

# Operation of monetary policy

*This article covers the period from July to early October.*

## Review

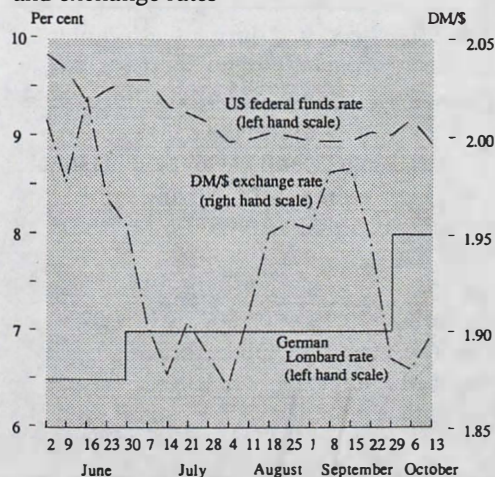
Financial confidence, which had been weak in June, strengthened in July under the influence of international developments and evidence that the adjustment of the domestic economy was proceeding satisfactorily. However it again weakened sharply in September amid growing market expectations of a rise in German interest rates and market concern about the emerging domestic indicators. When interest rates in continental Europe were increased early in October, there was no option for the United Kingdom but to follow, and the general level of interest rates was increased by a further 1% to 15%.

During June, the dollar had been strong against all currencies, including the pound, and there had been a widespread expectation that interest rates in continental Europe would rise, which in the event they did, on 29 June, by  $\frac{1}{2}$ %. Moreover, there had been some doubts in financial markets about the pace of adjustment of the UK economy to the progressive tightening of monetary policy over the preceding year. These developments had provoked recurrent bouts of market pressure for a lower exchange rate and higher interest rates, which the authorities had resisted.

During July and early August, the dollar fell back, encouraged by an apparent further easing of US monetary policy. The emerging UK indicators—notably on retail sales and external trade—strengthened market confidence that domestic demand was being adequately restrained. Indeed there was widespread discussion of the dangers of recession at that time, and concerns that interest rates might rise further in the near future soon gave way to hopes in some quarters that they might fall in the autumn. The Bank attempted in its market operations to moderate this swing in market sentiment, which in the event proved short-lived.

The July UK trade figures, released towards the end of August, showed a larger deficit than most commentators had expected, but had little effect in themselves on markets. However, in the light of the renewed general strength of the dollar, the G7 meeting on 23 and 24 September was followed by concerted official sales of dollars, which resulted in a sharp fall in the dollar's exchange rate, in particular against the deutschemark which appreciated against the generality of other currencies, including sterling. Moreover, market expectations grew that there would be a rise in interest rates in continental Europe. In the United Kingdom, the August trade figures, which showed a deficit only a little smaller than July's, and the news that consumer spending—a broader measure than retail sales—had increased by 1½% in the second quarter, revived market doubts about the adequacy of the slowdown in domestic demand.

Germany and the United States: interest rates and exchange rates



**Table A**  
Growth rates of the monetary and credit aggregates<sup>(a)</sup>

Percentages; seasonally adjusted (financial year constrained)

	12 months to	12 months to	1989	
	end-June 89	end-Sept. 89	Q2	Q3
M0(b)	5.9	4.5	2.0	2.1
NIBM1	-3.2	-6.7	-5.8	-2.4
M2	12.2	10.8	1.7	2.9
M4	19.1	17.8	4.3	4.5
M5	18.6	17.3	4.3	4.4
M4 lending	22.5	22.1	4.6	5.6

(a) See the statistical annex to the February 1989 *Bulletin* for definitions.

(b) Data are based on end-month figures, except M0, which is an average of Wednesdays in each month.

**Table B**  
Composition of changes in the money stock<sup>(a)</sup>  
£ billions; seasonally adjusted (financial year constrained)

	1989		Level outstanding at end-Sept. 89
	Q2	Q3	
M4 private sector holdings of:			
1 Notes and coin	0.3	0.3	17.5
2 Sight deposits:			
(a) interest bearing	6.6	5.8	91.3
(b) non-interest-bearing	-2.6	-1.3	46.0
3 Time deposits with banks and bank £CDs	6.5	7.6	110.4
4 Building society shares and deposits	4.7	5.2	140.0
5 Building society time deposits and £CDs	0.5	0.3	3.0
6 M4	16.0	17.9	408.2
7 M4 private sector holdings of money-market instruments and national savings in M5			
8 M5	1.2	0.3	16.7
	17.2	18.2	425.0

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

Against this background there was in late September and early October a further period of pressure on the exchange rate, and on short-term interest rates, which was somewhat more intense than in June. When on 5 October the Bundesbank raised its discount and Lombard rates by 1%—an increase at the upper end of market expectations—the authorities were obliged to follow suit. Not to have done so would have resulted in a sharp fall in the exchange rate (which even so declined from 90.8 on the ERI just before the Bundesbank's move to around 89 a week later). This in turn would have put at risk the continued adjustment of the economy and would have given misleading signals about the strength of official counter-inflationary resolve. Accordingly the Bank announced a further rise in the general level of interest rates, to 15%, on 5 October.

## Monetary aggregates and credit

*The figures in this section are seasonally adjusted.*

### Summary

M0 grew fairly strongly in the third quarter, rising by 2.1%. Its twelve-month growth rate fell back from 5.9% in June to 4.5% in September, but the latter figure was erratically low owing to M0 having been temporarily inflated during the postal strike in September 1988. Making an adjustment to allow for this, the underlying twelve-month growth rate of M0 in September was probably a little over 5%.

The 4.5% increase in M4 in the third quarter of this year was the second highest percentage rise on record; nevertheless, the twelve-month growth rate fell from 19.1% to just under 18%. The bulk of the increase in deposits came from the personal sector, with financial institutions other than banks and building societies (OFIs) also increasing their holdings. Industrial and commercial companies' (ICCs) bank deposits declined. The switch away from non-interest-bearing deposits continued.

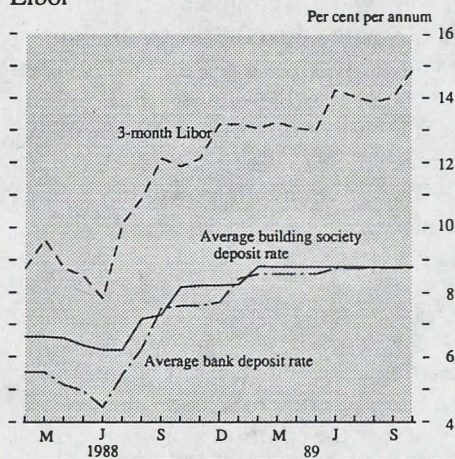
The increase in bank and building society lending was a little less in percentage terms than the rises recorded during the summer of 1988. Persons again accounted for the bulk of the increase, but the highest percentage rise was posted by ICCs, whose borrowing rose by just under 10%. ICCs' net recourse to the banks and building societies thus increased significantly, while the personal sector's deposits increased by more than its borrowing for the first quarter since the beginning of 1986.

### Components of money

The growth of M0 in the third quarter was erratic, with a particularly sharp increase in August. The fall in the twelve-month growth rate of M0 may largely reflect the slowdown in retail sales growth.

The decline in non-interest-bearing deposits continued in the third quarter, when they fell by 2.3%, bringing the cumulative fall since the end of 1988 to over 10%. This is likely to reflect the general effect of high nominal interest rates, as well as the introduction by the clearing banks of interest-bearing current accounts.

Most of the increase in broad money was in the form of retail deposits (£9.3 billion or 3.7%), but wholesale deposits increased more sharply in percentage terms (£8.4 billion or 6.7%). As usual,

Retail deposit rates and three-month  
Libor

**Table C**  
**Counterparts to changes in M4 and M5<sup>(a)</sup>**  
£ billions; seasonally adjusted figures (financial year constrained)

	Counterparts to M4		12 months to end-Sept. 89	Counterparts to M5 12 months to end-Sept. 89
	1989 Q2	1989 Q3		
1 PSDR (-)	-1.4	-1.6	-11.3	-11.3
2 Net purchases (-) of central government debt by the M4 private sector(b)	3.1	3.9	14.4	15.3
3 Net purchases (-) of other public sector debt by the M4 private sector(b)	0.2	0.1	0.7	0.8
4 External and foreign currency finance(-) of the public sector	-0.9	-1.1	-1.2	-1.2
5 Public sector contribution (=1+2+3+4)	1.0	1.2	2.5	3.5
6 Sterling lending to the M4 private sector(b)(c)	20.7	25.9	87.4	87.3
7 Other counterparts(d)	-5.7	-9.2	-28.2	-28.2
8 Total (=5+6+7) = change in the aggregate	16.0	17.9	61.7	62.6

(a) See the statistical annex to the February 1989 *Bulletin* for definitions.

(b) Transactions in public sector debt instruments included in M5 are necessarily excluded from the M4 counterparts.

(c) Including 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 counterparts include M4 private sector holdings of commercial bills.

(d) External and foreign currency transactions and increases (-) in net non-deposit liabilities.

banks secured the major part of the increase in wholesale deposits (£8.1 billion). The apparent increase in their share of retail inflows (44%, compared with 31% in the first half of this year) is partly attributable to the conversion of Abbey National.<sup>(1)</sup> However, banks have also become increasingly competitive in the retail deposit market, partly owing to the introduction of a range of new accounts, but also because the rise in banks' deposit rates following the increase in base rates in the second quarter was not matched by building societies.

**Counterparts to money**

For the third successive quarter the public sector was underfunded, this time by around £1.2 billion. This was despite a further negative contribution (of over £1.1 billion) from the public sector external counterpart which in part reflects the fall in the reserves.

The pace of bank and building society lending quickened during the quarter: the increase of £25.9 billion (5.7%) was over £5 billion higher than in the previous three months, though the twelve-month percentage growth rate fell back slightly. With the conversion of Abbey National, banks' share of new lending rose to over 75%, compared with 65% in the second quarter, and their share of the outstanding stock rose to 69%. Nevertheless, building societies' share of the mortgage market fell only slightly.

External transactions by banks and building societies were contractionary by £6.8 billion. This partly reflected the financing of the current account deficit, but in addition there seems to have been an increase in net underlying capital inflows, mainly associated with direct and portfolio investments. In the first half of this financial year, external influences on broad money have been considerably more contractionary than on average over the previous financial year.

**Sectoral finances**

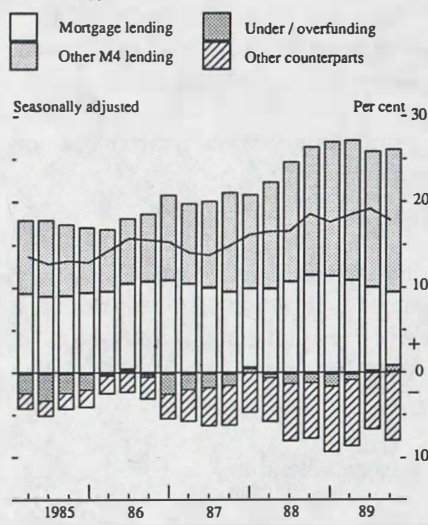
The personal sector's net claims on banks and building societies rose by £0.6 billion in the third quarter—the first rise since the beginning of 1986. Indeed, in the first half of this financial year persons' net indebtedness increased by only some £0.7 billion, compared with over £10 billion in the previous financial year. The change reflects both a slight slowdown in the rate of growth of borrowing, and a sharp rise in deposits.

The increase of 4.0% in personal sector sterling borrowing in the third quarter was slightly larger than in the second quarter, although still lower than last year. The twelve-month growth rate has declined for four successive quarters, to 17.5% at the end of the third quarter, compared with 22.1% at its peak.

Within the personal sector the sharpest rise has been recorded by unincorporated businesses, whose borrowing increased by £2.9 billion (8.0%)—although here, too, the twelve-month growth rate eased a little. Unincorporated businesses' deposits also rose quite rapidly, and the increase in their net indebtedness was only around £1¼ billion. This was a larger increase than in the second quarter, but comparable with the figures seen in the previous financial year.

(1) See the August *Bulletin*, pages 352-3.

## Counterparts to annual growth of M4



The increase in households' deposits exceeded the increase in their borrowing by a rather wide margin (around £2½ billion). Some of the deposits may have represented the proceeds of the redemptions of national savings which totalled over £850 million in the quarter. Although the rate of growth of households' borrowing picked up a little, the twelve-month growth rate of mortgage borrowing has now fallen to 15.4% (from a peak of 21% at this time last year), while the twelve-month growth rate of other household borrowing also eased back (to 16.6% from last year's peak of 22.8%).

The quarterly figures for the personal sector clearly suggest that the increase in interest rates may have had an effect on savings behaviour. As the housing market appears to have weakened significantly, it is doubtful whether the continued provision of mortgage funds is being applied to house purchase to the same extent as earlier. There are indications that such funds are being used increasingly for home improvements and extensions, and perhaps that net equity withdrawal from the housing market has increased. Bridging finance may also have become more important.

During the course of the third quarter, there was an acceleration in both building society mortgage commitments and building society mortgage lending. Indeed, societies accounted for almost 80% of the increase in M4 mortgage lending, down only 4% from the second quarter, notwithstanding the conversion of Abbey National. These developments may be associated with the building societies' decision not to raise interest rates following the May base rate increase, and with the proliferation of mortgages which offer lower interest charges in their early years.

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

£ billions; seasonally adjusted (calendar year constrained)

	1988		1989		
	H1	H2	Q1	Q2	Q3
<b>Personal sector</b>					
1 Deposits	21.0	19.9	9.6	9.5	12.2
of which:					
Banks	10.8	9.8	3.8	4.9	7.2
Building societies	10.2	10.1	5.8	4.6	5.0
2 Borrowing	22.6	24.9	11.4	10.8	11.6
of which:					
Mortgage	16.9	17.6	7.5	7.2	7.4
Non-mortgage	3.1	2.7	1.5	1.7	1.3
Unincorporated businesses	2.6	4.6	2.4	1.9	2.9
3 Net recourse (=2-1)	1.6	5.0	1.8	1.3	-0.6
<b>ICCs</b>					
4 Deposits	2.3	4.2	3.9	4.4	-0.3
of which:					
Sterling	2.8	3.4	4.9	2.8	-0.3
Foreign currency	-0.4	0.7	-1.0	1.6	—
5 Borrowing	17.7	15.3	8.9	9.1	14.3
of which:					
Sterling	13.4	11.1	6.4	7.2	10.9
Foreign currency	4.2	4.2	2.5	1.9	3.4
6 Net recourse (=5-4)	15.4	11.1	5.0	4.7	14.6
of which:					
Sterling	10.6	7.7	1.5	4.4	11.2
Foreign currency	4.6	3.5	3.5	0.3	3.4

ICCs' net recourse to banks and building societies rose by £14.6 billion in the third quarter—the largest quarterly increase on record. This represented the combination of a sharp increase in borrowing (£14.3 billion, or 9.7%) and a fall in their deposits (£0.3 billion, or 0.5%). Of the increase in net indebtedness, around three quarters (£10.9 billion) was denominated in sterling, and the rest in foreign currency. The increase in net foreign currency borrowing was much the same as in the first quarter, but the increase in net sterling borrowing was well above previous levels.

The rise in ICCs' borrowing is thought to have included a significant amount of takeover-related finance—perhaps of the order of £2½ billion. Indeed, there appears to have been a rather higher rate of takeover activity in the third quarter than in the first half of the year. Overseas takeovers may also be reflected in the foreign currency borrowing from UK banks.

Companies' issues in the equity and bond markets eased a little in the third quarter. In the earlier part of the year it was suggested that the proceeds of such issues might be held temporarily on deposit, awaiting future acquisitions; but the decline in issuing activity was sufficiently limited that it is unlikely to explain the weakness of deposits in the third quarter.

(1) Defined as the personal sector other than unincorporated businesses.

Much of the explanation of companies' borrowing may lie with their expenditures on goods and services. The latest statistics on demand and output in the economy as a whole suggest that companies' expenditures on investment and stockbuilding rose somewhat in the third quarter—even though this involved, in all probability, yet another rise in their financial deficit.

Financial institutions other than banks and building societies borrowed over £4 billion (4.2%) in the third quarter. Their deposits rose at the same time by around £6.4 billion (8%) so that their net recourse to banks and building societies fell. The increase in their deposits no doubt reflects, at least in part, receipts of the proceeds of gilt redemptions and company takeovers.

**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-Sept. 89
	Q3	Q2	Q3	Q3	Q2	Q3	
<b>Factors affecting the market's cash position</b>							
CGBR (+)	-0.4	+2.0	+0.3				-4.3
<i>of which, on-lending to local authorities and public corporations</i>	+1.3	+1.1	+1.8				+6.0
Net sales (-) of central government debt(a)	+1.3	+5.6	+4.9				+21.3
<i>of which: Gilt-edged</i>	+1.6	+5.6	+4.3				+20.2
<i>National savings</i>	-0.4	+0.1	+0.7				+1.0
<i>CTDs</i>	+0.1	-0.1	-0.1				+0.1
Currency circulation (increase -)	-0.7	-0.2	-0.3				-0.9
Reserves etc	+1.0	-2.1	-0.7				-2.9
Other	+0.5	-1.5	+0.6				-1.4
<b>Total (A)</b>	<b>+1.7</b>	<b>+3.8</b>	<b>+4.8</b>				<b>+11.8</b>
<b>Official offsetting operations</b>							
Net increase (+) in Bank's commercial bills(b)	-1.9	-1.4	-1.1				-5.3
Net increase (-) in Treasury bills in market	—	-2.7	-3.4				-6.2
Other	+0.2	+0.2	-0.4				-0.6
<b>Total (B)</b>	<b>-1.7</b>	<b>-3.9</b>	<b>-4.9</b>				<b>-12.0</b>
Changes in bankers' operational balances at the Bank (=A+B)	—	-0.1	-0.1				-0.2

(a) Other than Treasury bills.

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

**Table F**  
**Financing of the public sector**

£ billions: seasonally adjusted (financial year constrained)

	1989			12 months to end-Sept. 89
	Q1	Q2	Q3	
1 Central government borrowing on own account	-4.1	-0.8	-2.4	-10.3
2 Other public sector borrowing (a)	-0.2	-0.6	+0.8	-1.0
3 PSDR (-)=(1+2)	-4.3	-1.4	-1.6	-11.3
4 Net sales (-) of central government debt to the M4 private sector	+4.9	+3.1	+3.9	+14.4
<i>of which: Gilt-edged stocks</i>	+4.7	+3.8	+3.1	+14.0
<i>National savings</i>	+0.1	+0.1	+0.9	+1.1
<i>CTDs</i>	-0.1	-0.1	—	+0.2
5 Sales (-) of local authorities' and public corporations' net debt to the M4 private sector	+0.1	+0.2	+0.1	+0.7
6 External and foreign currency finance (-) of the public sector	-0.1	-0.9	-1.2	-1.2
<i>of which: gilt-edged stocks</i>	+0.2	+1.2	-0.5	+0.9
7 <b>Total financing (-) of the public sector from the M4 private and overseas sectors (=4+5+6)</b>	<b>+4.9</b>	<b>+2.4</b>	<b>+2.8</b>	<b>+13.9</b>

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

### 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 net flows of funds into the money market (see Table E) arising mainly from redemptions and official purchases of gilt-edged stock together with a seasonal excess of central government expenditures over revenues. These were offset by further declines in money-market assistance (the stock of which fell by around £1½ billion, to end the period at just over £1¼ billion) and a further increase in the Treasury bill issue (developments in the Treasury bill market are described in more detail in the note on pages 505-6).

With diminished anxiety about a possible rise in interest rates after the end of June, the average maturity of money-market assistance shortened sharply in July. Moreover, there was a substantial central government surplus and only limited official purchases of gilts, so the daily shortages of cash in the money market increased sharply, averaging £680 million compared with £230 million in June. The outstanding stock of money-market assistance rose over the month from £2.9 billion to £4.8 billion; the Bank bought only a small amount of Treasury bills in its money-market operations and the amount of Treasury bills in market hands<sup>(1)</sup> rose from £5.9 billion to £7.3 billion.

During August the average daily shortage was only a little lower than in July, at £610 million. Nevertheless, in the first half of the month very-short-term interest rates tended to softness even on days when there was a substantial shortage of cash in the money market and from the middle of the month the Bank chose generally to provide funds to relieve market shortages of cash, when they occurred, later in the day than hitherto. This had the intended effect of raising very-short-term money-market rates to close to the level of bank base rates.

This higher level of very-short-rates was largely maintained during September, even though the average daily cash shortage in the market was smaller, at £350 million, reflecting seasonal outflows of funds from the Exchequer. The total of official assistance to the money market fell back sharply during August and September to £1.3 billion (reaching a low point of £0.3 billion on 14 September), even though the total of Treasury bills in market hands rose to £9.3 billion.

(1) ie Treasury bills held other than in official accounts.

**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
8 1/2% Treasury Stock 1994(b)	196	505	30/5	Auction, offer basis price	30/6	91-11	91-10	10.94	10.95
12 1/2% Exchequer Stock 1994(b)	136	453	30/5	Auction, offer basis price	30/6	105-28	105-27	10.97	10.98
12 3/4% Treasury Loan 1995(b)	68	224	30/5	Auction, offer basis price	30/6	109-01	109-00	10.73	10.74
12% Exchequer Stock 1999-2002	27	353	29/8	Auction, offer basis price	29/9	107-12	107-12	10.71	10.71
9% Exchequer Stock 2002	59	353	29/8	Auction, offer basis price	29/9	91-28	91-27	10.12	10.13
13 3/4% Treasury Stock 2000-2003	314	511	29/8	Auction, offer basis price	29/9	119-13	119-11	10.67	10.68

(a) Prices are quoted in pounds and one thirty-second ticks eg 107-12 denotes £107 12/32.

(b) Although the reverse auction was held in June, settlement was effected in July.

Partly in response to this, but also in anticipation of the normal period of heavy corporate tax payments (which will be spread between December and January of this financial year) the Bank announced that the Treasury bill tender would be supplemented for a period by an offering of 9-week bills. Accordingly, the tender on 29 September was for £200 million of 9-week bills, £500 million of 13-week bills and £100 million of 26-week bills.<sup>(1)</sup>

#### Gilt-edged operations

The gilt-edged market advanced strongly in July, before easing in August and September. Net official purchases of stock with more than one year to maturity amounted to £1.2 billion, but two large redemptions and official purchases of stock approaching maturity meant that the total amount of stock in market hands fell by just over £4.3 billion, compared with an average of £6.1 billion in each of the previous two quarters. The two redemptions, 10% Exchequer 1989 and 11% Exchequer 1989, on 1 August and 29 September respectively, accounted for £3.0 billion of this fall.

Within the total, there were significant disposals of stock by banks and discount houses (just under £775 million) and building societies (almost £925 million). It is possible that these institutional disposals were related to liquidity considerations: building societies, in particular, came under some pressure as a result of their decision to hold mortgage interest rates unchanged after the May increase in bank base rates (although they also switched towards more liquid assets, especially Treasury bills, in the light of the increased tender). Overseas investors, by contrast, added around £550 million to their holdings (which was more than accounted for by activity in July and August).

The authorities conducted a further reverse auction during the review period, announced on 29 August and held on 29 September. The details of this auction, (and of the 30 June auction, for which settlement was in July) are shown in Table G. The stocks for which offers were invited were of around ten years to maturity. The auction was successful: it was over three times covered and stock was offered at prices within a narrow range, with the average accepted price around 1/8 of a percentage point higher (compared with stocks of a similar maturity) than market prices prevailing immediately before the announcement date.

(1) In the event, no bills were allotted at the tender on 29 September (see the account of market developments on page 502).

**Table H**  
Official transactions in gilt-edged stocks  
£ billions; not seasonally adjusted

	1988		1989		
	Q3	Q4	Q1	Q2	Q3
Gross official sales(a)	-0.1	-1.7	-3.8	-3.0	-1.2
less					
Redemptions and net official purchases of stock within a year of maturity	-1.4	-2.0	-2.8	-2.6	-3.1
Equals net official sales(b)	-1.5	-3.7	-6.6	-5.6	-4.3
of which, net purchases by:					
Banks(b)	-0.5	-1.1	-0.5	-0.1	-0.8
Building societies	+0.4	—	-1.2	-0.6	-0.9
Overseas sector	—	-0.1	-0.2	-1.2	+0.5
M4 private sector	-1.4	-2.4	-4.7	-3.8	-3.1

(a) Gross official sales of gilt-edged stocks are defined as net official sales of stock 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		
	July	Aug.	Sept.
Change in reserves	-34	-423	-332
of which:			
Net borrowing (+)/payment(-) of public debt	-205	-18	-190
Valuation change on roll-over of EMCF swap	+104	—	—
Underlying change in reserves	+67	-405	-142
Level of reserves (end of period)	43,631	43,208	42,876

The stock purchased in the June auction is included in the official purchases figures in Table H, but that purchased in the auction on 29 September, which was settled on 2 October, will first appear in the fourth quarter data.

#### Official reserves

The official reserves decreased by \$0.8 billion over the three months to end-September. The fall was, however, less than \$0.5 billion in underlying terms.<sup>(1)</sup> After a modest decline in July, the reserves fell more steeply in August and (to a lesser extent) in September.

#### ECU Treasury bills

At the latest three tenders of ECU Treasury bills (on 8 August, 12 September and 10 October) the Bank allotted a total of ECU 2,600 million of bills to the market, with an additional ECU 150 million allotted directly to the Bank to facilitate settlement of secondary market transactions. The monthly tenders have each included ECU 300 million of bills at both one-month and three-month maturities; both the September and October tenders additionally raised the allocation of six-month bills from ECU 200 million to ECU 300 million. On average, the tenders were covered 2.5 times, varying from 2.3 times in August to 2.75 times in October. The margin by which the average yield accepted has been below the bid rate for ECU-denominated bank deposits has varied according to the timing of the tender and the maturity of the paper involved: at the short end the margin has risen from 0.21% to 0.30%, while at the six-month maturity it has fallen slightly, from 0.44% to 0.39%.

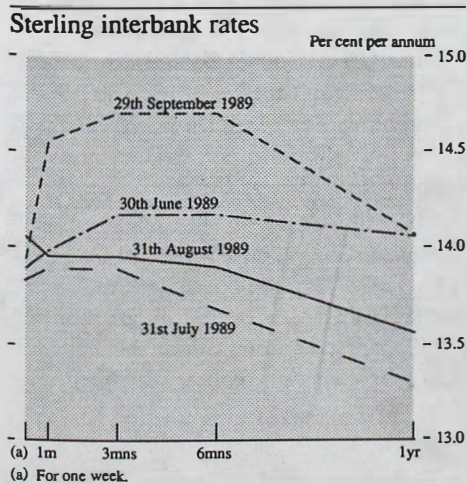
As at 12 October, a total of ECU 2,600 million of bills were outstanding, excluding the additional bills allotted to the Bank for lending.

Turnover in the secondary market again increased during the period, rising by nearly 8% (following a 16% increase in the previous quarter) to stand at almost ECU 4,500 million per month. Turnover was particularly strong in July, at ECU 6,100 million.

#### Market developments

In general, sterling and the domestic financial markets were stable until near the end of the period under review, and trading conditions were very quiet. A succession of economic indicators suggesting that retail spending remained subdued led to a gradual fall in longer-term interbank rates as the view became widespread that base rates might be at their peak. However, larger than expected current account deficit figures for July and August fuelled market speculation that renewed downward pressure on sterling might lead to a tightening of monetary policy.

The period under review began in the wake of the  $\frac{1}{2}$ % increase in official interest rates in several continental European countries on 29 June. Following this development, sterling had fallen back and money-market interest rates and gilt yields had risen, but in the light of the smaller than expected trade deficit for May announced two days earlier, the narrowing in sterling's interest

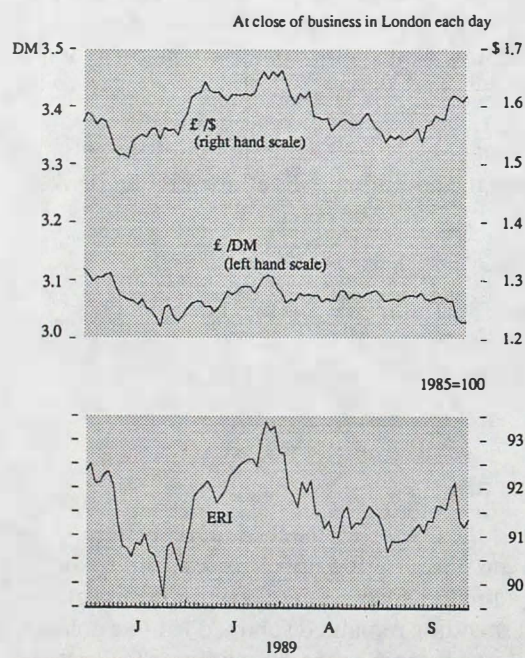


(1) ie excluding changes arising from net foreign currency borrowing and repayments and any associated valuation changes.

**Table K**  
Sterling interest rates, gilt yields and exchange rates

Date	Interbank interest rates (per cent per annum)				Gilt yields (per cent per annum)				Exchange rates		
	1 month	3 months	6 months	12 months	Conventionals			Index-linked	ERI	£/\$	£/DM
					Short	Medium	Long	Long			
30 June (close)	13 31/32	14 5/32	14 5/32	14 1/8	10 7/8	10 1/2	9 9/16	3 19/32	90.2	1.5502	3.0294
10 July (close)	13 27/32	13 29/32	13 29/32	13 7/8	10 5/8	10 11/32	9 15/32	3 1/2	92.2	1.6435	3.0540
21 July (close)	13 31/32	13 59/64	13 23/32	13 15/32	10 7/16	10 5/32	9 11/32	3 7/16	92.6	1.6227	3.0896
26 July (close)	13 29/32	13 29/32	13 23/32	13 3/8	10 5/16	10 1/32	9 1/4	3 13/32	93.0	1.6457	3.0926
1 August (close)	13 25/32	13 27/32	13 11/16	13 1/4	10 5/16	10	9 3/16	3 13/32	92.7	1.6525	3.0869
7 August (close)	13 27/32	13 27/32	13 3/4	13 7/16	10 3/8	10 1/16	9 7/32	3 7/16	91.6	1.6055	3.0657
16 August (close)	13 25/32	13 13/16	13 23/32	13 5/16	10 7/32	9 7/8	9 1/8	3 3/8	91.3	1.5800	3.0695

### Sterling exchange rates



rate differential over other European currencies was received relatively calmly in financial markets. Interbank interest rates for most maturities were slightly above 14%, thus discounting a small probability of a rise in base rates in the near term, but the pattern of short sterling futures prices indicated that the market believed that short-term rates were close to their peak. In the gilt market, the yield curve remained downward sloping. At the very beginning of July, sterling recovered from its fall in the last two days of June. It appreciated particularly against the dollar, which weakened on expectation of an easing of US monetary policy, and over the next few days recovered to levels last reached in mid-May. Against continental European currencies, too, the pound rose to around the same level as just after the May trade figures. Period interbank rates eased back to just below 14% in response to sterling's stronger tone, and conventional and index-linked gilt yields edged down. A fall in the federal funds rate in the United States and weaker than expected UK producer price data for June pushed sterling to a peak against the dollar on 10 July (\$1.6435).

Over the following week, the underlying rate of whole-economy average earnings in May was announced as unchanged, despite market expectations of a rise, and the June RPI and retail sales data also suggested that inflationary pressures were less strong than some commentators had feared. Interbank rates fell, particularly at the one-year maturity, where the rate dropped below 13½%, producing a noticeable downward slope in the interbank yield curve. Conventional gilt yields also fell, especially for shorter maturities, as the perception that base rates were at their peak became more widespread. The greater market optimism was partly caused by lower inflationary expectations, and the decline in index-linked gilt yields was more modest. The encouraging economic data also led to a rise in sterling (particularly against continental European currencies) in the period to 21 July, when the exchange rate index reached its highest level for seven weeks (92.6). By that time, though, three-month interest rates had reversed some of their recent decline as markets concluded that it was unlikely that official rates would be eased for some time.

The June trade figures, published on 26 July, showed a smaller deficit than expected, and market optimism about economic conditions grew, despite a series of high wage settlements; sterling rose sharply, and interbank rates fell, with the one-year rate



**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		
	1 month	3 months	6 months	12 months	Conventionals			Index-linked	ERI	£/\$	£/DM
					Short	Medium	Long	Long			
23 August (close)	13 15/16	13 29/32	13 27/32	13 7/16	10 1/4	9 31/32	9 7/32	3 11/32	91.2	1.5713	3.0687
31 August (close)	13 31/32	14	13 29/32	13 19/32	10 13/32	10 1/16	9 9/32	3 3/8	91.5	1.5735	3.0804
5 September (close)	14 1/32	14 1/32	14	13 23/32	10 5/8	10 15/64	9 23/64	3 25/64	90.7	1.5385	3.0647
14 September (close)	13 29/32	13 15/16	13 29/32	13 11/16	10 41/64	10 17/64	9 27/64	3 27/64	91.3	1.5625	3.0727
25 September (close)	13 15/16	13 15/16	13 15/16	13 3/4	10 21/32	10 9/32	9 7/16	3 13/32	91.9	1.6095	3.0645
26 September (close)	14	14 3/32	14 1/8	13 63/64	10 29/32	10 15/32	9 35/64	3 15/32	92.1	1.6200	3.0654
29 September (close)	14 9/16	14 11/16	14 21/32	14 7/16	11 5/32	10 37/64	9 41/64	3 1/2	91.4	1.6190	3.0291

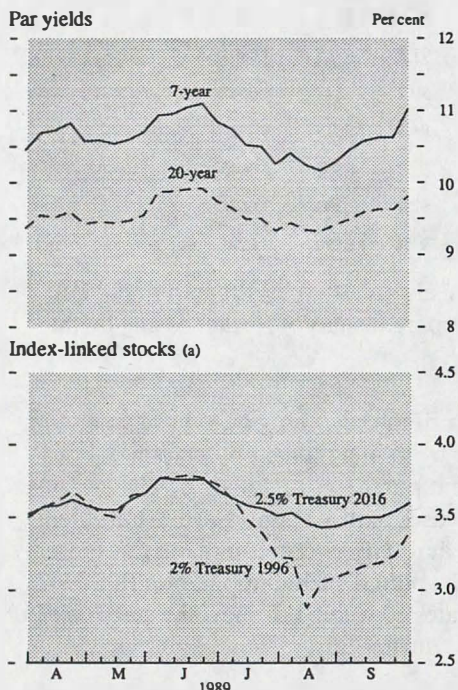
touching 13 $\frac{1}{2}$ %. Gilt yields were also boosted by strength in the US bond market following apparent signs of further easing by the Federal Reserve.

Sterling remained firm until the beginning of August, when the pound was pushed lower by selling thought by market commentators to represent purchases of dollars by UK clearing banks to cover their increases in provisioning against problem country debt. Gilt yields and longer-term interbank rates rose by up to  $\frac{1}{8}$ % in response to the pound's fall, but one-month to three-month interbank rates continued to show the stability which they had displayed during July.

The pound had steadied again by 8 August, helped by a downward revision to the June retail sales figure. Gilt yields and longer-term interbank rates accordingly eased back. However, beginning on 11 August, strengthening of the dollar, precipitated partly by renewed confidence in the US economy, led to a renewed decline in the pound. After the July retail sales and producer price data were announced on 14 August, sterling weakened as the expectation became more widespread that the next move in base rates would be downwards. In turn, these pressures in the foreign exchange market dampened the improvement in sentiment in the money and gilt-edged markets, and market hopes of lower interest rates began to diminish, despite declines in the twelve-month growth rates of underlying average earnings and the RPI announced on 17 and 18 August.

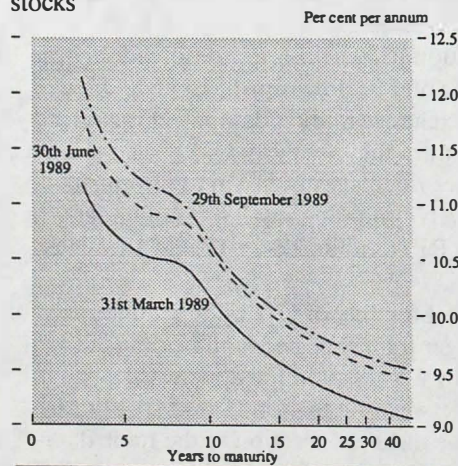
The current account deficit for July of £2.1 billion, announced on 23 August, was much larger than expected, and sterling fell sharply. Gilt yields rose by  $\frac{1}{8}$ %– $\frac{1}{4}$ %, and the downward slope in interbank interest rates between three months and six months disappeared. However, the markets' reaction to the trade data was conditioned by the recognised volatility of these monthly figures, and market conditions quickly returned to the quiet state which had been prevailing immediately beforehand; over the next few days sterling gradually recovered the ground it had lost. End-month position-squaring by institutions and the news that the Bank had been offered band 1 bills at 13 $\frac{3}{32}$ % in its daily operations caused interest rates in general to edge up as August came to a close. The rise in the discount rate at which the Bank purchased bills was a result of the steps the Bank was taking to keep very-short-term rates tight, but it was not interpreted as implying that the authorities wished to achieve a rise in base rates.

Gross redemption yields on UK government securities



(a) Real yields assuming 5% inflation.

Time/yield curves of British government stocks



The dollar's worldwide strength at the beginning of September drove the sterling/dollar exchange rate down and speculation that continental European countries might raise interest rates to restrain their own currencies' falls against the dollar led to a more modest decline in the pound's value against those currencies also. One-month to six-month interbank interest rates rose briefly above 14% for the first time since July, and conventional and index-linked gilt yields rose, reflecting the pressure on sterling and a somewhat greater degree of nervousness about economic prospects. Once the dollar's rise had paused just short of DM 2 and it became apparent that there would be no immediate tightening of policy in other countries, sterling steadied again. Interbank rates fell back below 14%, encouraged by the weaker than expected August retail sales and producer price data announced on 11 September, as well as by the steadier pound. Gilt yields, however, remained at their higher levels.

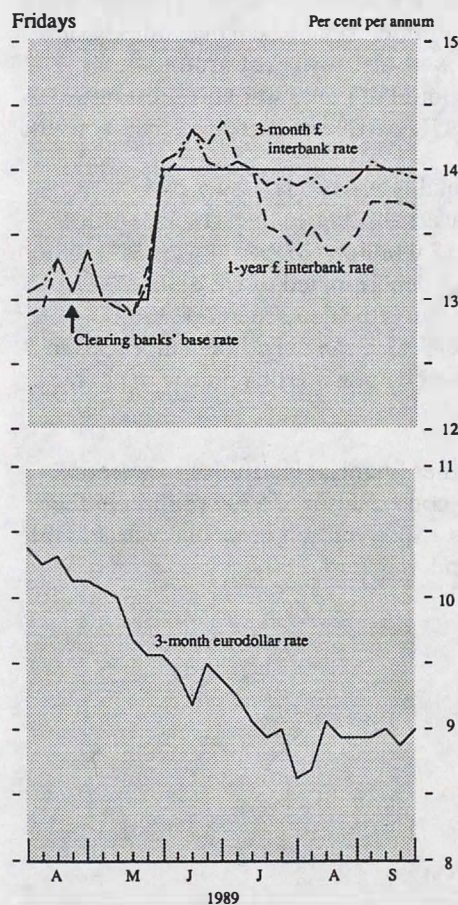
Sterling, like other currencies, rose against the dollar following co-ordinated official intervention immediately after the G7 meeting on 23-24 September, though it softened against continental European currencies. The market mood changed abruptly on 26 September, however, when the August UK current account deficit, like July's, turned out to be larger than expected. Initially, interbank rates reacted most sharply, rising by up to 1/4%, and conventional and index-linked gilt yields rose substantially also. Sterling was steady in London that day, but it then dropped sharply, particularly against the deutschemark in the light of market expectations of a tightening of German monetary policy. This in turn aroused speculation about a possible base rate rise, and six-month interbank rates climbed above 14 1/2%, their highest level since June.

The Bank sought to resist this market pressure for higher interest rates by continuing to buy bills at established dealing rates, and by declining to allot any Treasury bills at the tender on 29 September, rather than allotting them at rates which would have been inconsistent with the existing interest rate structure. Nevertheless, by the middle of the following week the pressure for a rise in UK interest rates was still intense, and the rise of 1% in the German Lombard and discount rates made a rise in UK rates inevitable. Accordingly, on 5 October (immediately after the German announcement) the Bank signalled a 1% rise in rates by announcing that the day's shortage would be relieved by lending at 15%. Gilt yields rose also, particularly at the shorter maturities.

One-to-six-month interbank rates finished the quarter under review (before the base rate rise) over 1/2% higher than at the end of June, having been well below the 14% level of base rates for virtually the whole of the quarter. Much of the earlier downward slope to the interbank interest rate curve had disappeared, but following the rise in interest rates on 5 October the downward slope became noticeably steeper, suggesting that the markets viewed the rise in base rates as likely to be temporary.

Conventional gilt yields ended the quarter about 1/8% higher at five years' maturity and 1/4% higher at longer maturities, as the downward slope of the yield curve steepened in the last few days of September in response to speculation about a tightening in policy.

## Short-term interest rates in London



## Market turnover

Transactions in eligible bills by discount houses,<sup>(1)</sup> including sales to the Bank, averaged over £1.3 billion daily over the quarter. Although this was higher than in the first half of the year, the daily volume of transactions declined as the quarter progressed. Within this total, turnover in Treasury bills rose from average daily transactions of £220 million in the previous quarter to around £240 million. Discount house transactions in certificates of deposit averaged under £0.5 billion daily over the period, rather less than the £0.7 billion recorded in the previous period. Average daily turnover in the short sterling futures contract on the London International Financial Futures Exchange fell back sharply in July and August—averaging around 24,400 contracts per day, compared with 30,900 in the second quarter. However, September saw some recovery in the average to just over 30,200.

Total turnover in gilts fell back in the third quarter, to around £3.4 billion per day from £3.7 billion per day in the previous three months. The share in the total of intra-market transactions declined from around 35% to just under 30%. Turnover was evenly spread over the three months. Average daily turnover in the long gilt futures contract also fell in the quarter, from 17,200 contracts per day, to only 14,600 contracts per day. Indeed, the decline was progressive through the quarter, with an average of only 13,700 contracts per day in September. No warrants exercisable into gilt-edged stock were issued during the quarter.

## Sterling commercial paper

Gross issues of sterling commercial paper during the third quarter totalled £12.1 billion compared with a revised figure of £11.1 billion in the previous three months. There were redemptions of £11.9 billion, and the total paper outstanding thus rose to £4.2 billion at the end of September. The Bank had been notified of 200 programmes by the end of the quarter, and paper had been issued under 160 of these.

## Other capital markets

Despite falling back in September, UK equity prices made overall gains in the third quarter, the FT-SE 100 index ending the period over 6% higher than at the end of June.

Equities were particularly strong in July and the FT-SE 100 index rose by 7% over the month. The increase was fuelled by a combination of speculation on takeover bids, favourable domestic indicators and lower US interest rates. The first two of these factors were also influential in early August, as was the strong performance of the US equity market. However, with domestic economic indicators less encouraging, and the continued strength of the dollar provoking fears about higher interest rates in Europe and Japan, the index fell steadily in September after reaching its highest level of the year early in the month.

The volume of sterling capital issues eased in the third quarter from the exceptionally high levels observed in the previous three months. Announcements of equity issues, for example, were

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

**Table M**  
**Sterling capital issues: amounts announced**  
 £ millions

	Equities	Fixed rate(a)		Sterling eurobonds		FRNs
		Domestic issues(b)	Sterling eurobonds			
			UK borrowers	Overseas borrowers		
1988	5,473	3,324	4,080	3,219	5,782	
Q1	808	350	1,890	1,340	1,129	
Q2	1,578	1,046	1,080	1,669	1,917	
Q3	1,895	541	135	—	1,917	
Q4	1,192	1,387	975	210	819	
1989						
Q1	618	1,744	1,813	1,022	600	
Q2	2,531	1,610	514	1,061	1,625	
July	359	161	700	595	200	
Aug.	460	158	150	200	—	
Sept.	1,352	800	225	200	875	
Q3	2,171	1,119	1,075	995	1,075	

(a) Of which £449 million was equity-related in the third quarter of 1989.

(b) All UK borrowers except for two 'bulldog issues' in 1988 Q4 for £200 million. Excludes local authority issues.

around £0.4 billion lower, at £2.2 billion—the bulk of which were announced in September, and which included a significant amount of issues by UK industrial and commercial companies. Because of uncertainty about interest and exchange rates, issues in the sterling debt market were also lower (by around £0.5 billion), though the amount of issues was still substantial, at £4.3 billion, and here, too, UK borrowers increased their activity.

During the third quarter, total international issues by UK companies and their overseas subsidiaries in currencies other than sterling amounted to \$2.0 billion compared with \$1.3 billion in the second quarter. Issues denominated in US dollars accounted for 64% of all activity; the deutschemark, the Canadian dollar and the ECU were the only other currencies to account for more than 5% of UK non-sterling borrowing in the eurobond market.

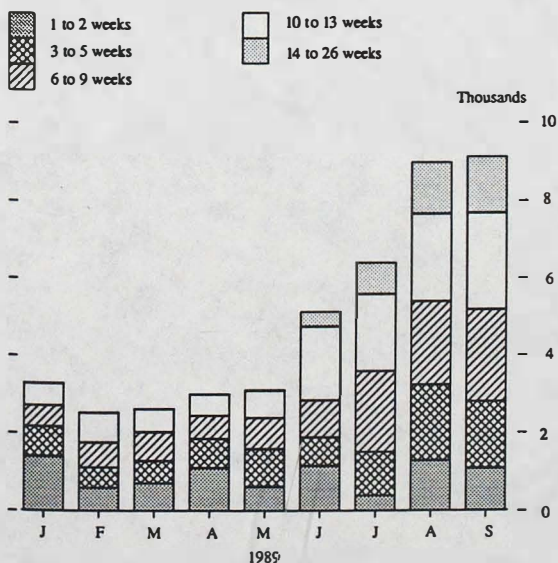
Borrowing by banks and other financial institutions increased from \$593 million in the second quarter to \$806 million in the third. The largest issue was a \$300 million perpetual variable-rate note by the Bank of Scotland.

## Recent developments in the Treasury bill market

On 5 May the Bank announced certain changes<sup>(1)</sup> in its money-market operations intended to prevent the emergence of persistent day-to-day surpluses of cash in the money market. One of these changes was that the Bank would normally relieve 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 effects of this change on the commercial bill market were discussed in the August *Bulletin* (page 342). This note describes some of the effects of the other main change, namely the enlargement of the Treasury bill issue.

Over the two weeks following the announcement, the size of the weekly three-month tender was increased from the customary £100 million to £500 million, and for the first time a weekly six-month tender of £100 million was introduced.<sup>(2)</sup> During May to September the amount of Treasury bills outstanding (other than official holdings) grew from £3.1 billion to £9.2 billion. Chart 1 shows the growth of this total, and the changing maturity distribution of outstanding bills over time.

Chart 1  
Treasury bills outstanding: breakdown by maturity



The table shows changes in the sectoral distribution of Treasury bill holdings over the last year. Of the increase in total holdings, over half has been absorbed by banks (including discount houses) and almost one quarter by building societies. Over 10% of the increase has been

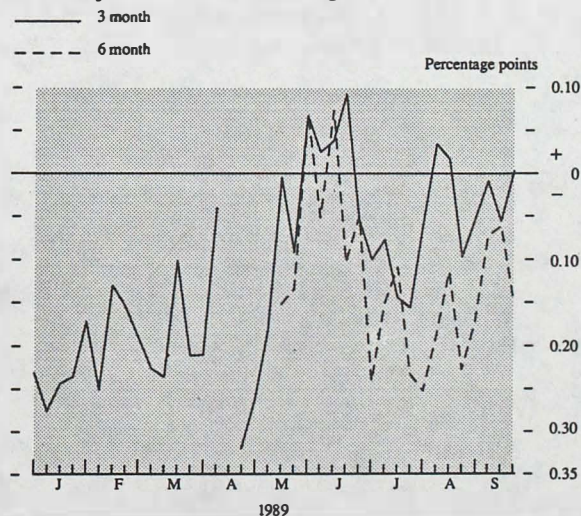
### Sectoral holdings of Treasury bills

£ billions; not seasonally adjusted

	1988		1989			Change over twelve months to end-Sept. 89
	end-Sept.	end-Dec.	end-Mar.	end-June	end-Sept.	
Discount market	0.1	0.7	—	0.7	0.3	+ 0.2
Other banks	0.6	1.6	0.2	1.3	3.7	+ 3.1
Building societies	0.0	0.1	0.1	0.6	1.4	+ 1.4
M4 private sector	0.4	0.7	0.6	1.3	1.4	+ 1.0
Central monetary institutions	1.4	1.6	1.5	1.9	2.5	+ 0.7
Other overseas	0.3	0.4	0.3	0.1		
Other public sector	0.3	0.1	0.6	—	—	- 0.3
<b>Total outstanding</b>	<b>3.1</b>	<b>5.1</b>	<b>3.2</b>	<b>5.8</b>	<b>9.3</b>	<b>+ 6.2</b>

identified as being held by overseas residents and, with a decline in public sector holdings, the remaining 16% is assumed to be held by the domestic private sector. In the latest six months, over 80% of the increase in the issue has been absorbed by banks and building societies. Nearly all of the bids in the weekly tenders have been by banks and building societies, so that purchases by the private sector must have been mainly in the secondary market.

Chart 2  
Treasury bill tender rate: margin below Libid



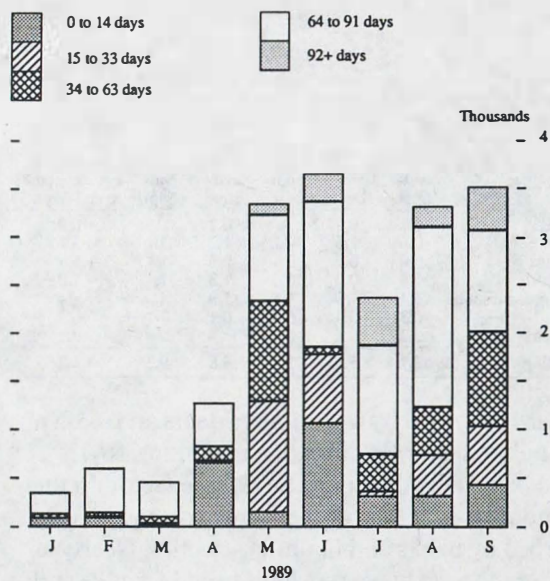
The increase in the size of the three-month tender has led to a distinct reduction in the margin by which the average accepted yield has been below Libid, as Chart 2 shows. The concentration of the Bank's bill purchases on the shorter maturity bands when relieving cash shortages in its daily money-market operations may also have been a factor. Nevertheless, the margin still exists, and has remained fairly stable since the size of the weekly tender was increased despite the gradual rise in the total amount of bills outstanding. The margin between Libid and the

(1) Described in more detail in the August *Bulletin*, page 343.

(2) The Bank additionally announced on 22 September that the Treasury bill tender would be supplemented for a period beginning on 29 September by an offering of nine-week bills.

six-month average accepted yield has usually been somewhat wider than that for the three-month, and may reflect in part the smaller supply of bills at this maturity.

**Chart 3**  
**Treasury bill turnover: discount house purchases and sales on the secondary market**



There are no comprehensive figures on secondary market turnover in the Treasury bill market, but data from the discount market (see Chart 3) suggest that the increase in bills outstanding has been accompanied by a rise in turnover, which has been proportionately larger than the increase in the amount of bills outstanding.