Operation of monetary policy

- *The evidence about the United Kingdom's economic performance remained favourable in the first quarter. Current retail price inflation increased slightly, but this was in line with the projection in the Bank's February* Inflation Report.

- *There were some indications that growth was slowing towards a more sustainable pace, but surveys continued to suggest a buoyant picture for the months ahead.*

- *At his meeting with the Governor on 2 February, the Chancellor decided to raise official interest rates by 1/2% to 6 3/4% to help keep inflation under control. The increase was well received in the financial markets and implied forward interest rates declined steadily over the following weeks.*

- *Foreign exchange markets suffered disturbance throughout the quarter—and especially in early March, when sustained selling of the dollar and buying of the Deutsche Mark and yen gathered pace. Sterling was drawn into the disturbance in March and depreciated in the first half of the month. Domestic markets, however, showed little reaction and remained calm.*

- *International bond markets recovered some ground in the quarter and sufficient gilt sales were made to achieve full funding against the Budget PSBR forecast. The Government published its funding remit to the Bank for 1995/96.*

Overview

Decisions on monetary policy are based on a wide range of indicators. The Bank's current assessment is given in the May *Inflation Report*; this article reviews the operation of monetary policy in the first quarter of 1995.

Statistics published in the first quarter showed GDP growth continuing above the long-term rate of growth in productive capacity in a majority of industrialised countries, but generally at a slower pace than in the previous quarter. There were some signs that the pace of economic expansion in the United States was slowing compared with late 1994, following seven US interest rate rises over the previous year. The Japanese recovery remained sluggish, with output declining by nearly 1% in the fourth quarter; the Kobe earthquake on 17 January will have affected output more recently. There was a slowing in the growth of domestic demand in the United Kingdom's main European trading partners, and the growth of UK exports to the rest of the European Union moderated.

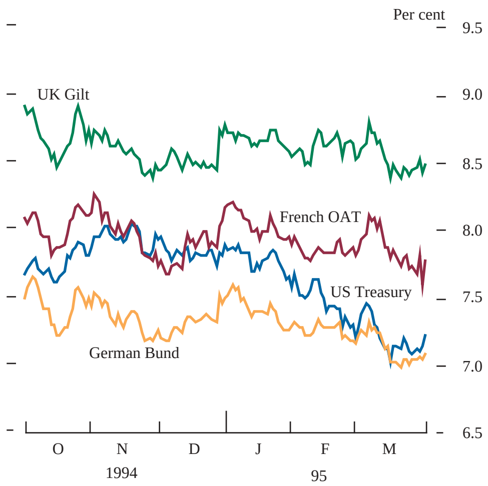
The United Kingdom's overall economic performance remained favourable, however. Upward revisions showed GDP to have risen by 4.2% in the year to 1994 Q4, with a larger contribution to growth from private consumption and investment in the fourth quarter than in previous quarters. Measured industrial production growth slowed, but surveys continued to suggest a buoyant picture for the months ahead. Unemployment continued to fall, and there was evidence of a pick-up in the rate of increase in full-time work. Private consumption seemed more buoyant than retail sales alone, but the housing market remained flat and consumer confidence unchanged. There was a further slowing in M0 growth, while broad money growth edged higher.

Current retail price inflation increased slightly, but in line with the projection in the Bank's February *Inflation Report*. Producer input prices continued to rise, though with suggestions that the rate of increase was slowing: the annualised three-month rate of increase fell to 9.5% in February from 15.4% in January. CBI surveys suggested that producers raised prices by less than they had expected (which is not unusual); competition in the retail sector may have reduced their ability to pass on cost increases. The three-month annualised increase in output prices (excluding food, beverages, tobacco and petroleum) remained around 5% between November and February. Nevertheless, survey evidence continued to suggest that producers intended to pass on price rises to a greater extent if demand conditions allowed.

There was a strong rise in the workforce in employment and a continuation of the steady decline in unemployment; vacancies fell, however. Underlying average earnings growth fell to $3^1/_2$% in January and median wage settlements were 3%.

Against this background, the Chancellor decided at his meeting with the Governor on 2 February that a further moderate rise in interest rates was appropriate to help keep inflation under control. The Bank implemented the $^1/_2$% rate rise to $6^3/_4$% that day and the move—which was widely expected—was well received in the financial markets: money-market rates, gilt yields, equities and sterling were all stable on the day, and implied forward interest rates declined steadily over the following weeks.

Ten-year government bond yields(a)



(a) Gross redemption yield on semi-annual basis.

International bond market sentiment improved in the quarter. Gilts benefited from the general improvement, helped by a rally in the US bond market: ten-year gilt yields fell from 8.77% at the start of the year to 8.49% by the end of March. The US and other major bond markets performed even better: over the quarter, the average yield spread between gilts and equivalent US and German bonds widened by 35 and 12 basis points respectively (to 112 and 134 basis points). Growing perceptions—perhaps encouraged by the further tightening in monetary policy—that steady economic growth with low inflation could be maintained, and an associated gradual moderation in expected future interest rates, led to greater confidence in the gilt market among domestic investors. Some overseas investors, however, were deterred by what they saw as heightened political uncertainty.

Market perceptions that growth in the United States was slowing to a more sustainable pace were reinforced by official comment. Market participants became more confident that a 'soft landing' could be achieved, and revised down their expectations of future US interest rates. Between the end of December and the end of March, the level of three-month interest rates expected at the end of 1995 eased from $8^1/_2$% to 7%. In Germany, the strength of the Deutsche Mark and slower M3 growth led to a moderation in interest rate expectations, though the Bundesbank's cuts in its repo rate and discount rate on 30 March surprised most market participants. The three-month rate expected in Germany at the end of 1995 fell by 140 basis points over the quarter to $5^1/_4$%.

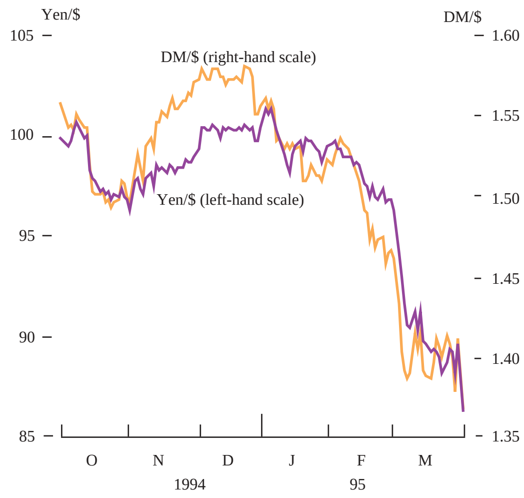
Table A
Interest rates, gilt yields and exchange rates; selected dates(a)

1995	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/£
3 January	6 1/8	6 19/32	7 5/32	7 31/32	8.22	8.67	8.75	8.57	3.90	88.6	1.5625	2.4286
24 January	6 5/16	6 23/32	7 1/8	7 7/8	7.91	8.65	8.71	8.60	3.95	89.0	1.5963	2.4149
1 February	6 1/2	6 25/32	7 3/32	7 23/32	7.69	8.48	8.51	8.41	3.89	88.7	1.5815	2.4082
2 February	6 9/6	6 25/32	7 3/32	7 23/32	7.68	8.51	8.53	8.42	3.90	88.6	1.5820	2.4038
7 March	6 1/2	6 25/32	7 5/32	7 7/8	7.67	8.70	8.80	8.66	3.96	86.5	1.6242	2.2604
17 March	6 9/32	6 21/32	7 3/32	7 11/16	7.52	8.39	8.48	8.38	3.86	84.4	1.5847	2.1964
21 March	6 11/32	6 21/32	7 3/32	7 21/32	7.45	8.31	8.40	8.31	3.85	84.8	1.5807	2.2319
31 March	6 3/8	6 11/16	7 1/16	7 19/32	7.34	8.38	8.50	8.44	3.88	85.3	1.6280	2.2271

(a) Close-of-business rates in London.
(b) Gross redemption yield. Representative stocks: short—8 3/4% Treasury 2000; medium—8 1/2% Treasury 2005; long—8 3/4% Treasury 2017; index-linked—2 1/2% Index-Linked Treasury 2016 (real yield assuming 5% inflation).
(c) Middle-market rates.
(d) Implied future rate: June 1995 contract.

Sterling's effective exchange index

Dollar exchange rates



The first quarter was a volatile period in foreign exchange markets. The dollar depreciated by 14% against the yen and by 12% against the Deutsche Mark. Many European currencies also recorded new lows against the Deutsche Mark, and the central rates of the peseta and escudo were devalued within the exchange rate mechanism (ERM).

Sterling was largely insulated from the volatility in January and February, declining against the strong Deutsche Mark and appreciating against a weaker dollar, with only a slight fall in its effective rate index (ERI). The relatively strong fiscal position and current account balance, together with low inflation, may have provided some support. But in early March, as the global turmoil intensified and the dollar became progressively weaker, sterling was drawn into the general disturbance. It reached a low on 17 March of 84.4 in effective terms and DM 2.1875, but had recovered somewhat to 85.3 and DM 2.2271 by the end of the quarter (it fell further after the end of the first quarter).

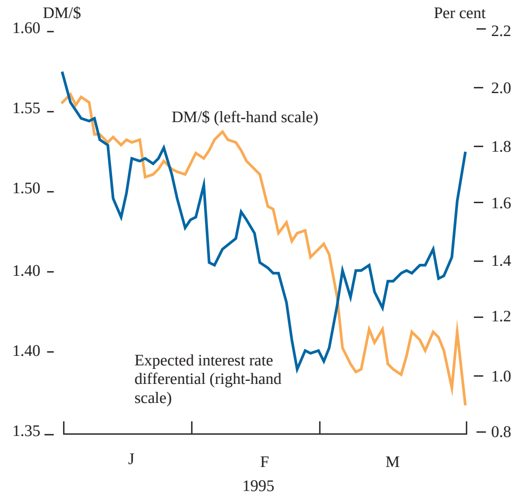
Foreign exchange markets

Foreign exchange markets were turbulent throughout the first quarter. A sharp appreciation of the Deutsche Mark led to the first ERM realignment since the bands were widened to 15% in August 1993; and the continuing Mexican crisis provided a backdrop of financial market uncertainty against which the dollar in particular suffered. It depreciated 6% in effective terms,(1) and reached new lows of DM 1.3410 and ¥86.20. Sterling's effective exchange rate was steady at the start of the period, but was later affected by the currency's close association with the dollar. The dollar's depreciation against the Deutsche Mark raised sterling to $1.65 at one point, but technical resistance and a market feeling that this level was unsustainable on competitive grounds led to a fall in sterling against the dollar, which in turn weakened sterling against the Deutsche Mark.

The markets started the year nervously, following Mexico's decision to devalue the peso on 20 December. There was a growing awareness that there would be no rapid solutions to the country's financing problems; some market participants were concerned that

(1) The effective index widely used was developed by the IMF and measures changes in the value of the dollar against 20 industrial-world currencies; see the article on pages 24–25 of the February 1995 *Quarterly Bulletin*, which explained recent changes in the calculation of these effective exchange rate indices. Indices which include the dollar's value against additional major trading partners of the United States in Asia and Latin America—notably Mexico—suggest a smaller fall in its overall value.

DM/$ exchange rate and expected interest rate differentials(a)



(a) Spread of US over German three-month rates implicit in June 1995 futures contracts.

US monetary policy might be compromised as a result, and the dollar fell gradually during January. Its depreciation was, however, limited by a weakening of the yen following the Kobe earthquake on 10 January and a belief that the Federal Reserve would raise interest rates at the 31 January/1 February meeting of the Federal Open Markets Committee (FOMC). The $^1/_2$% rise agreed at that meeting boosted the dollar, and it was driven higher by buoyant bond and equity markets.

During January, sterling traded in a narrow range around 89 on the ERI and DM 2.40—well within its recent trading range. It was underpinned by market perceptions of strong economic fundamentals—sound fiscal policies and data indicating that an export-led recovery was improving the current account position—as well as by expectations of an interest rate rise in the short term. The $^1/_2$% rate rise on 2 February was calmly received, but with subsequent attention increasingly focused on domestic political uncertainties, sterling weakened a little to reach DM 2.37 by mid-February.

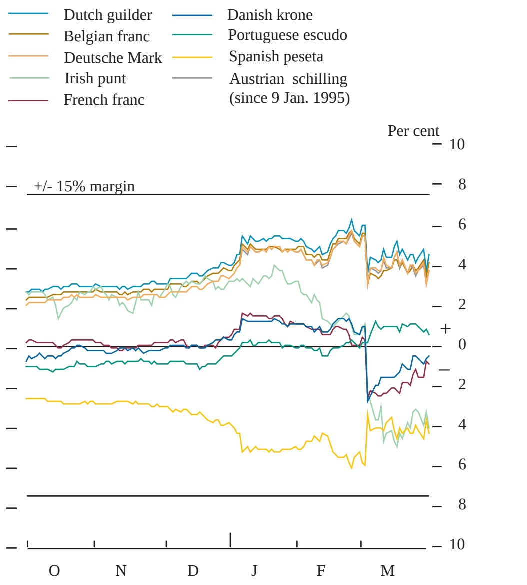
The movement since mid-1994 in expected interest rate differentials seems to have been an important factor behind the dollar's continuing weakness in recent months, but it did not explain its sharp depreciation in March, when expected interest rates fell faster in Germany and Japan than in the United States. Market participants appeared to have growing concerns about the effects on the capital markets of the US budget and trade deficits (especially *vis-à-vis* Japan). In addition, the Mexican crisis raised market anxiety about the potential sale of dollars in intervention operations; and there were indications that several emerging Asian countries were adjusting the level of dollar holdings in their official foreign exchange reserves.

At the same time, the Deutsche Mark benefited from the perception that it was a 'safe haven' among continental European currencies. The currency also appreciated against the yen following the Kobe earthquake.

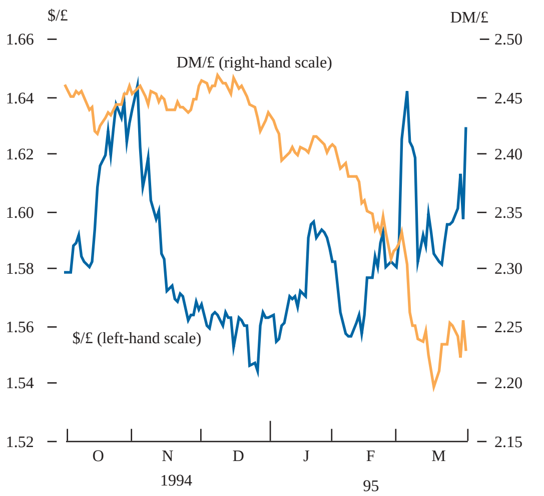
Market concerns about inflationary pressures in the United States resurfaced around the middle of February. At the same time, expected future US interest rates continued to decline, as the belief strengthened among market participants that US growth was easing and interest rates were close to their peak. This led to a further deterioration in sentiment about the dollar, and it fell steadily from mid-February against most major currencies. The speed of its decline quickened at the start of March, following statistics showing a faster-than-expected German recovery and what was perceived as a generous settlement agreed with IG Metall—usually a benchmark for subsequent agreements—which reduced market expectations of a further cut in German interest rates. This enhanced the Deutsche Mark's safe-haven status, as investors looked to sell the dollar and those European currencies that they believed to be particularly vulnerable to political or budgetary difficulties (including the French franc, Italian lira, Swedish krona and Spanish peseta).

Sterling was on the sidelines for much of February. Although it made some progress against the dollar, it fell back against the Deutsche Mark, reaching DM 2.34 in late February. Its effective rate fell to 87.1, towards the bottom of its trading range for the past two years.

Movements in the exchange rate mechanism, October 1994–March 1995



Sterling exchange rates



At the very end of February, market turbulence and uncertainty (as measured by implied volatility) increased. The Deutsche Mark and yen strengthened further and the dollar fell sharply. In the ERM, the French franc and Spanish peseta came under severe pressure. In an attempt to relieve some of the tensions, on 3 March central banks engaged in a round of concerted market intervention in support of the dollar, but this had little discernible effect. On 4 March, the Spanish authorities requested a realignment of the peseta within the ERM: its central rate was devalued by 7%, and the Portuguese escudo's by 3$^1/_2$%, with effect from 6 March.

The realignment did little to check the Deutsche Mark's rise against the dollar and the weaker ERM currencies. Outside the ERM, the lira and to a lesser extent the Swedish krona came under heavy pressure at times, both reaching historic lows against the Deutsche Mark. A round of interest rate rises in France, Denmark, Belgium and Ireland on 8/9 March eventually helped to provide steadier conditions. In the following weeks, the Deutsche Mark retreated a little on profit-taking and ERM tensions eased. Countries that followed the surprise cut in the German repo and discount rates on 30 March included Austria, the Netherlands, Switzerland and—alone among those that previously raised rates—Belgium.

The dollar fell sharply following the ERM realignment to hit a new all-time low against the Deutsche Mark of DM 1.3410 on 8 March. It subsequently recovered to trade in a range around DM 1.40 for much of the second half of March. It moved lower on 29 March following the decision at the 28 March FOMC meeting to leave interest rates unchanged, even though this was in line with market expectations. It then rose sharply on 30 March—moving from DM 1.38 to DM 1.42 in less than an hour—following the Bundesbank's $^1/_2$% cut in its discount rate. The sharp initial reaction was soon reversed, however, and by the close on the following day the dollar was back at DM 1.38.

The yen continued to strengthen throughout March, and the dollar fell to a new low of ¥86.20 on the final day of the quarter. Suggestions in the market that Japanese financial institutions were repatriating funds prior to the Japanese financial year-end at the end of March strengthened the yen, as did signs that Asian central banks were diversifying their reserves away from the dollar.

After dipping below its previous low of DM 2.3310—reached in February 1993—sterling initially gained from the ERM turbulence, moving rapidly from around $1.58 to a two-year high of $1.6566 against the dollar on 6 March. However, technical resistance and a market feeling that this level was unsustainable on competitive grounds led this to be reversed quickly. Sterling was then unable to make progress against a slightly weaker Deutsche Mark in the wake of the round of European interest rate rises on 8 March, with some short-term funds attracted to the higher yields available in the countries concerned. Market liquidity was often poor, which tended to exaggerate exchange rate movements.

In extremely volatile and disorderly markets, sterling briefly touched a low of DM 2.1875 on 17 March. It recovered quickly to around $1.60 and DM 2.24 for much of the second half of March, ending the month at 85.3 on the ERI—a depreciation over the quarter of 3.7%. In the sharp movements at the end of the period, sterling again moved closely with the dollar against the Deutsche Mark. It initially strengthened sharply following the German interest rate cut, trading briefly at DM 2.28 before returning to its previous levels.

Official money-market operations

The domestic markets showed little reaction to the foreign exchange market turbulence and remained calm throughout the quarter. While some European countries raised short-term interest rates to defend their exchange rates within the ERM, UK domestic markets appeared to recognise that monetary policy continued to be set on the basis of a wide range of indicators relevant to the medium-term outlook for inflation.

Short-term money-market rates were quite soft for most of the quarter, reflecting seasonally low money-market shortages; one-month rates were frequently quoted around $^1/_2$% below base rates and after the February rate rise three-month rates gradually declined to stand below base rate. Twelve-month rates eased over the quarter, from $7^{31}/_{32}$% to $7^{19}/_{32}$%. The average yield paid at the weekly tender for three-month Treasury bills remained below base rate throughout the quarter.

Conditions tightened before the interest rate rise on 2 February, when three-month rates peaked at $6^{25}/_{32}$% and the Bank was offered longer-maturity bills in its operations. Short-sterling futures rates also suggested that the rate rise was expected: the three-month rate discounted by March stood at 7.1% on the morning of the 2 February Chancellor/Governor meeting, compared with a three-month cash rate of $6^{25}/_{32}$%.

Much of the economic data released in January raised expectations of an increase in interest rates in February. A large fall in unemployment was accompanied by a rise in RPI inflation and a CBI survey showing an increase in the balance of firms expecting to raise prices in the months ahead. On the other hand, industrial production figures (for November) showed an unexpected fall. At the monthly monetary meeting on 2 February, it was agreed that interest rates would need to be raised further in either February or March, with the timing essentially a matter of market tactics. The decision to act early was taken in the hope that there would be a greater possibility of lowering expectations about future inflation and interest rates.

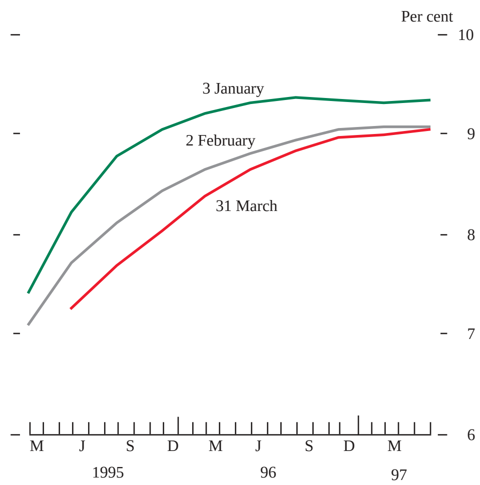
The Bank implemented the $^1/_2$% rate rise immediately by setting a Minimum Lending Rate of $6^3/_4$% just before the noon round of operations. The move was smoothly absorbed, with three-month rates ending unchanged on the day at $6^{25}/_{32}$%.

Interest rate expectations, as implied by short-sterling futures, moderated in the following weeks—the three-month rate discounted at the end of 1995 declined from 8.4% on 2 February to 8.0% on 31 March. Data suggesting a slight moderation in growth probably reinforced perceptions that early action might lead to a lower peak in official interest rates.

Since the spring of 1994, market expectations about the path of three-month interest rates (as measured by short-sterling futures rates) have proved quite accurate. The chart opposite shows the

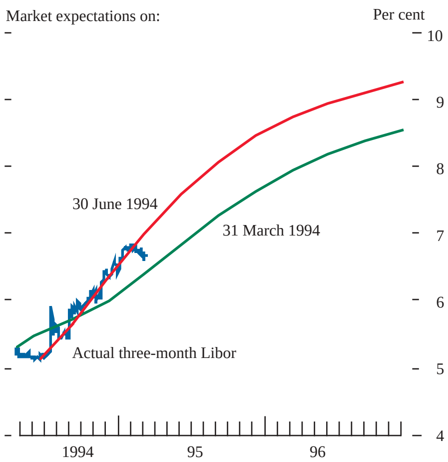
Sterling interest rates

Short-sterling futures rate curves(a)



(a) Short-sterling futures contracts.

Sterling interest rate expectations(a)



(a) Three-month Libor discounted by short-sterling futures contracts.

The open gilt repo market

On 21 February, the Chancellor of the Exchequer confirmed that an open gilt repo market is to be established and announced tax reforms to facilitate the market.

On 29 March, the Bank of England published a paper setting out plans for the operation of gilt repo trading, following responses to the consultative paper it issued last November and meetings with a wide range of market participants. The main points are:

- The market will commence on 2 January 1996. Until then, the existing arrangements for gilt lending and borrowing remain in place. The development of an open gilt repo market involves liberalisation in three areas. There will be no official bar on anyone borrowing or lending gilts for any purpose; it will be possible to transact repo business directly or via an intermediary; and intermediaries will be able to act as matched principals or name-passing brokers. These provisions will apply equally to repo activity and stocklending—which are equivalent in economic terms and differ only in the details of their legal structure and documentation, and in the general practice of stocklenders to take collateral in the form of securities rather than cash.

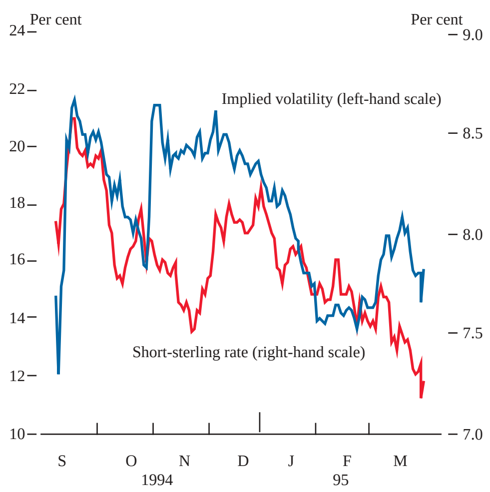
- Gilt-edged market-makers (GEMMs) and discount houses will be free to conduct repo business. The Bank would also be content in principle if they wished to absorb the gilt-lending intermediary functions of a Stock Exchange money broker (SEMB) contained in their group. The Bank will be content to continue to supervise firms as SEMBs, provided their business is directed predominantly at servicing the GEMMs.

- The Bank sought comments by 12 May on drafts of a gilt repo legal agreement and a code of best practice. The legal agreement comprises the Public Securities Association/International Securities Market Association's (PSA/ISMA's) global master repo agreement—which is widely used as the industry standard in existing repo markets in London—plus a specially drawn up annex to adapt it for the gilt market. The code covers a wide range of issues, including the importance of proper legal documentation and margining practices. The Bank will issue final versions of the documents as soon as possible after the market's comments have been considered.

- The Bank has established a third working party to address a variety of settlement issues. It is also discussing with Cedel and Euroclear the possibility of their joining the Central Gilts Office.

- Tax changes have been made to facilitate gilt repo trading. In particular, gross payment of interest on gilts will be available to all likely participants in the repo market, with quarterly accounting for those taxable in the United Kingdom. The distinction between gilts that are and are not free of tax to residents abroad (FOTRA) will no longer have any practical effect for overseas companies that are not trading in the United Kingdom through a branch or agency.

Short-sterling futures[(a)] and implied volatility[(b)]

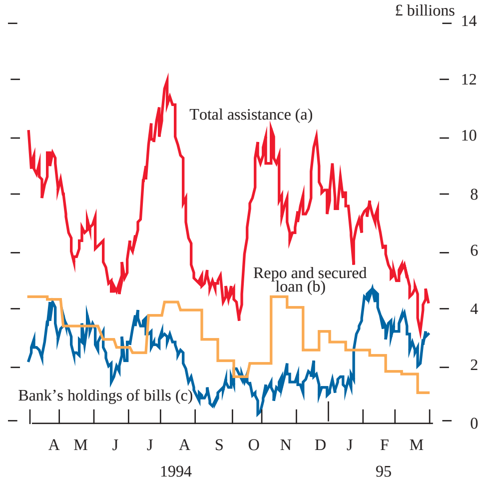


(a) Rate implied by the September 1995 short-sterling futures contract.
(b) The expected standard deviation of annualised price movements in the September 1995 short-sterling futures contract.

path of three-month rates discounted by short-sterling contracts of increasing maturity at March and June last year, and the history of three-month cash rates since then. The accuracy of the market's forecasts may have contributed to the fall in implied volatility of short-sterling contracts, and even perhaps to a lower risk premium being embedded in futures rates. The chart opposite shows the June 1995 futures rate and implied volatility derived from options on this contract.

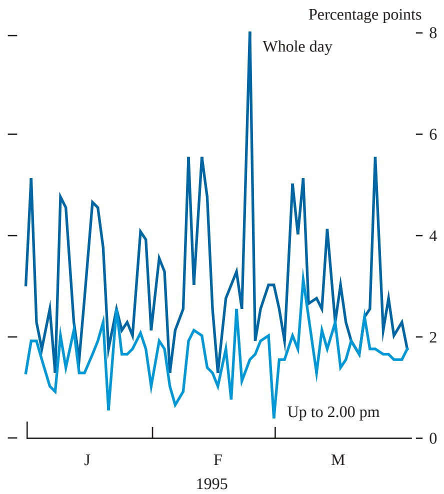
In 1994/95, the stock of assistance (the assets which the Bank acquires in providing liquidity to the money market) fell from a high of £11 billion at the end of July to £8 billion at the end of December and £4 billion at the end of the financial year. This was in part the result of the seasonal pattern of government expenditure (a high proportion of spending takes place towards the end of a financial year). But there were two special factors: 1993/94's £3.4 billion of overfunding and £6.8 billion of gilt purchases by banks and building societies in 1992/93 were both carried forward into 1994/95 for funding purposes. This reduced the total of gilt sales required and so, by the same amount, the drain of liquidity from the money market.

Money-market assistance

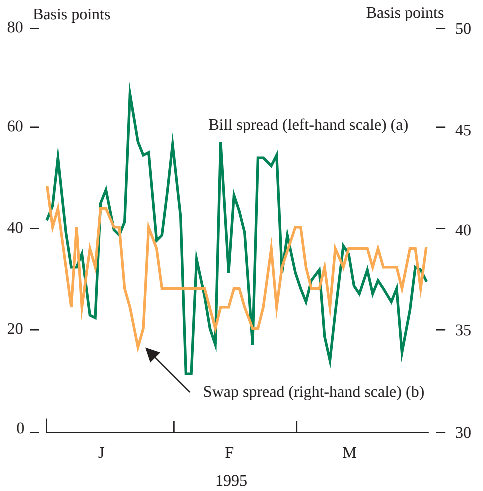


(a) Bank of England's holdings of bills, market advances and—until 19 January 1994—funds supplied under the temporary facilities; since that date, under the repo and secured loan facilities.
(b) Bank of England's holdings of gilt-edged stocks on a repurchase basis, and loans made against export and shipbuilding credit-related paper under temporary and secured loan facilities.
(c) Bank of England's holdings of eligible bank and sterling Treasury bills outright and on a repurchase basis.

Width of range of overnight interest rates



Spreads between government and market paper



(a) The spread of three-month eligible bill rates over three-month Treasury bill rates.
(b) The spread of ten-year sterling swap rates over ten-year gilt yields.

The smaller stock of assistance led in turn to more moderate daily shortages, contributing to the softer market conditions. The average daily shortage was just under £700 million in the first quarter (and £550 million in March), compared with about £900 million in the previous quarter. The amount on offer at the weekly Treasury bill tender was twice raised by £200 million (on 13 January and 31 March—to £900 million—to ease the run-down in the stock of assistance in the final months of the financial year.

On average, the assistance provided via the twice-monthly gilt repo and secured loan facilities was more modest, as short-term interbank offer rates were typically below the repo rate. Nevertheless, the facilities continued to be a useful 'safety valve' and helped sustain the reduced volatility in very short term interest rates. The average maturity of bills offered to the Bank in its daily operations was generally quite short. The only exception was in the week or so before the February rate rise, when £4.3 billion of Band 2 bills (those with a residual maturity of between 15 and 33 days) were purchased. On 1 February, the Bank had three offers of bills at rates higher than the established dealing rate: at noon £135 million of Band 2 bills were purchased at $6^{5}/_{32}$% (alongside £415 million bought at the established dealing rate of $6^{1}/_{8}$%), but in the afternoon sufficient offers of Treasury bills in Band 1 (with a residual maturity of less than 15 days) meant that the two other offers above $6^{1}/_{8}$% could be declined.

The chart opposite shows the intraday trading range of the overnight interest rate (the difference between the highest and the lowest observation) both for the whole trading day and also for the period up to 2.00 pm, the time of the Bank's final round of operations. It shows that the additional volatility after 2.00 pm can be considerable, which suggests that if participants were able, or chose, to square their positions by the final round of official operations, they might benefit from a more stable overnight interest rate.

Following the announcement on 26 February that Barings was going into administration, the Bank stated that it would 'stand ready to provide liquidity to the banking system to ensure that it continues to function smoothly'. In the event, there was no ensuing market disturbance and conditions remained calm. Spreads between Treasury and eligible bank bills widened only fractionally for a short time and swap spreads (between sterling swap rates and gilt yields) were unchanged (see the chart), although some tiering was seen in the CD market.

The Bank announced on 20 March that in future it would publish (on its screen pages) at the relevant times of the day details of the bill offers (including any bill repos) being invited. The aim of this technical change was to provide greater transparency in its operations.

The Bank published its plans for an open gilt repo market on 29 March—see the box on page 131; the repo market will commence on 2 January 1996. The Bank believes it should enhance liquidity and efficiency in the gilt market, increase demand and so over time reduce government funding costs. It will also promote greater integration of the gilt and money markets. In its paper setting out plans for the new market, the Bank indicated that while it does not at this stage have plans to change the form of its money-market operations, the development of gilt repo trading

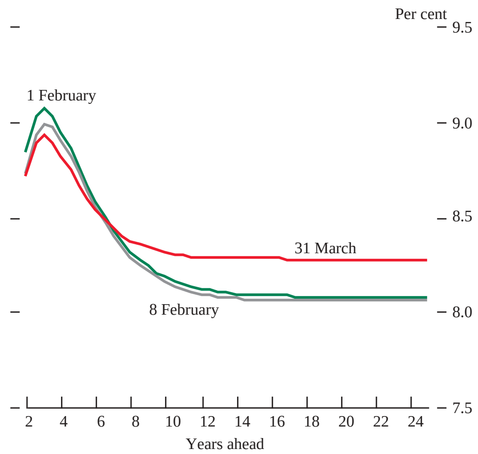
Table B
Influences on the cash position of the money market

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

	1994/95 Apr.–Dec.	Jan.	Feb.	Mar.
Factors affecting the market's cash position				
Under/overfunding (+/-) (a)	4.0	-2.9	2.0	7.8
Other public sector net borrowing from banks and building societies (-) (b)	0.6	0.7	0.9	-0.3
of which, local authorities' deposits with banks and building societies (+)	*0.2*	*0.4*	*0.6*	*-0.6*
Currency circulation (-)	-1.9	3.0	-0.1	-1.5
Other	4.5	-0.6	-0.1	-3.0
Total	**7.3**	**0.2**	**2.8**	**3.1**
Increase (+) in the stock of assistance	-4.5	-1.0	-2.1	-0.9
Increase (-) in £ Treasury bills outstanding (c)	2.7	-0.8	0.5	2.3
Increase in bankers' balances at the Bank	0.1	—	-0.1	-0.2

(a) From 1993/94, net purchases of central government debt by banks and building societies are included in funding. Purchases by banks and building societies in 1992/93 are counted as funding in 1994/95.
(b) From 1993/94, banks' and building societies' purchases of local authorities' and public corporations' listed sterling stocks and bonds are included in funding.
(c) Other than those held outright by the Bank and government accounts, but including those purchased by the Bank on a repurchase basis.

Implied forward rates(a)



(a) Annualised six-month interest rates derived from the zero-coupon yield curve.

activity could make it sensible for it to contemplate changes to its operations in due course, in which case it would consult market participants well in advance.

Gilt-edged funding

The period of consolidation in the gilt market in the final months of 1994 continued into the new year. Ten-year yields remained in a range of $8\frac{1}{4}$%–$8\frac{3}{4}$% throughout the quarter, and the shape of the yield curve was little changed. However, the average yield spread between gilts and equivalent US and German bonds widened by 35 and 12 basis points respectively (to 112 and 134 basis points) compared with the fourth quarter of 1994. The US bond market benefited from a widening perception that US growth was slowing down and that short-term interest rates were near to a peak. German bonds were also supported by a moderation in expectations about short-term interest rates and by uncertainty in other markets, which encouraged investors to hold Deutsche Mark assets. After some initial hesitation, the Bund market strengthened in response to the cuts in the German repo and discount rates.

The gilt market was largely unaffected by developments in the foreign exchange market. Participants noted that sterling had been caught up on the edges of the turbulence, and the depreciation in March was seen in the context of a very strong Deutsche Mark and yen and a weak dollar. The relative performance of conventional and index-linked gilts suggested no deterioration in medium-term inflation expectations following sterling's fall. Index-linked yields remained steady at around 3.9% during March, while conventional gilts rallied towards the end of the month, sharing in a more confident international environment. The German interest rate cuts on 30 March also helped underpin the market.

The announcement of the interest rate increase on 2 February caused little surprise in the gilt market. The (March) gilt future initially rallied by a quarter of a point on the news and continued to push ahead in the following two weeks. The rise seemed to reinforce the market's belief that the authorities would continue to act prudently on monetary policy, and that by acting in good time the eventual peak in rates could be lower than earlier expected. Implied forward rates—derived from the yield curve—fell after the increase: implied six-month rates in 1998 moderated from 9.1% on 1 February to 8.9% a week later, where they also finished the quarter.

The January auction for £2 billion of 8% Treasury 2015 was successful. Its 20-year benchmark status and long duration were

Table C
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 (a) when exhausted	Date exhausted
8% Treasury 2015	2,000	17.1.95	26.1.95	Auction	94.4375 (b)	Fully paid	8.58 (c)	8.58	26.1.95
Floating Rate Treasury 1999	500	7.2.95	7.2.95	Tap	99.8700	Fully paid	(d)	(e)	8.2.95
Floating Rate Treasury 1999	100	7.2.95	7.2.95	To CRND	99.8700	Fully paid			
2% Index-Linked 2006	100	7.2.95	7.2.95	Tap	170.2500	Fully paid	3.84 (f)	3.85 (f)	15.3.95
$2\frac{1}{2}$% Index-Linked 2024	100	7.2.95	7.2.95	Tap	111.2500	Fully paid	3.85 (f)	3.85 (f)	16.3.95
$8\frac{1}{2}$% Treasury 2005	2,000	14.2.95	23.2.95	Auction	98.3750 (g)	Fully paid	8.72 (c)	8.72	23.2.95
8% Treasury 2015	2,000	21.3.95	30.3.95	Auction	95.9375 (h)	Fully paid	8.42 (c)	8.42	30.3.95

(a) Gross redemption yield, per cent.
(b) Lowest-accepted price for competitive bids and the non-competitive allotment price.
(c) Yield at lowest-accepted price for competitive bids.
(d) Yield equivalent to 8.7 basis points below Libid.
(e) Yield equivalent to 8.9 basis points below Libid.
(f) Real rate of return, assuming 5% inflation.
(g) Lowest-accepted price for competitive bids. The non-competitive allotment price was £98.40625.
(h) Lowest-accepted price for competitive bids. The non-competitive allotment price was £96.09375.

The Government's funding requirement and remit for 1995/96(1)

The 1995/96 borrowing requirement

As set out in the November 1994 *Financial Statement and Budget Report*, the Government will continue to operate a full-fund policy.

The PSBR for 1995/96 was forecast in the Budget to be £21.5 billion. Some £4.1 billion of gilts are expected to mature in market hands and need to be refinanced. It is not possible at this stage accurately to forecast net changes over the year in the foreign currency reserves, so these are assumed to remain unchanged on balance. Any overfunding in 1994/95 will reduce the funding requirement in 1995/96, and any underfunding will increase it. The funding outturn for 1994/95 is not yet known.(2)

The funding requirement for 1995/96 is therefore currently forecast to be around £25.6 billion, subject to any over or underfunding carried forward from 1994/95 and to any changes in the foreign currency reserves (see the table).

The 1995/96 forecast funding requirement

£ billions

PSBR forecast	21.5
Expected increase in net official reserves	—
Expected gilt redemptions	4.1
Less:	
Over or underfunding from 1994/95	. .
Expected funding requirement	25.6 (a)
Funded by:	
Gilts sales required for full funding	23.1 (a)
Assumed net National Savings inflow	2.5
Expected net change in other public sector debt	—

. . not yet known.

(a) Subject to the adjustment for over or underfunding.

National Savings

The net contribution of National Savings to funding (including accrued interest) is assumed to be around £2.5 billion. This is not a target, but an estimate based on experience in previous years and forecasts for 1995/96.

Other debt sales

Net sales of Government debt instruments other than gilts and National Savings are expected to make a negligible contribution to funding.

Quantity of gilt sales

The Bank of England, as the Government's agent, will aim to meet the remainder of the funding requirement by selling gilts to the private sector. On the basis of the Budget forecast, this means selling approximately £23.1 billion of gilts, subject to any over or underfunding carried forward from 1994/95, and any change in the net official foreign currency reserves.

Nature of stocks

The Government will continue to have available the full range of funding instruments. Within conventional stocks, the Government will aim for there to be liquid benchmark issues in the five-year, ten-year and long-dated maturity areas. The conventional stocks may, in appropriate circumstances, include floating-rate or convertible issues.

Pace of funding

The Government will aim to fund at a broadly even pace through the year.

Maturity pattern of gilt issues

Gilt sales are intended to extend over the full maturity range. Over the year as a whole, the Bank of England, as the Government's agent, will aim to make approximately 15% of its sales in index-linked stocks with the remainder in conventional stocks spread across the maturity ranges, with approximately one third of issuance in each of the short (3–7 years), medium (7–15 years) and long-dated (15 years and over) bands.

(1) This box reproduces the funding requirement and remit published by HM Treasury on 30 March.
(2) Since the remit was published, total funding in 1994/95 has been estimated at £29.8 billion; the estimated underfunding was £0.6 billion.

Gross official sales of gilt-edged stock

attractive features. There was cover of 1.79 times and tight pricing of the bond; for the first time since December 1993, there was no tail—the yields corresponding to the average and lowest-accepted prices were the same.

The February auction for £2 billion of 8½% Treasury 2005 also went well. Although some had expected a short-dated stock, investors welcomed an addition to the new ten-year benchmark, which was also the cheapest-to-deliver stock into the June gilt future. This encouraged some switching out of the 9½% Treasury 2005, which dropped out of the basket of deliverable stocks in April.

A further £2 billion was added to the 8% Treasury 2015 at the March auction, as the Bank continued the policy of issuing a balance of maturities over the financial year as a whole: during 1994/95, It is planned that there will be at least two auctions in each of the three conventional maturity bands during the year.

Auctions

Auctions will continue to form the backbone of gilt-edged funding. In view of the lower borrowing requirement, it is planned that eight auctions will be held in 1995/96, on the following dates:

Wednesday 26 April 1995
Wednesday 28 June 1995
Wednesday 26 July 1995
Wednesday 27 September 1995
Wednesday 25 October 1995
Late November/December 1995[a]
Wednesday 31 January 1996
Wednesday 27 March 1996

(a) This auction date will depend on the timing of the Budget. It will be published in the relevant quarterly auction announcement (see below).

Each auction is planned to be between £2 billion and £3 billion of stock. An auction may on occasion be split between more than one stock, in which case separate auctions may be held for each stock on successive days.

Before the beginning of each calendar quarter, an announcement will be made giving an indication of the intended maturity of stock to be sold at auctions scheduled to be held in that quarter. The announcement will also give details of progress to date with the funding programme and of any changes to the Government's funding requirement.

The maturity ranges for auctions in the first quarter of 1995/96, to be held on Wednesday 26 April and Wednesday 28 June, will be announced by close of business on Friday 31 March.[3]

Full details of these, and subsequent, auctions will be announced at 3.30 pm on the Tuesday of the week preceding the auction, as in previous years.

Reviews of the issuance programme

The issuance programme, and in particular the number and timing of auctions, may be varied during the year in the light of substantial changes to the following:

- the Government's forecast of the PSBR;
- the level of gilt yields;
- market expectations of future interest and inflation rates; and
- market volatility.

Any revisions will be announced.

Tap sales

The programme of auctions will continue to be supplemented by official sales of stock by the Bank of England 'on tap' through its day-to-day operations with the gilt-edged market-makers. 'Tap' sales help maintain the liquidity of existing stocks and are typically issued into stable market conditions in response to demand for stock.

After an auction, the authorities will generally refrain from issuing stock of a similar type or maturity to the auction stock for a reasonable period, and will do so only if there is evident market demand for further such stock.

Coupons

So far as possible, coupons on new issues of gilts will be around gross redemption yields at the relevant maturity at the time of issue.

Conversions

The Government may ask the Bank to hold conversion offers during the year. Details of any such offers will be announced in time for all holders to be able to participate.

(3) On 31 March, it was announced that the maturity ranges would be 1999–2001 for the April auction and 2004–06 for the June auction.

Table D
Official transactions in gilt-edged stocks

£ billions: *not seasonally adjusted*

	1994/95 Apr.–Dec.	Jan.	Feb.	Mar.
Gross official sales (+) (a)	22.7	2.2	2.8	2.1
Redemptions and net official purchases of stock within a year of maturity (-)	6.0	2.3	—	—
Net official sales (b)	16.7	-0.1	2.8	2.1
of which net purchases by:				
Banks (b)	0.9	-0.5	1.2	-0.9
Building societies (b)	0.4	-1.2	0.5	-0.1
Overseas sector	-2.9	-1.3	-0.5	-0.9
M4 private sector (b)	17.9	2.9	1.6	4.1

(a) 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.
(b) Excluding transactions under purchase and resale agreements.

25% of conventional issuance was at the long end of the yield curve, where three auctions were held. The March auction was conducted in more difficult market conditions, the cover was lower at 1.24 times and there was a tail of two basis points.

The yield curve became only slightly less inverted following each announcement of a long stock auction, and had more or less returned to its former shape by the time of the two auctions. The long end of the yield curve has regularly been inverted over the past 15 years. Many domestic institutional investors have a natural demand for long-duration stock to hedge existing liabilities; this feature is perhaps more important than in other major bond markets. Such bonds also exhibit relatively high convexity: compared with lower-convexity bonds, their prices rise by proportionately more in a rally than they fall in a sell-off. This can increase their attractiveness relative to

Table E
Calendar of forthcoming debt issues

June	20	Announcement of stock details and amount(s) on offer at June gilt auction (3.30 pm).
	28	Gilt auction. (a)
	30	Announcement of maturity range for auctions in the following quarter (3.30 pm).
July	11	Confirmation of Ecu note issue and announcement of size (2.30 pm).
	18	Ecu note tender. (b) Announcement of stock details and amount(s) on offer at July gilt auction (3.30 pm).
	26	Gilt auction. (a)
September	19	Announcement of stock details and amount(s) on offer at September gilt auction (3.30 pm).
	27	Gilt auction. (a)
	29	Announcement of maturity range for auctions in the following quarter (3.30 pm).
October	10	Confirmation of Ecu note issue and announcement of size (2.30 pm).
	17	Ecu note tender. (b) Announcement of stock details and amount(s) on offer at October gilt auction (3.30 pm).
	25	Gilt auction. (a)

In addition to the gilt and Ecu note issues detailed above, Ecu Treasury bill issues will be confirmed—and the sizes and maturities of the issues announced—on the first Tuesday of each month, with the tender day the following Tuesday;(c) and sterling Treasury bills will be tendered each Friday, with an announcement on the same day of the size of the following week's tender.(d)

(a) Bids are submitted by 10.00 am on auction day and the result is normally published by 10.45 am. Value is next day.
(b) Bids are submitted by 10.30 am and the result is published at 1.00 pm. Value is seven days after the tender.
(c) Bids are submitted by 10.30 am and the result is published at 1.00 pm. Value is two days after the tender.
(d) Bids are submitted by 1.00 pm and the result is published by 2.30 pm. Value is on any day of the following week at the buyer's discretion.

medium-maturity stocks and make the slope of the curve sensitive to the level of the market.

The overseas sector was a large net seller of gilts during the quarter, with some investors deterred by what they saw as increased political uncertainty. Substantial purchases continued to be made by the M4 private sector, although a large redemption in January left some institutions with surplus cash. The Bank responded by issuing the first tap (for £500 million) of the floating-rate gilt, which was exhausted at the tender held on 8 February.

Implied volatility in options on the June gilt future moderated from $8^1/_2$% to 8% over the period, despite some spillover from more turbulent currency markets. This may have been in part because gilt prices have been relatively steady since the autumn and because market uncertainty about UK monetary policy has reduced.

Gilt sales in the first quarter of 1995 were £7.1 billion and sales for the 1994/95 financial year totalled £29.8 billion, allowing a full-fund against the Budget PSBR forecast (but small underfunding compared with the estimate for the PSBR published after the end of the financial year). Issues were spread across the range of maturities, with short and medium-dated stocks each constituting 32%, and long-dated 25%, of conventional stock sales, complemented by sales of index-linked gilts representing 11% of the total. On 30 March, HM Treasury published a debt management report which contained the Government's funding remit to the Bank for 1995/96; the remit is reproduced in the box on pages 134–35. The table opposite gives details of the schedule for sterling gilt auctions and Treasury bill tenders, and for Ecu note issues and Ecu Treasury bill tenders over the next six months.