Operation of monetary policy

- *Official interest rates remained unchanged during the third quarter.*

- *Markets revised down their expectations of UK inflation in the short term, and stopped anticipating an early increase in interest rates. But market expectations of inflation in the longer term remained well above the Government's target.*

- *Sterling was relatively unaffected by sharp movements in the foreign exchange markets during the quarter, and appreciated slightly on balance.*

- *Gilt sales of £6.5 billion were made, but the September auction result was disappointing.*

Overview

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

The economic and financial data which became available during the quarter were mixed, and their implications for future inflation were not straightforward. They suggested that in the second quarter growth had continued at, or a little above, its potential rate. Information on the third quarter itself suggested a less buoyant picture, but was very incomplete. A major uncertainty was the extent to which output had been supported by involuntary stockbuilding, which might be reversed. Also uncertain was the extent to which the continuing deterioration in the trade account was attributable to weakening demand abroad or should be taken as a sign of continuing strength at home.

Inflationary pressures at the input stage eased, but remained strong. There were some signs that output price increases had moderated, but it was too soon to be sure of a change in trend. Encouragingly, however, there was no sign of any increase in wage inflation, in part because of a decline in 'wage drift'—the difference between the growth in earnings and settlements. Narrow money continued to grow at around 6% a year, but M4 accelerated to a twelve-month growth rate close to the top of its 3%–9% monitoring range, with shorter-run growth rates even higher.

The Bank took the view that there remained a significant possibility that the inflation target would not be met in 18 months' time, but that, given the uncertainties, the case for tightening monetary policy had become less pressing.

Foreign exchange markets

The third quarter proved to be a turning-point for the dollar. Against a background of faltering economic recovery in Japan and signs that the US recovery was regaining momentum, interest rate

differentials moved in the dollar's favour. By contrast, concerns about US inflation—which had weighed against the dollar earlier in the year and had sent long bond yields up to 8%—receded, bringing the long yield down to 6.6% at the end of the quarter. Both these factors helped underpin the dollar throughout the period; however, the catalyst for its recovery against the yen was the market perception that the Japanese authorities had decided to act more firmly on some of the pressing macro and microeconomic problems facing the Japanese economy—in particular, the impact of the strong yen on stock market valuations and the banking sector.

The decision by the Bank of Japan at the start of July to let money-market rates move below the Official Discount Rate—which had previously acted as a floor—was seen as a sign that the Japanese authorities intended to act positively against the strong yen. The 25 basis point cut in the target federal funds rate on 6 July had been expected, but the markets' perception of the US authorities' attitude was altered by aggressive and overt joint US and Japanese intervention. This, along with a less outspoken US stance on trade disputes, was interpreted as signalling a renewed determination to bolster the dollar. The US currency rose by ¥4 in July, while Japanese capital markets revived.

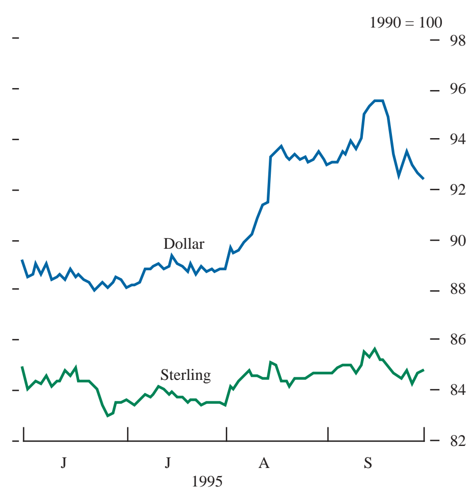
The dollar then rose sharply following the announcement of a new Japanese deregulation package on 1 August. The combination of the policy of injecting liquidity into the money market to lower money-market rates and ease the problems of the banking sector, fiscal measures to boost demand, and deregulation measures aimed at making the import of foreign goods easier would, it was hoped, help reduce the current account surplus with the United States—which had been seen as the main force which had driven the rise in the yen.

The dollar continued to rise throughout August, finally breaking a long-term resistance line around ¥94 early on 15 August. The accompanying concerted intervention pushed the dollar up to ¥97.3 and DM 1.4803 by the end of the day. The intervention was widely regarded as a success, the key factors being the element of surprise (it took place when many German banks were closed for regional holidays, and other European centres were closed), the fact that there was already demand for the dollar on technical and fundamental grounds, and the prominent role played by the Bundesbank.

The Bundesbank's participation in the intervention triggered a sharp rise in the value of the dollar against the Deutsche Mark. Until then, it had traded in a steady range against the German currency as the main policy changes were being made by Japan. With worries about inflation fast receding, expectations grew that the Bundesbank Council would decide to cut German interest rates at its meeting on 24 August, giving further momentum to the dollar. In the event, however, the 0.5% cut in official rates was widely discounted and the dollar hardly rose against the Deutsche Mark.

In the first few days of July, the re-election of John Major as Conservative Party leader in the vote on 4 July was seen as assured, and sterling quickly recovered ground lost earlier during the election campaign. With interest rates thought likely to remain unchanged in the short term and the domestic environment more settled, sterling was largely influenced by international factors. It maintained its

Effective exchange rate indices



strong link with the dollar, evident for much of the year. Throughout July and the first half of August, it traded at around $1.60; but it was unable to hold on to this level when the dollar rose sharply after the intervention on 15 August, and fell to the next area of strong technical support—in the $1.54 to $1.55 area—where it remained until mid-September. However, it appreciated both against the Deutsche Mark and in effective terms. By the end of August, sterling had risen to DM 2.2746 and 84.8 on its effective rate index (ERI), from lows for the quarter of DM 2.1943 and 83.2 on 20 July.

Most European currencies took advantage of the weaker Deutsche Mark, although in slightly different ways. The European countries with weaker currencies, Sweden and Italy, which are slightly ahead of the core ERM countries in the economic cycle, saw an appreciation. The lira rose 9% from its Q3 low of Lit 1,182.30 against the Deutsche Mark on 3 July to a high of Lit 1,077 on 14 September. Both the lira and the Swedish krona were helped by market speculation that they might join the exchange rate mechanism (ERM) next year, and that tough budgetary measures would be put in place. In contrast, other countries—such as France—used the easing of ERM tensions to lower interest rates; the differential between French and German three-month rates had fallen from 2.4% to 1.6% by mid-September.

The easing of tensions in the ERM and the rise in the dollar continued throughout the first half of September. The dollar rose to a twelve-month high of ¥104.66 on 19 September, prior to the Japanese supplementary budget on 20 September and following the 0.5% cut in the Official Discount Rate on 8 September. In the event, the market was disappointed with the results of the large package, particularly the absence of tax cuts and deregulatory measures, and profit-taking took the dollar back to around ¥100. Increased tension in the ERM affected confidence in the dollar recovery, as did the slow passage of the US budget for the 1996 fiscal year.

Tension in the ERM was heightened by reported comments of German officials, just before the summit of EU leaders in Majorca on 24 September, which were interpreted as casting doubts on the readiness of several countries for monetary union. This led to an outflow from the weaker currencies into the Deutsche Mark. Investors concerned about the impact of monetary union on the performance of the German economy were attracted by the Swiss franc, which rose to a ten-year high against the Deutsche Mark.

Sterling was caught up in these currency movements, falling back from the quarterly high of DM 2.3243 and 85.9 in effective terms reached on 14 September, and expected differentials over German interest rates increased. Sterling did, however, recover to the $1.58–$1.59 area against the dollar. As a result, its ERI finished September at 84.9, up 1.5 points over the quarter.

Official money-market operations

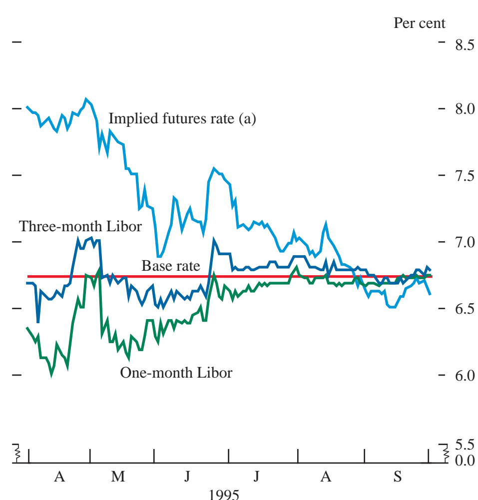
Although official interest rates remained unchanged, market expectations of their future direction underwent a significant change as the quarter progressed, so that towards the end of the period there was no longer an expectation of an *increase* in official rates, but instead some expectation that a *fall* might occur during the fourth

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

	Interest rates (per cent per annum)					Gilt yields (b) (per cent per annum)				Exchange rates		
	Sterling interbank rates (c)				Short-sterling future (d)	Conventionals			Index-linked			
1995	1 month	3 months	6 months	12 months	3 months	Short	Medium	Long	Long	ERI	$/£	DM/£
3 July	6 11/16	6 29/32	7 1/8	7 15/32	7.45	8.17	8.43	8.46	3.77	83.5	1.5992	2.2045
12 July	6 5/8	6 25/32	6 15/16	7 5/32	7.08	7.77	8.09	8.18	3.66	84.1	1.5918	2.2352
1 Aug.	6 13/16	6 7/8	6 31/32	7 3/16	7.06	7.86	8.25	8.30	3.68	83.3	1.5987	2.2072
15 Aug.	6 3/4	6 27/32	6 31/32	7 7/32	7.12	7.88	8.25	8.32	3.65	85.0	1.5527	2.2902
14 Sept.	6 23/32	6 11/16	6 5/8	6 19/32	6.50	7.24	7.76	7.91	3.56	85.3	1.5477	2.3045
29 Sept.	6 23/32	6 3/4	6 3/4	6 3/4	6.60	7.59	8.12	8.27	3.72	84.7	1.5825	2.2547

(a) Close-of-business rates in London.
(b) Gross redemption yield. Representative stocks: short—8% Treasury 2000; medium—8 1/2% Treasury 2005; long—8% Treasury 2015; index-linked—2 1/2% Index-Linked Treasury 2016 (real yield assuming 5% inflation).
(c) Middle-market rates.
(d) Implied future rate: December 1995 contract.

Short-term interest rates



(a) Three-month Libor implied by December 1995 futures contract.

quarter, perhaps around the time of the Budget. No change in interest rates was expected to result from any of the four Monetary Meetings between the Chancellor and the Governor held in the period (on 5 and 27 July, and 7 and 29 September). Although much of the improvement in sentiment was attributable to benign domestic economic statistics, developments in overseas economies and in the currency markets also played an important part.

At the end of the second quarter, the markets had been faced with the uncertainties generated by the Conservative Party leadership election; the resolution of the election on the first ballot in the first week of July and the associated recovery of the exchange rate prompted a swift return to the more positive mood that had emerged when rates had not been raised at the May Monetary Meeting. The three-month interest rates implied by the September short-sterling contract, which had stood at 6 15/16% before the election, rose to 7 1/4% during the campaign but eased back to stand close to their earlier level by 7 July.

The improvement in sentiment was significantly reinforced by the Federal Reserve's decision on 6 July to reduce its target federal funds rate by 25 basis points, the first downward movement in US rates since August 1992. This reduction was followed by persistent speculation that the Bundesbank would also cut rates and, encouraged by moderating M3 growth, the German central bank eventually did so on 24 August, having previously permitted a steady reduction in the rate at which allotments were made in its variable-rate repos. These developments encouraged the markets to believe that the peak in UK interest rates might be close—a view that was seen as being increasingly supported by economic data showing weakening domestic demand which, it was believed, would restrain inflationary pressures.

The markets suffered a sharp setback, therefore, when strong July producer price figures were released on 14 August, especially in view of the concerns that had been recorded in successive minutes of Monetary Meetings about the risk of strong input price pressures feeding through to the output stage. Over August, most of the short-sterling curve rose by 1/4%, as the market became nervous about the forthcoming retail price figures. However, the market began to rally once more on the afternoon of 15 August, as aggressive central bank intervention succeeded in pushing the dollar sharply higher; over the following two days, a combination of benign labour market and retail price data brought the market back to close to the levels prevailing before the publication of the producer price figures.

The money markets continued to strengthen during the remainder of August, with the recovery of the dollar providing a helpful background, and were further boosted at the start of September by the decision of several building societies to cut their mortgage lending rates. Although these cuts reflected the particular weakness of demand in the housing sector, the markets rallied on the view that the outlook was increasingly similar in other sectors of the economy and that a reduction in base rates might therefore be possible later in the year. As the rally continued into the middle of the month, there were significant changes in interest rate expectations, shown in the slope of the cash and futures market curves. In the cash markets, one-year cash traded as much as $^{1}/_{8}$% below three-months. And in the futures market, the prices of the nearest contracts discounted a fall in market rates.

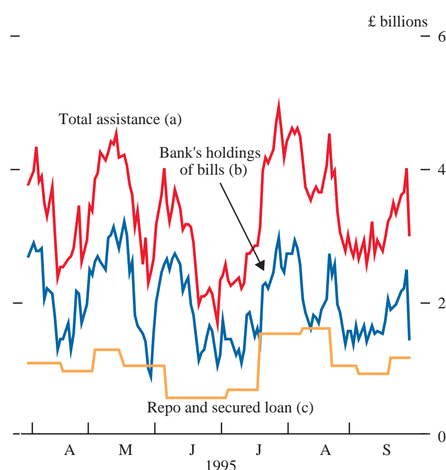
The rally faded a little in the second half of September, particularly on 20 September when the publication of buoyant broad money figures coincided with the release of the minutes of the July Monetary Meeting which described the recent strong growth of the monetary aggregates as worrying. Over the following days, renewed disturbance in the ERM—which also dragged sterling lower—and the result of the September gilt auction further dampened market optimism. But the impact of the gilt auction did not last long in the money markets and, generally, worse-than-expected news on the Government's budget—whether in the form of PSBR figures or the progress of funding—was regarded as encouraging for the money markets, since it was taken to limit the room for fiscal policy adjustments, and to make a monetary policy easing rather more likely.

During the quarter, the Bank became progressively less accommodating in its operational stance, with the intention of continuing the process—started in the second quarter—of returning shorter-term money-market rates closer to base rate, after the period of softening which followed the failure of Barings. The stock of assistance rose in the third quarter, following the increase in the size of the Treasury bill tender to £1,500 million weekly from 23 June. This led to an increase in the size of the average daily shortage; it had been around £550 million towards the end of the first quarter and around £625 million in the second, but rose to about £900 million in the third period. In the Bank's daily operations, the pace at which liquidity was injected each day was carefully managed: bill offers were scaled back when necessary, and part of each day's shortage was left to be satisfied through lending operations at the end of the day.

As the quarter progressed, cash rates out as far as three months converged on the prevailing level of base rate. The firmer rates at the short end of the money-market curve served to renew interest in the twice-monthly gilt repo. The total amount outstanding on the facility had fallen to around £550 million by the end of June, as short-term interbank rates traded below the repo rate. But as conditions tightened during the quarter, participation revived and by early October it stood at almost £2.3 billion. The repo conducted on 20 September attracted bids significantly in excess of the amount the Bank judged necessary to moderate fluctuations in the stock of money-market liquidity. In accordance with the functional purpose of the facility, bids were scaled down.

The increased size of the Treasury bill tender had several effects. Participation in the tender increased and broadened, with cover

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 bills outright and on a repurchase basis and 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 under secured loan facilities.

Table B
Influences on the cash position of the money market

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

	1995/96 Apr.–June	1995 July	Aug.	Sept.
Factors affecting the market's cash position				
Under/overfunding (+/-)	5.2	0.5	4.0	-0.3
Other public sector net borrowing from banks and building societies (-)	0.3	—	-0.2	0.7
of which, local authorities' deposits with banks and building societies (+)	*0.3*	*-0.2*	*-0.1*	*0.5*
Currency circulation (-)	-0.7	0.8	-0.4	-0.7
Other	4.0	-1.1	0.1	0.6
Total	**8.8**	**0.3**	**3.6**	**0.3**
Increase (+) in the stock of assistance	-2.5	2.9	-1.8	0.2
Increase (-) in £ Treasury bills outstanding (a)	6.1	3.2	1.9	0.4
Increase in bankers' balances at the Bank	0.2	-0.1	-0.1	0.1

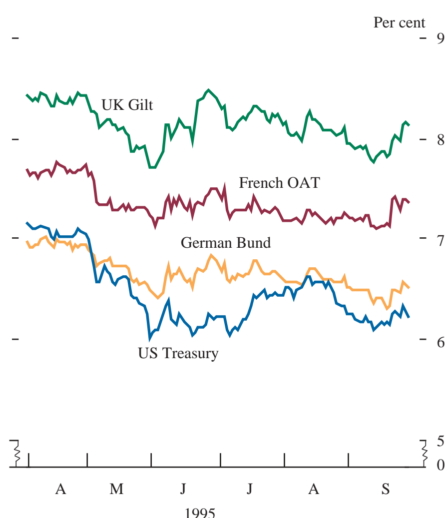
(a) Other than those held outright by the Bank and government accounts, but including those purchased by the Bank on a repurchase basis.

rising to a high of 6.4 times in early September, and the spread between Libid and the average Treasury bill yield narrowed, from 48 basis points in the first quarter—when the weekly tender was only £350 million—to around 10 basis points in the latest period.

Gilt-edged market

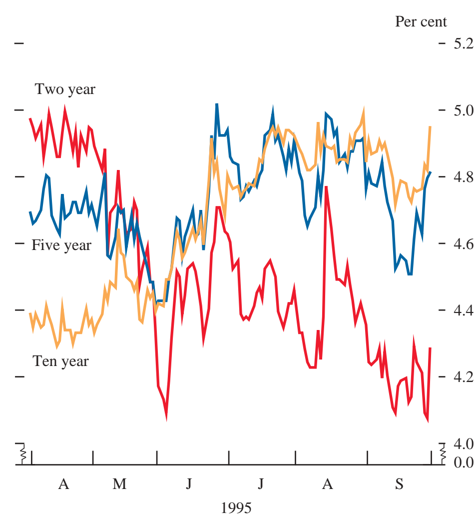
Gilt yields maintained a generally downward trend in the third quarter, although currency turbulence—following reported comments before the Majorca Summit—hit all bond markets towards the end of September. The main movements during the quarter were: the narrowing of spreads against other bond markets early on, following the resolution of the domestic political uncertainties, and a widening towards the close; the steepening of the UK yield curve, as the market came to expect the next move in interest rates to be downward; and a downward shift in inflation expectations up to seven years, with an upward shift thereafter.

Ten-year government bond yields[(a)]



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

Implied forward inflation rates for different maturities[(a)]



(a) Time series for implied inflation rates looking two, five and ten years ahead: derived using the Bank's Svensson yield curve model.

With the political uncertainties at the end of the second quarter resolved, gilts started the third quarter strongly. Ten-year yields approached 8%, and although the 25 basis point cut in US rates on 6 July was a factor, spreads with other major bonds narrowed as the underperformance in late June was corrected. After the successful July gilt auction, index-linked tap stocks brought in early August were quickly exhausted. These were the first tap sales since the publication of the Debt Management Review and followed the new procedures outlined there.[(1)]

International sentiment provided a positive backdrop to the UK bond market in the middle of the quarter: the main factors were weaker US data, the cut in Japanese official rates, a growing expectation of a cut in German rates and, in the currency markets, central bank support for the dollar. Although higher-than-expected UK producer price figures published on 14 August set the market back, weaker domestic data and cuts in mortgage rates thereafter helped gilts to outperform other government bonds: the spread over German government bonds (Bunds) dipped as low as 137 basis points (on 12 September) and ten-year yields went below 8% for the first time since June. The German rate cut on 24 August, and the subsequent reductions in the repo rate (leaving it at 4.08% at the end of the quarter, compared with 4.50% at the start) caused a further pick-up. This lasted until the middle of September, when all three gilt benchmarks traded with yields of under 8%, while the US 30-year bond yield fell to a low of 6.5% on 14 September; ten-year spreads over US and German bonds at this point stood at 167 and 140 basis points respectively. Further index-linked tap stocks brought in early September were also quickly exhausted.

But towards the end of September, currency turbulence and the disappointing gilt auction dented sentiment and the market fell: in the last week of the month, spreads over Bunds widened by 13 basis points and over US Treasuries by 18 basis points; ten-year yields rose from 7.98% to 8.12%. The September gilt auction was (just) uncovered.

Yields on index-linked stocks also fell during the quarter—but by less at the short end, suggesting that inflation expectations there had reduced. Volatility on the option on the long-gilt future was low: it began the quarter at 10.4% (before the resolution of the

(1) For further details on the Debt Management Review, see the August 1995 *Bulletin*, page 226.

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 (b)	Date exhausted (b)
8% Treasury 2015	2,500	18.7.95	27.7.95	Auction	96.6875 (c)	Fully paid	8.34 (d)		
2% Index-Linked 2006	100	3.8.95	3.8.95	Tap	181.1250	Fully paid	3.52 (e)	3.52 (e)	8.8.95
2½% Index-Linked 2013	150	3.8.95	3.8.95	Tap	139.6875	Fully paid	3.61 (e)	3.60 (e)	7.8.95
6% Treasury 1999	250	8.9.95	8.9.95	Tap	95.6875	Fully paid	7.28	7.27	8.9.95
6% Treasury 1999	100	8.9.95	8.9.95	To CRND					
8% Treasury 2003	100	8.9.95	8.9.95	To CRND					
2½% Index-Linked 2001	100	8.9.95	8.9.95	Tap	177.4375	Fully paid	3.30 (e)	3.30 (e)	12.9.95
2½% Index-Linked 2016	150	8.9.95	8.9.95	Tap	150.3750	Fully paid	3.55 (e)	3.56 (e)	14.9.95
7½% Treasury 2006	3,000	19.9.95	28.9.95	Auction	95.6875 (f)	Fully paid	8.09 (d)		

(a) Gross redemption yield, per cent.
(b) Taps are exhausted when the issue is no longer operating as a tranchette; the equivalent date for stocks sold at auction is the issue date.
(c) Lowest-accepted price for competitive bids. The non-competitive allotment price was £96.1875.
(d) Yield at lowest-accepted price for competitive bids.
(e) Real rate of return, assuming 5% inflation.
(f) Lowest-accepted price for competitive bids. The non-competitive allotment price was £96.1875.

Conservative leadership contest) but dipped under 7% in late July, before hovering under 7.5% for most of August and September. It rose in the run-up to (and after) the September auction, and ended the quarter at 8%.

Tax reform and the strips market

The Chancellor of the Exchequer announced on 10 July that the Government would go ahead with the reform of the taxation of gilts and other bonds, and that an official gilts strip facility would be introduced.[1] The Bank announced at the same time that the strips market would not start before the second half of 1996, to allow not only the legislative and tax issues to be resolved, but also a large number of practical issues to be dealt with. In September, it was announced that four stocks would be strippable: the three 1995 benchmarks (8% Treasury 2000, 8½% Treasury 2005 and 8% Treasury 2015) and the new ten-year benchmark, 7½% Treasury 2006. The four stocks have the same coupon dates (7 June and 7 December), so the coupon strips will be *fungible*—ie identical with one another for trading purposes, aiding liquidity. The September announcement led the four named stocks initially to outperform surrounding issues; however, the size of the strips premium was not clearly identifiable from the behaviour of the stocks.

Gilt-edged funding

The July auction, for £2.5 billion of 8% Treasury 2015 was 1.42 times covered, with a 1 basis point tail—the difference between the yields corresponding to the average and lowest-accepted bids. The September auction was for the new ten-year benchmark (7½% Treasury 2006), which will be strippable, pay coupons free of withholding tax and be accounted for on an annual basis once the strip facility starts. The auction was for £3 billion, at the top of the range indicated in the funding remit and the largest auction to date in the financial year (though four auctions of over £3 billion had been successfully held in 1993/94). The auction was just uncovered (with cover of 0.99 times), and the dispersion of bids received and accepted was exceptionally wide (there was a tail of 7 basis points). Unusually, the stock did not cheapen relative to other stocks in its sector in advance of the auction, and the prices accepted were unusually far below those recorded in 'when-issued' trading. The small amount of remaining stock (£28.6 million) was held on official portfolios; it was announced that it would not be sold for a

(1) For further details on this, see the August 1995 *Bulletin*, page 228.

Table D
Official transactions in gilt-edged stocks

£ billions: *not seasonally adjusted*

	1995/96 (a)	1995		
	Apr.–June	July	Aug.	Sept.
Gross official sales (+) (b)	5.7	2.7	0.5	3.4
Redemptions and net official purchases of stock within a year of maturity(-)	0.2	2.3	—	—
Net official sales (c)	5.5	0.4	0.5	3.4
of which net purchases by:				
Banks (c)	0.3	-0.6	—	0.5
Building societies (c)	—	-0.5	0.2	-0.1
M4 private sector (c)	2.7	1.3	-0.2	2.3
Overseas sector	2.4	0.2	0.5	0.7

(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.

period of at least two months, and in any event only in stable market conditions. The result of the auction was seen as disappointing in the market; the gilt future fell $1\frac{1}{2}$ points between the closing of bids (at 10.00 am) and 1.30 pm, when disappointing US durable goods figures were announced. Turnover at LIFFE in the long-gilt future was at record levels, with over 125,000 contracts traded.

Total gilt sales in the second quarter of the fiscal year, including tap sales, were £6,463 million, producing total sales for the first two quarters of £12,248 million, compared with a funding target of £26,875 million for the whole year.

Towards the end of September, the Bank convened the first quarterly meetings with gilt-edged market-makers and with end-investors, to seek views on the maturity schedule of the gilt auctions to be held in October and December. The minutes of the meetings were published.[1] On 29 September, the Bank announced that the auctions in the fourth quarter of 1995 would be for a stock in the range 2014–2016 on 25 October, and in the range 2004–2006 on 6 December.

(1) Copies may be sought from the Bank (telephone 0171-601 4492).

The gilt repo market

Open gilt repo trading will begin in January next year. It will be the most significant liberalisation in the gilt market since Big Bang and the second of the three central elements of the reform programme currently under way. It follows the introduction of a pre-announced auction calendar and maturity schedule, and comes ahead of an official gilt stripping facility. This note outlines the legal, regulatory and settlement structure under which—as a result of work undertaken with the market—gilt repo trading will take place. The Bank strongly urges all market participants to comply with the Code of Best Practice and not to enter into any repo or repo-like transactions unless there is sound legal documentation covering, among other things, marking to market, margining, netting and close-out in the event of default.

From 2 January 1996, there will be no official restrictions on anyone repoing, lending or borrowing gilts for any purpose, either directly or indirectly through an intermediary. The reform will therefore extend choice. By doing so, it should help to increase the demand for gilts and enhance the liquidity and efficiency of the gilt market. If successful, this should over time reduce the cost to the government—and hence the taxpayer—of servicing the national debt.

A series of mechanisms opened up by the gilt repo market should contribute to this goal. First, would-be investors will be able to repo out gilts—as 'collateral'—in order to finance

What is a repo?

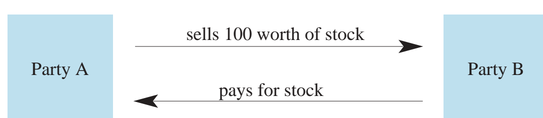
A repo is a 'sale and repurchase' agreement: Party A sells securities to Party B with a legally binding agreement to purchase *equivalent* securities from Party B for an agreed price at a specified future date, or at call. Party B has unfettered title to the securities, and may use or dispose of them as it pleases, but it has an obligation to deliver *equivalent* securities to Party A at the end of the repo.

The interest rate implied by the difference between the sale price and repurchase price is the repo rate. If Party A is selling securities to Party B in order to raise finance, the repo rate is, in effect, the cost to Party A of raising secured funds. Party B can 'lend' money to Party A for a 'repo rate' of interest, and take in a bundle of gilts. This is a *general collateral*, or GC, repo (see Figure A).

Alternatively, Party B may, for example, have a short position in a particular gilt, which it covers by obtaining ('reversing in') that stock from Party A. In this case, Party A is not paying Party B for raising secured funds; rather Party B is paying Party A for temporary title to an amount of the stock that it needs, for example to deliver into a sale. The repo rate may therefore be lower, so that Party A can invest the cash that it receives for the stock and earn a net return. This is a 'special' repo, ie a repo in a specific stock with a non-GC repo rate—see Figure B.

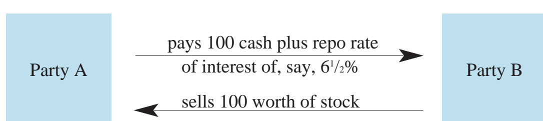
Figure A
General collateral repo (in non-specific stock)

First leg of the repo:



Party A now has 100 of cash, against which it has delivered 100 of stock to which Party B has full title.

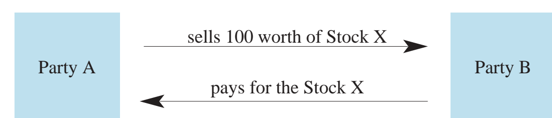
Second leg of the repo:



Party B has earned 6½% 'interest' on its cash.

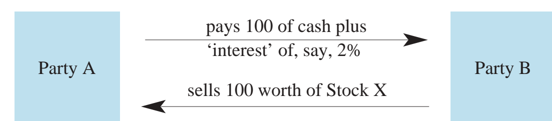
Figure B
Special repo (in a specific stock)

First leg of the repo:



Party B now has 100 of Stock X (eg to cover its short position) and Party A has the use of 100 of cash.

Second leg of the repo:



Party A has paid only 2% on the cash received in the repo, but has earned a higher money-market rate on investing the cash for the duration of the repo. Party B has foregone interest on its cash in order to cover its short position in Stock X.

purchases. This financing technique is widely used by international investors in other markets. Second, arbitrage in the cash market should be easier, as all market participants will be able to borrow stock to cover short positions. And, separately, the efficiency of the market in lending and borrowing gilts should be promoted if the price of borrowing stock becomes flexible.

Benefits should also arise from a greater integration of the sterling money and gilt markets. Gilt repo, as essentially a form of secured money, will extend the range of instruments traded in the sterling money markets. It is possible that they will also increase the emphasis placed on the cost of financing holdings of gilts and, more generally, promote arbitrage between the two markets, creating a more continuous yield curve.

What actually happens will depend on the appetite of market participants for repo trades. The role of the authorities has been to remove the obstacles to a repo market and to work with market practitioners on a framework for a safe and orderly market.

Market structure

Two major reforms are making the development of an open gilt repo market possible: to the structure of the gilt market, and to the tax regime for gilts.

The core of the gilt market structure will be unchanged, with gilt-edged market-makers (GEMMs) obliged to quote two-way prices on cash gilts on a continuous basis. But whereas in the past the existing stock-lending and borrowing facilities have been directed at servicing the market-makers, from 2 January any market participant will be free to undertake gilt repo or stock-lending transactions with any other for any purpose (subject to vires, supervisory consents, etc). There will be no official list of those who may undertake gilt repo transactions; it will be for each market participant to choose its counterparties. Similarly, any group will be free to offer intermediation services in gilt repos, on a name-passing, agency or matched-principal basis.

There are also changes for the core sterling market firms supervised by the Bank. Discount houses will be free to trade repos for any maturity and for any purpose, including running matched-book operations. Groups containing both a discount house and a Stock Exchange money broker (SEMB)—which currently provide intermediation services in stock borrowing and lending and in financing GEMMs' gilt positions—will be free to absorb the SEMB's sterling operations into the discount house.[1] As the Bank's counterparties in the money market, discount houses will, however, be required to remain separate from bank treasury operations in the same group.

To be supervised by the Bank of England, any SEMBs will need to run a business which, as now, is directed predominantly at servicing the GEMMs. Supervision by the Bank would no longer be appropriate if a SEMB opted to undertake wider business (unless it merged with, for example, a bank which was supervised by the Bank). It would then need authorisation from a self-regulatory organisation such as the Securities and Futures Authority and would no longer be a 'SEMB' as currently defined.

Gilt inter-dealer brokers (IDBs), which currently offer a matched-principal broking service among GEMMs in the cash gilt market, will also be free to offer a similar intermediation service to GEMMs in gilt repos.

Tax reforms

After the changes to the market structure, the second enabling step is the reform of the United Kingdom's withholding tax system. From 2 January 1996, UK and overseas companies and certain other investors will be able to receive gross dividends. The effect is that withholding tax should not be applied to dividend payments on most gilt holdings. Manufactured dividends[2] will be payable gross in all circumstances. This means that *all* counterparties to a gilt repo or stock loan will be able to manufacture gross dividend payments; most will also receive gross real dividends.

If that were the extent of the reforms, the Exchequer would suffer a one-off cash-flow loss. In order to offset this, UK-taxable investors who enter the new gross-paying arrangements will be subject to quarterly accounting to the UK tax authorities for tax on gilt interest. Investors wishing to take advantage of this gross payment regime will need to hold their gilts in special accounts (known as 'STAR' accounts) in the Central Gilts Office (CGO)—the book-entry transfer settlement system for gilts run by the Bank (see the box on page 327). If, as planned, international settlement systems—such as Cedel and Euroclear—join the CGO, then gilts owned by eligible persons held in those systems will also be able to receive gross dividends, provided that the settlement systems hold the gilts in CGO STAR accounts.

The Bank wrote to all CGO members in September allocating CGO STAR account numbers, to allow enough time for them to open STAR accounts by December. And following consultation in September and October, the Inland Revenue will soon finalise its Regulations for STAR accounts. It has also consulted on the revised tax forms that investors will need to use under the new quarterly accounting regime: both they and the implementing Regulations are due to be finalised shortly.

In tandem with these reforms to the withholding tax system, other important changes were introduced in the 1995 Finance Act which should promote the efficiency of the gilt market. In particular, from January 1996 the distinction between gilts that are and are not free of tax to residents

(1) The Bank will, however, review the nature and scale of equity and international securities lending intermediation that any discount houses taking this course would be permitted to undertake.
(2) A manufactured dividend is a payment of an amount equal to a dividend payment made by the 'borrower' of stock to the 'lender' of stock, so that the 'lender' receives the coupon income from the stock that it would have received had it not lent or repoed out the stock.

CGO STAR accounts and tax compliance

The main points concerning the operation of the CGO's new stock accounts are:

- To be eligible under the new CGO STAR account regime for gross dividend payments on gilts from January 1996, bodies will need to be UK-resident and subject to corporation tax, companies not resident in the United Kingdom, exempt bodies such as UK pension funds, or sovereign bodies not liable for UK tax.
- In order to obtain dividends gross, eligible market participants will have to hold their gilts in a CGO STAR account.
- Those already receiving gross payments have the choice of continuing with their current arrangements or moving to the CGO STAR account regime.
- So far as settlement is concerned, STAR accounts will function like ordinary CGO accounts, but they will be identifiable by their initial digit (which will be a 7 or an 8) and title (which will include the word 'STAR').
- An eligible market participant that is not a CGO member will need to make a declaration to a CGO member or to a 'recognised intermediary' (see below) to the effect that it is an eligible body. This declaration will be retained for inspection by the Inland Revenue. The declaration need be made only once for all current and future gilt holdings, unless the body's status changes.
- The Inland Revenue will maintain and publish a list of 'recognised intermediaries' who hold stock on behalf of others; it will embrace Stock Exchange members, EEA banks and building societies, and certain other UK and foreign intermediaries.
- Eligible bodies will need to ensure that their gilts are held in CGO STAR accounts by the end of November in order to receive gross payment on all gilts from the first dividend payment date in January 1996.[1]
- Existing CGO members have already been contacted about opening CGO STAR accounts.

(1) Those wishing to open a CGO STAR account should contact Hilary Jones, Central Gilts Office, Bank of England, 1 & 2 Bank Buildings, Princes Street, London, EC2R 8EU (telephone: 0171-601 4101).

abroad (FOTRA) will cease to be meaningful for most investors: most overseas investors will be able to receive gilt dividends gross and, having done so, will not be liable to UK tax whether or not a gilt is FOTRA.

On 10 July, following consultation by the Inland Revenue, the Chancellor of the Exchequer announced that the Government would introduce a fundamental reform of the taxation of gilts and other bonds from April 1996. The total return on wholesale investors' holdings of gilts and bonds will be taxed as income; this will make a strips market possible. Gilt issues that are designated strippable will be exempt from withholding tax and will therefore pay dividends gross from the start of the strips market.

Promoting a safe and orderly gilt repo market

The liberalisation involved in opening up the gilt repo market will involve new trading practices and, for some firms, new types of transaction. The Bank has therefore been addressing with market practitioners a series of measures designed to promote a safe and orderly market.

The Financial Services Act already provides a framework for the regulation of conduct of business and investor protection. Gilt repo transactions will also fall within the definition of 'financial instruments' for the purposes of the Investment Services Directive and the Capital Adequacy Directive, so that gilt repo trading will be subject to the requirements of the respective regulatory authorities.

Where new measures have been desirable, the Bank's role has been essentially catalytic, bringing together practitioners from various parts of the market to prepare and promote a standard legal agreement, a code of best practice and—where possible—standard settlement practices.

First, legal documentation using the PSA/ISMA Global Master Repurchase Agreement,[1] with which many market participants are already familiar, has been developed for use in the gilt repo market. An annex to the PSA/ISMA Agreement will cover points specific to the gilt market, such as the use of deliveries-by-value[2] in the CGO. This exercise has also prompted the ISMA, with the PSA, to review their Master Agreement. The opinion of leading Counsel on the key provisions of the Gilt Repo Legal Agreement, consisting of the revised PSA/ISMA Agreement with gilt annex, is being sought and will be published.

The use of a proper legal agreement is of paramount importance. The Bank strongly urges all market participants not to enter into any repo or repo-like transactions unless there is sound legal documentation covering, among other things, marking to market, margining, netting and close-out in the event of default. In other markets, some participants enter into undocumented sell/buy back transactions—where

(1) The PSA/ISMA Agreement was drawn up under the auspices of the Public Securities Association and the International Securities Market Association. The Agreement is widely used in existing repo markets.
(2) Delivery-by-value (DBV) transactions allow a bundle of gilts to a given aggregate value (rather than specific securities) to be delivered to another CGO member on an overnight basis. They unwind automatically the following day. DBVs are used primarily to provide collateral.

The key elements of the Gilt Repo Legal Agreement

The key elements of the gilt repo legal agreement (GRLA) are:

- It comprises the PSA/ISMA Global Master Repurchase Agreement for gross-paying securities together with supplemental terms and conditions to fit the characteristics of repos in gilts, set out as Part 2 to Annex I of the PSA/ISMA Agreement.
- It provides for absolute transfer of title to the securities being repoed.
- It provides for remargining during the life of a repo contract, or for a contract to be closed out and repriced. It also provides for close-out and set-off in the event of default.
- It provides for *all* transactions undertaken with a single counterparty under the PSA/ISMA Agreement with appropriate annexes (such as that for gilts) to be closed out and set off in the event of default by that counterparty.
- The GRLA facilitates the use of a series of overnight DBV transactions (securities delivered by value, rather than by individual security) in the CGO being entered into until either party wishes to end or amend the transaction, or until a specified date. Such transactions will be similar in economic terms to general collateral repos.
- It covers agency transactions where *one* of the parties acts as agent on behalf of a *named* principal.
- Users of the GRLA will be able to extend its provisions to cover further points specific to their needs, although they will need the agreement of their counterparties, and should obtain legal advice.

An updated and revised PSA/ISMA Agreement is being published. No major provisions are being changed, but there are minor changes of scope: for example, it will now cover some agency transactions, allow for repricing as a form of margin adjustment, and include an annex to allow repos to be structured as buy/sell backs.

The opinion of leading Counsel on the effectiveness of the GRLA between UK-incorporated counterparties will be made available to market participants.

a spot sale and forward purchase are undertaken as linked transactions. Such an arrangement provides less protection against market price movements in the event of counterparty default than does a properly documented repo, and the Bank regards this as falling well short of best practice.

The gilt repo Code of Best Practice

The key elements of the Code of Best Practice for gilt repo transactions are:

- Before entering into gilt repo transactions—and regularly thereafter—participants should review all legal, credit, systems and procedural matters relating to gilt repos to ensure that trading is adequately controlled and understood.
- New clients should be made aware of the Code.
- Gilt repo transactions should be subject to a legal agreement between the two participants concerned. It is strongly recommended that participants use the gilt repo legal agreement (subject to legal confirmation that it is appropriate for the transactions intended).
- A legal agreement should provide for: the absolute transfer of title to securities; daily marking to market of transactions; remargining; and full set-off of claims between the counterparties in the event of default.
- Particular consideration needs to be given to the effectiveness of any legal agreement proposed with a non UK incorporated counterparty.
- Margin should be called whenever a counterparty has a mark-to-market valuation exposure that they consider material.
- Taking delivery of securities and margin directly or via a third party can reduce potential credit risk. Those considering leaving securities purchased in the custody of their counterparty (a 'hold-in-custody' repo) should consider very carefully their counterparty's creditworthiness, systems and control procedures, etc.
- Special consideration should be given to 'stock events' such as ex-dividend dates, conversion options, etc occurring during the life of the repo.
- Confirmations should be sent out on the same day and checked on a timely basis.

The Code is recognised by financial regulators, exchanges and market associations.

These points are made in the industry-produced Code of Best Practice, which complements the Gilt Repo Legal Agreement. It endorses the best practice that has already developed over time in other repo markets and in London's existing cash gilt and stock-lending markets. The Code has been recognised as a statement of best practice by the Securities and Investments Board, the Securities and Futures Authority, and other regulators and trade associations. The Code Working Party will remain in existence as a standing body, and will keep the Code's provisions under review as the gilt repo market develops.

The report of the Gilt Repo Settlement Working Party, and CGO II

The Gilt Repo Settlement Working Party looked at existing gilt market and repo market settlement practices and relevant aspects of the Central Gilts Office (CGO) system.

The next generation of software for the CGO is currently being developed and should be in place by the end of 1996. Until then, various adjustments to the existing CGO and settlement conventions will be made to facilitate the smooth settlement of gilt repo transactions.

Enhancements to the current CGO system

The CGO settlement banks have agreed to increase the limit on free deliveries within CGO from £100,000 to £3 million to facilitate the movement of gilts as margin. They have also agreed to widen from 6% to 10% the consideration checking bands, which ensure that stock is transferred within the CGO at close to the market price, in order to allow smoother settlement of the second leg of a repo transaction. Both these changes will take effect from 2 January.

The capacity of the CGO is being increased by additional hardware and will be kept under review. And the CGO timetable is being extended at both the start and end of the day to accommodate any increase in volumes and help back offices.

Among the other points included in the Settlement Working Party report are:

- If the second leg of a repo transaction cannot be effected in CGO, even within the new consideration checking bands, it should be effected at the CGO Reference Price plus or minus the 10% checking bands, so as to minimise the side payment to be made through CHAPS.
- Repos will be possible using the CGO's delivery-by-value mechanism. Because DBVs unwind at the value at which they are initiated, a separate payment outside CGO will need to be made to cover the repo price differential.
- It is proposed that coupon entitlement should reflect the value date (settlement date), rather than the trade date as at present. This will be reflected in the Stock Exchange rules.
- Counterparties should agree whether margin should be delivered in cash, securities or by repricing the transaction.
- Where a repo spans an ex-dividend period, the forthcoming dividend payment should be factored into the calculation of margin.
- Open repos should be terminated and the gilts returned the same day if they are called before 10.00 am, unless the counterparties have agreed otherwise.
- The practice of call-over should be extended to cover all repo and stock-lending transactions, other than same-day trades. This involves the party due to deliver gilts calling its counterparty to confirm delivery.
- It is recommended that confirmations be sent and delivered on the day of trade, to ensure compliance with the gilt repo Code of Best Practice. A sample confirmation format, which may become the market standard, is included in the final report.
- Market participants cannot be forced to accept partial deliveries, but it is thought that many participants will wish to 'shape' large trades into smaller trades and also to accept partial deliveries. It is proposed that this become the basis of cash gilt market practice as well.

The development of CGO II

The Bank is proposing to use a clone of the CREST software to upgrade the current CGO software. Once in operation, it will:

- include a forward inputting facility;
- allow for the matching of trades for settlement;
- allow memorandum information, such as the repo rate, to be recorded;
- allow free deliveries for margin adjustments (which will be limited to £3 million in CGO I);
- allow the settlement banks to control their exposures by putting debit caps on members; and
- subject to there being room under these caps, allow settlement of the second leg of repos at the originally agreed price, regardless of prevailing market prices.

Monitoring the gilt repo market

The Bank plans to monitor gilt repo activity closely, in support of its operational responsibilities for gilt-edged funding and in order to provide information on the development of the market. Gilt repo activity undertaken by the Bank's money and gilt market counterparties will be covered by routine statistical returns and at supervisory and operational meetings. The Bank's gilt and sterling money market desk will monitor rates and day-to-day activity in the market.

In addition, the Bank is currently consulting on the collection of quarterly data from active gilt repo participants, with a view to publishing aggregate data in the *Quarterly Bulletin*. The proposed quarterly reports will cover:

- the value of repo contracts entered into during the period, broken down by original maturity;
- the total number of deal tickets written during the period; and
- the value of repo transactions outstanding at the end of the period, broken down by residual maturity.

This information will be requested for both repo and stock lending transactions, and will include buy/sell transactions undertaken under appropriate documentation. The Bank also aims to collect data on any undocumented transactions.

A third working party has considered a range of technical settlement and systems issues, such as whether to standardise various back office procedures relating to gilt repos and how repo transactions should be handled in the CGO. The CGO will be able to deal with greatly increased volumes, through an addition to its hardware capacity and an extension to its operating timetable to make it more convenient for users.

Where possible, settlement practices and related conventions for gilt repo transactions will conform with both existing gilt market and repo market practices. Where there are differences, the process of consultation has led to consensus either on what approach to adopt or, on certain points of detail, that the matter should be for counterparties to agree bilaterally. It is possible that some market practices which are necessary in the early days of the gilt repo market may not be needed when the upgraded CGO (CGO II) comes into operation. It is proposed that CGO II be based on CREST software and that it should incorporate many new services and features that will make the settlement of gilt repo transactions smoother and easier than is possible using the existing CGO software.

Some of the Working Party's recommendations are being adopted by the CGO, and some are reflected in the Gilt Repo Legal Agreement or the Code of Best Practice (or its Annex on conventions). The Stock Exchange is preparing amendments to its rules covering settlement practices in the cash gilt market.

Monitoring the market

The Bank supervises institutions rather than markets, and will not supervise the gilt repo market as such. It will, however, monitor its size, growth and orderliness, as well as its interaction with other markets. Day-to-day monitoring, both from the Bank's dealing room and via liaison with market participants, will focus on market rates and trading patterns. Beyond that, the Bank aims to collect data, mainly on activity levels, from the main repo market players; it plans to publish this in aggregate form and has put proposals to the trade associations whose members are affected.

Conclusion

This note has outlined some of the main elements of the preparations for the gilt repo market. Those interested in using the market should ensure that they follow the Code of Best Practice. They should seek professional legal, tax or other advice as necessary in order to ensure that all their business procedures and systems and controls are fully prepared for undertaking gilt repo transactions; and that, *prior* to starting trading, they have in place appropriate legal agreements with *all* counterparties (and legal opinions for non UK incorporated and other counterparties, as necessary).

Copies of the Gilt Repo Legal Agreement, the Code of Best Practice, the report of the Settlement Working Party and the repo monitoring forms that the Bank would like to receive from the main gilt repo market players are available from the Bank's Gilt-Edged and Money Markets Division.(1)

(1) Those interested should contact Mrs Amman Athwal, Gilt-Edged and Money Markets Division, Bank of England, Threadneedle Street, London EC2R 8AH (telephone 0171-601 5535).