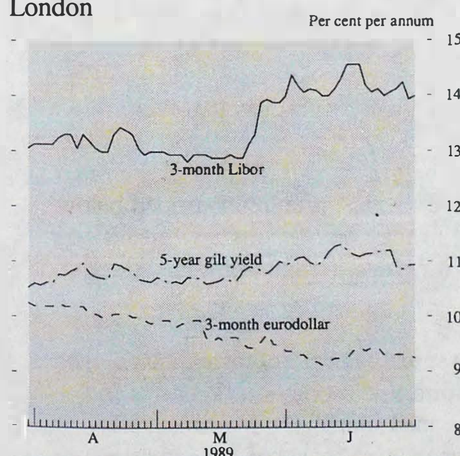
Table L
Sterling interest rates, gilt yields and exchange rates

Date	Interbank interest rates (per cent per annum)				Gilt yields (per cent per annum)				Exchange rates		
					Conventionals			Index-linked			
	1 month	3 months	6 months	12 months	Short	Medium	Long	Long	ERI	£/$	£/DM
23 May (close)	$12\frac{7}{8}$	$13\frac{1}{4}$	$13\frac{5}{16}$	$13\frac{5}{16}$	$10\frac{23}{32}$	$10\frac{5}{16}$	$9\frac{11}{32}$	$3\frac{17}{32}$	93.3	1.5785	3.1557
24 May (close)	$13\frac{27}{32}$	$13\frac{7}{8}$	$13\frac{3}{4}$	$13\frac{11}{16}$	$10\frac{25}{32}$	$10\frac{11}{32}$	$9\frac{3}{8}$	$3\frac{9}{16}$	93.1	1.5695	3.1558
31 May (close)	$14\frac{1}{4}$	$14\frac{11}{32}$	$14\frac{11}{32}$	$14\frac{3}{16}$	$10\frac{27}{32}$	$10\frac{1}{2}$	$9\frac{17}{32}$	$3\frac{19}{32}$	92.3	1.5722	3.1137
7 June (close)	$13\frac{3}{4}$	$13\frac{31}{32}$	$14\frac{1}{16}$	$13\frac{15}{16}$	$10\frac{7}{8}$	$10\frac{19}{32}$	$9\frac{11}{16}$	$3\frac{5}{8}$	92.3	1.5787	3.1045
14 June (close)	$14\frac{1}{8}$	$14\frac{17}{32}$	$14\frac{23}{32}$	$14\frac{1}{2}$	$11\frac{3}{32}$	$10\frac{13}{16}$	$9\frac{7}{8}$	$3\frac{21}{32}$	90.7	1.5170	3.0707
27 June (close)	$13\frac{3}{4}$	$13\frac{15}{16}$	$13\frac{15}{16}$	$13\frac{7}{8}$	$10\frac{25}{32}$	$10\frac{7}{16}$	$9\frac{17}{32}$	$3\frac{19}{32}$	90.7	1.5635	3.0535
30 June (close)	$13\frac{31}{32}$	$14\frac{5}{32}$	$14\frac{3}{32}$	$14\frac{1}{8}$	$10\frac{7}{8}$	$10\frac{1}{2}$	$9\frac{9}{16}$	$3\frac{19}{32}$	90.2	1.5502	3.0294

pound's exchange rate index steady even though the rise in the dollar was gathering pace. As the dollar continued to appreciate, the sterling/dollar rate fell to its lowest level since 1987 and sterling's exchange rate index slipped below 95, but the firmness of the pound against other currencies discouraged expectations of a rise in UK interest rates. Accordingly period interbank rates remained within the $12\frac{3}{4}$%–13% range throughout the first half of May, helped by slightly easier US interest rates. Similarly, firmer US bond prices helped gilt prices remain stable, offsetting worries over industrial unrest.

After the announcement on 19 May that the twelve-month increase in the RPI had reached 8% in April, sentiment began to change rapidly. The dollar rose further, to above DM 2, and sterling weakened not only against the dollar but also against other currencies (see Table L). This sharp general weakening of sterling created a very strong market expectation that UK interest rates would rise and the authorities concluded that, in order to prevent their monetary policy from being undermined by a lower exchange rate, a rise in interest rates was warranted.

Short-term interest rates and yields in London



Accordingly, at 9.45 am on 24 May, the Bank signalled a 1% rise in interest rates by announcing 2.30 pm lending to the discount market at 14%; this move was followed by increases in banks' base rates. Period interbank rates immediately rose to the $13\frac{3}{4}$–$\frac{7}{8}$% level, about 1% higher than they had been a week before; the pronounced downward slope to these rates indicated market confidence that official interest rates might now be at their peak. Short gilt yields rose by about $\frac{1}{4}$% and long yields by about $\frac{1}{8}$% over this period, the general increase in yields reflecting the increase in inflation fears, and the stronger downward slope to the yield curve reflecting the higher money-market rates. The rise in short-term interest rates also led to a sharp increase in index-linked gilt yields.

The tightening of policy stabilised sterling for a short while, amid market relief that the April trade figures announced on 25 May were no worse than expected. However, with the dollar remaining very strong, downward pressure on the pound quickly resumed, fuelled by market concern about the pace of adjustment of the domestic economy. There was also market concern towards the end of the month that the Bundesbank might raise German interest rates again in an attempt to restrain

the fall in the deutschemark against the dollar, and sterling fell sharply against the deutschemark. Market speculation about the possibility of a further rise in UK official rates, to 15%, pushed interbank rates above 14¼%, and this, together with concern about the potential inflationary consequences of exchange rate depreciation, also forced gilt yields up. The Bundesbank's decision at its 1 June meeting to leave interest rates unchanged led to some easing back in short-term UK interest rates, but gilt yields continued to rise, particularly at the longer end of the yield curve.

Subsequently, a ½% reduction in US banks' prime rates to 11% and other signs that US monetary policy was being eased, which marked an end to the progressive monetary tightening in the United States which had begun in spring 1988, helped bring three-month UK interbank rates below 14%. Nevertheless, sentiment concerning sterling and the domestic markets remained vulnerable. After steadying for a while, the pound resumed its fall against the dollar, particularly in the wake of stronger-than-expected May US producer prices. It declined against other currencies also following the news on 12 June of a 2.5% rise in UK retail sales during May. The steepness of the pound's decline provoked further strong upward pressure on interest rates, with six-month interbank rates rising above 14½% on 13 June, and gilt yields also moving sharply higher.

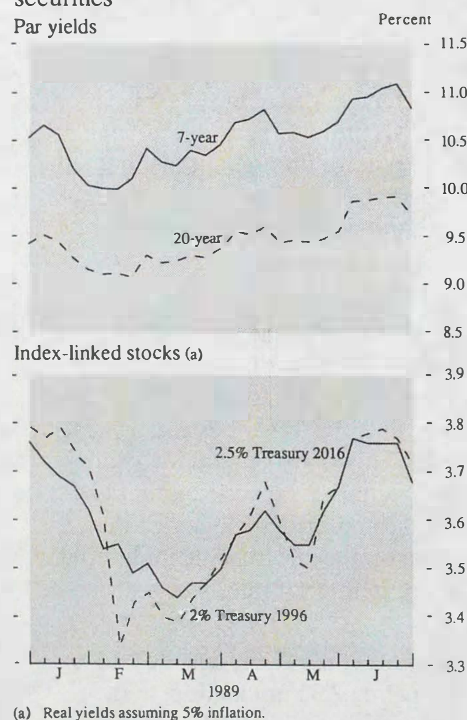
The pressure on interest rates proved to be only temporary: the May RPI, despite showing a rise in the twelve-month increase to 8.3% when released on 16 June, proved lower than expected, and the Bank's underallotment of Treasury bills at the tenders on that day also indicated official unwillingness to see short-term rates rise significantly above 14%. Interbank rates and gilt yields accordingly declined to the levels ruling earlier in the month, although sterling remained at its new lower level overall, benefiting from the dollar's retreat from its brief rise over DM 2, but continuing to decline against continental European currencies.

Sterling's weakness continued, amid rumours that there might be an announcement about UK entry to the ERM at the Madrid conference, and on the day before the publication of the May trade figures on 27 June its exchange rate index dipped below 90. Although the domestic money market was nervous, it was also mindful of the authorities' desire to hold interest rates at 14%.

In the event, the trade figures proved better than expected, sterling assumed a firmer tone, and money-market rates and conventional gilt yields dropped sharply. Index-linked gilt yields also fell back somewhat as prospects of a rise in interest rates receded. Against the background of this much improved market mood, the unexpected news on 29 June of a further ½% increase in the Bundesbank's official rates, soon followed in other continental European countries, was received relatively calmly. Sterling fell by 2 pfennigs but did not fall back to the levels seen before the trade figures, and interbank rates and gilt yields rose only modestly.

Period interbank rates finished the period under review about 1⅛%–1¼% higher than they had been at the end of March. The

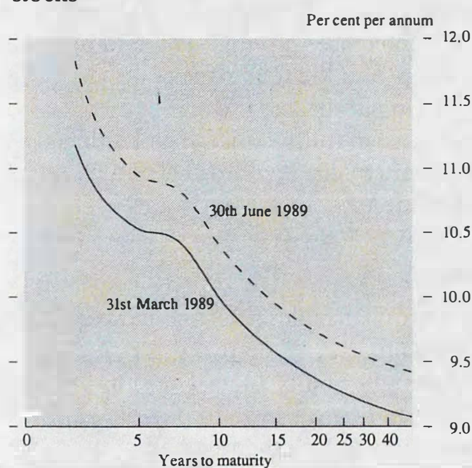
Gross redemption yields on UK government securities



(a) Real yields assuming 5% inflation.

pattern of short sterling futures prices showed, as it had done at the end of March, that the market believed short-term rates were close to their peak. At the close on 30 June, futures for September delivery were priced at 85.86, implying that three-month interbank rates would be still a little above 14% at that time, but December and March 1990 futures were priced at 86.56 and 87.26 respectively, implying an expected fall of nearly 1½% in interest rates in the six months to March.

Time/yield curves of British government stocks



Very-short-term interbank rates were soft throughout the period under review, reflecting both the unusually easy day-to-day money conditions and a market reluctance to hold longer-dated assets amid bouts of nervousness about rising interest rates. Conventional gilt yields ended the quarter ½% higher at five years' maturity and ⅜% higher at twenty years' maturity, market inflationary expectations having tended to worsen over the period. The tightening of monetary policy in May has caused the yield curve to steepen its downward slope at the shorter end. Index-linked yields rose by about ⅛% over the quarter, but remained below the peaks reached at the turn of the year.

After remaining firm in the first half of April, sterling tended to decline throughout the rest of the period under review; its exchange rate index finished at 90.2, down 5.5% over the quarter. It declined particularly steeply against the dollar for the second consecutive quarter, finishing 8.0% lower at $1.5502. This represented a partial recovery from the low point of $1.4937 reached on 15 June. Sterling did not begin to depreciate significantly against the deutschemark until the second half of May, but it nevertheless ended the period down 5.4% at DM 3.0294.

Market turnover

Transactions in eligible bills by discount houses,(1) including sales to the Bank, averaged £1.0 billion daily over the quarter. The fall from £1.3 billion in the previous quarter may partly reflect the effect of easier day-to-day money conditions and the decline in the amount of commercial bills outstanding. Within the total, average daily transactions in Treasury bills rose from £50 million to £220 million. Discount house transactions in certificates of deposit averaged £0.7 billion daily over the period, 24% above the level in the previous quarter. Average daily turnover in the short sterling futures contract on the London International Financial Futures Exchange continued to rise steeply, to 30,900 contracts in the second quarter from 22,400 contracts in the previous three months. Daily turnover averaged 35,600 contracts in June.

Total turnover in gilts fell to an average of £3.7 billion per day in the second quarter from £4.4 billion per day in the first quarter, with intra-market transactions, as usual, accounting for somewhat under half of total turnover. June was the most active month in the latest quarter, with average daily turnover of £4.0 billion as price volatility increased. Average daily turnover in the long gilt futures contract during the period fell to 16,300 contracts from 17,000 in the previous quarter,

(1) Figures for discount houses cover only those money-market dealing counterparties of the Bank of England which are within the monetary sector.

although June saw a pick-up to 18,400 contracts in parallel with the rise in cash market activity. Nevertheless, turnover remains well below the 30,000 average in the same quarter two years ago. No warrants exercisable into gilt-edged stock were issued during the quarter, and £100 million each of call and put warrants expired. This left £150 million of call warrants and no put warrants outstanding at the end of the quarter.

Sterling commercial paper

Gross issues of sterling commercial paper during the second quarter totalled £11,137 million, compared with a revised figure of £11,220 million in the previous three months. There were redemptions of £11,415 million, and the total paper outstanding fell to £3,940 million at the end of June, £278 million below its level three months earlier. The Bank had been notified of 170 programmes by the end of June, and paper had been issued under 145 of these.

Other capital markets

UK equity prices made modest further gains during the second quarter of 1989, with the FT-Actuaries all-share index rising by 2.4% over the period to 1,102 at the end of June. The substantial improvement in the US stock market was a major factor behind the rise in UK share prices during the first half of the period under review, and the all-share index reached a post-crash closing high of 1,131 on 19 May. It then fell back sharply as sterling weakened and interest rates rose, but regained some of the lost ground in June as takeover activity increased.

Table M
Sterling capital issues: amounts announced
£ millions

	Equities	Fixed rate(a)			FRNs
		Domestic issues(b)	Sterling eurobonds		
			UK borrowers	Overseas borrowers	
1988	5,473	3,324	4,391	3,160	5,809
Q1	808	350	1,890	1,340	1,090
Q2	1,578	1,046	1,173	1,670	2,155
Q3	1,895	541	183	—	1,645
Q4	1,192	1,387	1,045	150	919
1989					
Q1	618	1,647	1,813	1,144	600
Apr.	323	611	189	476	200
May	1,040	651	225	260	625
June	1,203	125	100	425	800
Q2	2,567	1,387	514	1,161	1,625

(a) Of which £512 million was equity-related in the second quarter of 1989.
(b) All UK borrowers except for two 'bulldog issues' in 1988 Q4 for £200 million. Excludes local authority issues.

The volume of equity issues was buoyant in the second quarter, totalling over £2.5 billion (see Table M). The total was boosted by Abbey National's £975 million flotation and a £500 million issue by RTZ. The sterling debt market was also very active with issues totalling £4.7 billion, almost as much as in the first quarter of the year. In the fixed-rate debt market, however, UK borrowers were less active, raising rather less than £2 billion, compared with £3½ billion in the first quarter. Overseas borrowers raised £1.2 billion, about the same as in the previous quarter. The FRN sector experienced a considerable revival, with over £1.6 billion of issues, owing mainly to the reappearance of building societies and other specialist mortgage lenders tapping the market with a series of mortgage-backed issues.

A notable feature of sterling capital market issues in the first quarter was the diversity of borrowers and maturities. There were six long-dated debentures raising a total of about £260 million, in the continuing absence of gilt-edged issues, and several sub-five-year issues to take advantage of the removal of the five-year minimum maturity announced in the Budget. A growing trend has been observed towards further tranches of existing issues, for example those issued by the EIB and Barclays Bank, partly to improve liquidity. Banks and building societies were significant borrowers in the sub-five-year and FRN markets.

UK companies together with their overseas subsidiaries raised the equivalent of $1.3 billion through capital market issues in currencies other than sterling, down from $3.6 billion in the

first quarter, but a similar amount to that raised in the fourth quarter of 1988. The US dollar accounted for 47% of total borrowing, the Swiss franc for 17% and the deutschemark for 10%. The yen accounted for just 3%, compared with 14% in the previous quarter. Non-financial companies raised $0.6 billion, although this was sharply down from the total for the first quarter, while banks raised $0.5 billion. The largest issue was a $400 million eurodollar perpetual FRN by Royal Bank of Scotland issued in repackaged form. Although this issue was permitted to count as Upper Case Tier Two capital under the Basle convergence agreement, the Bank announced that no further issues of that type would be allowed such supervisory treatment.

Statistical consequences of the conversion of the Abbey National Building Society to a public limited company

The Abbey National Building Society became a public limited company on 12 July 1989, and was authorised under the Banking Act 1987 from that date. As such it is classified as a bank, rather than as a building society, within the national accounts. This change of classification has far-reaching consequences for the compilation and presentation of financial statistics, and has led the Bank to review the principal monetary statistics. As a result, a number of changes will be made, and others are under consideration, as is explained below. In particular, publication of the broad monetary aggregate M3 will cease.

Balance sheet tables

Abbey National's data will be included within balance sheet totals for the building societies up to and including end-June 1989 (see the amounts outstanding in Table 6.2 of the statistical annex). From end-July 1989 onwards, Abbey National's data will be included within balance sheet totals for the banks (Table 3.1 of the statistical annex) and within the 'Retail banks' group (Table 3.2).

Changes, and breaks in series

This change of classification would involve large breaks in most series compiled for the banking and building society sectors of the economy. For example, Abbey National's total assets at the end of 1988 were £32 billion, compared with £190 billion for all societies (including Abbey National) and about £340 billion for banks' total sterling assets, excluding interbank business. For many series, these breaks would be the largest ever recorded (see 'Breaks in monetary series', Bank of England ***Technical Series*** paper No 23, February 1989). Changes in series are usually calculated as the differences in amounts outstanding, but at the time of a break the convention is to exclude from the change the increase or decrease in the amount outstanding arising from the inclusion or exclusion of figures for an institution transferring into or out of the sector (see the 'Breaks in monetary series' paper for details). This procedure will be applied on this occasion, where it is appropriate to do so. But, as the 'Breaks in monetary series' paper explains, such adjustments cannot correct for the changes in the behavioural characteristics of a series which usually follow a large break.

There will, of course, be no such break in those series where figures for banks and building societies are combined, since there will be no change in the composition of this combined sector.

Monetary aggregates

M2, M4 and M5 are examples of series which are unaffected by the Abbey National conversion, since both banks' and building societies' contributions are included in each category of deposits within these aggregates. There will of course be equal and offsetting breaks in the separate contributions of banks and building societies to each category.

There will be a small break in M0, arising from the fact that the Abbey National already maintained working balances at the Bank of England in connection with its participation in the Association for Payment Clearing Services (APACS) clearings. After conversion, these balances were classified under 'bankers' deposits' in the Bank of England's balance sheet, and as such were included in 'bankers' operational deposits' within M0. This change was first reflected in the Bank Return for 12 July. However, the break in M0 will be very small. The increase in 'bankers' operational deposits' arising from the Abbey National conversion will be excluded from the series for the changes in (and hence the growth rates of) M0, following the standard statistical technique for dealing with breaks described above. It should be noted that Abbey National's first cash ratio deposit with the Bank (which is *not* a component of M0) was also included in 'bankers' deposits' on the Bank Return for 12 July.

Aggregates which include bank deposits but exclude building society deposits would be subject to major breaks; these include M1, M3 and M3c. In the case of M3, the break would be the largest ever recorded (around 11%). This would make interpretation of the series very difficult, and if more building societies were to become banks in the future, the problem would be compounded. There is no statistical technique which can be applied to solve this problem. In the circumstances, it has been decided that publication of M1, M3 and M3c will cease. The publication of the counterparts to M3 (including the 'bank lending' counterpart) will also cease, for the same reasons. The back runs of figures up to and including June 1989 will continue to be available. These changes will take effect with the publication of the press release for the provisional figures for the monetary aggregates for July, published on 18 August, and will be carried through in other Bank and CSO publications thereafter.

Although M1 will no longer be published, its non-interest-bearing component ('nib M1') will be. There is unlikely to be a significant break in nib M1. Although nib M1 includes only bank deposits, the exclusion of building society deposits is immaterial, since building societies do not take significant amounts of non-interest-bearing deposits.

Although M3c will no longer be published, there will still be a role for an aggregate that includes deposits of UK residents in currencies other than sterling. A new aggregate will be constructed, to be called M4c, that will be similar in concept to M3c. In addition to the instruments included in M4, it will include deposits in currencies other than sterling placed with UK banks and building societies by the rest of the UK private sector.

Other statistical analyses and presentations

From July onwards, Abbey National will contribute, where appropriate, to all of the statistical analyses compiled for banks. In particular, Abbey National's data will be included in the 'Analysis of bank lending to UK residents' (Table 5 of the statistical annex), and Abbey National's external liabilities and claims will be included in Tables 14–16 of the statistical annex and within the UK contribution to the BIS statistics reproduced in Table 13. The small breaks in Tables 13–16 will not be identified.

Use of the terms 'monetary sector' and 'private sector'

Since 1981 the terms 'UK monetary sector' and 'monetary sector' have been used to describe the group of institutions whose liabilities were the main component of M1, M3 and M3c (see the section on 'Statistical changes' in the Bank's paper 'Monetary control—provisions' issued in August 1981 and reproduced in the September 1981 *Bulletin*, pages 347–50). These terms have become inappropriate now that the liabilities of these institutions are no longer so predominant in the definition of the monetary aggregates. Thus, in future issues of the *Bulletin* and the monthly *Monetary statistics* release, Table 6.1 will be retitled 'Banks in the United Kingdom: consolidated balance sheet' and the term 'monetary sector' will be replaced generally by 'banks' elsewhere in Bank and CSO publications.

The terms 'private sector' and 'non-bank private sector' have been used to describe the sector comprising UK residents other than the public sector and banks. More recently, it has been necessary to describe the sector comprising UK residents other than the public sector, banks and building societies, and the term 'M4 private sector' has been used in some presentations; this description will be used more widely in future.

Other developments

In addition to the conversion of the Abbey National, other developments such as new products introduced in recent years by banks, building societies and other financial institutions, and the changes in regulations for sterling commercial paper and other sterling capital market issues announced at the time of the Budget, call for a re-examination of the definitions of the broader monetary aggregates. M5, for example, currently excludes certain short-term public sector debt and holdings of sterling commercial paper (except paper issued by banks and building societies), and M2 excludes 3-month-notice and certain other short-term deposits with building societies. There may also be scope in future for rationalising the definitions of nib M1 and M2 to bring them more into line with the definition of M4 (nib M1 currently includes the building societies' holdings of cash and non-interest-bearing bank deposits, and M2 includes also certain national savings deposits, none of which is included in M4).

Given the alterations to the statistics caused by the Abbey National conversion, now seems to be an appropriate time to take stock of these issues. The Bank is therefore embarking upon a study of the arguments in principle for making definitional changes. When the study is complete, a paper will be published in the Bank's ***Discussion paper*** series, and comments will be invited from interested parties. It is hoped that the paper can be published in the autumn.

Summary of effects on and changes to the monetary aggregates

M0	there will be a very small break in the 'bankers' operational deposits' component.
Nib M1	a significant break is unlikely; it will continue to be published.
M1	will no longer be published.
M2	is unaffected.
M3	will no longer be published.
M3c	will no longer be published, but a new aggregate, M4c, will be constructed.
M4	is unaffected.
M5	is unaffected.