Operation of monetary policy

- *The economic and monetary data released during the second quarter provided further evidence of a steady recovery with low inflation. The April tax increases did not appear to have significant impact on the course of the recovery in the quarter.*
- *Although there was some increase in earnings growth and manufacturers' input prices, current inflation remained subdued.*
- *International financial markets continued to be volatile; much of the disturbance in the UK gilt-edged and equity markets reflected this worldwide instability.*
- *Despite the difficult market conditions, sufficient sales of gilts were made to keep pace with the annual funding target. This satisfactory result was achieved by introducing at the monthly auctions a range of gilt-edged instruments designed to take account of the unstable market conditions.*
- *With no significant pressure on UK interest rates in either direction, the Bank maintained a broadly neutral stance in its money-market operations and kept its dealing rates unchanged throughout the period.*

Decisions on monetary policy are based on a wide range of indicators. The Bank's current assessment of the latest indicators is given in the August *Inflation Report*; this article describes the operation of monetary policy in the second quarter of 1994. The minutes of the monthly monetary meetings between the Chancellor and the Governor are published by HM Treasury around two weeks after the subsequent meeting has taken place.

Overview

The economic and monetary data released during the quarter suggested that the economy was continuing to grow steadily. They showed output expanding at—or just above—the rate envisaged in the November Budget and a broadening of the recovery, with consumer spending, investment and net trade contributing in broadly equal degree to GDP growth. The tax measures which took effect in April did not appear to have significant impact on the course of the recovery in the quarter.

Although there was some increase in earnings growth and manufacturers' input prices, current inflation remained subdued. At their monthly meetings during the quarter to review monetary developments, the Chancellor and Governor concluded that it was appropriate to leave interest rates unchanged.

At times early in the quarter, short-term money-market rates and the rate implied by the June short sterling futures contract fell on expectations of a further slight easing in official rates, but the prices of the September and December 1994 futures contracts indicated that the market expected any reduction to be short-lived. As evidence of the recovery continued to accumulate, the yield curve

tended to steepen. There was, however, no significant pressure on current interest rates in either direction. The Bank maintained a broadly neutral stance in its money-market operations and kept its dealing rates unchanged throughout the period.

The international economic outlook showed signs of improvement, with some evidence of recovery in the major continental European economies and in Japan. Growth in the Group of Seven industrialised countries was estimated to have been 1.5% in the fourth quarter of 1993, and appeared to accelerate in the first quarter of 1994, with investment rising more rapidly than consumption. The US economy continued to grow quite strongly in the first quarter, though below the very high rate recorded in the fourth quarter of 1993. The Federal Reserve tightened its monetary stance further in the quarter, raising the federal funds target rate twice by a total of 75 basis points to $4\frac{1}{4}$% and the discount rate by 50 basis points to $3\frac{1}{2}$%. In Germany, the Bundesbank lowered the discount and Lombard rates twice by a total of 75 basis points to 4.5% and 6% respectively, despite an M3 growth rate above its target range. Markets nevertheless revised upwards their expectations about future movements in German rates as the German economy showed signs of recovery, though such expectations moderated towards the end of the quarter.

In the foreign exchange markets, attention was focused principally on the dollar—and especially its rate against the yen. Concerted central bank intervention early in May briefly checked its fall, but it weakened again from the middle of June onwards, falling to a post-war low against the yen despite a further round of intervention on 24 June. Sterling's trade-weighted effective exchange rate index remained steady throughout the quarter at around 80; its appreciation against the weaker dollar was counterbalanced by depreciation against a stronger Deutsche Mark.

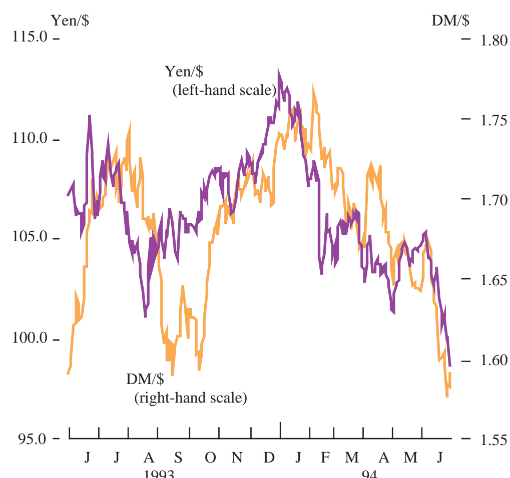
There was continued turbulence in bond markets around the world, and this again made its impact felt on the gilt-edged market. International equity markets were also disturbed (for details, see the review of financial market developments on pages 214–22). But differences in the performance of individual countries' government bonds were more marked than in the initial period of turbulence in February and March; gilts again tended to weaken by more than many other major bond markets. Over the quarter, despite a narrowing of differentials in June, the spread between UK and German ten-year yields rose from 115 to 160 basis points, and the spread between UK and US bonds increased by 60 basis points to 130 basis points. In part, these movements reflected a rise in real yields: the yield on index-linked gilts increased from $3\frac{1}{2}$% to 4% over the quarter. They served to return nominal gilt yields—and yield differentials with German and US bonds—to broadly the levels prevailing a year earlier, suggesting that the strong rally in the second half of 1993 had run too far.

Foreign exchange markets

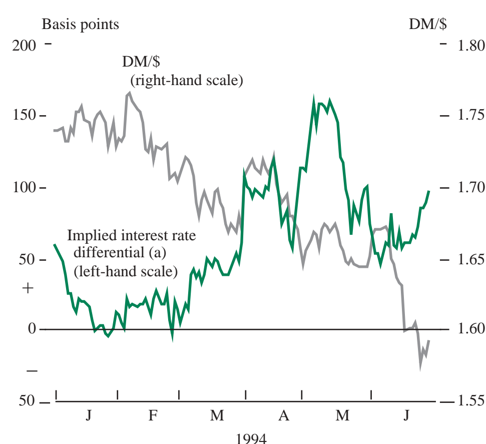
The main feature of the quarter was the dollar's persistent weakness. The Deutsche Mark and the yen strengthened; sterling remained on the sidelines.

The dollar fell sharply against the yen and reached a post-war low below ¥100, mainly in response to the protracted and inconclusive

Dollar exchange rates



Expected differential between US and German three-month rates in March 1995



(a) Derived from the difference between the prices of LIFFE's March 1995 US and German three-month futures contracts.

US/Japanese trade negotiations. Against the Deutsche Mark, after strengthening by five pfennigs to DM 1.72 in the first few weeks of April, it lost 14 pfennigs, falling to just below DM 1.58—its lowest level for over a year.

The persistence of the United States' trade and current account deficits with Japan appeared to be a main factor underlying the dollar's weakness against the yen. Though the US authorities stated that a fall in the dollar was not desired, setbacks in the bilateral trade talks heightened market expectations that the necessary adjustment would have to come through a depreciation of the dollar.

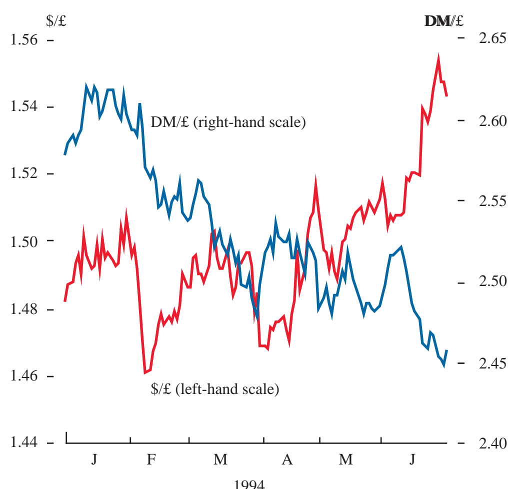
Market perceptions that the dollar would continue to depreciate were compounded by changing expectations about the differential between US and German interest rates. The actual spread of German over US three-month interest rates narrowed, from 182 basis points at the start of the quarter to 14 at the end of it. But expectations of future interest rates may have been more influential. Throughout the quarter, eurodollar and euromark futures implied expectations that in March 1995 US three-month rates would be higher than German rates; but the expected differential declined from a peak of 170 basis points in mid-May to 97 basis points by the end of June. A reduction of $^1/_2$% in the German discount and Lombard rates on 13 May left the markets with the view that the pace of any further easing in German interest rates would slow. When the Federal Reserve raised the federal funds target and discount rates on 18 May, its statements suggested that the rise of $^1/_2$%—rather than $^1/_4$%—showed that a neutral monetary stance would be reached sooner than previously expected. The resulting change in expectations about the future spread between US and German short-term interest rates reduced a source of support for the dollar.

The dollar rallied in the first half of April, following buoyant employment figures and a sharp rise in the US purchasing managers' index, reaching a peak of ¥105 and DM 1.72. But it fell back later in the month after the resignation of the Japanese Prime Minister and a higher-than-expected increase in the US GDP deflator (despite GDP data that were lower than expected).

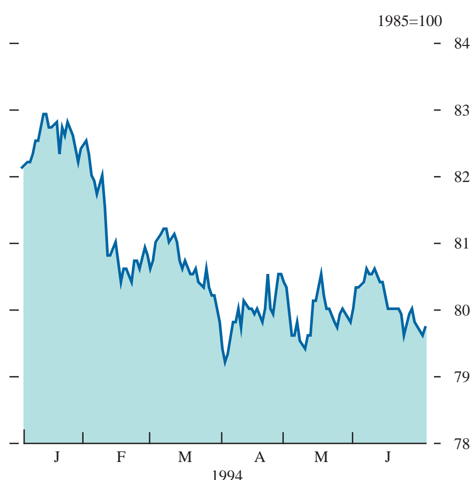
There was concerted intervention by a large number of central banks in support of the dollar on two occasions during the quarter. On 4 May, support was given at around DM 1.655 and ¥101.25; statements by the US authorities made clear their view that the dollar's fall had gone further than could be justified by economic fundamentals. The intervention, which was followed later in the month by the reduction in German and the increase in US rates, was temporarily successful in checking the dollar's fall; it steadied at around DM 1.665 and ¥102.50.

Further heavy sales, however, were triggered on 17 June by a research report suggesting that the dollar could fall by as much as 10% against the Deutsche Mark by the end of 1995. By 21 June, the dollar had dipped below DM 1.59, and below ¥100 for the first time since the Second World War. A further round of concerted intervention on 24 June provided some support at these lower levels but, because the market had expected the further intervention and many market participants were seeking to unwind long dollar positions, its impact was smaller than the intervention in early May. Statements by the US Treasury indicating that the administration

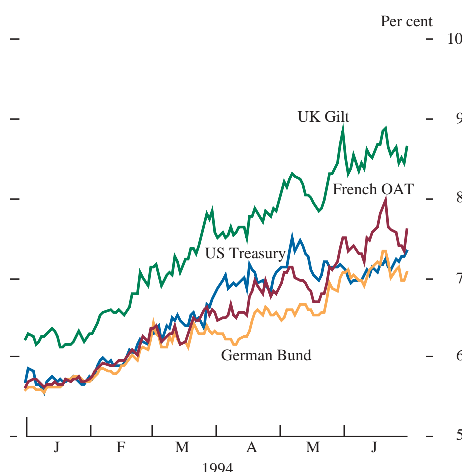
Sterling exchange rates



Sterling's effective index



Ten-year government bond yields(a)



(a) Gross redemption yield.

would prefer a stronger dollar failed to provide lasting support. Trading conditions remained nervous to the end of the quarter, by which time the dollar was trading at DM 1.5915 and ¥98.65.

Against this background, sterling rose in late June to a nine-month high against the dollar of around $1.55. Against the Deutsche Mark, it weakened somewhat in the wake of the dollar's fall. But sterling remained very much on the sidelines and experienced no significant pressure: its average value in trade-weighted terms against the major currencies—as measured by the Effective Rate Index (ERI)—remained steady at around 80. Sterling's stability was helped by strengthening market perceptions of the continuing economic recovery and the developing view that UK rates would fall no further. Political developments—especially at around the time of the local and European elections—had only a fleeting influence, and sterling ended the quarter calmly at around DM 2.46 and 79.7 on the ERI.

Most countries within the ERM followed German interest rate reductions, and for the most part the French and Belgian francs and the Dutch guilder traded steadily against the Deutsche Mark. Short-term market rates in Portugal and Spain rose occasionally in response to a weakening of the escudo and the peseta at the bottom of the ERM grid; the divergence between the strongest and weakest currencies widened to 8% on occasions. Outside the ERM, the lira suffered bouts of weakness, partly as a result of uncertainty about the policies of the new Italian government. The drachma weakened markedly towards the end of May in anticipation of the removal of capital controls; the Greek authorities moved to counter this by raising overnight interest rates temporarily to above 200%.

Developments in the bond markets

The disturbance in bond markets worldwide, which began in February, continued for much of the second quarter. Yields in all major bond markets rose further. There was, however, more differentiation in the changes in yield among the individual markets than in the first quarter. The US bond market steadied in May and the first half of June, whereas a further period of disturbance affected the German and other European bond markets from the last week of May.

The sharpest rises in ten-year government bond yields over the first half of the year were in Sweden, Australia, Finland, Canada, Spain and the United Kingdom. Those countries' bonds had been among the best performing during the rally in 1993, and the subsequent correction in the first half restored their differentials with German and Japanese bonds to levels close to those prevailing before last year's rally.

The increases in nominal yields in part reflected a rise in real interest rates during the second quarter. By the end of June, index-linked gilt yields had increased to 4% from 3% in January. There were similar—or larger—measurable rises in other countries with index-linked government bonds, such as Canada and Australia. This rise in real yields may have reflected the first evidence—seen since the start of the year—of a recovery in activity in a number of the major overseas economies, perhaps heightened by concern at the financing burden of high structural budget deficits in some countries.

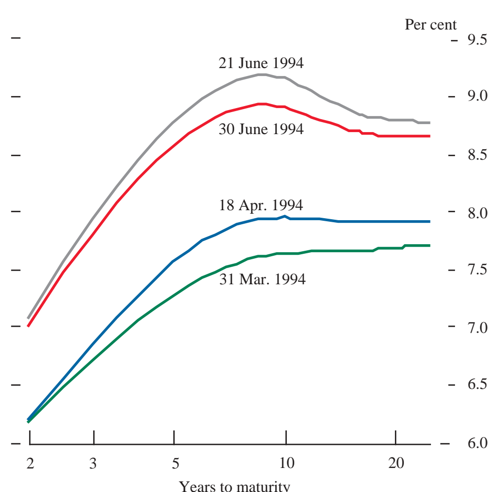
Table A
International ten-year government bond yields

As at end month:

	Dec. 1993	Mar. 1994	Change in Q1 (a)	June 1994	Change in Q2 (a)	Change in H1 (a)
United Kingdom	6.10	7.63	153	8.64	101	254
United States	5.80	6.77	97	7.33	56	153
Germany	5.55	6.33	78	7.06	73	151
Japan	3.04	4.01	97	4.30	29	126
France	5.63	6.56	93	7.60	104	197
Italy	8.49	9.11	62	10.46	135	197
Canada	6.64	7.95	131	9.28	133	264
Spain	8.12	9.19	107	10.67	148	255
Australia	6.64	7.88	124	9.64	176	300
Sweden	7.02	8.31	129	10.15	184	313
Finland	6.73	7.96	123	9.58	162	285

(a) In basis points; a positive figure indicates an increase.

Par yield curves for British government stocks



A further factor underlying the rise in nominal bond yields was the volatility displayed by the major bond markets. Implied volatility in both the US and German markets rose from around 5% in 1993 to around 9% in the second quarter of 1994.

Apprehension about greater inflationary pressures probably also played a part in the rise in bond yields internationally. The increased momentum seen in most industrialised economies this year led to some fears that the gap between potential and actual output might close earlier than previously expected, with inflationary consequences despite the low prevailing levels of inflation. Rises in commodity prices, in part attributable to increasing global demand and activity, were also taken by the markets to imply upward pressure on input costs.

All these factors appeared to lie behind the rise in bond yields early in the quarter. Around the middle of May, international bond markets showed signs of recovering some stability, following the concerted intervention to support the dollar, and the subsequent ½% cut in German interest rates on 13 May and the ½% rise in the US rates on 18 May. Markets were encouraged by this sequence of official actions, which improved confidence in US and other bond markets.

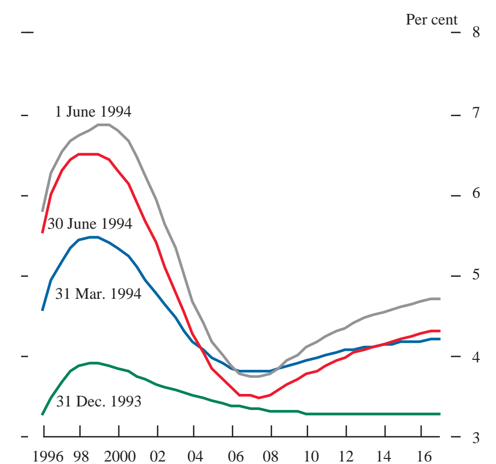
However, renewed disturbance emerged towards the end of May, led mainly by weakness in German Bunds. Initially, this seemed to reflect uncertain expectations about the future course of German interest rates, as the Bundesbank continued to make small reductions in its repo rate despite evidence of strengthening German economic activity and the continued growth of M3 above its target range. The market weakened further when the German authorities cancelled two bond auctions in the last week of May. In June, ten-year German yields briefly rose above US yields and on 21 June recorded their highest level for 18 months at 7.33%. Other European bond markets, including the gilt-edged market, weakened sharply in line with the rise in German yields.

International bond markets had seemed to steady in early June, but the weakness in the dollar in the second half of the month led to a renewed rise in US yields, with the ten-year Treasury yield rising from 6.92% on 6 June to 7.33% by the end of the month. This produced further falls in other major bond markets, although European bonds performed rather better than the US market.

Gilt-edged funding

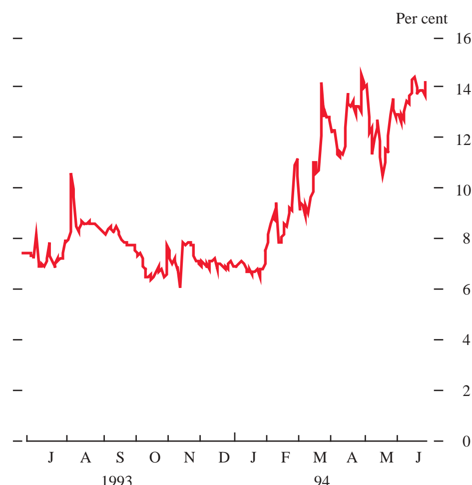
Conditions in the gilt-edged market largely reflected the continuing disturbance in the international bond markets; ten-year conventional gilt yields rose from 6.2% at the turn of the year to 8.6% by the end of June. Of this 240 basis-point rise, about 100 basis points were the result of the rise in real yields. Part of the remaining increase may have reflected inflation expectations, although surveys of analysts' short-term forecasts did not corroborate the rise suggested by implied forward inflation rates. It may also have reflected a rise in the risk premium in response to the increase in bond market volatility. The average intra-day range of the price of the long gilt future was 1.15 points, compared with 0.93 points during the first quarter and 0.56 points during 1993. The implied volatilities of options on the long gilt future were typically twice as high in the first half of 1994 as in the second half of 1993,

Implied forward inflation rates(a)



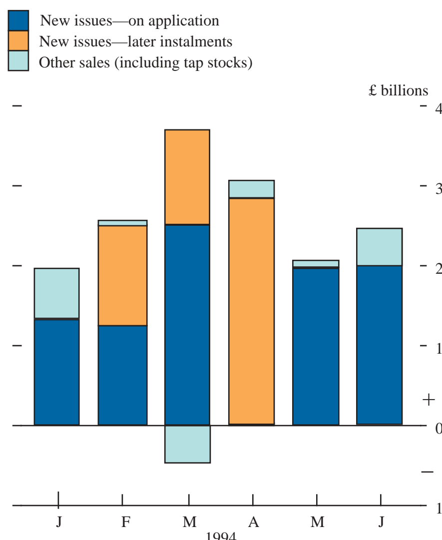
(a) Expectations of the 12-month change in the RPI in future years derived from the differential between yields on conventional and index-linked stocks. See the article on pages 232–40 for further explanation.

UK implied bond market volatility(a)



(a) The expected standard deviation of annualised price movements in LIFFE's long-gilt future.

Gross official sales of gilt-edged stock



which suggested that nominal yields may have embodied a higher risk premium than in 1993. In addition, the gilt-edged market-makers (GEMMs) cut the size of their overall open positions during the second quarter—thereby reducing the extent of the normal buffer between price pressure and price movements—which contributed to volatility.

In April, short and medium-term yields rose more than those at the long end, partly reflecting the continued hedging of fixed-rate mortgages by lenders or their swap market counterparties. The increase was most pronounced in the six to nine-year maturity range, with the yield curve becoming inverted further out. Gilt yields were steadier for most of May, following the concerted intervention in favour of the dollar and subsequent changes in German and US interest rates, and as hedging of fixed-rate mortgage lending came to an end. But towards the end of the month, yields rose sharply in the wake of the renewed rise in German Bund yields. In June, the weakening in the dollar was a further unsettling factor, but towards the end of the month the market showed signs of consolidation after more than four months of disturbance. Medium yields, which had touched 9% on 21 June, recovered to 8¾% by the end of June.

Despite the difficult market environment, the Bank maintained the required pace of funding. An auction was held each month. The market was extremely nervous throughout the quarter and, in order not to aggravate the fragile conditions, the Bank chose to supply £2 billion of stock at each auction—the bottom of the published range. When conditions began to stabilise at the end of the quarter, the Bank supplemented the auctions with sales of stock from official portfolios. Three packages of tap stocks were also issued during the quarter, of which the first two raised £740 million. (Sales of the third package of tap stocks—issued on 29 June—were settled in July, and therefore count as sales in the third quarter.) Gross official sales during the second quarter were £7.6 billion.

The April auction (a £2 billion tranche of 6% 1999 stock) was designed to alleviate a technical difficulty in the market. It was the first tranche issued to be immediately fungible with its parent stock, easing the problems experienced by the GEMMs in borrowing the tightly-held five-year stock. Despite the continuing market disturbance, demand at the auction was high; the tail—the difference between the yield corresponding to the average and lowest-accepted prices—was only one basis point and the auction was covered 1.70 times.

In May, against a background of continuing uncertainty about the future direction of yields, the Bank announced the auction of the first convertible gilt issued since 1987: a three-year stock with four successive options to convert into 9% 2012 stock. The issue provided an outlet for investment of liquid funds at a short-dated maturity—and thereby limited losses if gilt prices were to fall further—but also gave investors a method of gaining exposure to longer maturities, which would be valuable if yields fell. The high degree of uncertainty, evidenced by the implied volatilities on options on the long-gilt future, suggested that a convertible would be attractive. The response was very positive, with the issue covered 1.93 times; the tail of 4 basis points owed more to different methods of valuing the embedded options than to any lack of

Table B
Issues of gilt-edged stock

	Amount issued (£ millions)	Date announced	Date issued	Method of issue	Price at issue (per £100 stock)	Details of payment	Yield (a) at issue	Yield (b) when exhausted	Date exhausted
$2\frac{1}{2}$% Index-Linked 2011	150	15.4.94	15.4.94	Tap	164.4375	In full	3.38	3.36	18.4.94
$2\frac{1}{2}$% Index-Linked 2024	100	15.4.94	15.4.94	Tap	116.3125	In full	3.46	3.67	18.5.94
6% Treasury 1999	2,000	19.4.94	28.4.94	Auction	93.6563 (b)	In full	7.47 (c)	7.47	28.4.94
$4\frac{3}{8}$% Index-Linked 2004	150	20.5.94	20.5.94	Tap	111.8125	In full	3.43	3.85	23.6.94
$2\frac{1}{2}$% Index-Linked 2016	150	20.5.94	20.5.94	Tap	141.8750	In full	3.64	3.84	3.6.94
7% Treasury Convertible 1997	2,000	17.5.94	26.5.94	Auction	100.3750 (d)	In full	6.87 (c)	6.87	26.5.94
7% Treasury 2001	150	29.6.94	29.6.94 (e)	Tap	92.1875	In full	8.44	8.39	30.6.94
7% Treasury 2001	100	29.6.94	29.6.94	To CRND	92.1875	In full	8.44		
$6\frac{3}{4}$% Treasury 2004 ‘A’	150	29.6.94	29.6.94 (e)	Tap	88.5938	In full	8.41	8.34	11.7.94
$6\frac{3}{4}$% Treasury 2004 ‘A’	100	29.6.94	29.6.94	To CRND	88.5938	In full	8.41		
$2\frac{1}{2}$% Index-Linked 2011	150	29.6.94	29.6.94 (e)	Tap	156.0625	In full	3.90	3.90	12.7.94
8% Treasury 2013	200	29.6.94	29.6.94 (e)	Tap	96.3125	In full	8.38	8.34	11.7.94
8% Treasury 2013	100	29.6.94	29.6.94	To CRND	96.3125	In full	8.38		
Floating-rate Treasury 1999	2,000	21.6.94	30.6.94	Auction	99.7500 (f)	In full	. .	. .	30.6.94

. . not applicable.

(a) Gross redemption yield, per cent.
(b) Lowest-accepted price for competitive bids. The non-competitive allotment price was £93.7188.
(c) Yield at lowest-accepted price for competitive bids.
(d) Holders have four options to convert this stock into 9% Treasury 2012; the non-competitive allotment price was £100.4688.
(e) Tap stocks issued on 29 June were all settled in July, and will count towards funding for the third quarter.

demand. The implied value received on the options was about £1.25 per £100 of stock.

The auction enabled the government to raise three-year funds at 6.83% when outright yields for that maturity were around 7.3%, with the opportunity for investors—at the first conversion date on 6 August—to switch into the long conversion stock at a yield cost to the issuer of 7.65%, compared with a yield of 8.15% on the 9% 2012 stock at the time of the issue. On the same day as the gilt auction (25 May), the German authorities cancelled a four-year note issue, and a further Bund issue scheduled for early June was cancelled on 31 May. In the prevailing weak market conditions, the Spanish, Austrian and Japanese authorities also cancelled one or more of their auctions. In the United Kingdom, the ability to continue with the monthly programme of auctions on the normal schedule was a helpful element in enabling the market to stabilise once yields had adjusted.

For the June auction, with bond markets worldwide still subject to considerable uncertainty and volatility, the authorities decided to deepen the liquidity of the floating-rate gilt maturing in 1999, first issued in March with a coupon equal to Libid minus $\frac{1}{8}$%. This stock had been largely retained by the original investors, so that there had been relatively little trading activity. A £2 billion tranche was therefore added. The response was positive: the cover, at 2.73 times, was the highest since April 1991, and there was a difference of only one penny between the average (£99.76) and lowest-accepted prices (£99.75), equivalent to a tail of only a quarter of a basis point.

The funding arithmetic for 1994/95 was set out in the annual remit for the Bank’s operations in the gilt market.(1) Since the remit was published on 17 March, the amount of overfunding in 1993/94 (net of underfunding carried forward from 1992/93) has been estimated at £$2\frac{1}{4}$ billion, and the PSBR forecast for the current fiscal year has been revised down by the Treasury to £36 billion (in the summer economic forecast published on 28 June). Taking into account £$8\frac{1}{2}$ billion of gilt maturities in 1994/95, an assumed net contribution of National Savings of £$3\frac{1}{2}$ billion, and sales of gilts

(1) Reprinted in the review of the operation of monetary policy in the May *Quarterly Bulletin*, pages 112–3.

Table C
Official transactions in gilt-edged stocks

£ billions: *not seasonally adjusted*

	1993/94	1994/95 (a)		
	Total	April	May	June
Gross official sales (+) (b)	54.6	3.1	2.1	2.5
Redemptions and net official purchases of stock within a year of maturity(-)	-5.8	-1.1	-0.5	-1.6
Net official sales (c)	48.9	2.0	1.6	0.8
of which net purchases by:				
Banks (c)	6.5	-1.1	1.8	-0.7
Building societies (c)	1.3	0.1	—	—
Overseas sector	17.5	-0.1	-0.1	-0.7
M4 private sector (c)	23.4	3.0	-0.2	2.2

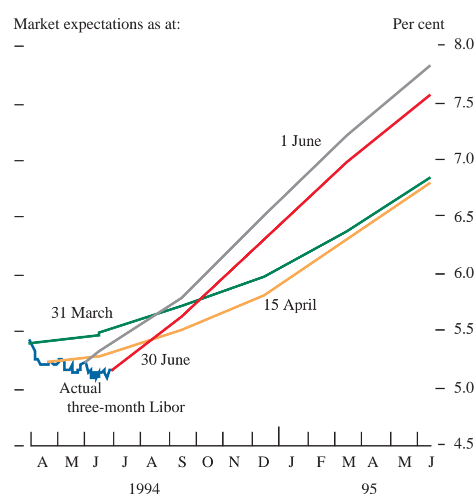
(a) Later instalments are included in the month when they fall due, not in the month when the sale is secured.
(b) Gross official sales of gilt-edged stocks are defined as official sales of stock with over one year to maturity net of official purchases of stock with over one year to maturity apart from transactions under purchase and resale agreements.
(c) Excluding transactions under purchase and resale agreements.

Table D
Interest rates, gilt yields and exchange rates; selected dates(a)

1994	Interest rates (per cent per annum): Sterling interbank rates (c): 1 month	3 months	6 months	12 months	Short sterling future (d): 3 months	Gilt yields (b) (per cent per annum): Conventionals: Short	Medium	Long	Index-Linked: Long	Exchange rates: ERI	$/£	DM/£
31 March	5 7/32	5 5/16	5 13/32	5 11/16	5.47	7.08	7.48	7.68	3.46	79.3	1.4841	2.4804
15 April	5 1/8	5 3/16	5 9/32	5 19/32	5.27	7.10	7.49	7.65	3.44	79.9	1.4733	2.5235
4 May	5 3/32	5 7/32	5 7/16	5 29/32	5.44	7.85	8.19	8.25	3.62	79.6	1.4975	2.4891
18 May	5 1/32	5 3/16	5 3/8	5 7/8	5.33	7.56	7.92	8.00	3.66	80.0	1.5070	2.5004
1 June	5 1/32	5 7/32	5 17/32	6 5/32	5.78	8.45	8.80	8.81	3.95	80.3	1.5170	2.4918
21 June	4 31/32	5 1/8	5 15/32	6 5/32	5.70	8.51	8.85	8.70	4.01	79.9	1.5377	2.4594
30 June	5 1/32	5 5/32	5 15/32	6 3/16	5.63	8.24	8.63	8.57	3.97	79.7	1.5435	2.4564

(a) Close-of-business middle-market rates in London.
(b) Gross redemption yield. Representative stocks: short—6% Treasury 1999; medium—6 3/4% Treasury 2004; long—8% Treasury 2013; index-linked—2 1/2% Index-Linked Treasury 2016 (real yield assuming 5% inflation).
(c) Middle-market rates.
(d) Implied future rate: until 18 May, the June contract, thereafter the September contract.

Sterling interest rate expectations(a)



(a) Three-month Libor implied by short sterling futures contract.

Table E
Influences on the cash position of the money market

£ billions; *not seasonally adjusted*
Increase in bankers' balances(+)

	1993/94 Total	1994/95 April	May	June (a)
Factors affecting the market's cash position				
Under/overfunding (+/-) (b)	-2.8	2.2	2.4	1.7
Other public sector net borrowing from banks and building societies (-) (c)	1.9	-0.7	0.3	0.1
of which, local authorities' deposits with banks and building societies (+)	*2.3*	*-0.4*	*0.4*	*0.1*
Currency circulation (-)	-2.9	0.3	0.7	0.2
Other	-2.4	2.6	1.2	1.3
Total	**-6.2**	**4.5**	**2.2**	**3.3**
Increase (+) in the stock of assistance	4.2	-4.5	2.2	-3.3
Increase (-) in £ Treasury bills outstanding (d)	1.7	—	-0.7	-1.6
Increase in bankers' balances at the Bank	-0.2	—	—	—

(a) Estimate; actual figures to be published on 3 August.
(b) From 1993/94, central government net debt sales to banks and building societies are included in funding.
(c) From 1993/94, banks' and building societies' transactions in local authorities' and public corporations' listed sterling stocks and bonds are included in funding.
(d) Other than those held outright by the Bank and government accounts, but including those purchased by the Bank on a repurchase basis.

made to banks and building societies of £6.8 billion in 1992/93, required gilt sales in 1994/95 are now approximately £32 billion (compared with the £37 billion originally forecast). Approximately 25% of the necessary gross sales were made in the first quarter of the financial year between April and June.

Official money-market operations

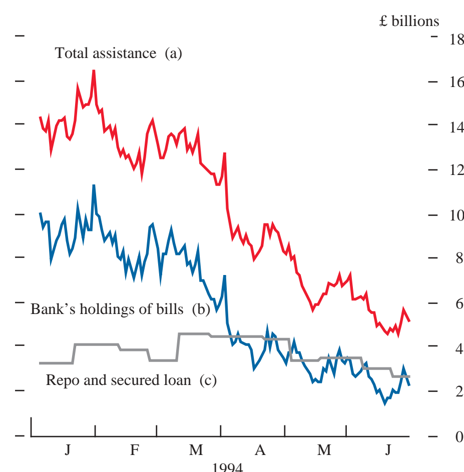
The Bank left its dealing rates unchanged and maintained a broadly neutral stance in its money-market operations throughout the quarter.

Short-term interbank rates drifted lower at the start of the period, and were subsequently fairly stable around 5% at the three-month maturity. This reflected calm money-market conditions and an absence of any significant market pressure for an early change in interest rates in either direction. 12-month rates rose from 5 3/4% to 6 1/4% and the rates implied by short sterling contracts increased at all maturities beyond September 1994.

In the middle of April, a number of factors led to a revival of expectations of a possible further rate cut. The minutes of the January, February and March monthly meetings between the Chancellor and the Governor were published on 13 April, and most analysts judged that a further cut remained a possibility particularly if, with the April tax measures, there were signs of a slowdown in activity. The surprise cut in German interest rates on 14 April was followed by March retail prices figures for the United Kingdom a day later, showing a fall in RPIX inflation from 2.8% to 2.4%.

But after the release of underlying average earnings and unemployment figures on 20 April and robust retail sales data on 21 April, the view that short-term interest rates might have reached their low-point gained strength and this was reflected in the prices of short sterling futures contracts. During May and June, implied rates came closer than in the two previous months to economists' forecasts of future interest rates. Sales of short sterling futures to hedge fixed-rate mortgage lending declined, as higher interest rates reduced the demand for fixed-rate mortgages, and hedging in the market became more attractive as a result of a fall in swap spreads (the premium over the yield on the equivalent-maturity gilt for institutions in the swap market paying a fixed rate of interest and receiving Libor).

Money-market assistance



(a) Bank of England's holdings of bills, market advances and funds supplied under the repo and secured loan facilities.
(b) Bank of England's holdings of eligible bank and local authority bills outright and on a repurchase basis; and of sterling Treasury bills on a repurchase basis.
(c) Bank of England's holdings of gilt-edged stocks on a repurchase basis, and loans made against export and shipbuilding credit-related paper.

The pattern of government expenditure and revenue flows, together with the sales of gilt-edged stock, meant that the average stock of assistance provided by the Bank fell from around £12 billion in March to around £5 billion by the end of June. This reduced the average daily money-market shortage and contributed to steady money-market conditions. On three days, there were money-market surpluses (for the first time in over a year)—twice in April and once in June.

There were very few large individual shortages and early rounds of operations were required only on 20 and 21 April. The more modest shortages on other days were comfortably relieved, and on some days with small shortages the Bank invited offers of bills in Band 1 only (bills with a remaining maturity of 1–14 days).

Overnight and other short rates became quite stable, helped by the repo and secured loan facilities which were made permanent earlier this year and are now available to a wider range of institutions. A Master Agreement governing use of the repo facility—formalising the legal arrangements and incorporating margin requirements—was introduced on 20 April. The facility was made available to all members of the UK banking sector, discount houses, GEMMs and building societies; however, as short interbank rates fell below the repo rate ($5^{5}/_{32}$%, the yield equivalent of the Bank's Band 2 discount rate), there was a fall in the amount borrowed using the facility—from £4.4 billion on 6 April to £2.6 billion on 22 June.

In anticipation of a fall in the outstanding stock of assistance, the weekly size of the Treasury bill tender was increased from £200 million to £400 million on 29 April, and to £500 million on 20 May. The increase both allowed the authorities to maintain an adequate influence over short-term interest rates and deepened the Treasury bill market. Demand for the bills remained strong and each issue was heavily oversubscribed. The increase in the size of the tender had little obvious effect on the yield (which remained about $^{1}/_{16}$% below the yield on eligible bank bills). On this basis by the end of August, there will be around £8.7 billion of Treasury bills outstanding, an increase of £3.9 billion compared with April.