Operation of monetary policy

This article covers the period from July to September.

Introduction

On 16 September, in exceptionally turbulent market conditions and after heavy official purchases of sterling, the United Kingdom suspended sterling's membership of the ERM. The Banca d'Italia also ceased its intervention in support of the lira and the peseta was devalued.

For the first eighteen months sterling's membership of the ERM was helpful in enabling base rates to be reduced from 15% to 10%, as activity slowed and inflation fell. These reductions were possible despite increases in German official interest rates to meet the inflationary and fiscal consequences of reunification. Membership of the ERM enabled the nominal short-term interest rate differential with Germany to narrow to less than 20 basis points while the wide ERM band provided some scope to accommodate the diverging needs of the UK and German economies.

Over the spring and summer, domestic recovery continued to prove elusive, while the consequences of German reunification were clearly greater than earlier envisaged. As German monetary growth remained rapid, there seemed little near-term prospect of an easing of German interest rates and indeed the German discount rate was raised again in July. Moreover, the policy mix in Germany relative to that in the United States and Japan caused the deutschmark, and therefore the whole ERM grid, to appreciate against the dollar and yen. It therefore became increasingly apparent in ERM countries where activity was weaker than in Germany that the conflict between the internal objectives of monetary policy and the exchange rate commitment would be prolonged. In the United Kingdom, the maintenance of sterling's position in the ERM constrained the scope for cutting nominal interest rates below those in Germany. As a result, real interest rates rose as the domestic inflation outlook improved.

The French referendum on the Maastricht Treaty, to be held on 20 September, provided an immediate focal point in the markets for these tensions. If, as in Denmark, the Treaty was not approved and the EMU process thus delayed or halted, a realignment of the ERM was judged more likely. Sterling and other European currencies came under increasing pressure in the period before the French referendum, as opinion polls cast doubt on whether a majority in favour of ratification would be achieved. Action was taken to defend sterling's position in the ERM but, given that the deutschmark was strengthening against the dollar as well as against other ERM currencies, intervention to support sterling ultimately entailed trying to push it to levels against the dollar at which sterling was generally considered to be overvalued. It did not seem likely that a defensive rise in interest rates would be seen by the foreign exchange market as a credible strategy because it was so

clearly at odds with the needs of the domestic economy. After the lira's devaluation on 14 September and comments attributed to the Bundesbank President which cast doubt on the appropriateness of sterling's parity (but which were subsequently denied), pressure came to a head. During 16 September, two increases in official interest rates were announced in order to defend sterling's parity. But after massive intervention had failed to lift sterling from its floor, the government suspended sterling's membership of the ERM that evening. A more detailed account of events is contained in the sections below on foreign exchange market developments and official operations in UK financial markets.

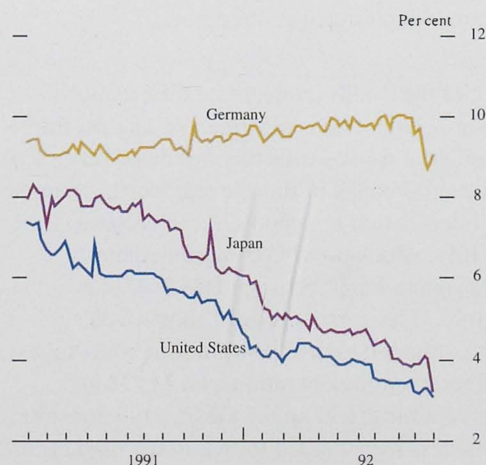
While sterling was in the ERM, the United Kingdom had in effect been forced to follow the tight monetary policy adopted in Germany and had witnessed increasing demands on the public sector's finances. Once sterling was outside the ERM, some rebalancing of the policy mix was possible. The Bank was able to signal a 1% reduction of interest rates later in September, to complement the easing of monetary conditions caused by sterling's depreciation, and official statements emphasised a rigorous approach to public spending.

Conditions in the gilt market during much of the quarter made funding through gilt sales rather more difficult than earlier in the year. Nevertheless, gross official sales amounted to £7.6 billion. Moreover, the sterling counterpart of the underlying change in the reserves and the use of the proceeds of HMG's foreign currency borrowing substantially reduced the funding requirement resulting in an overfund of £9.1 billion during the first six months of the financial year.

Foreign exchange market developments

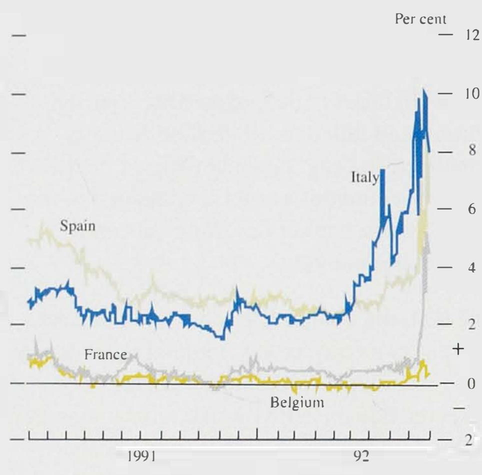
Foreign exchange markets, particularly in Europe, experienced a period of unrest and upheaval during the summer influenced by divergences among the European economies, concerns about the ratification of the Maastricht Treaty, and actual and prospective interest rate differentials between Germany and the rest of Europe on the one hand, and the United States and Japan on the other. In these conditions, monetary authorities around the world engaged in strenuous attempts to reduce volatility in exchange rates, involving in some cases massive market intervention and large changes in official interest rates.

G3 three-month euro-rates



During 1991 and the first half of 1992, interest rate differentials between European currencies and the dollar and yen became increasingly wide. German reunification had added greatly to the pressure of demand on German productive capacity and the authorities responded with a steady tightening of monetary policy, while in some other European countries demand was much less strong. Initially, the interest rate differentials between other European currencies and the deutschmark narrowed, but non-DM bloc countries were unable in practice to reduce their interest rates sustainably below German levels, and German interest rates thus came increasingly to constrain interest rate easing in those countries. At the same time, the weakness of the recovery in US output led to a long series of small reductions in US interest rates. By early summer, the short-term interest rate differential between the dollar and deutschmark was at an all-time high. This affected the value of the dollar against not only the deutschmark, but also against the other ERM currencies.

Three-month euro-rate differential with Germany



The narrow Danish rejection of the Maastricht Treaty on 2 June marked an important turning point in the development of the currency markets over the summer. By raising doubts about the EMU process, it reawakened market fears (which had been allayed to some extent by the agreement of the Maastricht Treaty in December 1991) about the permanence of the existing ERM parities. Talk of a two-speed Europe re-emerged and, as a result, tensions within the ERM increased. Consequently, short-term interest rate differentials against Germany widened again in Europe, particularly in Spain and Italy. The pro-Maastricht vote in Ireland on 19 June did little to dispel market doubts. The Italian lira came under particular pressure, and the Italian authorities reacted by raising the discount rate by 100 basis points to 13% on 6 July and to 13.75% on 16 July. The Ecu market, too, was much affected. The Ecu began to trade at a discount to the value of the basket of component currencies in the foreign exchange market, and yields on Ecu debt instruments rose sharply relative to the composite of yields on the component bonds.

Meanwhile the dollar was weakening against all major currencies. Economic indicators suggested that demand in the United States remained weak, and the market thus began to expect a further relaxation in US monetary policy. This easing occurred on 2 July, following the publication of disappointing employment data. The Federal Reserve cut the discount rate by 50 basis points to 3%, and the federal funds rate fell from about 3.75% to about 3.25%. The dollar subsequently fell to a seventeen-month low below DM 1.50. Other European currencies moved up steadily with the deutschmark against the dollar. Some, however, such as the lira and sterling, met growing resistance as their value in dollar terms seemed to the market unwarranted on fundamental grounds, and they slipped down against the deutschmark within the ERM.

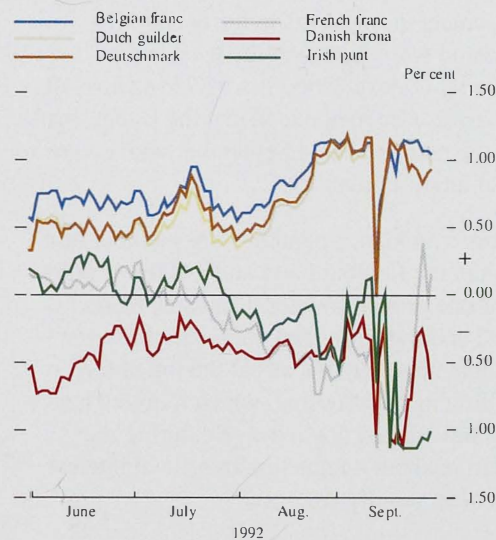
Early in July the deutschmark's appreciation gained momentum. Expectations grew of a further rise in German interest rates, given the Bundesbank's known concerns about the rate of growth of the German money supply, which was well in excess of its target range. In the event, the Bundesbank on 16 July raised the discount rate by 75 basis points to 8.75%, but left the Lombard rate unchanged at 9.75%. Although German money-market rates were not directly affected, the rise in the discount rate was quickly followed by rises in official interest rates in several other ERM countries. Moreover, some market commentators suggested that the rise in the discount rate presaged a further rise in the Lombard rate. Against this background, the deutschmark continued to strengthen.

The continued widening of the $-DM interest rate differential propelled the dollar towards its previous all-time low against the deutschmark, just above DM 1.44, towards the middle of July. This development prompted central banks in Europe and North America to undertake concerted intervention in support of the dollar against the deutschmark on 20 July, which provoked an immediate appreciation of the dollar into a range between DM 1.47 and DM 1.50 at the end of July. These gains proved short-lived, however, and the dollar continued to drift down throughout August. Three further concerted intervention operations, on 11, 21 and 24 August, had little perceptible effect on the DM/$ exchange rate, though they may nevertheless have helped to steady the markets and to slow the dollar's descent.

With the Japanese economy weak and the Nikkei index having fallen sharply to a six-year low, speculation about a cut in the Official Discount Rate in Japan grew and European currencies also strengthened against the yen. Indeed, the yen weakened against all major currencies during July, reaching a low of just above ¥128 against the dollar at the same time as the long-awaited ODR cut, of 50 basis points, was effected on 27 July.

Contrary to previous expectations, French public opinion appeared to turn progressively against the Maastricht Treaty over the summer. Pressures at the bottom of the ERM continued to be felt most strongly by the lira. But the approval of an austere interim budget brought some relief, enabling a cut of 50 basis points in the advances and discount rates on 4 August. However, opinion polls became a major influence on the foreign exchange markets, particularly on 25 August when one showed for the first time an apparent majority of voters opposed to ratification. This bolstered growing concerns about a possible realignment, and the ERM became increasingly polarised, with the narrow band at full stretch towards the end of August.

Narrow band positions (a)



(a) Relative to the centre of the narrow band. New central rates were established on 14 and 17 September.

The announcement of the UK government's ECU 10 billion borrowing programme on 3 September provoked an immediate and widespread reaction: sterling rose sharply; tensions within the ERM abated; and the dollar also gained, from its low of DM 1.3860 on 2 September. But these effects were largely reversed as a result of further developments in the United States, where expectations of a further easing of monetary policy were confirmed by an apparent reduction in the fed funds target on 4 September, following the release of further disappointing employment data.

The flight into the deutschmark gathered pace in September as the French referendum approached, and the market came to expect that the referendum might be closely followed by a general ERM realignment. Pressures upon the Italian lira, in particular, intensified and the Italian authorities raised the discount rate by a further 175 basis points on 4 September. The non-DM bloc ERM currencies also continued to rise against the dollar, but found it increasingly difficult to keep pace with the deutschmark's ascent, given the ample scope for profit-taking on short dollar positions. Sterling, the French franc and the Italian lira, for example, were at their highest levels against the dollar for more than a decade. The markets increasingly sensed a conflict between domestic objectives and ERM commitments, and accordingly marked several currencies down within the ERM.

In the event, the first casualty was outside the ERM. Despite rises in the official tender rate from 15.5% to 17% on 26 August and then from 17% to 18% on 3 September, the Finnish markka (which had been devalued after a massive outflow of funds in November 1991) came under intense speculative selling pressure. On 8 September the Finnish authorities abandoned the Ecu-markka peg. The markka fell by nearly 15% against the Ecu by the end of the following day, and has since then floated. The abandonment of the Finnish peg led in turn to very heavy pressure on the Swedish krona (and, to a lesser extent, on the Norwegian krone). Nevertheless, the Swedish authorities vigorously defended the exchange rate peg through considerable intervention, heavy foreign currency borrowing and, in late September, by achieving a political consensus for fiscal reforms and the maintenance of the current exchange rate policy. Moreover,

the commitment to the existing policy was demonstrated by raising in stages the official marginal intervention rate in the Swedish money market, to 500% on 16 September.

The unrest in the Nordic foreign exchange markets intensified market unease about other currencies pegged to the Ecu as well as about ERM parities, particularly that of the lira. With some expectation of a general realignment on 20 September, interest rate differentials became decreasingly effective as a means of providing exchange rate support; the cost of maintaining short positions could have little countervailing impact in the face of a possible realignment within such a short time horizon. After massive intervention and the announcement on 10 September that the Italian government would seek emergency powers in the event of an economic crisis, the decision was taken over the weekend of 12–13 September effectively to devalue the lira by 7% against all other ERM currencies. It was also announced that the Bundesbank Council would meet on the morning of 14 September with a view to reducing German official interest rates.

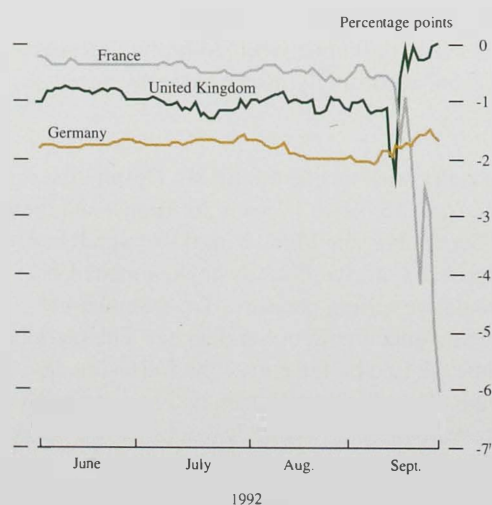
However, the Bundesbank's announcement on 14 September of a 25 basis points reduction in the Lombard rate and a 50 basis points reduction in the discount rate proved smaller than some market participants had expected and thus provided only a brief respite. On the morning of 14 September, the lira was at the top of the system and at its upper limit against sterling, which required heavy official support. But the lira slipped down the grid during the following day as speculation about a reduction in official interest rates and another realignment rapidly emerged.

Pressure intensified on 16 September on sterling, the lira and the peseta after reports that the Bundesbank President had suggested that the previous weekend's realignment would have been more effective had it been wider. Although the reports were denied, cuts of 25 basis points in Belgian and Dutch discount rates, the announced increases in sterling interest rates and massive intervention to support sterling failed to reduce tension. That evening sterling was suspended from the ERM and the EC Monetary Committee later agreed to suspend intervention obligations within the ERM for the lira with effect from 17 September. In addition, the peseta, which had fallen below its central ERM rate against the deutschmark for the first time since joining the ERM, was devalued by 5%. Following the announcement, the lira and sterling dropped rapidly against both the dollar and deutschmark.

Tensions in the ERM remained acute. Although the French electorate endorsed ratification of the Maastricht Treaty in the referendum on 20 September, the narrow majority left some market doubts unanswered. The French franc in particular came under heavy speculative pressure towards the end of September. This was successfully resisted by a 250 basis points rise in the five–ten day repo rate on 23 September, and statements of support for the franc's parity and overt intra-marginal intervention by the German as well as the French authorities. Indeed, there were some market expectations that the Bundesbank would cut German interest rates following small cuts on 24 September in Belgian and Dutch official interest rates.

Other currencies within the ERM were also tested, notably the Irish punt which met resistance in its rapid appreciation against sterling.

Slope of yield curves (a)



(a) Ten-year government bond yield less three-month interbank rates.

In response to the pressures, the administration of capital controls was tightened in Ireland on 24 September (capital controls were tightened on the same day in Portugal and penalties on certain capital positions were introduced in Spain) and the Irish official short-term facility rate was raised by 300 basis points on 28 September.

The dollar was on the sidelines for much of September, as dealers concentrated on events in Europe. It drew some benefit from its 'safe haven' status and from speculation about further cuts in German official interest rates, and rallied briefly above DM 1.50. Nevertheless, as the drama in Europe died down, attention refocused on the dollar. In particular the market came to the view that US interest rates might once more be lowered as data showed the economic recovery still to be anaemic. With expectations of a cut in German interest rates dwindling as ERM tensions became less acute, the dollar again tested DM 1.40.

The yen made steady gains against both the dollar and the deutschmark during late August and September, principally reflecting the uncertainty affecting the other major currencies. The response of the Japanese government to the weakening financial and economic situation, including the financial support package announced on 18 August and the emergency fiscal package announced on 28 August, also helped the Japanese currency and the Nikkei index. The yen reached an all-time high against the dollar of ¥119 on 28 September.

Over the four months to September, the volume of official intervention in the exchange markets was unprecedented. It was concentrated on sales of deutschmarks, which over the period amounted to the equivalent of over $160 billion. Only a very small proportion of this represented concerted intervention in support of the dollar: nearly all of the sales were against other European currencies. Since the end of September, some of those sales have been reversed. In addition, European central banks sold a significant amount of Ecu during the period and this was reflected in the behaviour of the Ecu exchange rate relative to its component currencies.

Official operations in UK financial markets

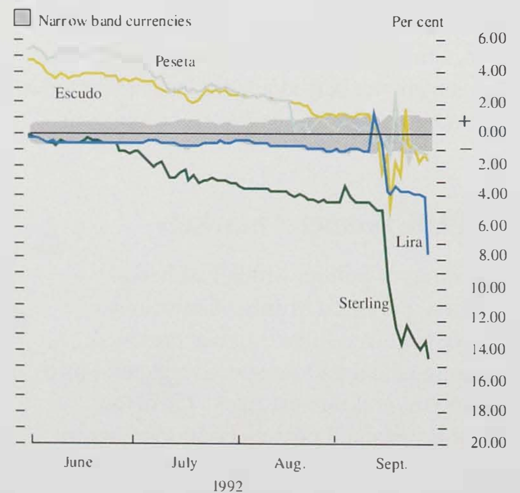
The domestic case for an easing of policy, which had become evident soon after the election, persisted in July. Consumer confidence measures showed renewed falls as house prices continued to fall and declining actual and prospective general price inflation put upward pressure on real interest rates. Growing concern over the absence of a sustained post-election increase in activity became voiced more often and prompted some to advocate sterling's devaluation. Sterling's position in the ERM was weakened by such advocacy as well as by the dollar's continued fall against the deutschmark; while the dollar fell to a seventeen-month low on 2 July, sterling met resistance in its rise against the dollar and therefore fell against the deutschmark.

The money market was nevertheless optimistic that a further reduction in domestic interest rates could be made, possibly in conjunction with other ERM members, without endangering sterling's position in the ERM. Further encouraged by the US discount rate cut on 2 July, interbank rates eased early in July,

three-month rates to below 10%. The underlying bullishness of the market was evident when a small downward adjustment of the Bank's dealing rates in bands 3 and 4 bills on 3 July, reflecting the movement in market rates which had already occurred, was misinterpreted as a signal that a base rate cut might be effected, possibly as part of co-ordinated action after the G7 meeting on the weekend of 4 July. Sterling was weakened by the expectation of a rate cut, and the Bank immediately sought to counter such expectations in its money-market operations on 6 July by dealing in band 1 and 2 bills only, rather than in all four bands as it had done over preceding weeks, and by offering a repo of rather longer maturity than usual. Money-market rates firmed again in response. Nevertheless, lingering expectations of a base rate cut served to weaken sterling as did widespread rumours of the lira's devaluation; once sterling fell to more than 2.25% below its central rate against the deutschmark, it dropped sharply, to below DM 2.85 on 14 July, as reports in the German press that German monetary policy would be further tightened at the Bundesbank Council meeting on 16 July intensified calls for sterling's devaluation if the alternative was a corresponding rise in UK interest rates.

Initially, the Bundesbank's decision to raise only the discount rate was greeted with relief by markets and the United Kingdom did not need to follow the rise in rates in some other ERM countries. Fears soon emerged, however, that a rise in the Lombard rate might still be in prospect and sterling's weakening suggested that an increase in UK rates might have to follow such a move. Money-market rates were therefore marked up, three-month interbank rates to over 10¼%, and futures prices reflected the view that, even if rates did not rise, they could not be reduced at least until a cut in German rates was clearly in prospect, which no longer seemed likely before 1993.

Sterling, lira and the ERM (a)



(a) Position relative to the centre of the narrow band. New central rates were established on 14 and 17 September.

Some slight easing of monetary conditions resulted from sterling's effective depreciation over this period. The UK authorities accepted that it was appropriate to make use of the flexibility afforded by sterling's membership of the wide ERM band, and sterling's downward movement was orderly. By the end of July, sterling had reached its lower limit against the Portuguese escudo, having gained only temporarily against the deutschmark from the successful concerted intervention in support of the dollar on 20 July.

The gilt market rallied with the money market early in July, enabling the issue of a £700 million package of tranchettes and substantial tap sales, but marked time thereafter, steady at a lower level but relatively resilient to sterling's weakening. Medium and long yields remained lower than in much of June, encouraged by further falls in measured inflation. But with further falls in inflation likely and nominal interest rates constrained at over 9%, implicit real yields rose, causing index-linked gilts to weaken. While the long tap (9% Treasury 2008) issued on 3 July was exhausted on 10 July, the other tranchettes remained in the Bank's portfolio as the market fell away, especially at the shorter end because of fears of a rise in official interest rates and selling by overseas investors. The Bank was reluctant to cut the price of the taps at least until the market had consolidated at lower levels and so few further official sales were made in July.

The CBI Industrial Trends survey published at the end of July once again showed a balance of manufacturing firms expecting output to

fall and was followed by calls for sterling's devaluation by prominent businessmen. Market attention again focused on the possibility that interest rates might have to be raised for external reasons in spite of the needs of the domestic economy. Market attention also began to focus on the possibility of a 'no' vote in the French referendum, with rumours that a poll to be published on 5 August would show a majority in favour of rejecting the Maastricht Treaty. The belief that there might be a general realignment in this event further strengthened the deutschmark and its satellites within the ERM and against the dollar and the yen. Sterling fell below DM 2.83 and support was required at the margin against the peseta and the escudo.

The Ecu bond market was particularly unsettled by concern over the French referendum and the future of the Ecu. But domestic government bond markets especially in France, Italy and the United Kingdom were also set back. Although German government bonds gained a little from the possibility of realignment they too were subject to selling by non-European investors. Long gilt yields rose by less than shorts, however, reflecting further progress on inflation and continued demand by domestic institutions. Indeed, the market rallied sharply following the release of the July RPI data on 14 August, enabling the two remaining conventional tranchettes to be exhausted, albeit at prices lower than when they had previously been sold.

Sterling in the ERM

(a) Scale inverted.
(b) The indicator measures the divergence between a currency's market and central Ecu rate as a proportion of the maximum permitted divergence, but adjusted to allow for the different fluctuation margins of the Ecu's component currencies.

The atmosphere of uneasy calm which pervaded the money market for much of the holiday season began to break on 21 August when the dollar fell sharply despite concerted intervention by central banks to support it. The dollar's fall exacerbated tensions in the ERM, with sterling, the peseta and the escudo all disproportionately weakened. Sterling fell to DM 2.7950 in the Far East over the weekend of 22 August and interbank rates opened firmer on 24 August in very nervous conditions with much less confidence that sterling could be defended until the French referendum without a rise in interest rates. With a money-market shortage of £2.1 billion, the Bank offered a short-dated (two-week) repo and invited offers of bills in all four maturity bands, the first time since mid-July that bills in bands 3 and 4 had been invited. Dealing rates in those bands were $^{3}/_{32}$% higher, reflecting the increase in market rates in the period since July, but were still consistent with yields below 10%. These operations had the desired calming effect.

A further round of concerted intervention to support the dollar was undertaken on the morning of 24 August but without apparent effect and sterling, steady at around DM 2.80, breached $2. It fell to DM 2.7950 on the morning of 25 August amid rumours that one of three French opinion polls to be published that night would show a majority 'no' vote. But in the money market the Bank offered the same menu again and, by signalling its wish to keep interest rates unchanged, the view was encouraged that, through intervention, sterling's parity could be defended without an increase in base rates. Although period rates discounted a 1% rise in rates, the Bank relieved the shortage as early in the day as possible, to minimise pressure on rates of up to one month's maturity and hence on clearing banks' base rates. Period rates rose in the afternoon of 25 August, however, after one of the French opinion polls showed for the first time a majority against the Treaty and three-month interbank rates touched $10^{27}/_{32}$% as sterling fell to DM 2.7885.

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			
Date, 1992	1 month	3 months	6 months	12 months	3 months	Short	Medium	Long	Long	ERI	$/£	DM/£
1 July	10	10 1/32	10 1/32	10	9.87	9.17	9.11	8.89	4.24	93.2	1.9132	2.8970
3 July	9 15/16	9 27/32	9 13/16	9 25/32	9.62	9.01	8.97	8.78	4.21	93.0	1.9053	2.8955
13 July	10 3/32	10 3/32	10 3/32	10 1/32	10.11	9.22	9.08	8.86	4.21	92.5	1.9272	2.8532
13 Aug.	9 31/32	10 7/32	10 9/32	10 11/32	10.37	9.57	9.39	9.13	4.43	92.1	1.9320	2.8199
24 Aug.	10 7/16	10 25/32	10 25/32	10 25/32	10.80	9.72	9.43	9.14	4.43	92.4	1.9955	2.8001
26 Aug.	10 11/32	10 25/32	10 7/8	10 29/32	10.83	9.88	9.56	9.26	4.50	92.3	1.9841	2.7970
4 Sept.	9 31/32	10 9/32	10 3/8	10 3/8	10.31	9.47	9.19	8.96	4.45	92.4	1.9920	2.8017
14 Sept.	10 3/32	10 7/32	10 9/32	10 9/32	10.26	9.47	9.08	8.78	4.44	91.6	1.8937	2.8131
16 Sept.	27	16	13 1/2	12 1/4	11.35	9.91	9.32	9.03	4.56	90.5	1.8467	2.7784
18 Sept.	10 3/16	9 5/8	9	8 15/16	8.40	8.96	9.06	9.08	4.38	85.5	1.7435	2.6100
30 Sept.	9 7/32	8 31/32	8 25/32	8 15/32	8.20	8.50	8.97	9.27	4.06	83.7	1.7770	2.5095

(a) Close of business rates in London.
(b) Gross redemption yield. Representative stocks: short—10 1/2% Exchequer 1997; medium—9 3/4% Treasury 2002; long—9% Treasury 2008; index-linked—2 1/2% Index-Linked Treasury 2024 (real yield assuming 5% inflation).
(c) Middle-market rates.
(d) Implied future rate: until 31 August, the September contract, thereafter the December contract.

With sterling barely more than one pfennig above its absolute ERM limit at DM 2.7780, the Bank moved to overt buying of sterling for deutschmarks on 26 August. The effect, however, was lessened by reports that a member of the Bundesbank Council would make a speech in which he would speculate about the potential for an ERM realignment even though in the event the speech contained no such reference.

The gilt auction on 26 August was held under very uncertain conditions which could not have been foreseen when the date was announced on 7 August. The stock—8 3/4% Treasury 2017—had been deliberately chosen, however, for its appeal to domestic investors in order to shelter the auction as far as possible from exchange rate uncertainty. By the morning of the auction, gilt-edged market-makers had collectively acquired a short position similar in size to that before the June auction but the when-issued price of the stock was trading nearly two points below its initial level. In the event the auction was 1.24 times covered, with an average yield only five basis points higher than at the auction of the same stock in April when market conditions were quite different.

Towards the end of that week pressure on sterling eased as the dollar appeared to find a floor at around DM 1.40 and attention focused on the lira which was at its limit rate against the deutschmark. Further comfort was drawn from the collective statement by EC Finance Ministers on 28 August that a change in the structure of ERM central rates would not be appropriate.

At the Treasury bill tender on 28 August no bills were allotted in order not to endorse the higher yields bid. Three-month interbank rates ended the week at 10 19/32%, 1/4% below their peak, amid a clearer sense that a rise in base rates before the French referendum might not be required.

At the start of the following week, pressure on sterling returned as the dollar fell to an all-time low of DM 1.3860 on 2 September, so forcing sterling to push through $2 in order to remain within its ERM bands. Sterling reached a peak of $2.0090 on 2 September, its highest for more than a decade. To provide further support for the currency, the government announced on 3 September that it was to borrow the equivalent of ECU 10 billion of foreign currency to sell for sterling in the market during the rest of the financial year.

Table B
Issues of gilt-edged stock

	Amount issued (£ millions)	Date announced	Date issued	Method of issue	Price at issue (per £100 stock)	Details of payment	Yield (a) at issue	Yield (a) when exhausted	Date exhausted
10% Conversion 1996	200	3.7.92	3.7.92	To Bank	103.4375	In full	9.01	9.39	17.8.92
9½% Treasury 1999	200	3.7.92	3.7.92	To Bank	103.3750	In full	8.80	9.21	14.8.92
10¼% Conversion 1999	100	3.7.92	3.7.92	To CRND					
10% Treasury 2001	100	3.7.92	3.7.92	To CRND					
9% Treasury 2008	200	3.7.92	3.7.92	To Bank	101.7500	In full	8.79	8.79	10.7.92
8% Treasury 2009	100	3.7.92	3.7.92	To CRND					
2½% Index-Linked 2013	100	3.7.92	3.7.92	To Bank	114.1250	In full	4.32 (b)	4.64 (b)	3.9.92
8¾% Treasury 2017 'A'	2,500	18.8.92	27.8.92	Auction	96.7500 (c)	Partly paid (d)	9.08 (e)	9.08	27.8.92
10¼% Exchequer 1995	100	4.9.92	4.9.92	To Bank	101.6875	In full	9.55	9.52	14.9.92
8¾% Treasury 1997	150	4.9.92	4.9.92	To Bank	97.8125	In full	9.31	9.31	4.9.92
9¾% Treasury 2002	250	4.9.92	4.9.92	To Bank	103.9375	In full	9.13	9.07	14.9.92
9½% Conversion 2005	250	4.9.92	4.9.92	To Bank	103.1875	In full	9.06	8.92	14.9.92
9½% Conversion 2005	150	4.9.92	4.9.92	To CRND					
4⅝% Index-Linked 1998	500	18.9.92	18.9.92	To Bank	100.0000	Partly paid (f)	4.64 (b)	4.49 (b)	21.9.92
4⅜% Index-Linked 2004	600	22.9.92	22.9.92	To Bank	100.0000	Partly paid (g)	4.42 (b)	4.18 (b)	25.9.92

(a) Gross redemption yield, per cent.
(b) Real yield, calculated on the basis of 5% annual rate of increase in the retail price index.
(c) Lowest accepted price for competitive bids.
(d) With £36.75% payable on issue and balance on 23.9.92.
(e) At lowest accepted price for competitive bids.
(f) £15% payable on issue, £40% payable on 26.10.92 and balance on 30.11.92.
(g) £15% payable on issue, £35% payable on 16.11.92 and balance on 21.12.92.

Table C
Redemptions of gilt-edged stock

Stock	Date redeemed	Nominal amount outstanding at redemption (£ millions)	Amount paid out (£ millions)
12¼% Treasury 1992	25. 8. 92	1,350	1,350
13½% Exchequer 1992	22. 9.92	1,757	1,757

Table D
Official transactions in gilt-edged stocks

£ billions: *not seasonally adjusted*

	1992 Q2	July	Aug.	Sept.
Gross official sales (+) (a)	+13.0	+2.4	+1.9	+3.3
Redemptions and net official purchases of stock within a year of maturity(-)	-2.7	-0.5	-0.7	-1.4
Net official sales (b)	+10.2	+1.9	+1.2	+1.9
of which, net purchases by:				
Non-funding sector	+1.8	+0.2	+0.7	-0.4
Banks (b)	+1.2	-0.3	+0.7	+0.2
Building societies (b)	+0.7	+0.5	+0.1	-0.5
Funding sector	+8.4	+1.7	+0.5	+2.3
Overseas sector	+1.6	+0.6	-1.3	-0.6
M4 private sector (b)	+6.8	+1.1	+1.8	+2.9

(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) Apart from transactions under purchase and resale agreements.

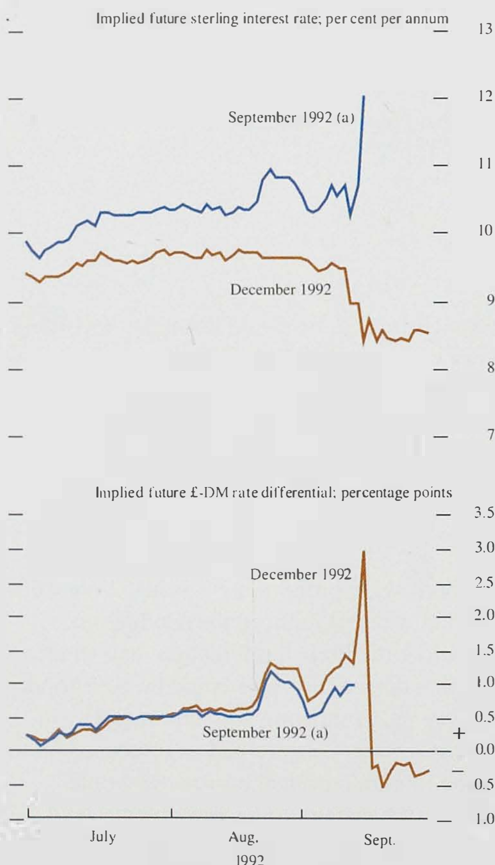
The first ECU 5 billion tranche was to be raised through a revolving bank credit facility and drawn in deutschmarks. The second ECU 5 billion would be raised through the issue of securities in the most appropriate currency. This demonstration of the authorities' intention and ability to defend sterling pushed it from around DM 2.79 before the announcement to DM 2.8225 during 4 September.

The announcement of the borrowing programme was also very well received in the money market where it reduced the residual fears that base rates might rise before the French referendum and where confidence began to grow that even a 'no' vote could be withstood. Moreover, opinion polls were again showing a greater majority in favour of ratification. The gilt market also rallied as it focused on the beneficial effect that the foreign currency borrowing would have, when spent, in reducing the gilt funding requirement. A package of tranchettes was issued into the rally on 4 September. Short gilts were particularly strong, sharing in the belief that a rise in interest rates could be avoided, and so one of the short-dated tranchettes issued that day was exhausted.

But the 175 basis points rise in the Italian discount rate on 4 September, the apparent cut in the fed funds target on 4 September, Finland's decision to abandon the markka's Ecu peg on 8 September, and the huge rise in the Swedish Riksbank's marginal lending rate to 75% announced on 9 September, all led the market to the view that, even if the French did vote in favour of ratifying the Maastricht Treaty, serious tensions would remain which would keep sterling under pressure. By 9 September sterling had fallen back to DM 2.7860.

Following the lira's devaluation on 13 September and the announcement of the special Bundesbank meeting to be held the following day, there was little surprise when the Bank announced on 14 September that its dealing rates would be unchanged. Three-month interbank rates, which had fallen briefly below 10% early that morning, rose again, to close to 10¼%, but the general expectation was nevertheless that a rise in base rates could be avoided before the French referendum. Gilts also rallied, particularly at the short end, where yields fell by around 50 basis points. But the reductions of 50 basis points in the German discount

Three-month sterling and euro-deutschmark futures contract



(a) The September sterling contract expired at 11.00 am on 16 September, and the deutschmark contract on 14 September.

rate to 8.25% and 25 basis points in the Lombard rate to 9.5% were smaller than had been hoped for. Although the deutschmark weakened, allowing sterling to rise to DM 2.8131 in the afternoon, the lira moved to the top of the ERM grid and heavy intervention was required to support sterling at its margin.

The optimism on 14 September that a UK rate rise could be avoided before the referendum and that a cut might just be possible in the event of a 'yes' vote was soon dampened by sterling's fall on 15 September. As the lira came under renewed pressure, it fell below its new central rate, so lowering sterling's floor. Sterling was further weakened by rumours that the Bundesbank had sought a wider realignment than that which had occurred at the weekend.

As sterling fell throughout the day to close at DM 2.7812, interbank rates rose—although a majority in the money market thought on Tuesday evening that a rise in rates might still only be necessary in the event of a 'no' vote in the French referendum. Short-dated gilt yields also rose.

That evening there were reports that the Bundesbank President had suggested in a newspaper interview that the previous weekend's realignment would have been more effective had it been wider. The reports were denied by the Bundesbank, and the article published the following day made no mention of the need for a wider realignment, but sterling was badly damaged. By 8.00 am on 16 September it had fallen to DM 2.7794, and in the following hour the Bank undertook very heavy overt intra-marginal intervention, with help from the Bundesbank and the Banque de France.

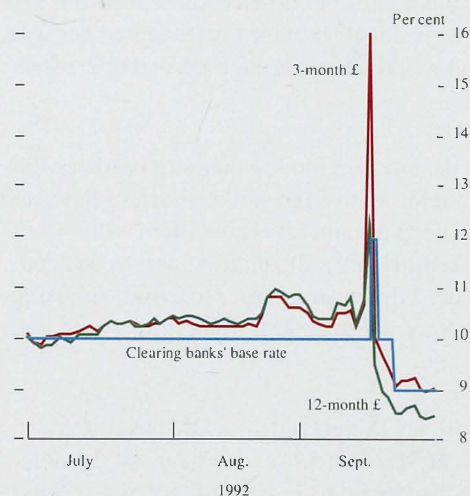
In the money market a relatively small shortage of £650 million was published and no early round of bill offers was invited. The money market interpreted the absence of an early round as a move to buy time for the authorities. Shortly after 10.00 am, interbank rates had risen to 12%–11½% overnight, 11⅞%–¾% at seven days and 12%–11⅞% for one month, effectively discounting a 2% rise in rates. Few in the money market thought a larger rise in official rates likely at that stage, except conceivably for a very short period, because it would have been so contrary to domestic needs as to be unsustainable.

Sterling fell to its limit rate against the deutschmark, where very heavy intervention was required. At 11.00 am, with sterling still at its lower ERM limit, it was announced that MLR had been set at 12%; no indication was given of the term for which this rate would apply. Clearing banks announced a corresponding rise in base rates shortly after. Any hope that such a rise would be sufficient to stem the selling pressure on the exchange rate was quickly dashed. The domestic markets reacted with alarm because they feared that the new level of rates could be in force for some time. At 12.00 the money-market shortage was revised to £900 million and, in the absence of bill operations that day, 2.30 lending was announced. In a departure from recent practice, the rate at which houses could borrow was not announced, leaving open the possibility of a further rise in MLR if necessary.

The announcement of MLR at 12% did not lift sterling from its floor. Nor did the reduction of the Belgian and Dutch discount rates by 25 basis points. One-month rates (which were 14%–13½% at 12.45 pm) rose to 15½%–15% shortly after 1.00 pm and 18% (bid)

an hour later. Overnight money was by then 13½% bid with one week money, 20% bid. The massive amount of foreign exchange intervention which had by then been undertaken, and due to be settled that Thursday and Friday, pushed the rates agreed on Wednesday for overnight Thursday and weekend money to 100% and 180% respectively.

Short-term interest rates (a)



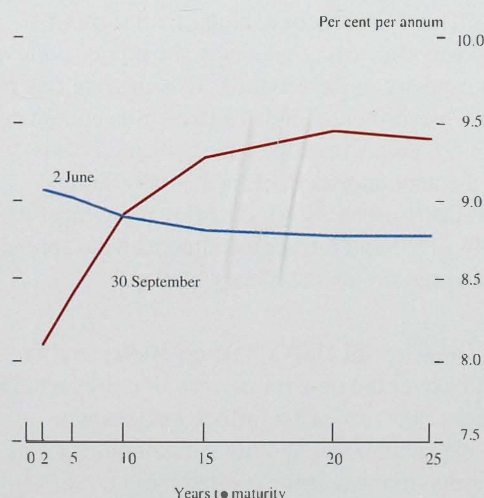
(a) Middle-market rates at the close in the London interbank market.

With sterling still at its limit and the scale of intervention continuing to mount, a rise in MLR to 15% was announced at 2.15 pm, to be effective from the following day. The clearing banks deferred any decision to raise base rates until the next morning and in the event none were raised to 15%.

This second rise in MLR did not succeed in lifting sterling off its floor though the rate of intervention decelerated after it had been announced. Domestic financial markets became more bullish, in the expectation that sterling would have to be devalued, and that this would enable a reduction in UK rates. By 3.00 pm, the FTSE-100 had risen by 72 points above the low which followed the first MLR announcement and closed 8.3 points up on the day at 4.00 pm, having been at worst 78 points down. The gilt market rallied strongly after the 2.15 pm announcement, although prices still finished down on the day. Shorts and mediums fell by less than longs, however, as expectations of a devaluation—and with it lower short-term rates but higher inflation—grew. Such interbank rates as were still being posted appeared to ease a little, to 25%–20% at one month, 15%–14% at three months and 11½%–¼% at twelve months. Concern over the size of the shortages in the following days kept shorter rates high.

At the close of EMS operating hours sterling was still at its floor. By this stage, the only appropriate option was to suspend sterling's participation in the ERM; the prospective cost of defending sterling's existing parity was prohibitive, but devaluation within the ERM was not a realistic option because it would have been impossible to determine a sustainable new parity amid the uncertainty before the French referendum. Just after 7.30 pm, the Chancellor therefore announced sterling's suspension from the ERM and rescinded the decision to raise MLR to 15%. The EC Monetary Committee endorsed this judgement when it met later that night.

Yield curves for British government stocks (a)



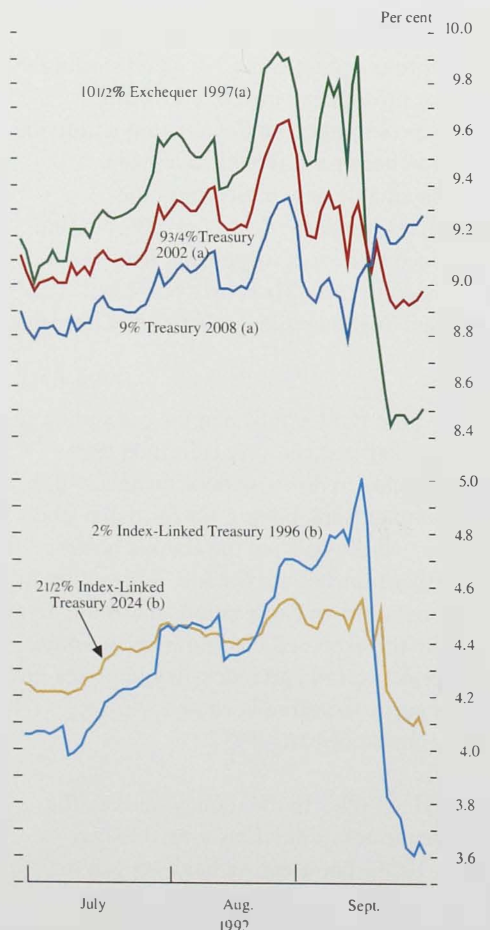
(a) Calculated par gross redemption yields.

At 8.00 am the following day, the Bank confirmed the rescinding of the 15% MLR. Gilt-edged market-makers were informed that exceptionally the Bank stood ready to do cross book swaps, which under the circumstances meant the Bank buying longer-dated stock in exchange for shorts: shorts were sold from the Bank's books without the need to issue further tranchettes of stock. Gilts of up to ten years' maturity were strongly bid on expectations that short-term interest rates would fall, while the expected deterioration in future inflation caused longer gilt prices to fall and index-linked prices to rise. The conventional yield curve therefore became upward-sloping for the first time since early 1988.

At 9.30 am MLR was reduced to 10%. In the money market, the Bank resumed normal bill operations at previously established dealing rates consistent with 10%. The clearing banks began to reduce their base rates to 10% soon after, although, with short-dated money rates still high, some delayed their reduction until later in the morning.

Sterling exchange rates

Yields on representative gilt-edged stocks



(a) Gross redemption yield.
(b) Real yield assuming 5% inflation.

Later in the day temporary facilities were announced, to be made available on 18 September, in order to relieve the huge money-market shortage which would result from the settlement of the official foreign exchange transactions on 16 September (see the box opposite). But concern about the size of the money-market shortage the following day kept rates firm on 17 September, despite the announcement of the special facilities, and so concealed some of the bullishness which had emerged. The December future, however, closed at 91–28 compared to 88–65 the previous day (implying a fall in three-month rates in mid-December from 11.35% to 8.72%). In the event, the residual shortage on 18 September was reduced to £2.7 billion and was relieved through normal operations, without difficulty.

In view of the increase in the stock of money-market assistance the Treasury bill tenders were reduced to £100 million each of three and six-month bills per week, the minimum level consistent with maintaining a market in Treasury bills. In addition, it was decided to cancel that day's Treasury bill tender in order to avoid endorsing any movement in yields before it was clear how sterling would fare outside the ERM.

Sterling fell sharply to close on 18 September at DM 2.6100, 6% below its ERM floor, and, at $1.7435, 5.6% lower against the dollar than on 16 September. Short-dated gilts continued to benefit from hopes of an interest rate cut while sterling's depreciation added to expectations of higher future inflation and index-linked stocks were strongly bid; 2% Index-Linked 1996 closed up $2^1/_2$ points on the day, unmoved by the issue of a new current coupon stock ($4^5/_8$% Index-Linked 1998). Only £15% was payable on issue with further payments stretching to the end of November in order not to add further to prospective money-market shortages and given the transformation of the gilt funding requirement.

Short index-linked gilts met with continued demand on 21 September and the new tap was exhausted at up to a $^3/_4$ point premium to the issue price.

By 22 September the money market had fully discounted a 1% fall in interest rates but hopes that the authorities would take greater advantage of the freedom outside the ERM had been largely eliminated by sterling's weakening. There was therefore no surprise that the Bank announced that it would lend to discount houses at 2.30 pm that day at 9%. This 1% reduction, along with sterling's depreciation, went some way towards rebalancing the mix of policy, with the extent of spare capacity in the economy reducing the risk of a resurgence in inflation. Nevertheless, index-linked gilts continued to rise strongly, by up to $4^1/_2$ points (a drop of more than 25 basis points in yield) despite the announcement of further new supply (£600 million of $4^3/_8$% Index-Linked 2004). The down-payment on this stock was again only £15% and further instalments were spread into December, to reduce pressure on the money market.

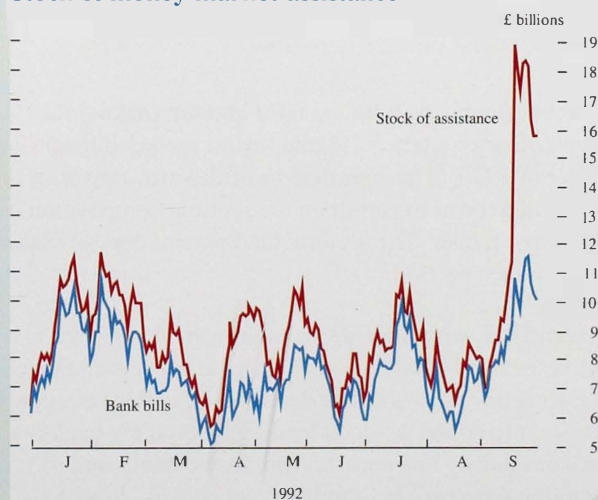
Sterling fell further, to a new low of DM 2.5005 on 30 September, given market uncertainties over the new framework of policy and in anticipation of further base rate cuts. This further weakening reduced money-market expectations of another cut, although a further 50 basis points reduction was still expected by December.

The cash position of the money market

Increased government expenditure resulted in a CGBR of £9.5 billion in the third quarter, some £6 billion more than in the same period in 1991. The fall of £1.2 billion between the second and third quarters of this year was smaller than has occurred in recent years, even though there was a large repayment to central government of borrowing by local authorities. Net gilt sales amounted to £5 billion, some £0.8 billion more than in the third quarter of 1991, despite greater maturities. The CGBR and net gilts sales taken together would have resulted in a large flow of funds to the market of £4.4 billion during the quarter. However, the large-scale official purchases of sterling prior to the suspension of the ERM commitment on 16 September drained sterling funds from the money market. The transfer of sterling to central government as the counterpart of all of its foreign exchange transactions during the quarter was £13.1 billion. As a result, there was an overfund(1) in the third quarter of £9.6 billion.

Given that most of the foreign exchange intervention was undertaken on 16 September, a large part of the flow of funds from the money market which occurred over the quarter was concentrated into one day (18 September) when the transactions settled. In order to reduce the large money-market shortage which would have resulted, the relief of which would make deep inroads into the private sector's bill holdings, the Bank offered temporary facilities on 18 September (for the first time since 1988) whereby it purchased gilts for future resale and provided finance against promissory notes relating to sterling export credit and shipbuilding paper guaranteed by the ECGD and DTI respectively. The facility was offered to the largest banks and also exceptionally to the five largest building societies and to the GEMMs. It allowed the use of assets not normally available for money-market purposes and thus took some pressure off the bill market. The residual shortage was reduced to under £3 billion, and relieved through normal operations, without difficulty. The stock of outstanding

Stock of money-market assistance (a)



(a) Bank of England holdings of eligible bank and local authority bills outright and on a repurchase basis; its holdings of gilt-edged stocks, sterling Treasury bills, export and shipbuilding credit-related paper on a repurchase basis; and market advances.

Table 1
Influences on the cash position of the money market

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

	1991 Q3	1992 Q3	July	Aug.	Sept.
Factors affecting the market's cash position					
CGBR (+)	+3.5	+9.5	+1.0	+4.0	+4.5
of which, on-lending to local authorities and public corporations	*-0.2*	*+0.4*	*+0.2*	—	*+0.1*
Net sales (-) of central government debt (a)	-3.1	-6.1	-2.5	-1.4	-2.2
of which: Gilt-edged	*-4.2*	*-5.0*	*-1.9*	*-1.2*	*-1.9*
National savings	*-0.7*	*-1.2*	*-0.6*	*-0.3*	*-0.3*
CTDs	*-0.1*	*+0.1*	*-0.1*	*+0.1*	—
Currency circulation (increase -)	+0.6	-0.3	-1.2	-0.2	+1.1
Reserves etc	-0.9	-13.1	-0.2	-0.5	-12.3
Other	+0.4	+0.4	-0.2	-1.5	+2.1
Total (A)	**-0.7**	**-9.6**	**-3.1**	**+0.3**	**-6.8**
Offsetting official operations					
Net increase (+) in Bank's commercial bills (b)	-0.8	+3.8	+1.6	-0.6	+2.8
Net increase (-) in sterling Treasury bills in market (c)	+2.9	+1.2	+1.2	+0.9	-0.8
Other	-1.5	+4.5	+0.2	-0.6	+4.9
Total (B)	**+0.7**	**+9.5**	**+2.9**	**-0.3**	**+6.9**
Change in bankers' operational balances at the Bank (A+B)	—	-0.2	-0.2	—	+0.1

(a) Other than sterling Treasury Bills.
(b) By the Issue and Banking Departments of the Bank of England.
(c) Excluding repurchase transactions with the Bank.

assistance to the market rose to £18.9 billion on 18 September, of which £10.8 billion was accounted for by holdings of bank bills (see the chart) (compared with a peak of £14.3 billion in 1985). The Bank's holding therefore accounted for about half of the total number of bills outstanding. The facilities were initially in place for one week only, thereby giving time for more careful consideration of the longer term need for liquidity. The following week the facilities were reoffered, to mature on 30 November.

In view of the tight money-market conditions in prospect in October, a tax-gathering month, the size of the 91-day Treasury bill tender was reduced to £100 million per week. The stock of assistance fell to £15.7 billion by the end of September (see Table 2).

Table 2
Average daily money-market statistics

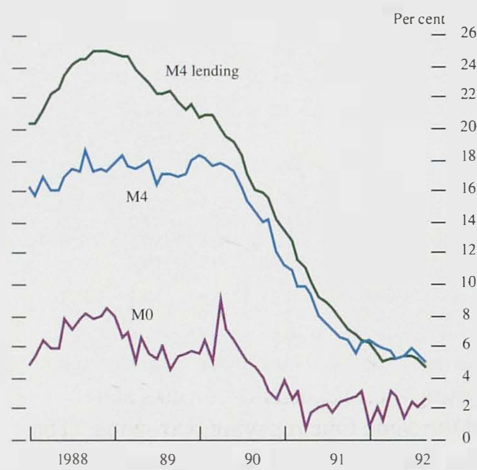
£ millions; *not seasonally adjusted*
Increases in the market's cash (+)

	1991 Q3	1992 Q3	July	Aug.	Sept.
Average daily figures					
Influences (excluding maturing assistance)	-10	-145	-135	+15	-310
Maturing assistance (a)	-1,175	-935	-935	-1,065	-805
Surplus(+)/shortage(-) before daily operations	-1,185	-1,080	-1,070	-1,050	-1,115
End-period levels					
Stock of assistance	4,665	15,690	9,175	7.990	15,690
Treasury bills outstanding (b)	10,715	6,590	6,620	5,755	6,590

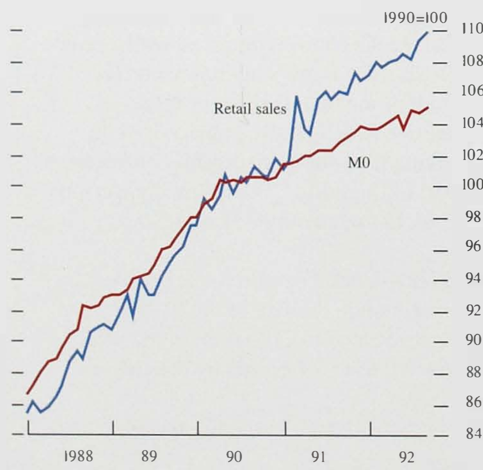
(a) Including net issuance of Treasury bills and the level of bankers' balances above or below target from the previous day.
(b) Other than those held outright by the Bank. Bank customers and government accounts but including those purchased by the Bank on a repurchase basis.

(1) Under the full fund guideline the net total of maturing debt, the PSBR and any underlying increase in the foreign exchange reserves is funded by sales of debt (other than Treasury bills) outside the banking and building society sectors. For funding purposes, the underlying fall in reserves is taken net of the proceeds of borrowing under the VSTF. Receipts of sterling from the sale of the proceeds of the first tranche of the Ecu borrowing facility also reduced the funding requirement.

Twelve-month growth rates of M0, M4 and M4 lending



Level of M0 and the value of retail sales



Monetary aggregates and credit

The figures in this section are seasonally adjusted unless otherwise stated.

The growth of M4 continued to slow in the third quarter. The sustained deceleration in broad money appears to be related to further adjustment in private sector financial behaviour. Whereas the personal sector undertook net new borrowing on a scale similar to that seen in the three previous quarters, the corporate sector repaid a significant amount. Contrary to the relatively depressed picture presented in the broad money data, narrow money grew comparatively strongly, probably reflecting the strengthening in retail sales over the period.

Components of money

Between June and September, M0 grew at an annualised rate of 5.5%, raising the twelve-month growth rate from 1.3% to 2.1%, still well within its 0%–4% target range. The underlying growth of narrow money, as measured by the twelve-month change in notes and coin, rose to 2.2% (from 1.4% in June). The relative buoyancy of narrow money over the quarter is in line with the latest figures for retail sales.

The annual growth rate of M2 continued its downward trend, falling to 3.5% in the third quarter compared with 4.2% in the previous quarter. The three-month annualised growth rate of retail M4 remained at its weak second quarter level of 3.2%. Banks, in particular, suffered large outflows of retail deposits in the third quarter, which resulted in the twelve-month growth rate of these deposits falling below 2% for the first time. Building societies' retail deposits increased by 7.1% (annualised) in the third quarter, compared with 5.9% in the previous quarter. Although the overall weakness in retail deposits may be partly accounted for by the private sector running down deposits to meet the £2.9 billion of privatisation payments made over the quarter, it may also reflect stronger consumer spending during this period. Over the quarter as a whole, inflows into national savings were in line with the two previous quarters and therefore do not appear to be a factor explaining the weakness in retail deposits.

M4 grew by 3.9% (annualised) in the third quarter, making the growth rate over four quarters 5.1%, the lowest recorded level since the first quarter of 1970. The significance of this slowdown for the real economy will depend in part upon the sectoral composition of the aggregate growth rate. The sectoral lending and deposit data are considered in the next section.

Within aggregate M4, wholesale deposits grew by 5.6% (annualised) in the third quarter, compared with 6.7% in the second quarter. The weakness of wholesale deposits in the third quarter may, in part, stem from the subdued lending by both the banks and building societies during this period. That is, the banks and building societies, engaging in 'liability management', may have adjusted the level of their wholesale deposits in line with their lending activities. The effect of external and foreign currency factors on M4 was broadly neutral over the third quarter as a whole, despite the large official purchases of sterling in the foreign exchange market.

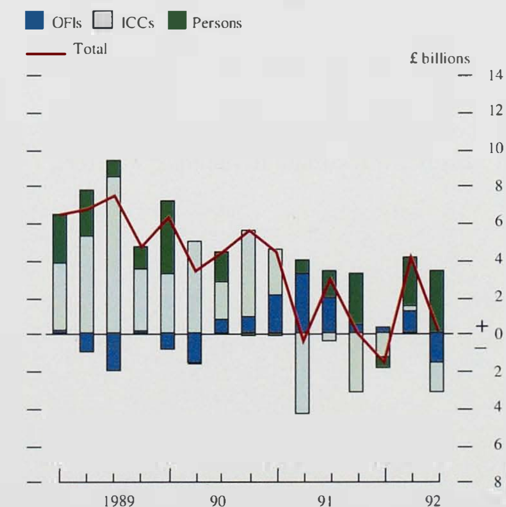
Table E
Sectoral analysis of sterling deposits with, and borrowing from, banks and building societies

£ billions; *seasonally adjusted (calendar year constrained)*

		1991		1992		
		Year	Q4	Q1	Q2	Q3
	Personal sector					
1	Deposits	23.5	3.3	6.7	3.3	2.8
	of which:					
	Individuals	23.7	3.7	5.7	3.4	3.6
	Other	-0.2	-0.4	1.0	-0.1	-0.8
2	Borrowing	28.5	6.2	6.0	5.9	6.2
	of which:					
	House purchase	25.4	5.9	5.6	5.4	5.9
	Consumption	2.4	0.5	0.4	0.2	0.6
	Unincorporated businesses, etc	0.6	-0.2	0.0	0.3	-0.2
3	**Net recourse** (=2-1) (a)	**5.0**	**2.9**	**-0.7**	**2.6**	**3.4**
	ICCs					
4	Deposits	6.7	3.3	0.5	1.2	0.3
5	Borrowing (b)	1.3	0.1	-0.8	1.5	-1.3
6	**Net recourse** (=5-4) (a)	**-5.4**	**-3.2**	**-1.3**	**0.3**	**-1.6**
	OFIs					
7	Deposits	-1.1	0.9	0.1	1.0	1.3
8	Borrowing (b)	6.7	1.3	0.4	2.3	-0.2
9	**Net recourse** (=8-7) (a)	**7.8**	**0.4**	**0.3**	**1.3**	**-1.6**

(a) Excludes notes and coin.
(b) Includes Issue Department take-up of commercial bills.

Private sector net sterling recourse to banks and building societies (a)



(a) Changes in the stock of borrowing less the change in the stock of deposits. Net borrowing is positive, net additions to deposits are negative.

Sectoral lending and deposits

The private sector's financial balance in the third quarter can be inferred, by residual, from that of the public and overseas sectors.[1] In this context, the PSBR excluding privatisation proceeds provides a guide to the public sector's finances. This measure stood at £10.2 billion in the third quarter compared with £7.3 billion in the previous quarter, a rise of £2.9 billion. The current account deficit, ie the overseas sector's financial surplus, increased by approximately £0.4 billion over the same period. The combination of these movements suggests that the (net) private sector surplus rose by around £2.5 billion during the third quarter.

This implied improvement in the private sector's financial balance is broadly consistent with the monetary data—the private sector's net recourse to banks and building societies was £0.3 billion in the third quarter compared with £4.1 billion in the previous quarter. Within the private sector, the reduction in net recourse reflected both ICCs and OFIs increasing their deposits with banks and building societies while at the same time repaying borrowing. The personal sector, on the other hand, increased its net recourse from the already high level observed in the previous quarter.

Within the personal sector, the net recourse by individuals, at £2.5 billion, was the highest level seen since the second quarter of 1988. The scale of this recourse partly reflected greater lending for house purchase in the third quarter (8.2% annualised growth compared with 7.7% in the second quarter), although total mortgage lending, including that by centralised lenders, was probably unchanged between the two quarters. To the extent that house purchases were brought forward before the end of the stamp duty holiday in mid-August, it is possible that lending for house purchase may be more subdued in the final quarter of this year. This effect would be offset by any increase in housing market activity stimulated by the recent reductions in mortgage rates.

The high level of personal sector recourse also reflected the increase recorded in borrowing from banks and building societies for consumption, from £0.2 billion in the second quarter to £0.6 billion in the third quarter. This reflected an acquisition of loans from a non-bank lender, however, rather than a pick-up in underlying borrowing for consumption. Indeed, individuals repaid net credit card debt to the banks and building societies in the third quarter for the first time since 1983.

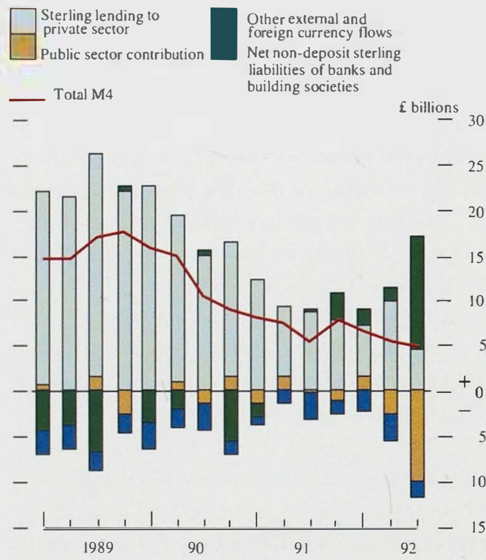
Within the personal sector, unincorporated businesses substantially reduced their bank and building society deposits during the third quarter. The run-down of deposits (£0.9 billion) was the largest reduction since the series began. This may reflect unincorporated businesses having to undertake the economic and financial restructuring necessitated by the recession with only limited access to alternative sources of finance.

It appears that the corporate sector, in the third quarter, may have begun to adjust to the growing perception that economic recovery might take longer to materialise than previously thought. This is perhaps evidenced, for example, by the falls in manufacturing employment recorded in July and August. A similar adjustment

(1) This indirect estimate is subject to the statistical balancing item being broadly unchanged between quarters.

process can also be seen in the monetary data. In particular, after increasing borrowing from banks and building societies by £1.5 billion in the second quarter, the corporate sector repaid almost as much in the third quarter. The corporate sector's recourse to the capital markets was also low. Net sterling capital issues by ICCs fell below £2 billion (not seasonally adjusted) in the third quarter for the first time in over two years.

Counterparts to changes in M4



Other financial institutions both increased their deposits and repaid some of their loans in the third quarter. This is the first time OFIs have reduced their stock of loans with banks and building societies for over 15 years. This net repayment of loans may reflect an unwinding of the high borrowing seen in the previous quarter and, perhaps, a smaller take-up of bonds and equities by OFIs in the third quarter. In addition, the low recourse of OFIs to banks and building societies may also, to some extent, reflect a corresponding reduction of their holdings of capital uncertain assets as heightened tensions within the ERM, particularly in August and September, caused financial market volatility to increase.

Over the quarter as a whole, public sector external and foreign currency factors were negative by £12.4 billion. Most of this occurred during September; it reflected changes in the official foreign currency reserves net of official foreign currency borrowing and overseas transactions in public sector debt, including gilts. The potential effect of this on M4 over the quarter, however, was offset by correspondingly large positive bank and building society external and foreign currency factors, including sterling lending to overseas borrowers (bank and non-bank) of £6.3 billion (not seasonally adjusted) and an increase in banks' net foreign currency assets of £3.6 billion (not seasonally adjusted). The public sector's net external transactions contributed to the large overfund of £10.5 billion (seasonally adjusted) recorded in the third quarter.