Operation of monetary policy

This article covers the three months from July to September 1988.

Review

Monetary conditions were tightened during the period in order to exert firm downward pressure on inflation and domestic demand growth. Domestic interest rates were increased by a further two and a half percentage points, taking banks' base rates to 12%, while sterling ended the period at a slightly higher effective rate than at the end of June.

Domestic interest rates had been increased four times during June, on each occasion following a weakening of sterling, thus tightening monetary conditions without provoking an over-reaction in the foreign exchange market. At the beginning of July a continuation of this process was necessary. Domestic demand was continuing to grow rapidly and to outpace even the exceptionally encouraging response of the supply side of the economy; money and credit aggregates were accelerating; and the twelve-month rates of increase in both retail prices and other earnings and prices indices were tending to edge upwards.

The phase of sterling weakness which had begun in the middle of May continued into July and the level and slope of the money-market yield curve indicated a strong market expectation of further increases in interest rates. Two such increases, each of half a percentage point, took place in July, bringing short-term interest rates up to 10½%, thereby continuing the pattern established in June and giving the clear message that monetary policy was directed at achieving a slowdown in the growth of domestic demand and at restraining inflationary pressures. This message was reinforced by a further half percentage point increase in interest rates on 8 August, which surprised the markets because it took place despite the firmness of sterling, and by an increase of a full percentage point to 12% on 25 August, after the announcement of a record current account deficit for July and an associated fall in sterling, which had already begun to weaken in response to earlier indicators of a resurgence of inflationary pressures. These rises in interest rates provoked only a modest upward movement in the exchange rate, partly because monetary conditions were being tightened in other countries, notably the United States and Germany, during the same period.

The economic indicators published in September confirmed the need for tight monetary conditions. The twelve-month growth rate of M0 rose in August to 7.6% (seasonally adjusted) compared with the target range of 1%–5%; mortgage lending by banks and building societies remained exceptionally strong; the underlying annual growth rate of average earnings reached 9%; and retail price inflation rose to 5.7% over the year to August. After a particularly nervous period at the beginning of the month, the financial markets remained fairly calm during September.

Table A
Growth rates of the monetary aggregates(a)
Percentages

	Unadjusted		Seasonally adjusted(b)	
Calendar months	12 months to June 88	12 months to Sept. 88	Apr. 88– June 88	July 88– Sept. 88
M0(c)	+ 7.7	+ 8.1	+2.5	+3.4
Non-interest-bearing M1	+10.8	+12.5	+1.0	+3.2
M1	+18.6	+17.4	+4.1	+3.7
M2	+15.0	+17.2	+4.5	+4.4
M3	+20.3	+22.6	+4.7	+6.9
M3c	+18.6	+20.3	+4.8	+6.5
M4	+16.8	+18.6	+4.0	+5.7
M5	+16.2	+17.9	+3.6	+5.5

(a) See the February 1988 *Bulletin* for definitions of the broad money aggregates.
(b) Seasonal adjustments constrained over the financial year.
(c) Weekly average.

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

	Calendar months.	Apr. 88– June 88	July 88– Sept. 88	Level outstanding at end– Sept. 88
1	Non-interest-bearing M1	+ 0.5	+ 1.5	48.7
2	Interest-bearing sight deposits	+ 3.4	+ 2.1	54.7
3	**M1 (= 1+2)**	**+ 3.9**	**+ 3.7**	**103.4**
4	Private sector holdings of time deposits with banks and bank CDs	+ 5.2	+10.3	111.6
5	**M3 (= 3+4)**	**+ 9.1**	**+14.0**	**215.0**
6	Building society holdings of M3 (increase–)	– 2.1	– 0.1	– 17.2
	Non-bank private sector holdings of:			
7	Building society shares and deposits(b)	+ 5.3	+ 4.9	145.1
8	Building society £CDs and time deposits(c)	+ 0.2	– 0.2	2.7
9	**M4 (= 5+6+7+8)**	**+12.5**	**+18.6**	**345.6**
10	Non-bank, non-building-society private sector holdings of money-market instruments and national savings in M5	– 0.5	+ 0.2	15.5
11	**M5 (= 9+10)**	**+12.0**	**+18.8**	**361.1**

(a) See the February 1988 *Bulletin* for definitions of the broad money aggregates.
(b) Including term shares and interest credited.
(c) Excluding holdings by building societies themselves.

Table C
Counterparts to changes in M3, M4 and M5[(a)]
£ billions; *seasonally adjusted figures (financial year constrained) in italics*

	Counterparts to M4			Unadjusted: Counter-parts to M3	Unadjusted: Counter-parts to M5
			Unadjusted		
	Apr. 88– June 88	July 88– Sept. 88	Oct. 87– Sept. 88	Oct. 87– Sept. 88	Oct. 87– Sept. 88
1 PSBR	*– 2.2*	*– 3.2*	– 9.2	– 9.2	– 9.2
2 Net purchases (–) of central government debt by the 'private' sector(b)(c)	*+ 0.6*	*+ 1.5*	– 3.0	– 2.8	– 2.3
3 Net purchases (–) of other public sector net debt by the 'private' sector(b)(c)	*+ 0.3*	*– 0.3*	+ 0.3	+ 1.3	+ 0.4
4 External and foreign currency finance of the public sector	*+ 0.3*	*+ 1.1*	+ 8.7	+ 8.7	+ 8.7
5 Public sector contribution (= 1+2+3+4)	*– 1.0*	*– 0.9*	– 3.3	– 2.0	– 2.4
6 Sterling lending to the 'private' sector(b)(d)	*+22.2*	*+22.8*	+77.2	+54.9	+76.9
7 Other counterparts(e)	*– 8.7*	*– 3.3*	–19.6	–13.1	–19.6
8 Total (= 5+6+7) = change in the aggregate	***+12.4***	***+18.6***	**+54.4**	**+39.7**	**+54.9**

(a) See the February 1988 *Bulletin* for the definitions of the broad money aggregates.
(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 Industry. The M5 counterpart includes 'private' sector holdings of commercial bills.
(e) External and foreign currency transactions and changes (–) in net non-deposit liabilities.

Indeed, at the end of the month an upward movement in sterling following the smaller than expected trade deficit for August led to a marked rally in financial markets, but the Bank resisted this by giving a cautionary signal that it did not wish to see a reduction in the general level of interest rates.

There are some emerging signs that domestic demand growth has begun to moderate—in particular a slowdown in retail sales and lower mortgage commitments in August and September, and lower mortgage lending in September. However, the extent of this moderation is not yet clear, and the full effects of the tightening in monetary conditions which has taken place will not become evident for some time to come.

Monetary aggregates and credit

The figures in this section are seasonally adjusted except for twelve-month growth rates or as otherwise stated.

M0 continued to grow rapidly in the three months to September and its twelve-month growth rate increased to 8.1%. However, the acceleration in September was attributable to distortions caused by the Post Office strike. All the broad money aggregates expanded strongly, with twelve-month growth rates rising to 22.6%, 18.6% and 17.9% for M3, M4 and M5 respectively. Although the lending counterparts to broad money all grew slightly less fast than in the previous three months, their twelve-month growth rates all accelerated. Lending to the personal sector, especially for house purchase, continued to be strong. The public sector counterparts remained modestly negative, but among the other counterparts the external and foreign currency transactions of the banks and building societies were close to zero, having been strongly negative in the previous three months.

During the postal dispute, in the first part of September, the Post Office itself held more notes and coin than usual; and there may also have been effects on the behaviour of other holders of notes and coin. As M0 is calculated as the average of amounts outstanding on each Wednesday in the month, this raised its level and growth rate in September, even though the strike was over by the end of the month. The scale of these strike effects is not known with any precision, but the Bank's judgement is that there was no underlying increase during September in the annual growth rate of M0. Strike effects on the other monetary aggregates (which are calculated at the end of the month) are impossible to estimate.

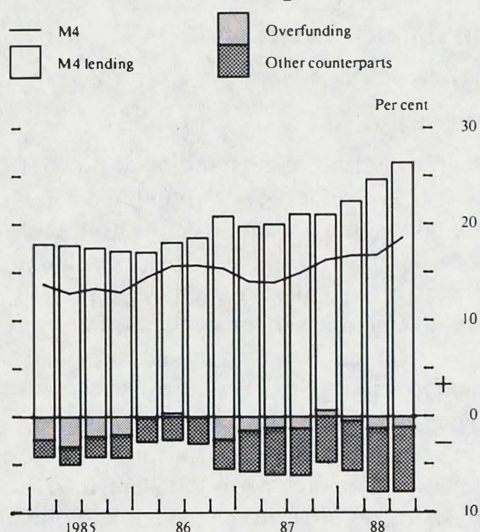
The public sector counterpart to broad money growth remained contractionary over the three months to September. Although the postal dispute is thought to have inflated the public sector borrowing requirement a little in September, in the three months to September an increased public sector surplus was recorded. The second call on BP shareholders raised £2.2 billion, but privatisation proceeds in total were slightly lower than in the previous three months. The contractionary influence of the public sector surplus was again in part offset by a reduction in holdings of public sector debt by the private sector (other than banks and building societies), mainly reflecting heavy redemptions of gilt-edged stock in July, and by positive public sector external transactions, mainly reflecting an underlying

Table D
Sectoral contributions to the growth of the broad aggregates and credit in the twelve months to September 1988[a]

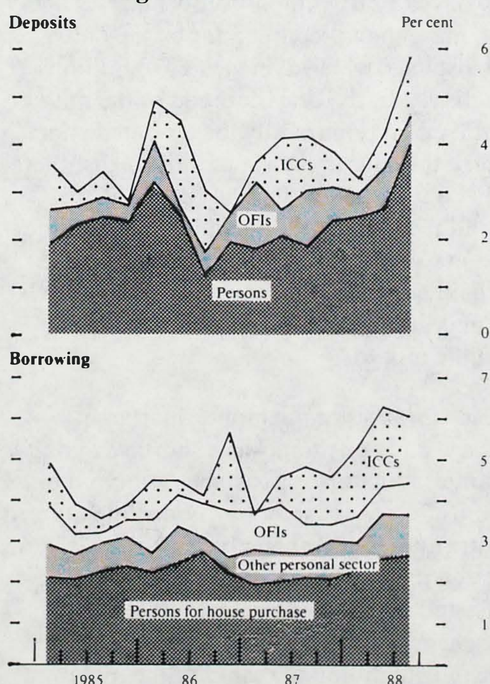
	Persons	ICCs	Building societies	Other OFIs
M3 components				
Percentage growth	20.4	20.1	41.7	24.9
Contribution to M3 growth(b)	10.1	5.2	2.8	4.4
M4 components				
Percentage growth	17.9	18.2	—	24.3
Contribution to M4 growth(b)	12.9	3.0	—	2.6
M3 credit counterparts				
Percentage growth	28.3	31.7	21.4	21.8
Contribution to M3 credit growth(b)	11.9	11.0	0.7	4.4
M4 credit counterparts				
Percentage growth	22.0	32.3	—	21.8
Contribution to M4 credit growth(b)	14.5	7.0	—	2.7

(a) Rows may not add to growth rates of the aggregates given in other tables because of rounding.
(b) Percentage points.

Contributions to annual growth of M4



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



increase in the official reserves, part of which was due to overseas payments of the second call on BP shareholders. Taken together, public sector transactions resulted in overfunding of £0.9 billion in the latest quarter, and of £3.3 billion in the year to end-September (equivalent to 1¼% of M4). This was a little lower than in the year to end-June.

The external counterparts to broad money—the external and foreign currency transactions of banks and building societies—had a broadly neutral effect on monetary growth over the quarter, having been heavily negative in earlier quarters. They would have been expected to be negative if part of the financing of the current account deficit had flowed through the banks. The absence of such an influence in the third quarter may reflect, directly or indirectly, transactions by overseas shareholders in BP, meeting the second call. The banks and building societies continued to increase their sterling net non-deposit liabilities in the quarter, of which further capital issues formed a part, constituting a further negative influence on broad money growth.

Lending by banks and building societies rose slightly less fast in percentage terms in the third quarter than in the second, but the twelve-month rate of growth of such lending moved up again, to 24.2% at the end of September, compared with 22.8% at the end of June. In the quarter as a whole, lending to the personal sector grew even faster than in the second quarter. Lending to industrial and commercial companies decelerated from the unusually high rate of the previous quarter, but it nevertheless continued to grow at a faster percentage rate than lending to persons. Lending to other financial institutions, a relatively small part of the total, accelerated further,but this was more than accounted for by a change in mortgage financing arrangements within a banking group.

Lending for house purchase had begun to rise more strongly earlier in the year, as building societies attracted greater inflows following the stock market crash and as a result of tax changes announced in the Budget. Such borrowing accelerated further in the quarter under review. However, the ending of multiple tax relief on mortgages and, possibly, the increase in mortgage lending rates effective from August, caused building societies' new lending commitments to fall in August, and the monthly figures from both the building societies and the Committee of London and Scottish Bankers (CLSB) show a sharp fall in the flow of such lending in September. Building society commitments to lend also fell further in September. In the quarter as a whole, banks' non-mortgage personal lending rose only a little less fast than in the second quarter, as did their lending to unincorporated businesses included in the personal sector.

The personal sector's net recourse to banks and building societies moderated sharply in the third quarter. Alongside the sector's continued strong borrowing has to be set a much stronger rise in deposits, of over £12 billion. A high proportion of this increase was in deposits with banks rather than building societies, reflecting in particuar the competitive advantage which banks had gained by adjusting their deposit rates more quickly to the general increase in short-term interest rates.

Table E
UK monetary sector: sterling and foreign currency deposits of, and lending to, the non-bank private sector

£ billions; *seasonally adjusted*(a)

	1987		1988		
	Year	Q4	Q1	Q2	Q3
Sterling deposits					
Other financial institutions	+15.7	+ 3.6	+ 2.7	+ 4.5	+ 2.0
ICCs	+10.0	+ 2.3	+ 0.9	+ 1.9	+ 4.3
Persons	+ 8.1	+ 2.7	+ 3.2	+ 2.8	+ 7.3
Total	+33.8	+ 8.6	+ 6.7	+ 9.2	+13.6
of which, transit items allocated to ICCs	*– 0.2*	*– 0.1*	*+ 0.9*	*– 0.8*	*+ 0.6*
Sterling lending					
Other financial institutions(b)	+10.5	+ 2.1	+ 2.3	+ 2.8	+ 2.8
ICCs(b)(c)	+ 9.4	+ 3.9	+ 5.7	+ 5.9	+ 6.1
Persons	+18.5	+ 5.6	+ 4.6	+ 6.6	+ 6.5
Total	+38.4	+11.6	+12.6	+15.4	+15.4
of which, transit items allocated to ICCs	*– 0.1*	—	*+ 0.6*	*– 0.5*	*+ 0.4*
Foreign currency deposits					
Other financial institutions	+ 7.1	+ 1.6	—	+ 0.1	+ 0.5
ICCs	– 0.4	+ 0.6	+ 0.1	– 0.7	+ 0.6
Persons	+ 0.2	+ 0.2	+ 0.1	+ 0.2	—
Total	+ 6.8	+ 2.4	+ 0.2	– 0.4	+ 1.1
Foreign currency lending					
Other financial institutions	+ 7.1	– 0.6	– 0.1	– 0.5	+ 0.6
ICCs	+ 3.3	+ 0.6	+ 2.0	+ 2.1	+ 2.4
Persons	+ 0.1	– 0.2	– 0.1	+ 0.1	+ 0.1
Total	+10.5	– 0.2	+ 1.8	+ 1.6	+ 3.2

(a) Seasonal adjustments constrained over the calendar year.

(b) Includes Issue Department take up of commercial bills.

(c) Includes Issue Department take up of guaranteed shipbuilding paper.

Table F
Influences on the cash position of the money market

£ billions; *not seasonally adjusted*
Increases in the market's cash (+)

Calendar months	July–Sept. 87	Apr.–June 88	July–Sept. 88	Oct. 87–Sept. 88
Factors affecting the market's cash position				
CGBR (+)	+0.4	+0.1	–0.4	–4.0
of which, on-lending to local authorities and public corporations	—	*+1.6*	*+1.3*	*+4.7*
Net sales (–) of central government debt(a)	–2.0	+1.2	+1.2	–2.4
of which: Gilt-edged	*–1.4*	*+1.4*	*+1.5*	*–1.3*
National savings	*–0.6*	*–0.4*	*–0.4*	*–1.7*
CTDs	—	*+0.2*	*+0.1*	*+0.6*
Currency circulation (increase –)	–0.3	+0.3	–0.7	–1.6
Reserves etc	+0.3	+0.6	+1.0	+8.2
Other	+0.3	–0.9	+0.6	–1.2
Total (A)	**–1.3**	**+1.3**	**+1.7**	**–1.0**
Official offsetting operations				
Net increase (+) in Bank's commercial bills(b)	+0.4	–1.0	–1.9	+1.4
Net increase (–) in Treasury bills in market	+0.9	–0.3	—	–0.6
Securities(c) acquired (+) under sale and repurchase agreements with banks	—	—	—	—
Other	–0.1	+0.2	+0.2	+0.4
Total (B)	**+1.2**	**–1.1**	**–1.7**	**+1.2**
Changes in bankers' operational balances at the Bank (= A + B)	–0.1	+0.2	—	+0.2

(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.

Industrial and commercial companies' net recourse to the banks was also reduced in the third quarter, to well below that of the previous two quarters. Not only did their bank borrowing slow a little, although it remained much higher than before the stock market crash, but these companies' bank deposits rose exceptionally fast. With input prices rising less rapidly than in the previous quarter, profit margins may have widened, and companies will have paid over to the public sector the smaller amounts of income tax withheld from employees in the second quarter. Some of the fall in bank borrowing may have been affected by the repayment of earlier takeover-related borrowing.

The industrial analysis of all sterling bank lending is available only to the three months ending in August, not seasonally adjusted. It shows strong lending to property companies (up 58% in the year to end-August) and to the construction industry (43%). Continued strong borrowing by these categories is suggested by the CLSB statistics for September.

Official operations in financial markets

The figures in this section are not seasonally adjusted.

Money-market operations

The amount of money-market assistance outstanding declined over the period under review. The central government had a modest cash surplus, after taking into account receipts from the second call secured on the sale of shares in the British Petroleum Company plc, and there was also a significant increase in the currency circulation, but these factors were more than offset by a net repayment of central government debt and modest official sales of sterling in the foreign exchange market. Against this background, relatively light maturities of bills in the Bank's portfolio were reflected in unusually small cash shortages in the money market over the quarter. The only periods of sustained and significant daily cash shortages arose in the second half of July, early in August and towards the end of August. In September, there were cash surpluses on a succession of days.

Daily cash shortages averaged £270 million in July and £310 million in August, more than accounted for by the daily volumes of maturing assistance, which averaged £310 million and £330 million respectively. In the bearish mood of the market in July, the Bank was offered predominantly longer-dated paper in its operations to relieve the shortages, whereas in August there was a diversity of market opinion over the prospect of further interest rate increases and the Bank was offered bills in both the shortest and the longest maturity bands, with official purchases of short-maturity bills having the effect of raising both the levels of maturing assistance and the size of the daily shortages on subsequent days within the month.

There were frequent cash surpluses in the money market in September and the average daily position was a shortage of only £40 million. Daily volumes of maturing assistance averaged only £100 million, because most of the assistance provided in July and August was due to mature after September; although the cash shortages in June had been met largely by official purchases of bills maturing in August and September, these shortages were modest. Meanwhile, Exchequer transactions during September injected a daily average of £50 million of cash into the money

Table G
Financing of the public sector
£ billions; *seasonally adjusted (financial year constrained)*

Calendar months	Jan. 88– Mar. 88	Apr. 88– June 88	July 88– Sept. 88	Oct. 87– Sept. 88
Central government borrowing on own account	−1.8	−3.2	−2.2	−8.9
Other public sector borrowing(a)	+0.1	+1.0	−1.0	−0.5
PSBR	**−1.7**	**−2.2**	**−3.2**	**−9.4**
Net sales of central government debt to the private sector(b)	−1.9	+0.6	+1.5	−3.0
of which: Gilt-edged stocks	*−1.1*	*+0.7*	*+1.5*	*−1.8*
National savings	*−0.8*	*−0.4*	*−0.1*	*−1.5*
CTDs	*−0.3*	*+0.2*	*−0.1*	—
Net sales of local authorities' and public corporations' debt to the private sector(b)	+0.2	+0.3	−0.3	+0.3
External and foreign currency finance of the public sector	+1.6	+0.3	+1.1	+8.7
of which, gilt-edged stocks	*−0.1*	*−0.4*	—	*−0.6*
Total financing of the public sector from the private(b) and overseas sectors	**−1.7**	**−1.0**	**−0.9**	**−3.4**

(a) Includes on-lending from central government to local authorities and public corporations.
(b) Non-bank non-building society private sector.

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

Calendar months	July 87– Sept. 87	Oct. 87– Dec. 87	Jan. 88– Mar. 88	Apr. 88– June 88	July 88– Sept. 88
Gross official sales(a)	+2.6	+3.8	+3.1	+0.9	−0.1
less					
Redemptions and net official purchases of stock within a year of maturity	−1.2	−1.3	−1.4	−2.3	−1.4
Equals net official sales(b)	+1.4	+2.5	+1.7	−1.4	−1.5
of which, net purchases by:					
Monetary sector(b)	*+0.2*	—	*+0.8*	*−1.5*	*−0.5*
Building societies	*+0.2*	*−0.5*	*−0.2*	*+0.4*	*+0.4*
Overseas sector	*+2.2*	*+0.1*	*+0.1*	*+0.4*	—
Non-bank non-building society private sector	*−1.3*	*+2.9*	*+1.1*	*−0.7*	*−1.5*

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.

market. This reflected in part the effect of the postal strike in September, which delayed some tax payments. The Bank sold Treasury bills to the market to mop up cash surpluses on eleven days over the month as a whole, compared with fourteen days of cash surplus during the first eight months of the year. On days when assistance was required in September the nervous mood of the market elicited offers to the Bank almost exclusively of longer-dated paper.

Outstanding assistance (excluding that provided through dealings in Treasury bills) amounted to £8.9 billion at the end of June, almost all in the form of eligible bills held outright. With the average daily volumes of maturing assistance exceeding the average daily shortages over each month of the quarter, the total of assistance outstanding declined to £7.2 billion by the end of September, mostly in the form of eligible bills held outright. Within the quarter, the peak level of outstanding assistance was £9.2 billion on 21 July, at the end of a short period of heavy flows of cash to the Exchequer, while the lowest level was £6.9 billion on 14 September.

The weekly tender for thirteen-week sterling Treasury bills was increased from £100 million to £400 million on 23 September and remained at this level for five weeks. At the tender on 28 October the amount of thirteen-week bills on offer reverted to £100 million, but in addition £400 million of nine-week bills were offered. The issue of additional Treasury bills maturing at the end of December and in January was intended to smooth the expected increase in money-market assistance between the end of September this year and the period of heavy corporate tax receipts in January 1989. A similar operation was undertaken last year with the issue of nine-week bills in October and November, although on that occasion there was no prior increase in the amount of thirteen-week bills on offer. There was good demand for the larger volume of bills on offer, with the tender on 23 September covered five times and subsequent tenders covered at least two and a half times.

Gilt-edged operations

The aim of the authorities continued to be to fund over the financial year as a whole the total of maturing debt, the PSBR and any underlying change in the foreign exchange reserves by sales of debt outside the bank and building society sectors. The persistent strength of government finances and much lower official purchases of sterling so far this financial year compared with the previous year reduced the need to issue new stock to the market and the authorities brought very little stock except for the auction on 10 August of £750 million of 8½% Treasury Stock 1994 'A', the first conventional issue for nearly three months, and three tranchettes of index-linked stock issued at the end of July when demand in this sector of the market was strong (see Table J). The Chancellor announced in his Mansion House speech on 20 October that there will be no further auctions of gilt-edged stock for the foreseeable future.

Within this overall context the Bank purchased significant amounts of stock. In total, notwithstanding the receipt of £0.4 billion calls already secured and the proceeds of the auction, there were gross official purchases of £0.1 billion over the period. Moreover, with redemptions of stock and net official purchases

Table J
Issues of gilt-edged stock

Stock	Amount issued (£ millions)	Date announced	Method of issue	Date issued	Price paid per £100 stock (£)	Payable per £100 stock: Initial payment(a) (£)	Payable per £100 stock: Further instalments (£)	Redemption yield at issue (per cent)	Date exhausted
2½% Index-Linked Treasury 2024(b)	100	22/7	Direct to Bank	22/7	80.3125			3.74(c)	28/7
2½% Index-Linked Treasury 2016	100	29/7	Direct to Bank	29/7	98.1875			3.83(c)	3/8
2% Index-Linked Treasury 2006	100	29/7	Direct to Bank	29/7	112.9375			3.90(c)	5/8
8½% Treasury 1994 'A'	750	2/8	Bid price auction	10/8	92.3750(d)	42.375	50.00 (19/9)	10.38	10/8

(a) If not fully paid at time of issue.
(b) The prospectus includes provision for exemption from UK taxation in favour of non-resident holders.
(c) Real yield, calculated on the basis of 5% annual rate of increase in the retail price index.
(d) The lowest accepted price for competitive bids. The non-competitive allotment price was £92.4375.

of stock of under one year's maturity amounting to £1.4 billion, the total of stock outstanding in market hands declined by £1.5 billion. This favourable technical position in the gilt-edged market was reflected in generally lower yields only during September, since in July and August the market was affected by more general monetary and economic developments.

Building societies made net purchases of gilts of £0.4 billion over the quarter, but this was more than offset by net sales of £0.5 billion by banks. The holdings of the overseas sector remained unchanged, following a lengthy period since 1984 during which this sector had consistently been a net purchaser of gilts. The non-bank non-building society private sector was a heavy net seller of gilts, but despite this the public sector was overfunded by £0.9 billion (seasonally adjusted) over the quarter, reflecting the strength of the government's cash position.

Two firms became gilt-edged market makers during the quarter, Nomura Gilts Limited on 1 August and Daiwa Europe (Gilts) Limited on 16 September. This brought the number of gilt-edged market makers up to 24, following the withdrawal of Citicorp Scrimgeour Vickers Securities Limited on 14 July.

Table K
Changes in UK official reserves
$ millions

	1988 July	Aug.	Sept.
Change in reserves	**+ 1,307**	**+ 813**	**− 157**
of which:			
Net borrowing (+)/payment (−) of public debt	− 47	− 14	− 14
Valuation change on roll-over of EMCF swap	+ 444	—	—
Underlying change in reserves	+ 910	+ 827	− 143
Level of reserves (end of period)	**49,826**	**50,639**	**50,482**

Official reserves

The official reserves increased by almost $2 billion over the three months to end-September. In underlying terms the reserves increased quite strongly in July and August but declined slightly in September.

ECU Treasury bills

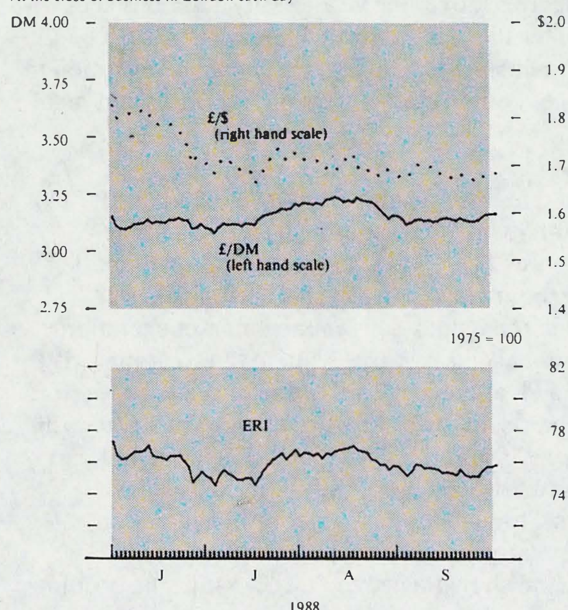
The Chancellor of the Exchequer announced on 2 August that the $2.5 billion floating-rate note issued by the government in September 1985 would be repaid on 7 October 1988, the first date on which an option for early repayment could be exercised, and that a programme of Treasury bills denominated in ECU would be launched in the autumn. Details of the terms of the ECU Treasury bills and of the tender, payment and delivery arrangements were announced by the Bank on 14 September, together with a list of twenty-nine institutions which had undertaken to the Bank to provide their active support at the initial series of six tenders at monthly intervals and to act as market makers for the bills in the secondary market. In order to support market liquidity further the Bank undertook to make a price to these institutions for any bills they offered to the Bank, at least with respect to bills issued at the initial series of tenders.

At the first tender for ECU Treasury bills, held on 11 October, the Bank offered a total of ECU 900 million of bills, comprising ECU 500 million of three-month bills and ECU 200 million each of one-month and six-month bills. The tender of one-month bills was covered 4.6 times and offers were accepted at an average yield of 6.97%; the three and six-month tenders were covered 3.5 and 3.7 times respectively and were sold at average accepted yields of 7.18% and 7.27%. At each maturity the average accepted yield was significantly below the bid rate for ECU-denominated bank deposits and since the tender the bills have traded steadily in the secondary market.

Market developments

Sterling exchange rates

At the close of business in London each day



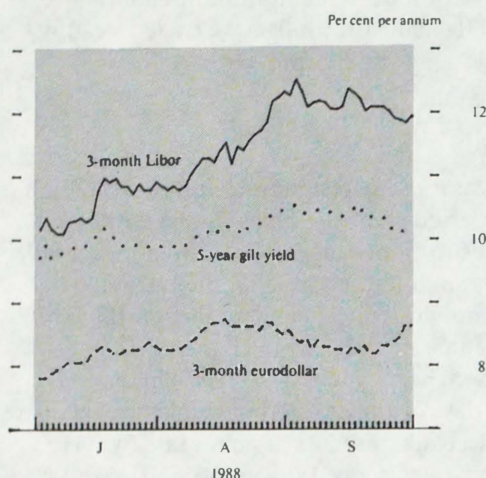
Following the four increases in interest rates in June, each of half a percentage point, the period opened with banks' base rates at $9\frac{1}{2}$%. However, the domestic money market had discounted a full percentage point increase in interest rates after the UK trade figures for May were announced on 27 June, so the fourth $\frac{1}{2}$% rise in interest rates during June, signalled by the Bank on 28 June, left base rates well below interbank rates. This gap widened in the last few days of June as sterling weakened against the dollar and the Bundesbank raised its discount rate by $\frac{1}{2}$% to 3% on 30 June. Interbank rates opened July at $9\frac{19}{32}$%, $10\frac{3}{32}$% and $10\frac{15}{32}$% respectively at the one, three and twelve-month maturities, indicating the strength of the market's expectation of a further increase in the general level of interest rates. Meanwhile, following its marked weakness throughout June, sterling began July at an ERI of 75.0 and at $1.6990 and DM 3.0964.

In the gilt-edged market the fall in prices since the middle of June had taken yields on short, medium and long gilts up to $9\frac{3}{4}$%, $9\frac{25}{32}$% and $9\frac{3}{4}$% respectively by the beginning of July, while the yield (calculated before tax and assuming a 5% rate of inflation) on long index-linked stock ($2\frac{1}{2}$% Treasury 2016) was $3\frac{29}{32}$%.

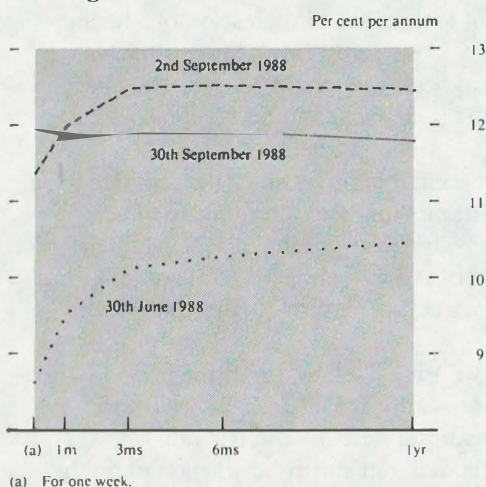
Having remained steady during the first day of the period, sterling opened weaker on 4 July at ERI 74.7, $1.6890 and DM 3.0802. The three-month interbank interest rate rose sharply to $10\frac{9}{32}$% and the markets were not surprised when at noon the Bank announced 2.30 pm lending to the discount market at 10% to signal a further $\frac{1}{2}$% rise in the general level of interest rates; banks' base rates moved up in line with this to 10%. Sterling drifted a little lower that afternoon in a thin market (it was Independence Day in the United States), touching what proved to be a low point for the quarter of DM 3.0770 and closing at ERI 74.6, $1.6840 and DM 3.0812. However, sentiment towards the pound improved considerably over the next two days as the foreign exchange market concluded in the light of prevailing interest rate differentials that sterling was unlikely to decline further against the deutschemark.

The money market began to settle back to a 10% level of interest rates, with the yield curve becoming much flatter as the longer-maturity interbank rates eased back from their 4 July peaks and with the three-month rate shedding $\frac{1}{4}$% to close at $10\frac{1}{16}$% on 6 July. There was also a rally in the gilt market, with yields on conventional stocks falling by around $\frac{3}{16}$% in all maturities, although in the index-linked sector only the short maturities saw any price gains.

Short-term interest rates and yields in London



Sterling interbank rates



(a) For one week.

However, market expectations of a sustained period of interest rates at around 10% proved to be short-lived. From 8 July onwards a number of developments in the United States and a series of announcements of UK domestic economic indicators led interbank interest rates and gilt yields to drift steadily upwards, while sterling weakened, in particular against the dollar. In the United States, the employment data released on 8 July provided evidence of the rapid growth of the US economy and caused the dollar to strengthen generally, a trend which was accentuated by the ½% increase in US banks' prime rates to 9½% on 14 July and particularly by the better-than-expected US external trade figures for May announced on 15 July. As a result, sterling fell back from $1.7172 at the close on 7 July to $1.6630 a week later. Meanwhile, although some encouragement was taken from the announcement on 14 July of the growth in UK manufacturing output during May and of the underlying growth in average earnings (8.5% over the year to May and revised down to the same figure for the year to April), the news on price inflation was less welcome to the markets, with an acceleration in the rate of growth of both manufacturing output prices and retail prices.

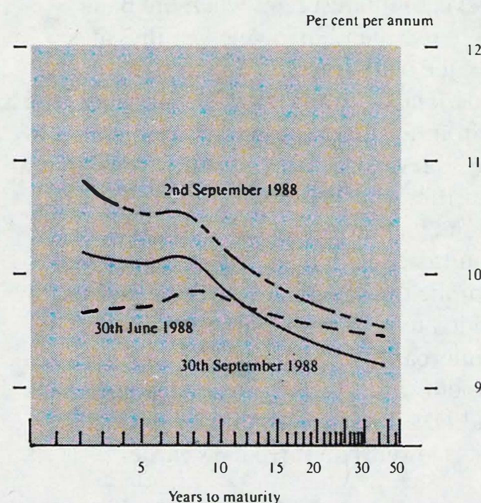
Interbank interest rates rose steadily from 8 July, and by 18 July the three-month interbank rate was as high as 11% and the twelve-month rate was 11$\frac{3}{16}$%. As a further indication of market sentiment, the discount houses displayed a keenness to sell longer-dated bills in the Bank's daily money-market operations. Yields on conventional gilts rose by ⅜% at the five-year maturity, ¼% at ten years and ⅛% at the long end, tilting the yield curve from its flat profile at the beginning of July to a downward slope, with yields moving above 10% at the shorter end. The yield on long index-linked stock reached 3$\frac{31}{32}$% on 18 July, its highest level during the quarter. Throughout this rather turbulent period, sterling remained relatively steady against the deutschemark at around DM 3.12, and strengthened to DM 3.1345 at the opening on 18 July amid expectations that UK interest rates would rise by 1%.

Market expectations of an upward movement in interest rates were confirmed at noon on 18 July when the Bank signalled a half point increase to 10½% by announcing 2.30 pm lending to the discount market, followed by an identical move in banks' base rates. Although the absence of the expected full point increase caused sterling to dip against the dollar to a low for the quarter of $1.6567, the subsequent general easing of the dollar and a shift in foreign exchange market sentiment in favour of high-yielding currencies enabled sterling to advance steadily to ERI 76.6, $1.7422 (a high point for the quarter) and DM 3.1965 on 25 July. The market remained nervous about the prospects for a further increase in interest rates in response to the increase in the Bundesbank's repurchase rate by ¼% to 4% on 19 July and to the announcement on 20 July of the UK money and credit figures for June, which showed M0 to have risen by 7.3% (seasonally adjusted) over the year and sterling lending by banks and building societies to the private sector to have increased by £8.5 billion over the month. With the three-month interbank rate around 11%, the discount market remained keen to sell longer-dated bills to the Bank. However, as the firmness of sterling persisted, the money market became less nervous of an imminent further move by the authorities and the three-month

interbank rate fell back to $10\frac{3}{4}\%$ by 25 July. With the six-month rate also at $10\frac{3}{4}\%$ and the twelve-month rate at $10\frac{13}{16}\%$, the interbank yield curve was almost flat beyond two months.

Both the money and the foreign exchange markets exhibited only slight and transitory bearish tendencies when the CBI quarterly trends survey released on 26 July showed demand and output expectations remaining buoyant and the UK trade figures for June, announced on 27 July, showed a current account deficit of just over £1 billion. Sterling was the main beneficiary of the weakening of the dollar on indicators which suggested that US growth was less strong than had been expected; it also advanced against a deutschemark which was softening despite an increase of $\frac{1}{2}\%$ in the Bundesbank's Lombard rate to 5% on 28 July, moving up sharply to ERI 77.1, $1.7385 and DM 3.2260.

Time/yield curves of British government stocks



Gilt yields eased back from their mid-July peak on the strength of sterling, shedding $\frac{1}{4}\%$ at the short end and $\frac{1}{8}\%$ at the long end, to close the month at $9\frac{13}{16}\%$, $9\frac{3}{4}\%$ and $9\frac{11}{16}\%$ at five, ten and twenty years respectively, even though retail interest remained subdued throughout the month. The index-linked sector was more robust: the tranchette of $2\frac{1}{2}\%$ Index-Linked Treasury 2020 issued on 13 April was exhausted on 12 July and three further index-linked tranchettes issued at the end of July, each of £100 million, were quickly sold out (see Table J). Details were announced on 2 August of the gilt-edged stock to be auctioned on 10 August, a further tranche of £750 million of $8\frac{1}{2}\%$ Treasury Stock 1994, for auction on a bid price basis. The tranche was issued on a partly paid basis, with one call of £50 payable on 19 September. At the auction, the stock was covered just over three times and was allotted at an average yield of 10.37% with a small difference between the highest accepted yield and the average yield.

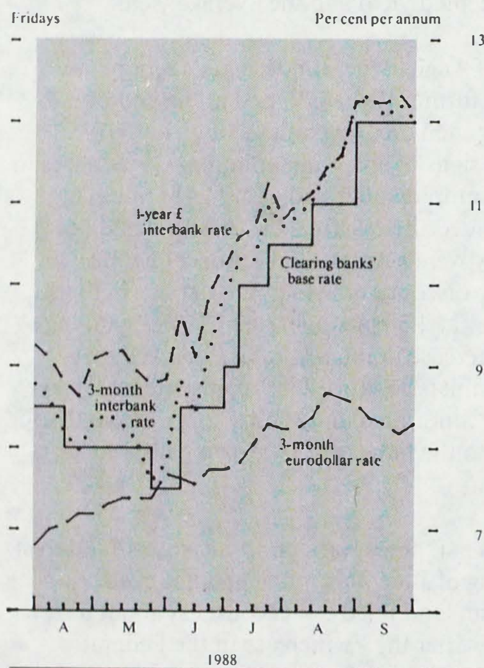
During the first week of August, the Bundesbank's repurchase rate was increased by a further $\frac{1}{4}\%$ to $4\frac{1}{4}\%$, and at the end of the week the dollar strengthened on expectations of higher US interest rates following signs of emerging inflationary pressures in the United States, with employment and earnings both having risen strongly in July. Nevertheless, financial markets had been generally quiet and they were surprised on 8 August by the Bank's invitation to the discount houses (issued at noon) to use their borrowing facilities at 2.30 pm at a rate of 11%, signalling a half percentage point increase in interest rates, followed by a corresponding rise in bank base rates. This represented a further tightening of monetary conditions in response to the strength of domestic demand and to the indicators of growing inflationary pressures in the economy.

Unlike the six previous half percentage point increases in interest rates since the beginning of June, this move had not been anticipated in the market, and it led to nervousness about a further rise, particularly after the $\frac{1}{2}\%$ increase in the Federal Reserve discount rate to $6\frac{1}{2}\%$ on 9 August. Nervousness persisted with the increase in US banks' prime rates to 10% on 11 August; the announcement on 15 August of a 2% increase in the volume of retail sales during July; the money and credit figures for July; the average earnings figures for June showing an acceleration in the underlying growth of earnings in manufacturing to 9%; and an acceleration in the rate of growth of the retail price index to 4.8% over the year to July.

Sterling remained strong in the immediate aftermath of the increase in interest rates to 11%, closing at ERI 77.1, $1.7255 and DM 3.2175 on 16 August and rising further against the deutschemark later that week, but it began to weaken against the dollar as the US currency recovered strongly following the initial weakness of the dollar on the announcement on 16 August of the June US trade deficit. Sentiment towards sterling turned bearish on 22 August as the dollar's strength continued and unease about future UK economic performance became more widespread in the foreign exchange market. Sterling dipped below DM 3.20 on 24 August and closed at ERI 75.9, $1.6805 and DM 3.1854. This weakening of sterling and nervousness in advance of the announcement on 25 August of the UK current account figures for July caused interbank rates to move up further, closing on 24 August at $11\frac{11}{16}$% at three months and at $11\frac{3}{4}$% at the six and twelve-month maturities.

The UK current account figures for July, announced on 25 August, revealed a record deficit of £2.15 billion. Sterling steadied after the signal at noon of a full percentage point increase in the general level of interest rates when the Bank invited discount houses to use their borrowing facilities at 2.30 pm at a rate of 12%; the banks increased their base rates to 12% shortly afterwards. The discount rates at which the Bank purchased eligible bills from the discount market were established the same day at levels declining steadily from $11\frac{7}{8}$% at band 1 (1–14 days) maturities to $11\frac{11}{16}$% at band 4 (64–91 days), equivalent to an almost flat yield curve at 12% across the four maturity bands. This contrasted with the upward-sloping yield curve which had been implicit in the Bank's earlier pattern of stop rates and was intended to help calm market sentiment. By the close on 26 August interbank interest rates had moved up to $12\frac{1}{4}$% from three months outwards and sterling had slipped back to ERI 75.6, $1.6915 and DM 3.1437, with the rate against the deutschemark six pfennigs lower than three days earlier.

Short-term interest rates in London

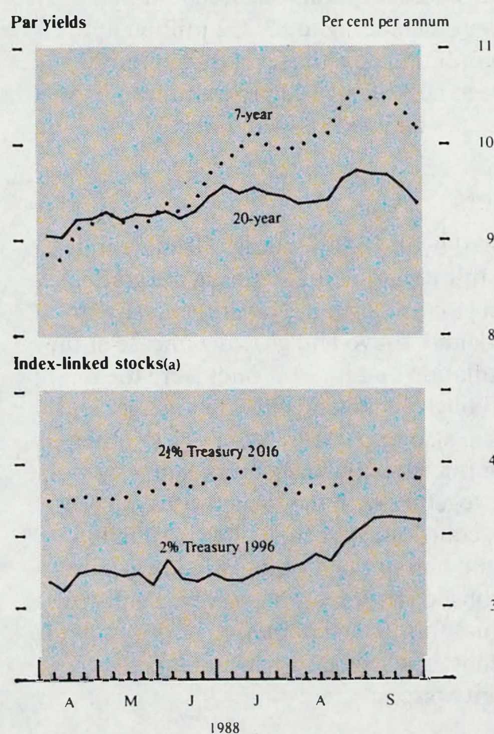


The yield on five-year gilts had moved up by $\frac{5}{32}$% to 10% following the interest rate increase on 8 August and edged up further during the middle two weeks of the month to close at $10\frac{3}{16}$% on 24 August. Meanwhile, the yield on medium-maturity gilts rose by $\frac{3}{16}$% from the beginning of the month to $9\frac{15}{16}$% and that on the long maturity by $\frac{3}{32}$% to $9\frac{25}{32}$%. Thus the downward slope of the gilt-edged yield curve became steadily more pronounced. Retail demand for gilts remained very low.

From the end of August onwards, the money market followed the path of sterling very closely, with any signs of a weakening in sterling causing interbank interest rates to move up. The most acute period of such nervousness occurred in the first two days of September when sterling fell to ERI 75.1, $1.6655 and DM 3.1170 and the three-month interbank rate reached $12\frac{1}{2}$%. At the same time the discount market was particularly anxious to sell longer-dated bills to the Bank. Interbank interest rates eased again as sterling recovered to ERI 75.9, $1.7030 and DM 3.1429 by the close on 7 September and the tendency throughout September for the interbank yield curve to be slightly downward sloping from three months outwards reflected market expectations that short-term interest rates were at or near their peak. In addition, the discount market took some comfort from the positive running yield on holdings of bills which arose from easy day-to-day money conditions.

It was generally recognised in the markets that it would take a considerable time to assess properly the impact of higher interest rates. As a consequence, although the domestic economic statistics announced during September confirmed the strength of domestic demand and the persistence of inflationary pressures, the markets tended to discount these backward-looking indicators. Sterling proved resilient, in part because there was no serious expectation of further monetary tightening in major overseas countries, and there was little market reaction to the announcements on 15 and 16 September that the growth in average earnings had accelerated to 9% over the year to July and that retail price inflation had accelerated to 5.7% in the twelve months to August. The three-month interbank interest rate rose to $12\frac{5}{16}$% but the longer interbank rates showed little movement and the three-month rate soon fell back to below $12\frac{1}{4}$%.

The encouraging US trade figures for July, announced on 14 September, led to a slight strengthening of the dollar, and sterling eased back further in advance of the announcement of the August UK trade figures on 27 September, falling to ERI 75.0, $1.6635 and DM 3.1315 at the opening on 26 September. However, sterling picked up quickly following the trade figures, which were better than many had expected, rising to ERI 76.0, $1.6865 and DM 3.1715 by 29 September. This produced a marked rally in the money, gilts and equity markets, with the most pronounced effects emerging in the interbank market, where the three and six-month rates closed at $11\frac{13}{16}$% and the twelve-month rate at $11\frac{11}{16}$% on 29 September. The authorities did not believe that economic conditions warranted a reduction in interest rates and on 30 September the Bank announced 2.30 pm lending at the unchanged rate of 12%, a technique not used since February 1987. The money market began to respond appropriately and interbank rates firmed as the period ended, closing the quarter at $11\frac{7}{8}$%, $11\frac{27}{32}$% and $11\frac{3}{4}$% at the three, six and twelve-month maturities respectively. Sterling closed at ERI 75.9, $1.6860 and DM 3.1692.



Yields on conventional gilts had risen by around $\frac{3}{16}$% at all maturities in the wake of the increase in money-market interest rates to 12% on 25 August, taking the medium-maturity yield above 10% for the first time since the middle of January, and the yields on shorter maturities in particular rose further on the first two days of September as sterling weakened, with gilt yields peaking at $10\frac{1}{2}$%, $10\frac{1}{4}$% and 10% at the five, ten and twenty-year maturities respectively. Thereafter, yields eased a little in quiet trading conditions, falling back to $9\frac{27}{32}$% on long gilts by 23 September, to $10\frac{1}{32}$% on mediums and to $10\frac{1}{4}$% on shorts. The gilt market then shared in the general rally in domestic financial markets following the announcement of the August trade figures to end the quarter at $10\frac{1}{16}$%, $9\frac{27}{32}$% and $9\frac{11}{16}$% at the five, ten and twenty-year maturities respectively. The yield on long index-linked stock closed the period at $3\frac{7}{8}$%, following a steady decline from $3\frac{15}{16}$% in the second week of September.

Market turnover

Transactions in eligible bills by discount houses, including sales to the Bank, averaged £0.6 billion daily over the quarter, compared with a daily average of £1.2 billion over the previous quarter. This reduction reflected bearish sentiment in July and

August and low money-market shortages in September. Discount house transactions in certificates of deposit averaged £0.5 billion daily over the quarter.

Total turnover in gilts was low in each month of the quarter, averaging £4.1 billion a day compared with £4.4 billion in the second quarter and £4.6 billion in the first. Trading in medium-maturity gilts was particularly subdued. Intra-market transactions accounted for just over half of total turnover. Futures market activity was also extremely low. Average daily turnover in the long gilt futures contract on the London International Financial Futures Exchange was 18,900 contracts, well below the 28,500 and 21,000 contracts in the first and second quarters respectively. Interest in the medium gilts contract was almost non-existent in July and August, although in September the average picked up to 235 contracts. During the quarter £400 million of call warrants exercisable into gilt-edged stock matured; £50 million of these were renewed but there were no other new issues, leaving the total outstanding at the end of the period at £350 million. There were redemptions of £250 million of put warrants but no new issues, reducing the amount outstanding to £300 million. The fall in turnover in cash gilts and in derivative instruments may be attributable in part to the lowness of price volatility during the period under review.

Sterling commercial paper

Gross issues of sterling commercial paper during the third quarter totalled £9,488 million, compared with £7,699 million in the previous three months. Redemptions of £9,085 million brought the total of paper outstanding to £3,752 million at the end of September, £403 million above its level three months earlier. The Bank had been notified of 142 programmes by the end of September, and paper had been issued under 117 of these.

Other capital markets

Equity prices, as measured by the FT-Actuaries all-share index, increased by 1½% in the third quarter, maintaining the gradual upward drift from the post-crash level of November last year. Movements in New York and Tokyo and growing unease at the prospect for domestic inflation and interest rates were the main influences on prices, although actual and expected merger and acquisition activities were also important influences at times during the period. Economic news in August was generally worse than expected, and this, together with the related rises in base rates from 10½% to 12%, contributed to the quite sharp fall in equity prices in the second half of the month. By contrast, the economic indicators published in September were generally in line with expectations, and this led to a tentative improvment in market sentiment, which was reflected in growing investor demand and rises in equity prices.

New equity issues of nearly £2 billion were announced in the third quarter, compared with £1.6 billion in the second. The largest were rights issues by Carlton Communications for £370 million and Standard Chartered Bank for £312 million.

The level of sterling debt issues, at £2.3 billion, was well down on the levels of the first and second quarters, largely on account of the rise in interest rates between June and August. Only

Table L
Amounts raised in the domestic capital market
£ millions; *not seasonally adjusted*
Net cash raised +

	1987			1988		
	Q2	Q3	Q4	Q1	Q2	Q3
UK private sector						
Loan capital and preference shares	+ 435	+ 750	+ 294	+333	− 161	+ 670
Equity	+2,122	+7,298	+3,740	+351	+1,787	+ 959
Unit trusts	+1,234	+2,982	+ 389	+355	+ 416	+ 590
Issues on the unlisted securities market	+ 184	+ 457	+ 215	+102	+ 163	+ 208
Local authorities						
Stocks	− 14	− 35	− 3	—	—	− 16
Bonds	− 56	− 28	− 16	− 5	− 14	—
Overseas	+ 11	—	+ 177	—	+ 41	+ 177

Table M
Sterling capital issues: amounts announced
£ millions

	Equities	Fixed-rate(a)			FRNs
			Sterling eurobonds		
		Domestic issues(b)	UK borrowers	Overseas borrowers	
1987	13,891	2,332	3,544	4,413	1,247
Q1	1,803	190	1,431	1,775	250
Q2	3,648	1,146	1,090	1,306	150
Q3	5,956	493	620	507	411
Q4	2,484	503	403	825	436
1988					
Q1	808	436	1,890	1,340	1,090
Q2	1,578	835	1,273	1,670	2,155
July	400	209	108	—	535
Aug.	356	30	—	—	515
Sept.	1,223	216	75	—	595
1988					
Q3	1,979	455	183	—	1,645

(a) Of which, £148 million was equity-related in the third quarter.
(b) All UK borrowers in 1987 and so far in 1988. Excludes local authority issues.

£490 million was raised by way of non-convertible fixed-rate issues in the domestic and sterling eurobond markets; a further £148 million was raised from convertible preference share issues in the domestic market. As might be expected, issues of floating-rate notes were less depressed by rising interest rates but even so, at £1.6 billion, were 25% lower than in the second quarter. The mortgage-backed sector of the market was particularly active in the third quarter: there were six issues for a total of £970 million, including one for TSB, the first such issue by an authorised bank. Most of the other FRN issues were by building societies. There were no sterling debt issues by overseas borrowers.

UK companies and their overseas subsidiaries raised the equivalent of £1 billion in currencies other than sterling through sixteen new bond issues, of which 60% were denominated in US dollars. UK building societies maintained the high level of activity seen in the previous quarter, raising the equivalent of £300 million. BP America announced three new eurodollar issues, totalling £180 million equivalent.