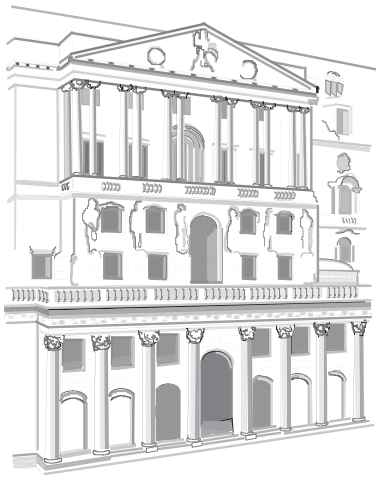
Bank of England Quarterly Bulletin



November 1994

Volume 34 Number 4

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Bank of England publications

Quarterly Bulletin and Inflation Report

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Bound volumes of the *Bulletin* for the period 1960 to 1985 (in reprint form for the period 1960 to 1980) can be obtained from Schmidt Periodicals GmbH, Dettendorf, D-83075 Bad Feilnbach 2, Germany, at a price of DM 180.00 per volume or DM 4,100.00 per set.

See page 371 for details of the annual *Statistical Abstract*.

The gilt market

'Investing in gilts: A guide for the small investor', providing basic information for small investors, and 'British Government Securities: The Market in Gilt-Edged Securities', intended for those with a professional interest in gilts and the gilt market, may be obtained from the Bank of England, PO Box 96, Gloucester, GL1 1YB.

Working Papers

The following ***Working Papers*** have been published in the last 12 months:

No	Title	Author
20	M0: causes and consequences	F J Breedon P G Fisher
21	An empirical analysis of M4 in the United Kingdom	P G Fisher J L Vega
22	A model of building society interest rate setting	Joanna Paisley
23	Deriving estimates of inflation expectations from the prices of UK government bonds	Mark Deacon Andrew Derry
24	Estimating the term structure of interest rates	Mark Deacon Andrew Derry
25	Potential credit exposure on interest rate swaps	Ian Bond Gareth Murphy Gary Robinson
26	New currencies in the former Soviet Union: a recipe for hyperinflation or the path to price stability?	C L Melliss M Cornelius

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The Quarterly Bulletin and Inflation Report

Inflation Report
(published separately)

The *Inflation Report* provides a detailed analysis of recent monetary, price and cost developments in the UK economy. There are signs that the strong rise in producer input prices seen earlier in the year has begun to feed through to output prices. Despite this, inflation on the Government's target (RPIX) measure was 2.0% in September, down from 2.4% in June; the Bank's RPIY measure of underlying inflation (which excludes the effect of indirect taxes) fell to 1.2%. Output has continued to grow at above its long-run potential rate, and unemployment has continued to fall. Section 6 of the *Report* sets out the Bank's current views on the prospects for inflation over the next two years.

Operation of monetary policy (pages 299–306)

As a result of the assessment of the medium-term prospects for inflation, official interest rates were raised by ½% on 12 September. Financial markets welcomed the move as a clear signal of the authorities' commitment to counterinflation. Sterling rose, and maintained its strength to the end of the third quarter. Gilts also rallied initially—but yields rose again later, as international bond markets weakened.

The international environment
(pages 307–16)

Strong growth continued in the United States, but inflation rose from its low in May. Activity in Western Europe strengthened in the second quarter, but in Japan output fell. Official US interest rates were increased further in the third quarter and, for the first time in this cycle, rates rose in a number of other OECD countries. The current account imbalances of some of the major economies have begun to fall.

Financial market developments
(pages 317–23)

Government bond prices continued to fall in most major markets in the third quarter, affected by uncertainties about inflation, future interest rate movements and the potential supply of debt. As a result, issuing activity in the capital markets was subdued. Prices in most major equity markets remained weak, and the level of new issues was low.

Research and analysis
(pages 324–46)

Research work published by the Bank is intended to contribute to debate, and is not necessarily a statement of Bank policy.

Regional differences and their importance for the UK economy (by Andy Murfin and Kieren Wright of the Bank's Structural Economic Analysis Division) looks at longer-term trends in the performance of the UK regions and at the short-term outlook. Analysis of the last 20 years reveals that differences in regions' average income per head have in general been persistent, and that the range of regional growth rates tends to widen in a recession. Labour mobility between regions seems relatively low. Over the shorter term, the recovery at present seems well-balanced among the regions.

Regulating investment business in the Single Market (by Professor Richard Dale) examines the regulatory framework for investment business put in place by the Capital Adequacy and other Directives, focusing on the attempt to establish a level playing-field for banks and other financial institutions. The article is the second in an occasional series—begun in the May *Bulletin*—of pieces by contributors from outside the Bank.

The developing Single Market in financial services summarises the views, outlined in discussions with the Bank, of a range of financial sector firms on the development to date of the Single Market in that sector.

Reports
(pages 347–61)

The net debt of the public sector: end-March 1994 analyses developments affecting the national debt and the public sector position during the last fiscal year. As a share of GDP, the public sector's net debt rose by 5.4 percentage points to 38.4%; general government consolidated gross debt (on a Maastricht basis) rose by 5.9 percentage points to 48.4%.

The external balance sheet of the United Kingdom: recent developments analyses changes to UK net external assets during 1993, focusing on changes in the pattern of capital flows and the impact of revaluations.

Operation of monetary policy

- *Figures published in the third quarter showed that inflation continued to moderate, but there were some signs of increasing cost and price pressures in the pipeline.*
- *Economic activity had been strengthening, here and abroad: in the second quarter, UK GDP was shown to be growing well above trend, and the margin of spare capacity in the economy to be smaller than previously thought, though there were indications of a moderation in growth in later data.*
- *Following his early September meeting with the Governor, the Chancellor decided on 9 September that official interest rates should be raised by ½%; the change was implemented by the Bank on 12 September.*
- *The move was immediately welcomed by the financial markets as a clear signal of the authorities' commitment to counterinflation. Sterling strengthened and long-term bond yields fell.*
- *The exchange rate strength continued up to and beyond the end of the quarter, but UK bond yields rose again as international bond markets weakened.*

Overview

Decisions on monetary policy are based on a wide range of indicators. The Bank's current assessment of the latest economic indicators is given in the November *Inflation Report*; this article reviews the operation of monetary policy in the third quarter of 1994.

Statistics published during the quarter showed that the growth of consumption had slowed, but that output was growing faster than at any time in the previous five years. It appeared that the margin of spare capacity in the economy was smaller than had previously been thought. Investment and, especially, net exports had accelerated, with UK trade performance reflecting continued expansion in the United States and the Far East, and stronger-than-expected recovery in Western Europe. Current inflation remained low. The 12-month increase in the retail price index excluding mortgage interest payments (RPIX) fell to 2.2% in July, the lowest rate since the series was first compiled in 1975; and it was only marginally higher in August. But there was evidence of incipient inflationary pressure in the faster growth of import and manufacturers' input prices, and from surveys which showed both that capacity utilisation had risen and that greater numbers of producers expected to be able to raise prices in the following months. A fast rate of growth in narrow money was consistent with this picture.

Against this background, the Chancellor decided after his meeting with the Governor in early September that rates should be raised by ½%. The immediate market reaction to this was a strengthening of sterling and a fall in bond yields, suggesting that the market viewed the move as evidence of the Government's commitment to counterinflation.

Conditions in financial markets at home and abroad continued to be influenced by news and expectations about growth and inflation, and by the monetary authorities' actual or expected responses. In the third quarter, the main issues were the pace of monetary policy tightening in the United States, and whether there was any prospect of a further easing in monetary policy in Europe.

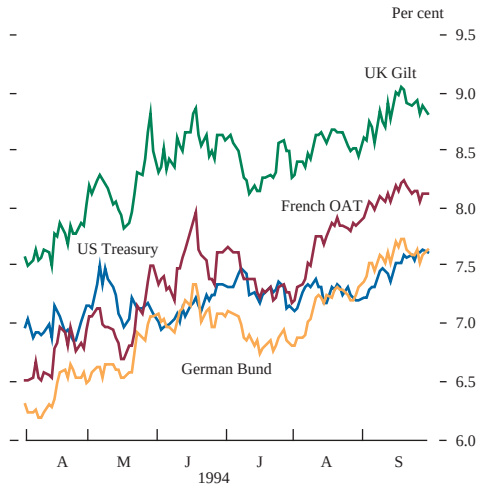
The indications from data releases in the United States were mixed, with labour cost and consumer price inflation continuing to be subdued, but a significant pick-up in producer prices. There was some evidence of slower growth in activity, perhaps in response to earlier monetary tightening but perhaps also as a result of capacity constraints. The Federal Reserve tightened policy once more during the quarter, raising official rates by ½% on 16 August (when they indicated that this was expected to be sufficient, at least for a time, to meet the objective of sustained, non-inflationary growth). The move had been widely anticipated, but its scale was at the upper end of market expectations and helped briefly to steady the bond market and the dollar, both of which had fallen earlier in the year. The course of the dollar during the quarter was also significantly affected by news on the US-Japanese trade talks. Towards the end of the quarter, renewed signs of strength in the economy led the money markets to anticipate an early further tightening; US bond yields also reached new highs for the year.

In continental Europe, data releases showed that growth in the second quarter had been much stronger than had generally been expected, with GDP in both Germany and France expanding by 1%. Consumer price inflation in the major economies appeared to have stopped falling, but upward pressures seemed weak. The Bundesbank left its Lombard and discount rates unchanged in the quarter, and the repo rate—which had been gradually reduced earlier—remained fixed from late July onwards.

Nevertheless, the strengthening of the German economy reinforced market expectations of an eventual turning-point in German interest rates. The three-month rate for December implicit in futures contracts rose from 5.1% to 5.3% and ten-year bond yields rose from 7.2% to 7.6%. The heavy remaining borrowing requirement of the federal government and other official bodies (after the cancellation of bond auctions in the second quarter) also weighed on German bonds. Yields in Germany were higher than in the United States for a significant part of the quarter.

Many other European central banks followed the Bundesbank's pattern of unchanged official rates and only small falls in intervention rates. But in Sweden and Italy, official rates were raised by ½% on 11 August. Both moves were partly designed to check emerging inflationary pressures, but against a background of exchange rate depreciation, large fiscal deficits and political uncertainty, they were initially received sceptically in the markets. Both countries' currencies weakened and bond yields rose sharply; this had adverse consequences for other European bond markets, including gilts. In Australia, the bond and foreign exchange markets welcomed a pre-emptive tightening undertaken at the same time as the US rise and against a background of strength in the exchange rate, fiscal consolidation and low inflation.

Ten-year government bond yields(a)



(a) Gross redemption yield.

Foreign exchange markets

A main feature of the quarter was the dollar's continuing weakness compared both with its historical value and with its value at the start of the year. But overall it did not depreciate further, and for most of the period traded in ranges around DM 1.56 and ¥99. Sterling remained largely on the sidelines tracking the dollar, until it strengthened following the interest rate increase on 12 September.

After it had become apparent that the concerted intervention undertaken at the end of June had failed to underpin the dollar, it fell sharply until the middle of July. It touched a post-war low of ¥96.45 on 12 July, before rallying to over ¥100 by the end of July. The inability of the US and Japanese authorities to reach a bilateral trade agreement remained a key factor behind the dollar's weakness against the yen. Exchange rate and capital market weakness became more closely linked as overseas investors—particularly from Japan—were increasingly unwilling to commit funds to dollar-denominated assets.

The dollar also fell against the Deutsche Mark at the start of July. When the Federal Reserve Open Market Committee (FOMC) meeting of 5–6 July and the Group of Seven (G7) meeting in early July produced no policy action to halt or reverse the fall, the dollar reached a low for the year of DM 1.52 against the Deutsche Mark—also on 12 July. It then rallied briefly when a modest fall in German M3 revived hopes of a further cut in interest rates by the Bundesbank. From then until mid-August, it remained fairly steady at these lower levels.

The Deutsche Mark was firm, apparently buoyed by growing perceptions that the German recovery was stronger than had been forecast earlier in the year and that the Bundesbank's move to fixed-rate repos (set at 4.85% from 27 July onwards) meant that Germany was at or near the trough of the interest rate cycle. Currency movements in the run-up to the FOMC meeting on 16 August were volatile; the dollar fell by three pfennigs after the unexpected interest rate rises in Sweden and Italy led to large inflows into the Deutsche Mark.

As on earlier occasions this year when US interest rates were raised, the dollar gained little sustained support from the ½% increase in the federal funds and discount rates announced after the FOMC meeting. On this occasion, the decision by the Bundesbank on 18 August to leave the repo rate unchanged after its summer recess disappointed hopes, which had gradually been building, that an easing of German interest rates would shift interest rate differentials in favour of the dollar. The dollar was also influenced by continuing bond market weakness and by political controversy surrounding the Whitewater hearings.

The dollar rallied briefly—along with the US bond and equity markets—at the end of August, but then fell back to trade in a narrow range around DM 1.55. When the Federal Reserve did not raise rates following the September FOMC, the bond markets and the dollar retained their prevailing levels. Expectations that there would be an interest rate rise in October if data showed continued strong growth enabled the dollar to trade steadily against the Deutsche Mark, which was undermined by concern about the outcome of the October federal elections.

Dollar exchange rates

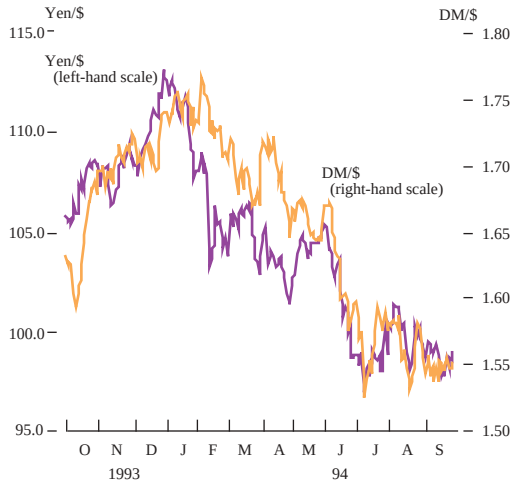
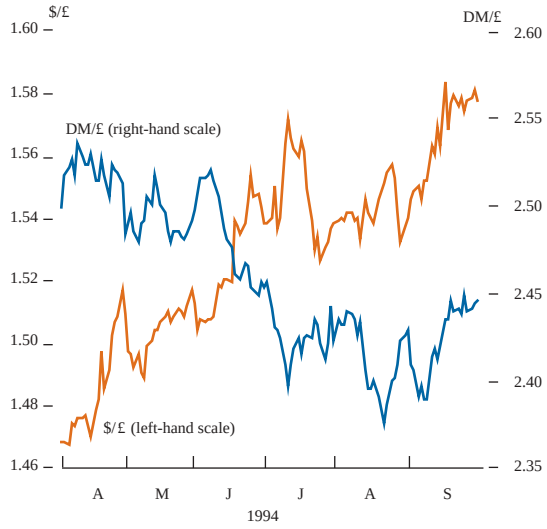


Table A
Interest rates, gilt yields and exchange rates; selected dates[a]

	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			
1994	1 month	3 months	6 months	12 months	3 months	Short	Medium	Long	Long	ERI	$/£	DM/£
1 July	5 1/32	5 3/16	5 15/32	5 3/16	6.29	8.32	8.62	8.55	3.97	79.6	1.5355	2.4568
14 July	4 31/32	5 5/32	5 13/32	6 1/32	6.00	7.79	8.10	8.12	3.88	79.1	1.5632	2.4123
29 July	5 21/32	5 29/32	6 7/32	6 3/4	6.73	8.29	8.48	8.42	4.00	79.0	1.5262	2.4300
2 August	5 3/16	5 15/32	5 13/16	6 15/32	6.57	8.09	8.25	8.25	3.91	79.2	1.5383	2.4282
9 September	5	5 13/32	5 27/32	6 3/4	6.33	8.50	8.84	8.68	3.86	78.8	1.5432	2.4046
12 September	5 19/32	5 27/32	6 3/16	7 3/32	6.70	8.51	8.73	8.57	3.87	78.4	1.5517	2.3853
20 September	5 15/32	5 29/32	6 9/16	7 1/2	6.97	8.83	9.03	8.84	3.98	79.7	1.5702	2.4453
30 September	5 13/32	5 27/32	6 15/32	7 13/32	6.80	8.64	8.80	8.64	3.87	79.9	1.5772	2.4454

(a) Close-of-business rates in London.
(b) Gross redemption yield. Representative stocks: short—6% Treasury 1999; medium—6¾% Treasury 2004; long—8% Treasury 2013; index-linked—2½% Index-Linked Treasury 2016 (real yield assuming 5% inflation).
(c) Middle-market rates.
(d) Implied future rate: December 1994 contract.

Sterling exchange rates



Sterling's effective index

Against the yen, the dollar eased to ¥97.60 in the middle of September, as a result of renewed concern over the progress of the trade talks before the 30 September deadline. But as the deadline approached, it recovered amid anticipation that there might be sufficient agreement to avoid the near-term imposition of sanctions.

Sterling remained on the sidelines for much of the summer, with its course generally linked to that of the dollar. In July and August, it traded some way below the levels seen earlier in 1994, with its effective rate index (ERI) at times falling below 79. During this period, as a result of the dollar's weakness, sterling fell below DM 2.40 in mid-July and again in late August and early September. It reached a 17-month low of DM 2.3713 towards the end of August. Sterling rose against the dollar, however, briefly breaking through the $1.55 level in early August, having traded at around $1.50 for much of the year. But it met strong technical resistance there, and was undermined as its fall in effective terms and against the Deutsche Mark prompted commentators to question the authorities' attitude to the currency and their willingness, in the face of incipient inflationary pressures, to increase interest rates.

Sterling rose sharply following the interest rate increase on 12 September; the market viewed the decision as confirmation of the strength of the authorities' commitment to counterinflation. It reached DM 2.4248 in New York on that day, around four pfennigs higher than its opening level in London. Sterling strengthened further—at times testing DM 2.45—as expected interest rate differentials, particularly in the medium term, moved sharply in its favour. By the end of September, interest rate futures contracts suggested that the differential between three-month sterling and Deutsche Mark rates in June 1995 was expected to be 30 basis points higher than had been expected at the end of August. Against the dollar, the expected differential widened by 20 basis points; and sterling rose to around $1.58 by the end of the quarter. The ERI rose from 78.6 on 9 September to finish the quarter at 79.9.

The reaction of the foreign exchanges to the Swedish and Italian interest rate increases on 11 August was negative. The Swedish krona fell against the Deutsche Mark from Skr 4.92 to Skr 5.02, while the lira also dropped sharply—from L1,006 to L1,025. These market reactions contrasted with the generally positive responses to the UK and Australian rate rises—where the markets took the view

that the authorities were acting prudently and from a position of relative strength, with subdued inflation, continuing growth and an improving fiscal position. The absence of any immediate trigger in UK data releases or financial market developments emphasised the fact that the move resulted from the authorities' medium-term assessment.

There was little movement within the ERM during the third quarter. With most of their economies at a similar stage in the economic cycle and with the uncertainty over the dollar, the ERM currencies generally tracked the Deutsche Mark. The width of divergence in the ERM band hardly changed, and ended the quarter at around 5.5%. There was, however, some turbulence as a result of the foreign exchanges' reaction to the interest rate rises in Sweden and Italy, which weakened the Danish krone, the peseta and the escudo.

Official money-market operations

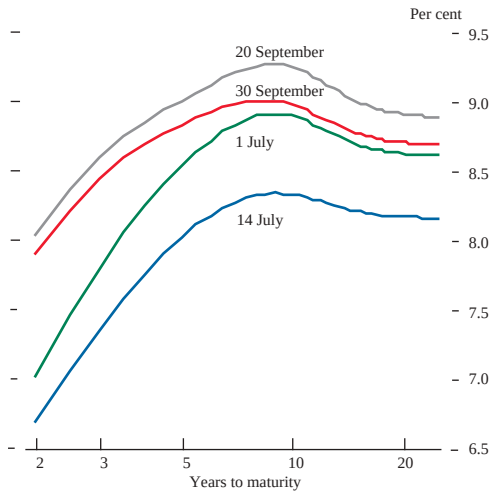
At the beginning of the quarter, many participants in the money markets expected the next move in official rates to be upward. But the low figures for current inflation suggested that any such move might still be some time away. Three-month money-market rates remained below base rates, and in the first three weeks of July short-sterling futures contracts rallied, implying lower expectations of three-month rates in subsequent months.

In the week beginning 25 July, however, the mood changed. The GDP figures published in the previous week had showed strong growth in the second quarter; the results of the CBI Survey published on 26 July pointed to continued increases in output and more widespread expectations of price increases. And the meeting between the Chancellor and the Governor on 28 July focused attention on the possibility of a change in the monetary stance.

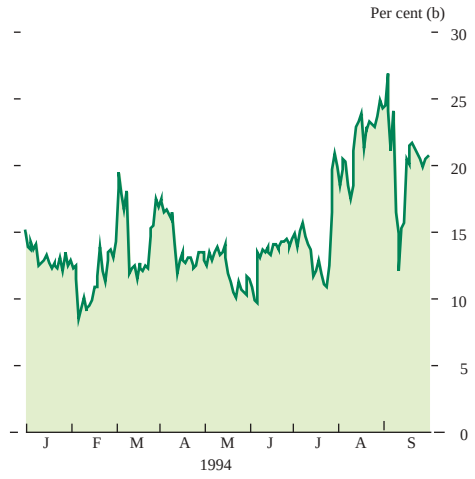
Money-market rates rose in the course of the week; three-month interbank rates moved above base rates on 27 July. Rates on bills eligible for use in the Bank of England's operations also rose. (The differential between the yield on such bills and interbank rates had narrowed considerably over previous months, as the size of daily shortages had fallen and market conditions had eased.) By 28 July, market rates on Treasury bills were only just below base rate. On 29 July, the last business day of the month, market rates rose further, particularly at around the time of the mid-morning British Bankers Association (BBA) interbank fixing, when a wide range of rates were quoted. By midday, three-month interbank rates were at about $5^{5}/_{8}$%. Bids in that day's Treasury bill tender reflected the movement in other market rates. The average price at which bids were accepted implied a yield of $5^{11}/_{16}$%, which was misinterpreted by some as implying a signal about official interest rate intentions—even though the Bank's market operations that day were conducted both before and immediately after the tender at unchanged rates.

Some market participants criticised the Bank for not cancelling the tender. But to have done so would itself have been open to misinterpretation, as an overt indication of resistance by the authorities to rising market rates. The market calmed after the weekend, as it was acknowledged that there had been a considerable overreaction to the outcome of the tender result and as the Bank continued to deal at established rates.

Par yield curves for British government stocks

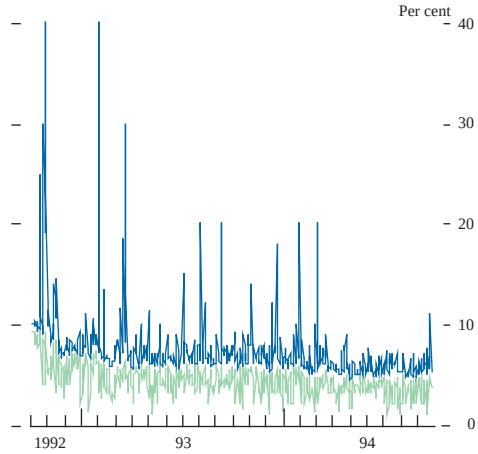


Implied volatility of short sterling futures(a)



(a) Implied volatility of short sterling futures contracts.
(b) The expected standard deviation of annualised price movements in LIFFE's short sterling futures (nearest maturity contract).

High and low overnight interest rates(a)



(a) Intra-day high and low for overnight interest rate (scale capped at 40%).

Table B
Influences on the cash position of the money market

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

	1994/95			
	Apr.–June	July	Aug.	Sept. (d)
Factors affecting the market's cash position				
Under/overfunding (+/-) (a)	6.0	-2.5	2.8	1.5
Other public sector net borrowing from banks and building societies (-) (b)	-0.2	0.3	-0.2	0.4
of which, local authorities' deposits with banks and building societies (+)	*-0.4*	—	—	*0.3*
Currency circulation (-)	1.2	-1.2	0.7	-0.7
Other	3.0	-1.3	3.6	-0.9
Total	**10.0**	**-4.7**	**6.9**	**0.3**
Increase (+) in the stock of assistance	-7.6	5.9	-5.8	-0.9
Increase (-) in £ Treasury bills outstanding (c)	2.4	1.0	1.3	-0.5
Increase in bankers' balances at the Bank	—	0.2	-0.1	-0.1

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

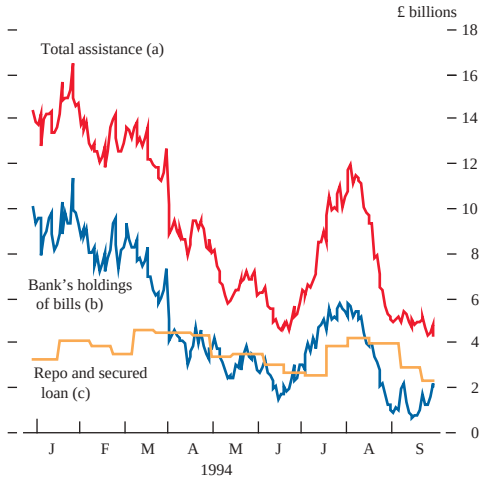
Three-month interbank rates remained a little proud of base rates throughout August, but towards the end of that month and into September longer period rates and those implied by futures began to ease. A number of economic indicators suggested that growth might be slackening and that inflation remained very low; a consensus developed in the money market that the evidence might provide sufficient reason for the authorities to delay raising rates until later in the year.

The precise timing of the interest rate announcement on 12 September therefore surprised the market. It was widely welcomed as an indication of the authorities' determination to follow the course necessary to achieve the inflation target. Near-term rates immediately came into line with official rates at 5¾%. As at previous turning-points, the first upward movement in rates heightened expectations of further rises to come, and period rates also rose. The three-month rates implied by short-sterling futures contracts rose by 23 basis points for June 1995 and by about 7 basis points beyond June 1996, with implied forward rates falling only beyond 1998. Short-sterling futures rates remained high, and ended the period at 6.78% for December and 8.32% for June 1995. But the absolute levels of these implied forward rates were hard to square with even the most pessimistic market anecdote about the likely level of official rates over this horizon. Short-sterling futures rates probably also reflected the low level of business that was done at longer maturities, the continuing high volatility implied by options contracts (which suggested that a significant risk premium might be being incorporated in longer-term rates), and their use as a hedging instrument for short-maturity gilts.

Overnight rates were generally below base rates and quite stable. The average intra-day range—the difference between the high and the low each day—was 2.6 percentage points, compared with 3.1 percentage points during the first quarter and 3.4 percentage points in 1993. The stock of assistance provided to the money market by the Bank rose in July (partly because of seasonal overfunding), but fell back by the end of the quarter. This was partly matched by changes in the use made of the Bank's twice-monthly repo and secured lending facility, and therefore only in part by changes in the Bank's holdings of bills. By easing the Bank's daily operations in this way, the repo facility has contributed to greater stability of short-term rates. The market preferred at times to sell short-dated bills to the Bank in the daily operations (sometimes preferring the day-to-day operations to the repo facility because short rates in the market were below the repo rate). This meant that the shortage turned over more frequently, but did not directly affect the average stock of assistance. The further rise in eligible bill rates relative to interbank rates led to fewer bills being drawn.

Daily shortages averaged around £650 million; this was a little higher than in the previous quarter but they were generally relieved comfortably. The shortages tended to be a little lower in the second half of the period, partly as a result of underfunding (no auction was, for example, held in August). There were, however, a total of 15 days when the shortage was sufficiently large to warrant an early round of operations and the invitation to counterparties to offer bills on a repurchase basis. On such occasions, the Bank normally sets a maturity date (or dates) around two to three weeks away, taking into account the expected size of the shortage or surplus that would

Money-market assistance



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

Table C
Official transactions in gilt-edged stocks

£ billions: *not seasonally adjusted*

	1994/95 Apr.–June (a) Total	July	Aug.	Sept.
Gross official sales (+) (b)	7.6	3.6	0.8	2.6
Redemptions and net official purchases of stock within a year of maturity (-)	3.2	—	1.0	—
Net official sales (c)	4.4	3.6	-0.2	2.6
of which net purchases by:				
Banks (c)	—	1.5	-1.8	0.1
Building societies (c)	—	—	-0.4	0.2
Overseas sector	-0.9	—	-0.5	-0.8
M4 private sector (c)	5.2	2.0	2.5	3.0

(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 purhcase and resale agreements.
(c) Excluding transactions under purchase and resale agreements.

otherwise prevail on the maturity date. There were no surpluses during the quarter.

A reduction of around £1 billion in the net take-up at the repo facility on 7 September meant that the money-market shortage the following day was enlarged by that amount. As a result, the shortage on 8 September was £1,350 million. As normal in these circumstances, the Bank invited an early round of operations and offered a bill repo maturing on 26/27 September. These operations were interpreted by some in the market as a signal that a decision had been taken at the previous day's meeting between the Chancellor and the Governor to leave interest rates unchanged. But the Bank was simply following its normal practice for a shortage of this size. An early round of operations has been held on every recent occasion when the money-market shortage has been of such a size, and on every such occasion a bill repo of a similar maturity has been included.

Three-month Treasury bill tenders were held each Friday for £500 million. The full effect of the increase in size of the tender from £200 million in April has now been felt—the outstanding amount of Treasury bills was £7.2 billion at the end of September.

Gilt-edged funding

There was a positive mood in the gilt market during the first few weeks of the quarter. Domestic indicators confirmed continuing low inflation, and new government PSBR forecasts showed a reduced requirement for gilt sales in the current financial year. Medium and long-term yields fell, and spreads over other markets narrowed. In these conditions, tap issues of both conventional and index-linked stocks were made and quickly exhausted.

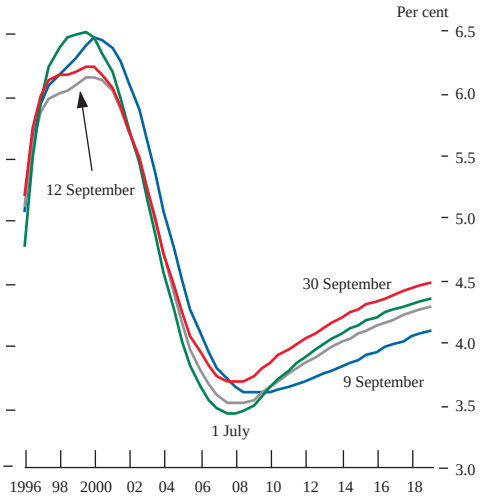
The auction on 27 July was for £2 billion of 6¼% Treasury 2010, the first long-dated conventional stock to be auctioned since January. Despite considerable prior market comment about the incipient demand for long-dated stock from domestic institutions, the auction was only 1.29 times covered—though the tail (the difference between the yields corresponding to the average and the lowest-accepted prices) was only one basis point, indicating that bidding by the market had been highly concentrated. Gilt prices fell slightly when the result of the auction was announced, and fell

Table D
Issues of gilt-edged stock

	Amount issued (£ millions)	Date announced	Date issued	Method of issue	Price at issue (per £100 stock)	Details of payment	Yield (a) at issue	Yield (b) when exhausted	Date exhausted
7¼% Treasury 1998	200	13.7.94	13.7.94	Tap	98.4375	Fully paid	7.73	7.71	14.7.94
7¼% Treasury 1998	100	13.7.94	13.7.94	To CRND	98.4375	Fully paid	7.73		
8% Treasury 2003	200	13.7.94	13.7.94	Tap	97.8125	Fully paid	8.35	8.33	14.7.94
8% Treasury 2003	150	13.7.94	13.7.94	To CRND	97.8125	Fully paid	8.35		
8¾% Treasury 2017	200	13.7.94	13.7.94	Tap	105.8125	Fully paid	8.19	8.17	14.7.94
2½% Index-Linked 2003	100	13.7.94	13.7.94	Tap	161.3125	Fully paid	3.78 (b)	3.78 (b)	20.7.94
2½% Index-Linked 2020	100	13.7.94	13.7.94	Tap	131.1250	Fully paid	3.90 (b)	3.89 (b)	14.7.94
6¼% Treasury 2010	2,000	19.7.94	28.7.94	Auction	81.7500 (c)	Fully paid	8.30 (d)	8.30	28.7.94
7% Treasury 2001	250	8.8.94	8.8.94	Tap	92.6250	Fully paid	8.37	8.88	15.9.94
7% Treasury 2001	150	8.8.94	8.8.94	To CRND	92.6250	Fully paid	8.37		
8½% Treasury 2007	250	8.8.94	8.8.94	Tap	100.4688	Fully paid	8.43	8.80	15.9.94
8½% Treasury 2007	150	8.8.94	8.8.94	To CRND	100.4688	Fully paid	8.43		
2½% Index-Linked 2009	100	8.8.94	8.8.94	Tap	152.1875	Fully paid	3.83 (b)	3.84 (b)	15.8.94
2½% Index-Linked 2024	100	8.8.94	8.8.94	Tap	110.1250	Fully paid	3.84 (b)	3.85 (b)	15.8.94
2% Index-Linked 2006	100	25.8.94	25.8.94	Tap	168.8750	Fully paid	3.70 (b)	3.87 (b)	29.9.94
2½% Index-Linked 2016	150	25.8.94	25.8.94	Tap	139.5000	Fully paid	3.75 (b)	3.90 (b)	29.9.94
8½% Treasury 2005	2,000	20.9.94	29.9.94	Auction	97.0625 (e)	Fully paid	8.91 (d)	8.91	29.9.94

(a) Gross redemption yield, per cent.
(b) Real rate of return, assuming 5% inflation.
(c) Lowest-accepted price for competitive bids. The non-competitive allotment price was £81.84375.
(d) Yield at lowest-accepted price for competitive bids.
(e) Lowest-accepted price for competitive bids. The non-competitive allotment price was £97.15625.

Implied forward inflation rates(a)



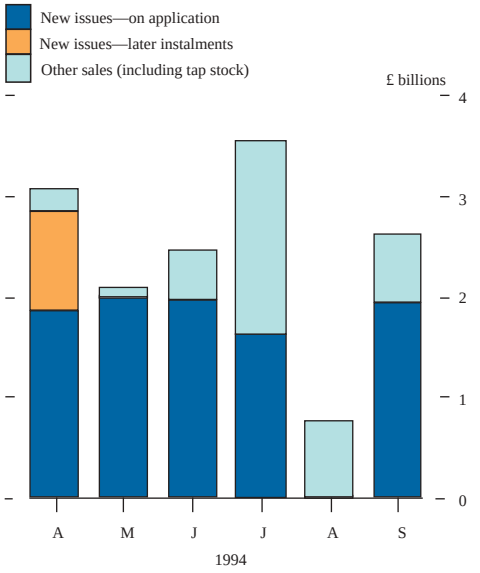
(a) Expectations of the 12-month change in the RPI in future years derived from the differential between yields on conventional and index-linked stocks.

Table E
Ten-year government bond yields

	UK yield	Differential compared with: (a) United States	Germany	France
1 July	8.62	129	155	102
2 Aug.	8.25	114	146	109
9 Sept.	8.84	140	125	76
12 Sept.	8.73	126	118	67
30 Sept.	8.80	119	117	68

(a) In basis points.

Gross official sales of gilt-edged stock



further after higher-than-expected US durable goods orders caused declines in bond markets worldwide. Gilt futures in particular were sold heavily, especially after an important technical support level had been breached; and cash prices fell by over two points at the long end.

The market was defensive for much of August, with conventional yields rising fractionally even though no auction was held. The strengthening picture of a more buoyant economy had helped to raise equity prices and to drive dividend yields below yields on index-linked stocks. This increased the relative attraction of such stocks and two index-linked tap issues were made and exhausted.

The conventional market did not improve in the first part of September, despite data suggesting weaker growth and continuing low inflation. But the rise in official interest rates on 12 September—though its timing came as a surprise to the market—was welcomed. Short-term yields rose in line with money-market rates, but medium and long-term stocks rallied as the move was interpreted as a clear signal of the strength of the authorities' counterinflationary commitment. The downward movement in the implied forward inflation curve on 12 September suggests the interest rate rise led markets to lower their long-term inflation expectations.

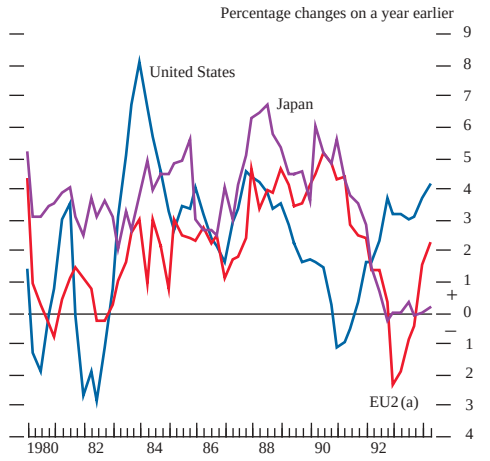
The improvement proved short-lived, however, largely under the influence of international developments, though the PSBR figure published for August was also rather higher than the market had expected. Bond markets worldwide fell, prompted by US figures for production and capacity utilisation published on 16 September. There was also growing uncertainty prior to the Federal Reserve's FOMC meeting on 27 September and the German federal elections on 16 October. But during the last weeks of the quarter, gilts outperformed other major bond markets. The differential between the yields on ten-year gilts and US Treasuries narrowed from 140 basis points on 9 September to 119 basis points on 30 September; and the differential compared with German yields from 125 to 117 basis points over the same period.

The September auction stock was 8½% Treasury 2005, which will probably form next year's ten-year benchmark stock. The amount (£2 billion) was at the lower end of the indicated range, but the cover—at 1.74—was comfortable and the result improved market sentiment. The Bank sold stock from its holdings into the secondary market and two index-linked taps were exhausted shortly afterwards. In the quarter as a whole, gross sales of £7.0 billion were made, bringing the total for the financial year to £14.5 billion.

The international environment

- *Economic growth continued to be strong in the second and third quarters in the United States. In Western Europe, activity strengthened in the second quarter; Japan's output fell.*
- *In the United States, inflation has risen from its low in the second quarter. In Japan, western Germany and France, the outlook is for low inflation.*
- *Official interest rates increased further in the United States in the third quarter. And for the first time in this cycle, official rates rose in a number of other OECD countries.*
- *Current account imbalances have begun to fall in some of the major economies. Budget deficits are still high, but higher growth may reduce the cyclical parts of deficits and some countries have tightened fiscal policy.*

Chart 1
GDP in the major economies



(a) A GDP-weighted average of France and western Germany.

Table A
Capacity utilisation

Per cent

	Capacity utilisation	
	1994 Q2	1970–94
France	81.7	83.9
Japan	82.7	94.2
United States	83.3	80.5
Western Germany	80.5 (a)	83.3

(a) First quarter 1994.

Overview

In most of the Group of Seven (G7) countries, economic recovery continued in the second and third quarters. In Western Europe, activity strengthened but it may not yet be broadly based. In the United States, growth remained above its long-run trend rate. In Japan, which is still affected by high borrowing and investment undertaken in the late 1980s, recovery continued to be unsteady.

In the G7 countries as a whole, GDP rose by 0.8% in the second quarter—as in the first. As Chart 1 shows, the growth rates in the United States and western Europe have begun to converge. In the second quarter, US GDP rose by 1% and Canadian output by 1.6%. In France and western Germany, GDP rose by 1%; but Japan's GDP fell by 0.4%.

Although growth rates are converging, the cyclical positions of the major economies still differ. In the second quarter, output in the United States was 8% above its pre-recession peak, while output in France was ½% above and in Japan ½% below their pre-recession peaks. Table A shows that industrial capacity utilisation rates in France and Japan were below their long-run averages in the second quarter; by contrast, a utilisation rate of 83% in the United States was above its long-run average and close to its peak in the late 1980s. An alternative measure of spare capacity is the gap between actual and potential output (the 'output gap'). The IMF's latest *World Economic Outlook* estimated that the output gap in Japan was around 5% this year, whereas in the United States the gap had probably closed. Spare capacity is, however, hard to estimate on any measure—output gaps or utilisation rates—and comparisons between countries are difficult.

Inflation in the G7 countries was 2.2% in the year to August, compared with 2.5% at the end of last year. Although there is no mechanical relationship between the output gap and inflation, the extent of spare capacity and unemployment in parts of western Europe and Japan suggest that supply constraints are unlikely to push inflation up next year. By contrast, inflation has been slowly

Chart 2
United States: consumer prices and residential investment deflator

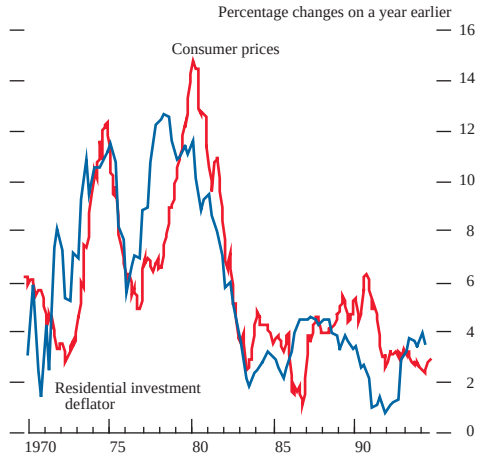


Chart 3
Japan: consumer prices and residential investment deflator

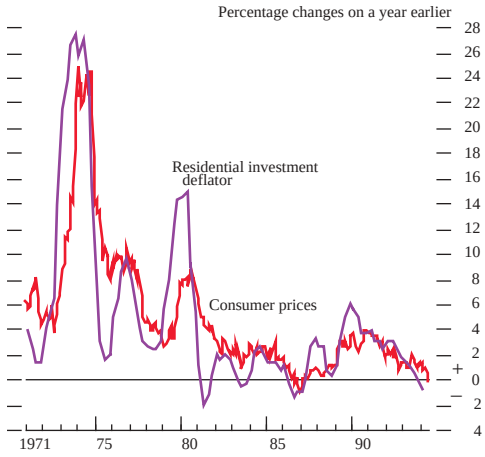


Table B
Contributions to US GDP growth

Percentage points (a)

	1993	1994	
	Year	Q1	Q2
Consumption	2.2	0.8	0.2
Investment	1.6	0.4	0.4
Government expenditure	-0.1	-0.2	-0.1
Stockbuilding	0.3	0.3	0.6
Domestic demand	**4.0**	**1.2**	**1.2**
Net trade	-0.8	-0.4	-0.1
GDP	**3.1**	**0.8**	**1.0**

(a) Quarterly contributions are relative to the previous quarter.

rising in the United States since May. Charts 2 and 3 show that, in the United States and Japan, changes in residential investment deflators (which in the past have moved broadly in line with residential house prices) often precede changes in consumer prices. Based on past relationships, the recent movements for the G3 countries suggest upward pressure on US inflation and continued downward pressure in Japan and western Germany.

It is unclear, however, how far the rise in US inflation will go, since there has been little increase in wage inflation and monetary policy has been tightened this year. The Federal Reserve increased the federal funds and discount rates by a further 50 basis points in August, taking the federal funds rate 175 basis points above its February low.

Australia, Italy, Sweden and the United Kingdom also increased their official interest rates in the third quarter, for the first time during this recovery. By the end of September, futures markets appeared to be discounting the possibility of higher short-term rates before the end of the year in the United States, and also in Germany and Japan (which have not yet increased rates in this cycle).

In the United States, despite fears that consumption had weakened, activity has remained strong

US GDP rose by 1% in the second quarter, compared with 0.8% in the first. Table B shows the contributions to this growth in the first two quarters. In the second quarter, investment continued to grow strongly and contributed 0.4 percentage points to growth. Consumption grew more slowly, however, rising by 0.3% compared with an average growth rate of 0.9% in the preceding four quarters. Stockbuilding made the largest contribution to growth during the quarter.

The weakness of consumption and the strength of stockbuilding suggested that the rise in US interest rates earlier this year was already slowing the economy significantly. Consumption growth, however, was always likely to slow from the high rates of the fourth and first quarters—and consumption was still 3.4% higher in the second quarter than in the same period of 1993. But there has been some evidence of a slowing in housing market activity (an interest-sensitive sector of the economy). In 1992 and 1993, housing starts rose sharply, encouraged by low and falling long-term interest rates. Research published by the Bank for International Settlements earlier this year suggested that a one percentage point rise in US official interest rates would have little discernible effect on activity until at least nine months after the change and the full effect might take around two to three years to register. If so, the rise in official interest rates since February is unlikely yet to have had much effect on activity. But long-term interest rates began rising in October 1993 and it seems, partly as a consequence, that the upward trend in housing starts has become shallower.

Although part of the growth in stocks in the second quarter was probably involuntary (because consumption proved to be weaker than firms had expected), it is likely that some of it was deliberate. Chart 4 shows the inventory to sales ratio for manufacturing industry. During the 1990–91 recession, the ratio rose much less than it had done in the 1974–75 and 1981–82 recessions, partly

because of the introduction of 'just-in-time' stock controls. As the recovery has gathered pace, the ratio has fallen and may now have reached a level at which firms wish to rebuild stocks. The Federal Reserve's *Beige Book*, published in September, reported that some retailers were building up stocks ahead of the holiday period; some companies may previously have over-economised, and then lost sales opportunities in the face of faster-than-expected demand.

Chart 4
US business inventories/sales

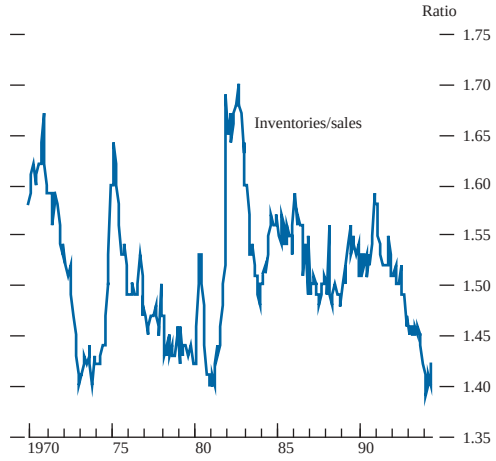


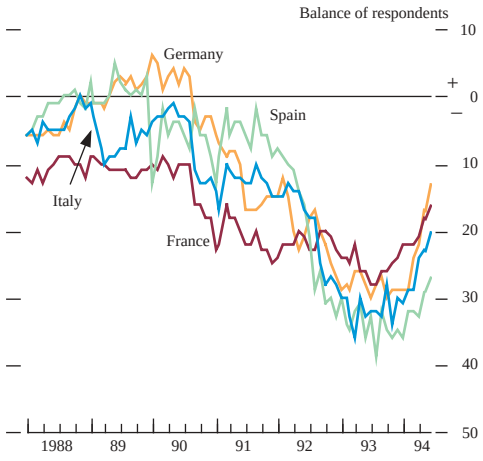
Table C
Contributions to western German GDP growth

Percentage points (a)

	1993	1994	
	Year	Q1	Q2
Consumption	0.1	0.2	-0.6
Investment	-1.7	0.8	-0.2
Government expenditure	-0.2	0.2	-0.6
Stockbuilding	-0.3	-0.4	2.1
Domestic demand	**-2.1**	**0.8**	**0.8**
Net trade	0.4	-0.2	0.2
GDP	**-1.7**	**0.5**	**1.0**

(a) Quarterly contributions are relative to the previous quarter.

Chart 5
European consumer confidence



Source: European Economy.

Growth has strengthened in Europe . . .

Economic activity in the large west European economies has been stronger in recent months than most commentators expected at the beginning of the year. In both France and western Germany, GDP rose by 1% in the second quarter, following rises of 0.7% and 0.5% respectively in the first.

Table C shows the contributions to western German GDP growth in the first two quarters. Stockbuilding more than accounted for the rise in GDP in the second quarter; consumption, which fell by 1%, made a negative contribution of 0.6 percentage points. Chart 5 shows that European consumer confidence has been rising since the second half of last year. But it is probably being held back in Germany by the prospect of tax rises early next year equivalent to around 1½% of this year's real personal disposable income; business confidence has recovered more quickly this year, partly because of the strength of industrial export orders.

In France, consumption and investment each rose by around 1% in the second quarter, in contrast to the first quarter when growth was led by stockbuilding. Household consumption of manufactured goods rose by 1.5%, but without government stimulus to the car market would perhaps have increased by about 0.2%. The consumer sector seems likely to remain fragile; despite a government subsidy scheme, unemployment was unchanged between June and August at 12.6%. Chart 6 shows that business investment in France, Japan and western Germany has yet to recover to pre-recession levels, whereas US investment has grown strongly since the beginning of 1992.

One feature of the recoveries in Western Europe has been the growth of net exports—which, until the first quarter, made a proportionately larger contribution to growth in the major European economies than in the two previous recoveries. A box on page 310 looks at European export performance in more detail.

. . . but in Japan activity was weak in the second quarter

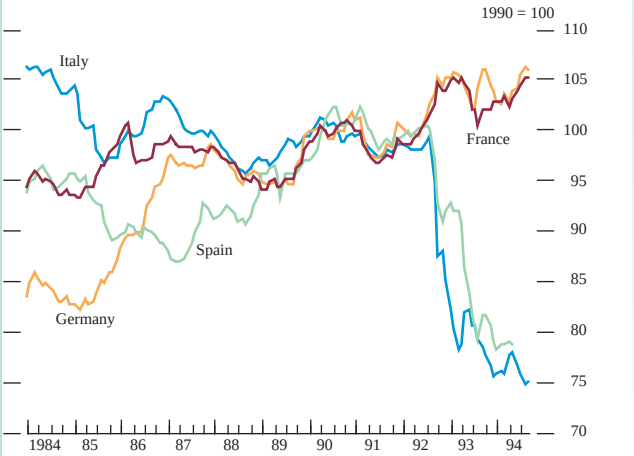
In Japan—where the economy is still recovering from a period of high borrowing and investment in the late 1980s—economic activity has passed its low point, but business and consumer confidence are low and fragile. This year, the high yen, rising real interest rates and political uncertainty have prevented a steadier recovery. Corporate and personal sector indebtedness are probably higher than in parts of continental Europe, and this may be one reason why Japan has not recovered as quickly. Because consumer and producer prices are falling in Japan, the real value of debt is rising.

Japan's GDP rose by 1% in the first quarter, but fell by 0.4% in the second, when both consumption and investment fell. (Housing investment rose by 11%, but this partly reflected government stimulus through subsidised housing loans.) Consumption and

Trends in European trade

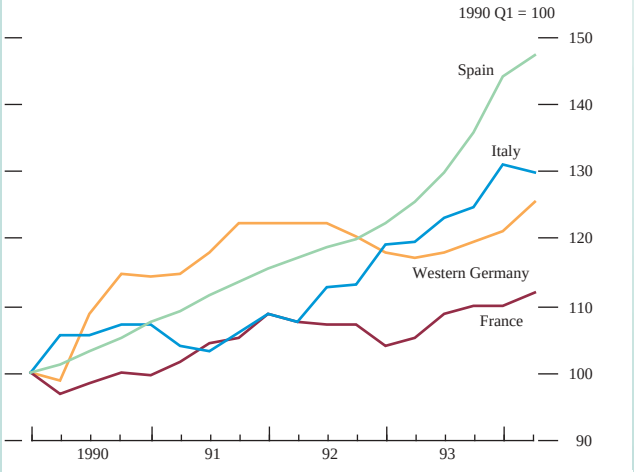
One feature of the recent recovery in western European economies has been the external sector's contribution to growth. This box looks at the recent trade performance of France, Italy, Spain and western Germany. As Chart A shows, these countries provide an interesting contrast: nominal exchange rates in Italy and Spain depreciated sharply in 1992 and 1993; French and German exchange rates did not.

Chart A
Nominal effective exchange rates



The nominal trade-weighted exchange rates of Italy and Spain each fell by around 20% in the 12 months after September 1992. This improvement in competitiveness fed quickly through to trade volumes; Chart B, for instance, shows the path of export volumes. Goods and services exported by Italy and Spain rose by 9%–10% last year, while French and western German export volumes fell by ½% and 3% respectively. In the first half of this year, however, export volume growth in France and western Germany was positive. The weakness of European domestic demand last year meant that import volumes fell in all four countries. As a consequence of these changes, the current account deficit to GDP ratios fell by 2–3 percentage points in Italy and Spain between 1992 and 1993; current account balances in France and Germany changed by less.

Chart B
Export volumes(a)



(a) Goods and services.

The table shows that the contribution of the external sector to GDP growth has so far been much larger in Italy and Spain than in France or western Germany. In Spain, for example, GDP rose by 0.5% between the end of 1992 and the first quarter of 1994; net exports contributed around 4 percentage points to growth. Up to the first quarter, net exports had contributed proportionately more to GDP growth in the main continental European countries in this recovery than in the previous two.

Net trade contributions to GDP 1992 Q4–94 Q1

Percentage points

	GDP growth	*of which:* Net trade
France	0.2	0.8
Western Germany	—	1.5
Italy	0.8	4.3
Spain	0.5	3.8

In 1992, around 60% of EU countries' exports were to other EU countries. Given the weakness of European domestic demand, the strength of export volumes in Italy and Spain last year—and in France and western Germany this year—is partly the result of net export growth to fast-growing regions such as North America and Asia. The value of the four European countries' exports to Asia rose by 16% last year, while their total non-EU exports fell by 1%.

Potential problems, however, with the new method of collecting European trade statistics mean that caution is needed in drawing firm conclusions. In March, Eurostat (the Statistical Office of the European Communities) said that, in the first nine months of 1993, recorded intra-EU exports exceeded intra-EU imports by ECU 19 billion. So it is possible that difficulties with the new statistical method may have boosted Europe's net exports artificially.

Despite the sharp depreciation in Italy and Spain in 1992 and 1993, to date domestic inflation has not risen greatly. (This has also been true for other countries whose currencies have depreciated in the last two years—including Canada, Sweden and the United Kingdom.) Domestic deflationary pressures have overcome the effects of import price rises. But as output growth rises and the amount of spare capacity falls, it is possible that inflation pressures will rise in Italy and Spain. Inflation was 3.6% and 4.8% respectively in the two countries in the year to July, higher than the EU average of 3%. If inflation continues to exceed the EU average, some of the competitive gains from the fall in nominal exchange rates will be eroded.

Chart 6
Business investment

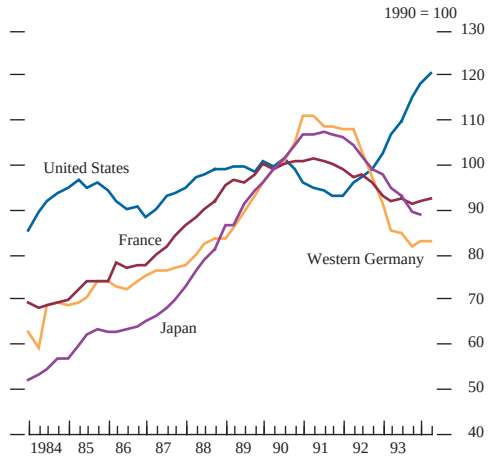
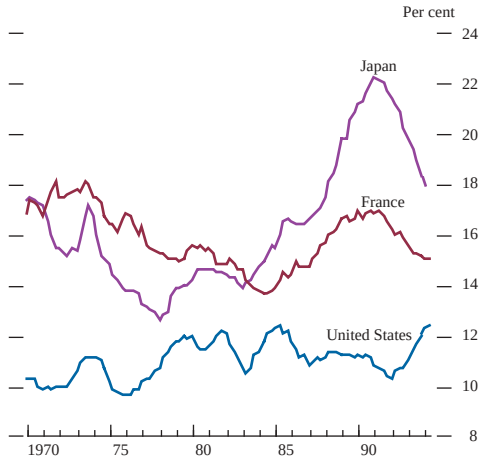
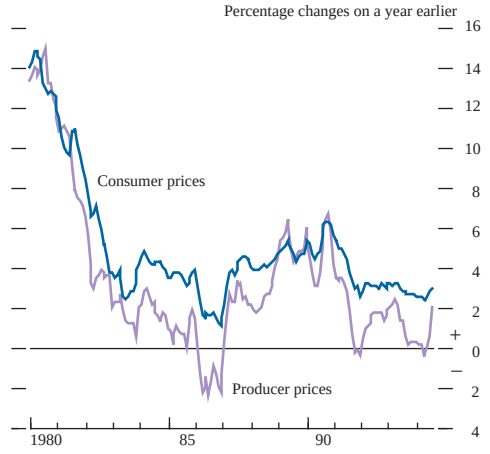


Chart 7
Business investment/GDP(a)



(a) At constant prices.

Chart 8
US consumer and producer prices



business investment account for about three quarters of output; their contraction in the second quarter therefore raises a question about the solidity of the Japanese recovery. But there may be some seasonal adjustment problems with the measure of Japan's GDP; in each of the last three years, output has risen in the first quarter and fallen in the second. In the third quarter, consumption was boosted by income tax cuts in June and the effect of hot summer weather. Real earnings, which fell by ½% last year, rose in the first half of this year and may underpin consumption in the rest of the year.

Although the latest Bank of Japan Tankan survey showed business confidence improving for the second consecutive quarter, many more firms were pessimistic about the outlook than were optimistic. Manufacturers again reported that stocks were higher than necessary and expected this to continue for the rest of the year. Major firms expected to cut capital spending by around 4% this fiscal year—the third successive year of declining investment. Japanese companies borrowed and invested heavily in the mid to late 1980s, during a period of cheap finance and high economic growth (annual GDP growth averaged 4½% between 1985 and 1989); it may be that the period of stock adjustment is not yet complete. Chart 7 shows that the share of non-residential investment in Japanese GDP rose sharply in the second half of the 1980s; it has since fallen, but remains higher than in the United States.

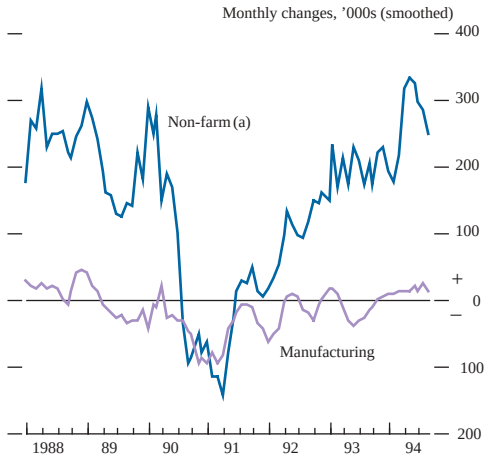
Economic activity has strengthened in a number of other industrialised countries. The recovery in Canada, which has broadly followed that in the United States, is well established. Canada's GDP rose by 1.6% in the second quarter, following an increase of 1.1% in the first quarter. Growth was thus more rapid than in the United States in the first half but, because Canada's recession was deeper and longer than in the United States, it has more spare capacity. For instance, although Canadian unemployment is on a downward trend, it remains high—at 10.1% in September; in the United States unemployment is around 6%. And the gap between actual and potential output may be around 3%–4% in Canada.

In Italy and Spain, whose currencies both depreciated sharply in 1992 and 1993, growth patterns are now diverging. Last year, recovery was led by net exports in both countries. Towards the end of last year and in the first half of this, domestic demand strengthened in Italy but it remained weak in Spain. In the Netherlands, which did not experience the sharp fall in GDP of western Germany and France, GDP rose by 1% in both the first and second quarters and domestic demand is recovering. Unemployment has also begun to fall, from 10% in the first quarter.

Outside the United States, inflation pressures are weak

In the United States, inflationary pressures may be rising. US consumer price inflation was 3% in the year to September, compared with a low of 2.4% in May. And Chart 8 shows that the annual rate of producer price inflation rose sharply in August. In part, this reflected last year's tobacco price cuts dropping out of the index, but it was also because of higher raw material prices. These price rises have probably not yet been fully passed on to consumers. But the annualised three-month rate of consumer price inflation has risen this year and was above the annual rate during the third quarter.

Chart 9
US employment



(a) Excluding manufacturing.

Chart 10
Real manufacturing earnings

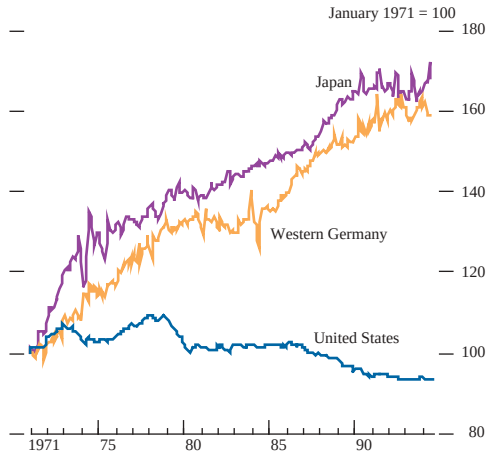


Chart 11
Western Germany: consumer and producer prices

During the early part of the US recovery, falling unit wage costs offset some of the pressures from rising raw material prices. In the second quarter, however, the tightening of the labour market led to a fall in labour productivity and a rise in unit wage costs. Chart 9 shows how non-farm employment has risen this year. Robust growth in employment has helped reduce the unemployment rate to 6% in the third quarter—probably around its 'natural' rate. Despite this, earnings growth has not picked up markedly. Manufacturing earnings rose by 2.5% in the year to September, around the same rate as in 1992 and 1993.

The stability of nominal earnings growth, despite the tightening of the labour market, is not altogether surprising, given that US inflation has also been stable over the last two years. Chart 10 shows that real earnings in the US manufacturing sector have been stable since 1971, in contrast to Japan and western Germany. The growth of firms' non-wage (particularly healthcare insurance) costs has probably been an important factor in the low US wage growth. As a proportion of nominal labour compensation, non-wage costs increased by nearly 60% between 1970 and 1991, a much larger rise than in Germany. The flexibility of the US labour market has also limited real wage growth. And many of the jobs created during this recovery have been in contract or part-time work, which may also be restraining wage pressures.

In western Germany, consumer price inflation was 3% in the year to September; as Chart 11 shows, it has been around this rate since May. And the weakness of the consumer sector—which may be adversely affected by next year's tax rises—will probably limit firms' ability to pass through increases in input prices. In addition, unit wage costs in manufacturing were lower in the first half of this year than in the same period last year, and seem unlikely to pick up sharply.

In January next year, indirect tax increases will drop out of the year-on-year comparison, lowering the measured inflation rate. In addition, western Germany's consumer price index will be rebased: the existing 1985 weights will be replaced with 1991 weights. The prices of some of the consumer durables whose weights are likely to increase are currently being discounted; if this discounting continues, measured inflation could fall early next year.

The rate of growth of German M3 has also slowed in recent months. In August, M3 grew at an annualised rate of 8.2% compared with the fourth quarter of 1993; the three-month growth rate was 0.3%, its lowest this year. Part of this lower growth reflected a switch from M3 deposits to money-market funds (which were legalised from the beginning of August). In its mid-year review, the Bundesbank said that M3 growth was likely to remain outside its 4%–6% target growth range this year, but left the target unchanged.

Average hourly earnings in western Germany rose by around 1% in the year to the second quarter, as the weakness in the labour market enabled firms to secure cuts in real earnings growth. But with unemployment beginning to fall and employment growing, workers may be more resistant in the 1995 annual wage round to an erosion of their real earnings. The prospect of tax increases in the new year is likely to add to their concerns.

Other European economies have made good progress in reducing inflation over the last two years. In France, Italy and Spain,

inflation in the first half of the year was at, or near to, its lowest-ever level. Further progress in the third quarter was slow, perhaps partly because it is unusual in some countries for firms and workers to accept continued low increases (or falls) in prices and wages; it is also possible that in parts of Europe demand pressures are beginning to be felt and are preventing further falls in inflation in some sectors.

In Japan, consumer prices were unchanged in the year to August. It is possible that this measure overstates inflation, however, since discounting (which is widespread) is not fully recorded. Despite the large output gap in Japan, firms have not shed labour significantly: unemployment rose to 3% in July, compared with an average of 2.5% last year. This labour hoarding has led to rising unit wage costs, as shown in Table D. If output recovers in the second half of the year, there will probably be a cyclical recovery in productivity and a fall in unit wage costs (following other G7 countries' experience).

Table D
Unit wage costs in manufacturing(a)

Percentage changes on a year earlier

	1992	1993	1994	
	Year	Year	Q1	Q2
Canada	-2.9	-2.8	-1.6	-0.6
France	0.5	1.5	-1.6	-3.1
Italy	4.7	3.0	-0.7	. .
Japan	8.7	4.5	5.0	0.7
United States	-0.7	-1.2	-1.6	. .
Western Germany	4.9	1.5	-5.0	. .
Major six	**1.8**	**0.2**	**-1.3**	**. .**
Memo:				
United Kingdom	2.0	0.4	2.0	0.2

. . not available.

(a) Bank estimates for major six countries.

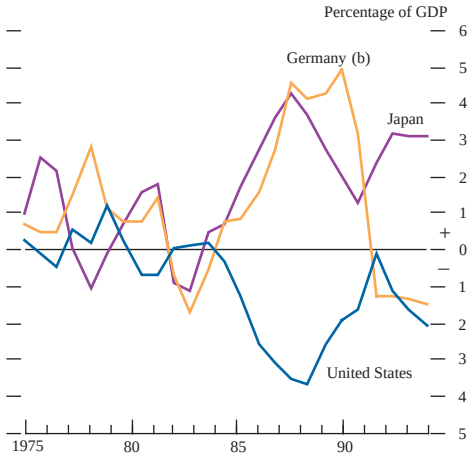
Futures markets imply that the turning-point for European interest rates is close

In the United States, the Federal Reserve increased short-term interest rates by 50 basis points in August, taking its federal funds target rate to 4.75%, compared with 3% in February. The 'real' federal funds rate, adjusted for current consumer price inflation, was 2% in the third quarter, compared with zero in the fourth quarter of last year. There has been speculation about the appropriate level of US interest rates; and officials at the Federal Reserve have occasionally referred to moving short rates back to more 'neutral' levels. Adjusted for current consumer price inflation, 'real' three-month interest rates were around 2% in the third quarter, compared with an average of 2½% since 1970.

Official interest rates in Germany were unchanged in the third quarter. Rates in Italy and Sweden were increased by half a percentage point in August. Italian interest rates were increased partly to support the lira whereas the increase in Sweden was based on the outlook for inflation. After Sweden abandoned its currency peg to the Ecu in November 1992, the Riksbank announced an inflation target for the headline rate of 2% (with a range of plus or minus one percentage point) from January 1995. Import prices rose sharply last year and consumer price inflation also increased; both have been lower this year, though annual consumer price inflation rose from 1.7% in January to 2.5% in June.

By the end of the third quarter, financial markets appeared to be discounting higher interest rates in the G3 countries over the following year. Eurodollar futures prices, for example, implied a rise of half a percentage point in three-month dollar interest rates by the end of the year. Futures markets were discounting a similar rise in German rates over the same period, following strong second-quarter GDP figures and continued recovery. But futures prices are only a guide to the expected path of short-term interest rates; they did not, for example, accurately anticipate the cut in German short-term rates in May.

Chart 12
Current account balances(a)



(a) First half of 1994 only.
(b) Western Germany before 1991.

Japan's current account surplus stopped rising in the first half of the year

Chart 12 shows that German, Japanese and US current account imbalances are now smaller relative to GDP than they were in the

late 1980s. Japan's surplus was 3% of GDP in the first half of the year, compared with 3.3% in the same period last year. The high value of the yen has slowly affected the Japanese current account. Import volumes have grown more quickly than exports for around 1½ years. But because export volumes are much larger, it will take time for changes in volume growth to cause a significant fall in the surplus. The surplus may, however, fall more quickly over the next 18 months if Japanese domestic demand picks up. The deficit may also fall because of rising imports from Japanese companies based in lower-cost centres in south-east Asia.

The US current account deficit was $37 billion in the second quarter, compared with $32 billion in the first. US competitiveness (as measured by the real effective exchange rate) has been broadly stable during the last 18 months, but the strength of domestic demand relative to that in the rest of the G7 has led to a rising deficit.

The US dollar depreciated by 2% (in trade-weighted terms) in the third quarter, and was 8% lower than at the end of 1993. This trade-weighted index does not, however, include Latin American countries' exchange rates, though last year they accounted for 17% of US exports. Measured against a wider group of countries—some of which have historically been subject to high inflation—the US dollar has not weakened as much. The dollar's depreciation against the major currencies meant that by the end of September it was around 11% lower than at the end of 1993 against both the Deutsche Mark and the yen. Its weakness against the yen partly reflected continuing concerns about the likelihood of progress in Japan-US trade talks; and concern about US inflation may have added downward pressure to the US currency. A box on page 315 looks at the financing of current account imbalances in Germany, Japan and the United States.

Higher economic activity will reduce cyclical budget deficits, and some governments have implemented policies to reduce structural deficits

Higher economic activity in the United States helped to cut the government's budget deficit by around a fifth between the 11 months of the fiscal year which ended in September and the same period in the previous year. Lower defence spending and last year's tax increases have also lowered the US deficit. As activity picks up elsewhere in the industrialised world, the cyclical parts of budget deficits should fall similarly. Falls in structural (or underlying) deficits will be slower. The OECD's June *Economic Outlook*, for instance, estimated that the (overall) deficit in European OECD countries would be 6.1% this year, compared with 6.3% last year.

A number of countries announced measures to cut deficits. In Germany, a rise in income tax—due to take effect in January—may raise an additional DM 22 billion (0.3% of this year's tax revenue). It follows a rise in mineral oil tax this year and higher value added tax last year. The OECD projects that Germany's general government structural deficit will fall from 5.2% of GDP in 1991 to 2.3% in 1994.

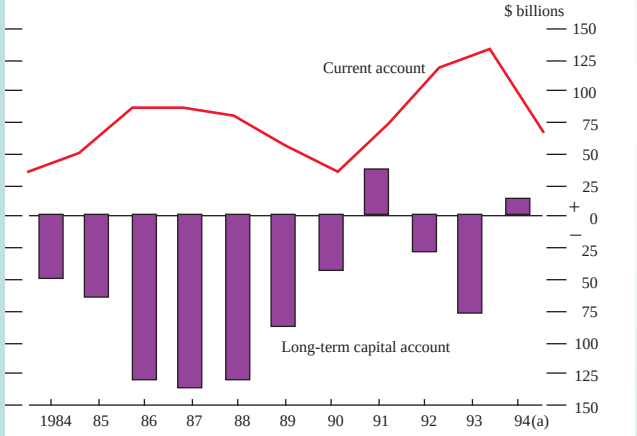
In its budget in September, the French government announced plans to cut the general government budget deficit from 5.3% of GDP this year to 4.6% next year. Public spending is to increase by 1.9%, probably implying no real growth. Increased revenue is projected to

The financing of G3 current account imbalances

Between 1990 and 1994, current account imbalances in Germany, Japan and the United States (the G3 countries) have been lower as a proportion of GDP than they were during the previous five years. This box looks at some of the cyclical and secular factors influencing the financing and recycling of current account imbalances. There is no reason to think that recent changes in the pattern of capital flows make current account imbalances any less sustainable.

Chart A shows that, in the first half of this year, Japan was a net *importer* of long-term capital, in contrast to its position over most of the last decade. The development mainly reflected a change in Japanese bond investment overseas and in foreign investment in the Japanese equity market. During the mid-1980s, Japanese investors were large purchasers of overseas bonds (particularly US Treasury bonds): between 1986 and 1989, Japanese net investment in overseas bonds was around $80–90 billion a year. It fell in 1992 and 1993, and in the first half of this year totalled $19 billion—the fall was partly a response to continuing currency losses as a result of the yen's appreciation.

Chart A
Japan: current and long-term capital accounts



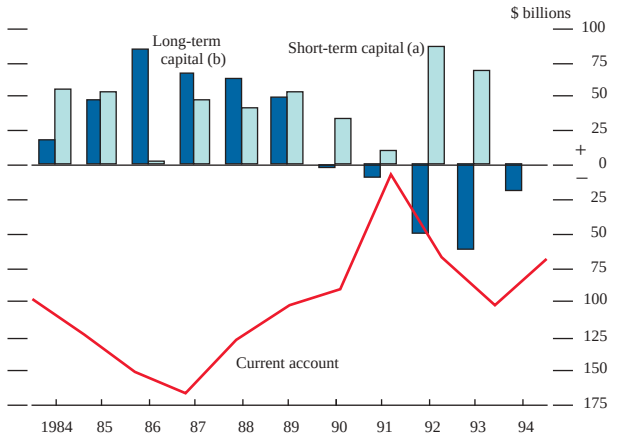
(a) First half.

Conversely, foreign investment in the Japanese equity market has risen since 1992—attracted by the rising yen (which provided capital gains) and, in the first half of this year, by the prospect of a growing economy and hence improved corporate profitability. In the first half of this year, net foreign investment in Japanese equities was $48 billion, more than in 1993 and 1994 put together.

Japan's net outflow of foreign direct investment has been lower between 1992 and 1994 than in the peak 1988–91 period, partly because of the weakness of foreign property markets. But its direct investment in the rest of Asia has increased as a share of total direct investment, as Japanese manufacturers—in response to the high yen—have shifted production to neighbouring countries with lower labour costs.

As Chart B shows, since 1992 the United States has been a net exporter of long-term capital—again in contrast to the mid-1980s, when its large current account deficit was offset

Chart B
United States: current and capital accounts

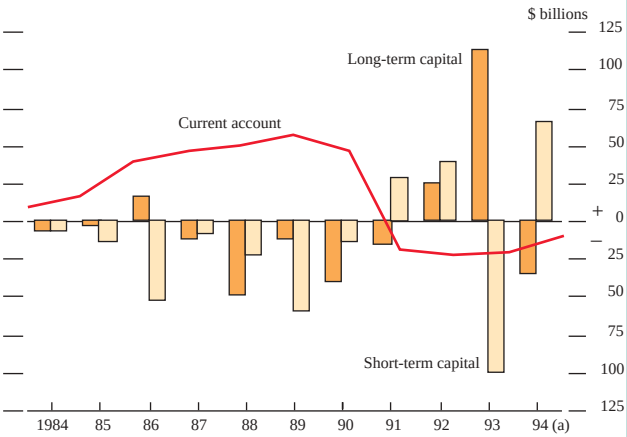


(a) Short-term capital data to 1993 Q3.
(b) Long-term capital and current account data to 1994 H2.

by net inflows of long-term (and short-term) capital. Three factors help to explain recent developments. First, low US interest rates in 1992 and 1993 encouraged US investment in overseas markets to enhance nominal returns. Second, the fall in the US federal government deficit has meant that there has been less need to attract foreign capital to the US bond market. And third, as part of a longer-term trend, US investors may be investing elsewhere to diversify their portfolios.

Chart C shows Germany's current and capital accounts. In 1993, long and short-term net capital flows rose sharply, with a large inflow of long-term capital and a large outflow of short-term capital. The flows were partly influenced by short-term interest rates: markets expected German short rates to continue falling, and this probably encouraged both an outflow of short-term capital seeking higher returns elsewhere, and an inflow of long-term capital as lower short rates were expected to lift bond prices and provide capital gains. During the first half of 1994, these flows have been partly reversed.

Chart C
Germany: current and capital accounts



(a) First half.

come from higher economic growth (forecast by the government at 3.1%), privatisation receipts (of FFr 55 billion, or $10 billion), and higher taxes on electricity, gas and petrol.

In July, the Italian government announced a three-year budget plan to cut its deficit from around 9½% of GDP this year to 6½% in 1996. Despite the plan, however, the lira depreciated during August and the Bank of Italy raised short-term interest rates partly to support the currency. Bond yields rose by around a percentage point in the third quarter. Because Italian government debt is of short average maturity, the rise in interest rates will add significantly to debt-servicing costs.

The Spanish government's budget for 1995 aims to cut the general government budget deficit to 5.9% from 6.7% of GDP this year. The projection relies largely on higher economic activity to boost revenue. Unemployment, at over 24% in the second quarter, will continue to impose high costs on the deficit.

In Japan, the government budget surplus was 0.3% of GDP last year; and the OECD projects a deficit this year. Excluding the social security surplus, the deficit to GDP ratio may be around 3–4 percentage points higher. Since August 1992, four fiscal packages totalling ¥45 trillion have added to the deficit (though the size of the stimulus has been less than the headline figure suggests). The weakness of the economy has also reduced tax revenues. The income tax cuts in June and December this year will reduce revenues by ¥5.5 trillion. The government plans to maintain these tax cuts in 1995 and 1996, but ¥2 trillion will be reversed in 1997. Japan's sales tax—which is low compared with other OECD countries—may be increased from 3% to 5% in 1997, but this is subject to review. Japan is the only G7 country which has recently announced a loosening of fiscal policy, but (based on IMF data) it is probably also the country with the largest output gap. It has, in addition, by far the lowest level of net government debt relative to GDP among the G7.

Canadian government sector debt, at more than 90% of GDP in 1993, is the second highest in the G7. The federal government's budget in February forecast that the federal deficit would fall from 5.4% of GDP this year to 3% by 1996/97. The prospects for achieving this depend partly on the level of interest rates; interest costs accounted for around a quarter of government spending in 1992/93. The budget assumed long-term interest rates of 6.4% in 1994 and 6.1% in 1995. In the first nine months of the year, ten-year Canadian bond yields averaged 8.3%. Apart from interest costs, unemployment benefits are one of the largest areas of spending and, as part of a review of the social security system, the government is changing the unemployment insurance system. In addition, if growth this year is higher than anticipated, the deficit may be lower.

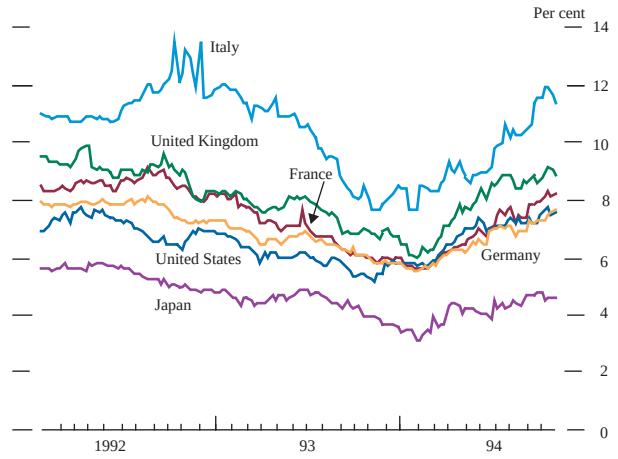
Financial market developments

- *Government bond prices in most major markets continued to fall during the third quarter, as stronger growth rates led to concerns about inflation and uncertainty over interest rate movements. There were also fears in many markets about a potentially heavy supply of debt.*
- *As in the second quarter, issuing activity in the international capital markets was at a subdued level because of market turbulence.*
- *Prices in most major equity markets remained weak; and the level of new issues continued to be low.*

Overview

The major bond markets were slightly calmer throughout the third quarter than earlier in the year, but uncertainty persisted. The US bond market weakened, as inflation expectations increased and the timing of future interest rate changes remained uncertain to market participants. This may have contributed to price falls in most European bond markets, which were also influenced by uncertainty about interest rates and persistently high public sector deficits. Despite the major economies being at markedly different points in the cycle, movements in their government bond prices remained highly correlated during the quarter, with prices continuing their downward trend (see Chart 1).

Chart 1
Ten-year government bond yields



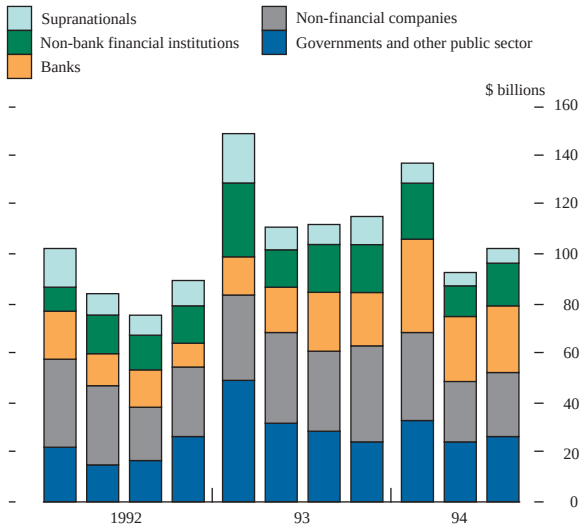
Source: Bloomberg.

Most major equity markets rose during the first two months of the quarter because of the favourable economic background, but fell back in September. Of them, only North American and UK markets managed price rises over the quarter as a whole.

Real government bond yields in the major industrial countries have risen to historically high levels during 1994. Partly in response to this, the Group of Ten industrial countries recently adopted a proposal by the Chancellor of the Exchequer to study global savings and investment trends, and their implications for real interest rates.

The level of new issues in the international capital markets remained subdued. The uncertain market environment led to a shift of funds into shorter-term assets. Among currency sectors, there was a shift in composition towards yen bond issues and away from European currencies. And there was some switching towards floating-rate borrowing, reflecting falling fixed-rate bond prices and investor demand for floating-rate instruments in an environment where interest rates were expected to rise. Sovereign borrowers were again prominent in the international bond markets, while corporate borrowing remained subdued (see Chart 2). Emerging market borrowers continued to find issue conditions difficult, although total borrowing by such issuers increased slightly.

Chart 2
Borrowers in the international bond market



Source: Bank of England ICMS database.

Ordinary share issues by UK companies fell from the high levels seen earlier in the year, perhaps because those earlier

issues had sated issuers' immediate demand for funding and because company profits had been boosted by economic recovery. Likewise, few equity-related bonds were issued in the international markets. The improvement in most major economies, and in banks' balance sheets and profitability, meant that announcements of international syndicated credits continued to be strong, even though bank credit in the United Kingdom remained subdued.

Bond market developments: prices and yields

Prices in the major government bond markets continued their recent downward trend in the third quarter, led by falls in the United States that reflected market concerns about inflation and interest rate movements. European markets were affected by a view that the low point of the present interest rate cycle might already have been reached. In addition, there were growing concerns about the supply of debt in some markets, notably in continental Europe and Japan. The prices of Japanese government bonds fell in parallel with other markets—in contrast to the second quarter—suggesting that market comment earlier in the year about the decoupling of bond markets might have been premature.

The prices of US Treasuries continued to fall over the quarter; in September, the yield on the 30-year long bond peaked at 7.85%—its highest since 1992. After the Federal Reserve's decision to raise both the federal funds rate and the discount rate by 50 basis points (to 4.75% and 4% respectively) on 16 August, the (positively-sloping) yield curve flattened: the yield differential between ten-year and three-month rates fell by 26 basis points over the quarter, to just over 280 basis points. But Treasury bond prices continued to fall, reflecting doubts about whether the authorities' action was sufficiently timely. And the market continued to be sensitive to data on the pace of growth and to any signs that further rate rises might be necessary. By the end of the quarter, eurodollar futures suggested that market participants expected further rises in short-term interest rates—of around 50 basis points—before the end of the year.

Japanese government bond prices fell steadily throughout the first part of the quarter. Concerns about potentially high bond supply—particularly of government debt—unsettled the market and counteracted the positive effects of low inflation and the strength of the yen. But the continued weakness of share prices—which were also affected by fears of oversupply—led some institutional investors to switch out of equities into bonds, prompting a tentative rally in government bonds towards the end of the quarter. Over the period as a whole, the yield on the ten-year bond rose by 30 basis points.

In Germany, Bund prices fell sharply in the last two months of the quarter, as it became apparent that further interest rate cuts were unlikely in the immediate future; the view that much of continental Europe had begun to move into the upward phase of the interest rate cycle strengthened as a result. Uncertainty over the direction and timing of the next interest rate move adversely affected the market; the yield on the ten-year Bund reached a high point for the year of 7.71% towards the end of the quarter.

Prices in most other continental European bond markets continued to fall during the quarter, depressed by expectations of increases in official interest rates. Futures prices appeared to suggest a market view that short-term interest rates had reached their low point not only in those countries that had already raised rates, but also in Germany and France. This view reflected a growing belief in the onset of economic recovery in continental Europe. Interest rate rises in Italy and Sweden on 11 August were unfavourably received by bond markets: yields on both countries' debt rose more sharply than elsewhere. Concerns about public indebtedness, and about the effects of higher short-term interest rates on the governments' debt-servicing costs, were pronounced in both countries.

International bond issues

$102 billion was raised in the international bond markets during the third quarter, an increase of $10 billion over the second quarter, which indicated some steadying of the markets after the conditions earlier in the year (see Table A). Fixed-rate borrowing totalled $80 billion despite the continuing interest rate uncertainty. The volume of yen-denominated fixed-rate issues was unusually strong, probably reflecting the low yields on yen issues and perhaps expectations about the exchange rate (see Table B). The bulk of the straight bonds issued were—as in the second quarter—of short maturity, in response to investor demand

Table A
Total financing activity:[a] international markets by sector

$ billions; by announcement date

	1992	1993		1994		
	Year	Year	Q4	Q1	Q2	Q3
International bond issues						
Straights	281.5	375.7	82.6	77.1	68.6	79.9
Equity-related	24.0	39.6	12.0	20.7	5.7	4.1
of which:						
Warrants	*18.3*	*20.8*	*5.3*	*8.2*	*0.8*	*0.7*
Convertibles	*5.7*	*18.8*	*6.8*	*12.5*	*4.8*	*3.4*
Floating-rate notes	43.2	68.5	20.3	38.7	17.8	17.9
Bonds with non-equity warrants (currency, gold, debt)	1.2	1.5	0.1	0.1	—	—
Total	**349.9**	**485.4**	**115.1**	**136.6**	**92.1**	**101.7**
Credit facilities (announcements)						
Euronote facilities	113.2	117.4	55.9	35.7	46.0	40.2
of which:						
CP	*21.5*	*24.2*	*12.2*	*3.9*	*15.4*	*10.9*
MTNs	*90.8*	*92.7*	*43.6*	*31.9*	*30.6*	*29.3*
NIFs/RUFs	*0.9*	*0.5*	*0.1*	—	—	—
Syndicated credits	221.4	221.2	55.0	52.0	64.5	59.3
Total	**334.6**	**338.6**	**110.9**	**87.7**	**110.5**	**99.5**
Memo: amounts outstanding						
All international						
Bonds (b)	1,686.4	1,847.9	1,849.6	1,977.4	2,060.1	. .
Euronotes (c)	173.1	255.8	255.8	289.8	330.3	378.7
of which, EMTNs	*61.4*	*146.6*	*146.6*	*177.9*	*216.5*	*259.4*

. . not available.

(a) Maturities of one year and over. The table includes euro and foreign issues and publicised placements. Issues which repackage existing bond issues are not included. Figures may not add to totals because of rounding. Bond total includes issues from MTN programmes.
(b) BIS-adjusted figures, including currency adjustment. Includes issues of fixed-rate bonds and floating-rate notes.
(c) Euroclear figures.

for bonds which hold their value better in an environment of falling prices.

Table B
Currency composition of fixed-rate bond issues(a)

Percentage of total issues announced

Currency denomination	1992 Year	1993 Year	1993 Q4	1994 Q1	1994 Q2	1994 Q3
US dollar	32	30	28	24	24	27
Deutsche Mark	11	13	16	13	4	6
French franc	8	11	12	13	12	4
Sterling	6	8	6	12	4	4
Yen	14	13	16	8	28	32
Italian lira	2	3	2	6	5	6
Canadian dollar	6	8	5	5	6	4
Ecu	7	3	2	4	3	2
Swiss franc	5	5	5	2	4	5
Other	9	6	8	13	10	11
Total	**100**	**100**	**100**	**100**	**100**	**100**

(a) Excluding equity-related issues.

The volume of international floating-rate note (FRN) issues in the third quarter was almost the same as in the second—at just under $18 billion, with nearly half dollar-denominated. Such issues were popular with investors as a means of protecting themselves against future rate rises; issuers could still obtain fixed-rate costs using the swaps market.

Fixed-rate issues

US dollars

After a weak second quarter, the volume of dollar-denominated international issues recovered to $21 billion. Sovereign borrowers continued to be prominent in the dollar sector. 36% of borrowing was by public sector entities, reflecting their continuing borrowing needs despite pre-funding earlier in the year.

A notable development in the international primary market was the return of a group of highly-rated borrowers whose issuance is potentially very sizable. US federal agencies, including the Federal National Mortgage Association ('Fannie Mae') and the Federal Home Loan Mortgage Corporation ('Freddie Mac'), have recently sought to diversify their sources of funding by launching large international issues. This development may have consequences for the terms and conditions that other borrowers face in the future, as the agencies are among the largest issuers of debt in the world. Their issues form a large proportion of borrowing in the US domestic bond markets—considerably more than the entire investment-grade corporate sector—but until this year no agency had launched an international issue since 1989. Since the spring, they have made a number of global bond issues of $1–1.5 billion. The rationale for these large issues is that they are likely to be more liquid over the term of the bond and to appeal to a wider variety of investors; they therefore offer the prospect of lower funding costs.

Several eurodollar issues by Japanese government guaranteed entities were, however, less well received by investors when they were launched in September, largely because of concerns about future supply of similar-maturity paper from comparable Japanese entities.

Yen

At $26 billion, borrowing in Japanese yen was strong in the third quarter. This reflected high issue levels during the first two months of the quarter; there was a relative dearth of issues in September, as the end of the half-yearly accounting period approached at the end of the month. The strength of the currency was the main stimulus to overseas demand for yen-denominated issues; investment was also boosted by Japanese investors repatriating funds before the end of the accounting period. The low yields and continuing deregulation of the yen markets may also have made such issues more attractive to borrowers.

There was at the same time a clear trend away from Samurai bonds (yen-denominated bonds issued in the Japanese domestic market by a foreign borrower), which in recent years had accounted for up to a third of international yen offerings. Foreign borrowers have increasingly preferred to issue in the euroyen sector: Samurai issuance fell 56% between the first half of 1993 and the first half of 1994, and new issuance has not recovered to its former level. In July, it was $2.8 billion out of total international yen issues of $15 billion. The shift has been largely the result of regulatory changes earlier in the year which removed the 'lock-up' period(1) for foreign public sector borrowers; euroyen issuance by Japanese borrowers has similarly been made easier by the easing of rating restrictions. The euroyen sector was also buoyed by banks shifting their portfolios from listed government debt into unlisted euroyen issues, in the light of a Tokyo Stock Exchange disclosure rule which would have meant revealing trading losses made in the first six months of the year.

European currencies

The share of fixed-rate issuance in European currencies fell to 34% during the quarter, compared with 42% in the second quarter. There were no fixed-rate offerings in the French franc sector until late in the period; swap opportunities were unattractive, and many major franc borrowers had already completed their funding programmes. There were likewise few Deutsche Mark issues—a total of only $4.9 billion over the three months—as the outlook for German interest rates remained uncertain. Eurolira issues picked up to $4.4 billion in the period, in spite of growing market concerns over Italian political stability; the issues were targeted at retail investors attracted by the high coupons relative to other sectors. The Swiss franc sector was also active with $4.2 billion of issues. Borrowers were attracted by favourable swap opportunities, investors by a number of high-quality issuers and attractive coupons.

Sterling debt issuance in July was quite substantial at £1.9 billion, of which the vast bulk was eurosterling; some

(1) Prior to the change, euroyen bonds could not be sold to Japanese domestic investors for a period of 90 days after issue, though issuers regularly sought to circumvent this rule by 'warehousing' bonds—registering investor interest on the day of issue but only delivering the bonds after 90 days. Issues by public sector entities became exempt from these 90-day 'seasoning' restrictions with effect from 1 January.

two thirds of this was issued by UK borrowers. British Telecom announced a £300 million long-dated fixed-rate issue to refinance its liability position, having purchased a tranche of its outstanding debt back from HM Treasury in its auction of privatised utilities' debt. August was a far quieter month, with only £0.5 billion of new issues announced; but in September borrowing rose to £1.5 billion.

The attraction of asset-backed floating-rate debt issued through special-purpose vehicles continued to be evident, with mortgage-backed issues by Residential Property Services (in three tranches totalling £500 million) and Household Mortgage Corporation (£210 million, again in three tranches) and £66 million of consumer loan backed bonds by First 4 plc. Outstanding issues in the sterling CP market declined slightly to £5.6 billion at the end of the quarter. Total outstandings of sterling MTNs rose again to £11.1 billion.

In the Ecu sector, activity was very subdued and concentrated in high-quality short-term instruments. The Bank's monthly Ecu Treasury bill auctions continued to be oversubscribed at all three maturities on offer, with overall cover of at least two times at each auction, at levels of around Ecu Libid to 10 basis points below Ecu Libid. ECU 200 million of one-month, ECU 500 million of three-month and ECU 300 million of six-month bills were on offer at each tender. There are currently ECU 3.5 billion of Ecu Treasury bills outstanding across the maturities. Monthly turnover averaged over ECU 2 billion in the quarter. Liquidity in all three of the outstanding Ecu Treasury notes—maturing in 1995, 1996 and 1997—has been fairly steady, with turnover of around ECU 1½ billion a month.

Among the United Kingdom's other foreign currency debt, the DM 5.5 billion five-year and US $3 billion ten-year bonds, launched in 1992 to complete HMG's ECU 10 billion borrowing programme, have continued to trade well since launch. Over the third quarter, they remained liquid and continued among the more actively traded Eurobond issues settled through the international settlement systems.

Floating-rate notes

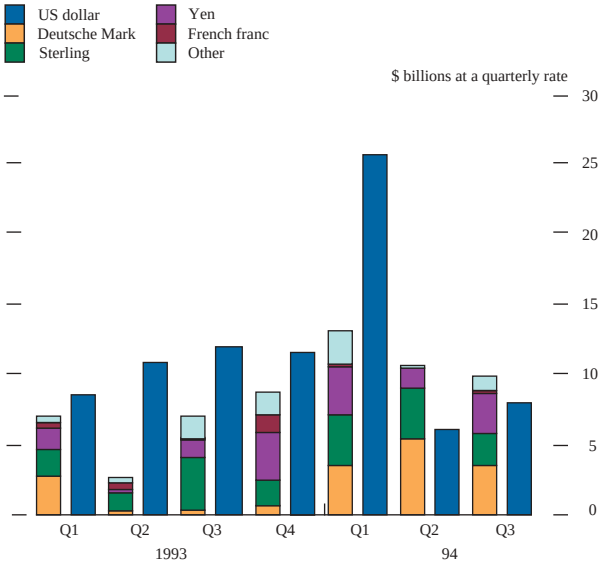
Floating-rate note (FRN) issues rose marginally to $17.9 billion in the third quarter; almost half of the issues were dollar-denominated (see Chart 3). In an environment of rising short-term interest rates, FRNs are attractive instruments for investors. Borrowing in FRNs had faltered during the second quarter, but in recent months activity has picked up again as interest rate uncertainty continues to lead investors to seek defensive strategies. Few structured FRNs have been issued in recent months; they accounted for less than 5% of floating-rate issues during the quarter.

Other debt

Equity-linked debt

The convertible market continued to be subdued, with $3.3 billion issued in the period, as European borrowers

Chart 3
Currency composition of floating-rates issues



Source: Bank of England ICMS database.

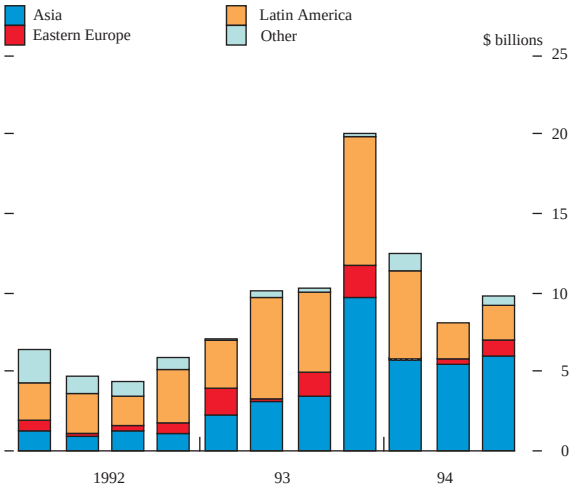
continued to be almost entirely absent. The Swiss franc/yen dual currency convertible sector opened in the first week of July: issues are denominated and pay coupons in Swiss francs, but repay principal in yen at a predetermined exchange rate. The sector was viewed as potentially attractive because of changes in Japanese accounting rules that made issuing bonds with attached equity warrants more expensive. The sector had become almost inactive by the middle of July, however, as early issuance sated demand; Swiss investors were viewed as having a preference for Swiss franc issues, and the very low coupons also deterred demand. Issue volumes of bonds with attached equity warrants continued to be depressed, partly reflecting the changes to Japanese accounting rules; issues totalling just $0.7 billion were made.

Emerging markets

Conditions continued to be difficult for fixed-income issues by emerging-market borrowers; there were several predictions of market recovery, but this proved elusive. The market was affected by the continuing uncertainty affecting US Treasuries, and new issues were generally difficult to place. Many emerging-market borrowers interested in issuing resisted paying the spreads on offer.

Non-OECD international bond issues totalled $9.8 billion during the period, almost two thirds of which was by Asian borrowers (see Chart 4). Some countries—including Nigeria and Venezuela—continued to be seen as very risky; in July, the Venezuelan par bond was trading at a spread of almost 1,500 basis points over US Treasuries, compared with 530 basis points at the start of the year. There was positive news from Brazil, which decided not to go ahead with a planned $1 billion eurobond issue, because of strong capital inflows following the better-than-expected performance with its new economic programme. The Republic of Argentina successfully launched a eurolira issue. In secondary market trading, the Salomon Brady Bond Index, which gives an

Chart 4
International bond issues by non-OECD borrowers



Source: Bank of England ICMS database.

indication of the general movement of prices, rose 14.3% over the quarter, but was still 9.6% down on the year.

Syndicated credits

Announcements of international syndicated credits continued to be relatively strong in the third quarter; they totalled $59.3 billion. On the supply side, the market was encouraged by banks' improved profitability and balance sheets which led to an increased willingness to lend. On the demand side, improvement in most major economies led to increased demand from industrial and commercial companies, which normally account for over three quarters of the market. LDC borrowers accounted for 13% of borrowing.

Eurocommercial paper and euromedium-term notes

The attractiveness of short-term assets in a period of turbulence was reflected in both the announcements of, and issues from, eurocommercial paper (ECP) and euromedium-term note (EMTN) programmes. This continued the trend of the previous quarter. Net borrowing from ECP programmes totalled $3.0 billion, bringing outstandings to $88.8 billion. Announcements of new ECP programmes totalled $10.9 billion. Net borrowing from EMTN programmes continued to grow, to $42.9 billion, bringing outstandings to $259.4 billion. Announcements of new EMTN programmes totalled $29.3 billion, broadly similar to the previous two quarters.

Equity markets

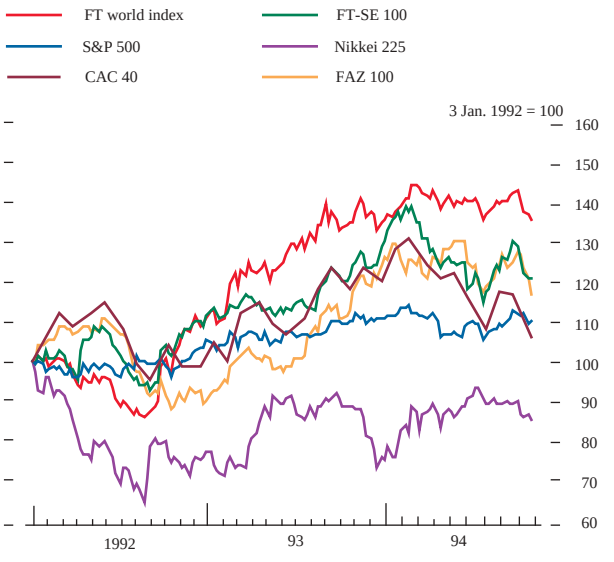
Equity prices in the G7 economies, affected by changing perceptions of interest rate movements and the pace of economic recovery, fluctuated throughout the quarter (see Chart 5). Prices in most major markets increased strongly in the first two months of the quarter, but all major indices declined in September. As a result, over the quarter as a whole North American and UK markets showed gains, but prices in the rest of the G7 fell. Overall, the FT-SE Actuaries world index rose 0.6% over the quarter.

The bilateral trade negotiations continued to be an unsettling factor affecting the US and Japanese equity markets early in the quarter. Uncertainty over interest rate changes and concerns about inflation gained weight as influences as the quarter progressed. The US market was boosted by domestic factors, including good company results and a well-received interest rate rise on 16 August. Data published during September offered mixed signals about the pace of growth, but prices fell following indications on the trade deficit and housing starts. The S&P 500 index ended 4.2% up over the quarter as a whole. In contrast, the Nikkei 225 fell 5.3% over the period in very thin trading. There was a shortage of favourable domestic news, and interest from foreign investors and public funds was sporadic.

European equity markets were affected by uncertainty over future interest rate movements—particularly towards the end of the quarter, after rate increases in both Italy and Sweden and as market participants viewed further cuts in German interest rates as increasingly unlikely in the near term. In Germany, the FAZ 100 ended the quarter down 1.6%, while in France the CAC 40 fell 0.7%. Political concerns added a further dimension in Italy, where the Comit index ended the quarter down 1.4%.

In the United Kingdom, prices rose steadily through July and August, but fell sharply in September (see Chart 5); as a result, the FT-SE 100 index rose by only 3.7% over the quarter. The market was initially buoyed by the favourable

Chart 5
Equity indices(a)



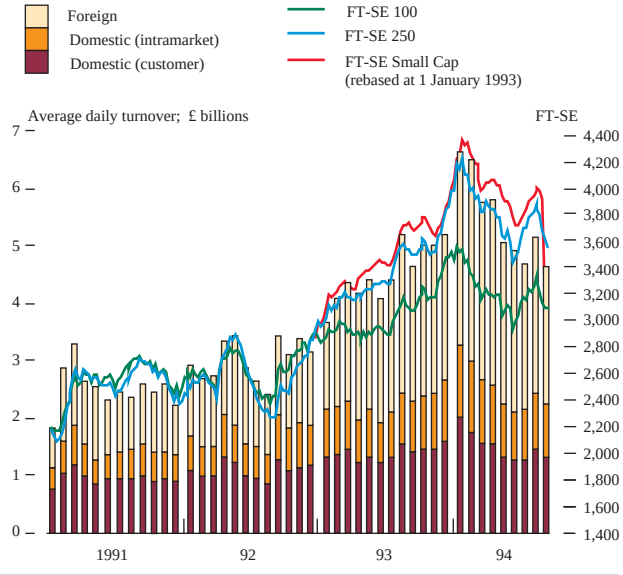
(a) End-week prices, except CAC 40 (end-month).

economic data releases and improved earnings prospects. These domestic factors reinforced the upward trend resulting from the generally favourable reception given to the US interest rate rise and stable German interest rates; the rate rises in Sweden and Italy gained a less favourable reaction. The increase in UK interest rates on 12 September also gained a favourable initial market reaction. But by the end

of the quarter, prices had fallen again to the levels seen in mid-July.

Announcements of forthcoming equity issues by UK issuers totalled only £1.4 billion in the third quarter of 1994, compared with £4.2 billion in the second quarter and £5.3 billion in the first. UK companies announced

Chart 6
Equity turnover and prices on the London Stock Exchange



£0.8 billion of rights issues, including £0.3 billion raised by a UK insurance company to help fund its overseas expansion.

There were several notable structural developments. In August, the Stock Exchange announced the publication of new rules to promote the listing of Global Depositary Receipts (GDRs).(1) The rules are part of the Exchange's strategy to market itself to non-UK companies and strengthen London's position as an international trading centre. They are also a response to the increasing number of companies, particularly in developing economies, that use depository receipts to raise capital from international investors. To enable GDRs to be competitive with domestic securities, the listing requirements are less demanding than those for shares, and listing charges are also competitive with those on the home market. (Less-demanding listing requirements are possible because of the comparative sophistication of the investors involved.)

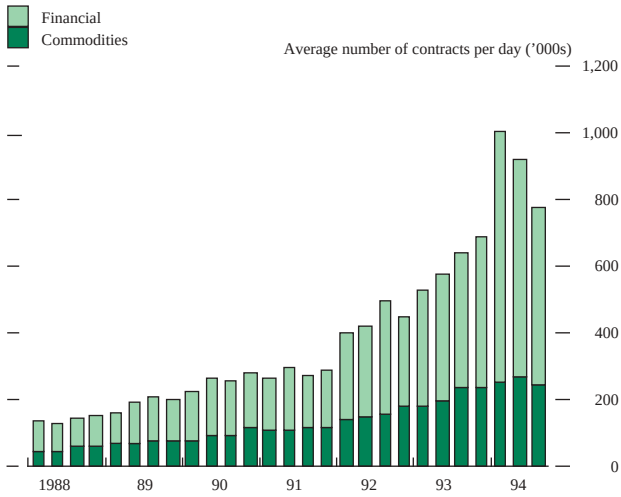
In September, the London Stock Exchange issued a consultative document describing the Alternative Investment Market (AIM), a proposed replacement for the Unlisted Securities Market (USM) which is due to close in 1996. The AIM is scheduled to begin operating in June 1995 and will provide small companies with a means of reaching a wide range of investors, both retail and wholesale, prepared to bear the greater risk associated with such companies.

To attract young companies with growth potential to the market, less stringent entry requirements than for the Official List are proposed. For example, no trading record prior to listing will be required, no minimum limit on company size will be imposed and the responsibility for the accuracy of company reports and news announcements will fall on company directors. Each application for listing must be accompanied by the sponsorship of a member of the Stock Exchange. The Stock Exchange sought comments on the consultative document by the middle of October.

Derivative exchanges

Interest rate uncertainty and concerns about inflation (highlighted by the fall in bond prices) provided the focus for the derivative markets during the quarter. Activity on London's derivative exchanges declined for the second successive quarter, but was still 17% higher than the same period in 1993 (see Chart 7). All LIFFE's major contracts posted declines in turnover in the third quarter, despite the volatility stemming from increases in interest rates in the

Chart 7
Turnover on the London derivative exchanges



United States, the United Kingdom and several continental European countries. It is possible that the decline in activity might indicate a return to more normal growth after an exceptionally strong first quarter, rather than a change in the medium-term growth trend.

LIFFE delisted its medium-term German government bond ('Bobl') future after the expiry of the September contract. Liquidity in the contract dried up in the third quarter, whereas the rival contract on the DTB (Frankfurt's derivative exchange) achieved daily turnover of just over 16,500 contracts. Two main factors seem to have contributed to the delisting of LIFFE's contract: the 15-month headstart of the DTB's contract (which allowed it to win liquidity) and the fact that the product's main appeal was to domestic German, rather than international, investors. LIFFE, however, retains its advantage in the

(1) A Global Depositary Receipt is a certificate which represents title to a specified number of shares in a foreign company. The underlying shares are held in custody by a financial institution, which receives any dividends and remits the proceeds to the holder.

trading of two other important Deutsche Mark contracts—the Bund (8½–10-year bond) and the Euromark (three-month interest rate) futures. LIFFE's market share of Bund and Euromark business was 71% and 98% respectively in the quarter.

OMLX (the London Securities and Derivatives Exchange) saw no trading in its contract on the FT-SE 250 index during the quarter. Both LIFFE and OMLX listed futures contracts on the index in the first quarter. After an initial flurry, OMLX's contract attracted low volumes; there was no turnover during the third quarter, and after the September rollover the open interest fell to zero. The turnover of LIFFE's contract has also been poor, with an average daily volume in the third quarter of only 145 lots.

The aggregate turnover on the London commodity exchanges (the LME, the IPE and the LCE) decreased by 9% in the quarter. Commodity price movements diverged: aluminium prices continued to rise, but copper and coffee sustained their July price levels. The oil price fell from $18 a barrel to just over $17 a barrel. There is some evidence that institutional investors have switched funds into commodities to enhance returns during the first three quarters of the year, encouraged by the fact that commodity prices tend to rise during periods of economic recovery.

Regional differences and their importance for the UK economy

By Andy Murfin and Kieren Wright of the Bank's Structural Economic Analysis Division.

This article offers an analysis of regional economic performance in the United Kingdom, looking both at longer-term trends and the short-term outlook. It incorporates data published by various sources during the first three quarters—including government statistics and industrial surveys—and includes information from the Bank's Agents. A number of points are highlighted:

- *Generally, the differences in the average income levels of the regions have been persistent over the last two decades. The main changes in regions' relative incomes have affected the West Midlands and the North West (adversely), and Scotland and East Anglia (positively). The South East has consistently been the most prosperous region and Northern Ireland the least.*

- *The dispersion of regional growth rates tends to widen in a recession, as some regional economies are more cyclical than others.*

- *Labour mobility between regions is low, compared with countries such as the United States. Despite this, there has been an unprecedented convergence in regional unemployment rates recently, while the corresponding earnings differentials have widened. The convergence in unemployment rates seems largely the result of the recent recession, which had a particularly big impact on the South East.*

- *At present, the recovery seems well-balanced and all regions are growing. The evidence suggests that the South and the Midlands are growing relatively strongly.*

- *Regional house prices have yet to rise consistently in the present recovery; business and consumer confidence remains generally fairly subdued.*

Why is it important to look at regional performance?

This article analyses the United Kingdom's economic performance by region. The Bank of England has three reasons for being interested in the subject.

First, an examination of the differences between regions can improve understanding of the nature of economic cycles and of the effects on the economy of disturbances ('shocks') to supply or demand—such as a change in raw material prices that affects particular industries or, on the monetary side, a change in real interest rates. Some of these shocks, although they affect the whole economy, have a greater impact on some regions than on others, because of differences in industrial structure or demographic composition. Shocks affecting particular industries—such as the impact of increased international competition on the car industry in the 1970s, or the effect of liberalisation on financial services in the 1980s—and longer-term trends, such as the decline in shipbuilding and coal mining, clearly affect some regions particularly. Technological shocks that affect particular industries will likewise have geographically unequal effects. And compared with the United States for example, the United Kingdom's regional inequalities in average income, unemployment rates, etc are enduring. The economy does not appear to be very flexible in accommodating shocks.

The process of adjustment to shocks takes place over both time and space. As a result, an understanding of the regions may improve understanding of the national economy and its responsiveness to shocks. It may do so even though many regional data are not produced in a timely way and so cannot provide *early* warnings of developments in the wider economy. Regional GDP data, for example, appear some time after the national statistics; currently, the most recent annual data cover 1992. Regional labour market data are published at best contemporaneously with the national figures. And the available data on regional prices—produced by the Reward Group—are produced biannually. Nevertheless, appreciation of regional patterns may improve understanding of the processes of adjustment of the

economy. For example, if inflation is related to the economic cycle, examining the regional price pattern during the cycle may shed light on the inflation process.

Second, regional patterns of activity may be affected by monetary policy. Monetary policy is directed at the objective of national price stability, but policy decisions may affect regions differently. The present high debt levels in the South East may, for example, make that region more sensitive to interest rate changes than the North and Scotland, and may influence the path of its recovery.

Finally, the picture to be drawn from a set of whole-economy statistics is not independent of their regional composition, because how the economy as a whole responds will be affected in a number of ways by the dispersion of the components. The overall level of unemployment, for example, will depend on the regional pattern of labour demand and supply. Total household expenditure will depend on the dispersion of the level of indebtedness. And national wage inflation will depend on the regional distribution of wage increases if there are structural rigidities: particular regions may be especially important if, for instance, there is a 'leading region'—one which dominates in the setting of national wage rates—whose wages are sensitive to demand conditions. In that case, the impact of demand in the 'leading' region will extend into other regions and, as a consequence, a wider variation in regional growth rates would be associated with higher average wage increases.

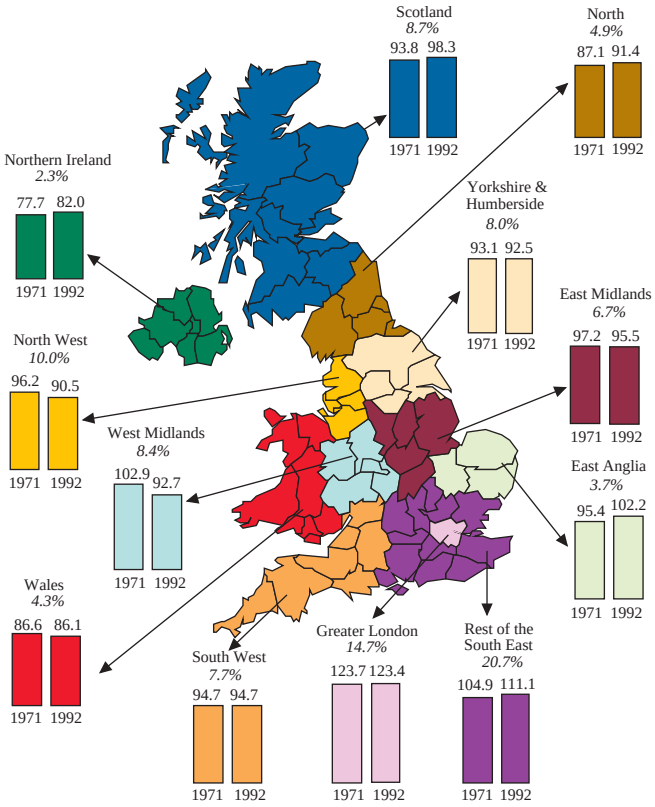
Long-term regional trends

GDP per head

Data are collected for 12 *standard regions* in the United Kingdom. The regions have been defined historically, both as large areas with some internal cohesion for the purposes of economic management, and on political and cultural grounds.(1) They are shown in Chart 1, with their levels of income(2) for 1971 and 1992 relative to the UK average, and their share of national GDP in 1992.

The ranking of the regions by GDP per head has changed very little over the last 20 years, especially at the extremes of the range: Greater London and the Rest of the South East have remained at one extreme, and Northern Ireland and Wales at the other (see Table A). Among the middle-income regions, the West Midlands fell from third to seventh most prosperous between 1971 and 1992, Scotland rose from eighth to fourth and East Anglia from sixth to third. In 1971, GDP per head exceeded that of the median region in the South East (including Greater London), the East and West Midlands, and the North West. In 1992, the South East and the East Midlands were still above the median, but East Anglia and Scotland had replaced the West Midlands and the North West. The overall dispersion of GDP per head narrowed slightly over the period—the ratio of the GDP per

Chart 1
Index of regional GDP per head (UK=100)(a)



(a) Each region's share of UK GDP in 1992 is given in italics. GDP is at factor cost.

head in the highest region (Greater London) to that in the lowest (Northern Ireland) fell from 1.59 in 1971 to 1.52 in 1992.

Table A also illustrates how GDP per head has grown in the regions. In the 1979–81 recession, output per head fell most heavily in the West Midlands. In that between 1990 and 1992, it fell most rapidly in Greater London and the Rest of the South East; in Scotland and Northern Ireland, however, it continued to increase. The regional variations in activity

Table A
Ranking and growth of real GDP(a) per head by region (1990 prices)

Percentages in italics

	Ranking of regions by GDP per head		Growth from: Trough to peak	Growth from: Peak to trough
	1971	1992	1971–90	1990–92
East Anglia	6	3	*57.5*	*-2.7*
East Midlands	4	5	*46.5*	*-4.1*
Greater London	1	1	*51.7*	*-5.9*
North	10	9	*50.4*	*-0.5*
North West	5	10	*39.9*	*-3.8*
Northern Ireland	12	12	*47.0*	*2.7*
Rest of South East	2	2	*60.5*	*-5.7*
Scotland	8	4	*49.1*	*0.6*
South West	7	6	*48.2*	*-3.5*
Wales	11	11	*45.2*	*-2.0*
West Midlands	3	7	*33.9*	*-3.7*
Yorkshire and Humberside	9	8	*45.0*	*-2.0*
United Kingdom			*48.3*	*-3.6*

(a) Calculated using the UK GDP deflator.

(1) See, for example, Brown, A J, (1972), *The framework of regional economics in the United Kingdom.*
(2) GDP per head is measured here as regional GDP divided by regional population.

are high in comparison with the variations for the United Kingdom as a whole.(1)

A picture of slightly greater change in relative incomes emerges from more disaggregated, county-level data. In 1991, 19 counties (out of 62) had GDP per head above the UK average, compared with 13 in 1977. Of the 19, nine—six of those in the South— had GDP per head above the UK average in 1977 as well (Table B).

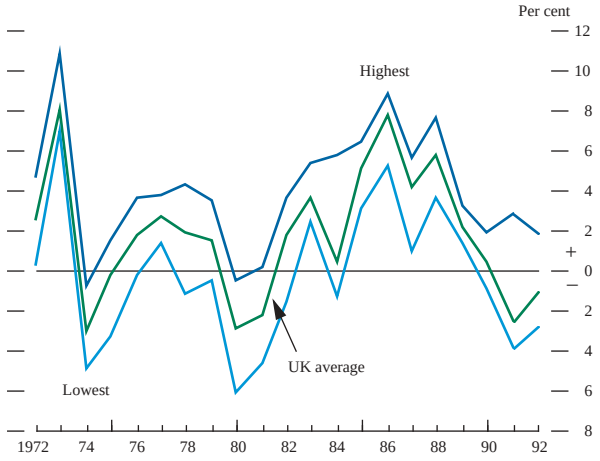
Table B
Counties with above-average GDP per head(a)

In 1977 and 1991; *1977 in italics*

Above-average in both 1977 and 1991			Above-average in 1991 but not in 1977		
Greater London	*140.3*	146.5	Buckinghamshire	*89.5*	113.4
Grampian	*110.3*	134.8	Lothian	*99.7*	110.5
Berkshire	*115.8*	129.0	Cumbria	*96.3*	112.7
South Glamorgan	*107.5*	110.9	Wiltshire	*97.9*	110.0
Cambridgeshire	*102.4*	108.7	Surrey	*83.1*	107.3
Avon	*102.3*	104.2	Oxfordshire	*94.1*	104.9
Cheshire	*108.3*	103.6	Leicestershire	*98.3*	104.6
Hertfordshire	*107.6*	102.8	Hampshire	*99.1*	103.1
Bedfordshire	*100.5*	100.7	Northamptonshire	*95.1*	101.6
			Gloucestershire	98.9	100.9

(a) UK=100. Four regions had above-average GDP per head in 1977 but below-average in 1991: Cleveland *110.1* 89.3; Nottinghamshire *100.5* 98.0; the West Midlands *109.5* 96.7; and the Borders in Scotland *100.8* 81.5.

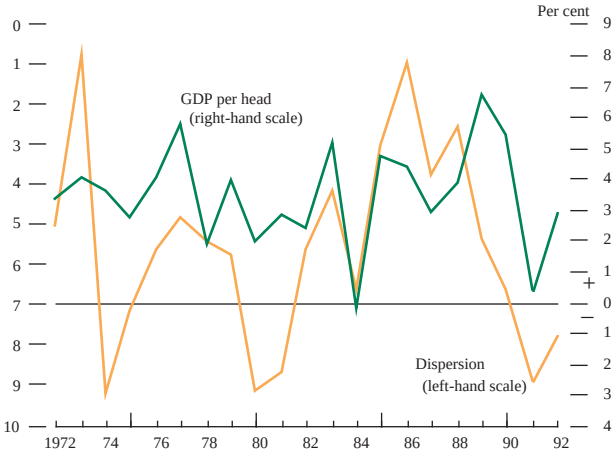
Chart 2
Growth in regional real GDP per head:(a) dispersion



(a) UK GDP per head in real terms given by the GDP deflator.

Chart 2 shows the range of regional growth rates in real GDP per head during the last 20 years. Whereas in the 1979–81 recession GDP per head fell in every region, as already noted in 1990–92 it did not fall in Northern Ireland or Scotland. As Chart 3 suggests, during a recovery growth tends to increase in all regions, but recessions have a more diverse impact: some regions seem relatively unaffected and carry on growing. These findings prompt a number of questions: are most of the adverse shocks that lead to a downturn specific to one or a few regions initially, and then transmitted to others; or is it simply that such shocks affect regions differently? Is the impact on the whole economy influenced by the extent of the regional dispersion? And are beneficial shocks more fully transmitted between regions

Chart 3
Growth of GDP per head(a) and dispersion of growth rates across regions



(a) The figure for GDP per head is average annual UK growth; that for dispersion is the difference in GDP growth between the fastest and the slowest-growing region (note inverted scale).

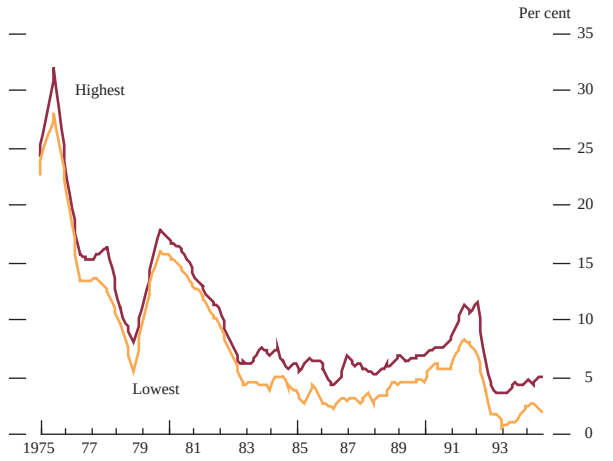
than adverse shocks; or are they more likely to have a national source? Is there an asymmetric element of this kind in the regional impact of shocks? These are all important areas for future research.

Regional prices

As the central bank, the Bank's primary concern in assessing regional performance is inflation. The Central Statistical Office publishes no data on regional price inflation. The Reward Group, however, produces regional cost-of-living series—the equivalent of consumer price indices—for its 11 major UK regions.(2)

Regional inflation rates differ considerably: over the 1975–94 period, the average difference between the highest and lowest regional annual inflation rates was 2.2 percentage points (see Chart 4). Over the period, the South East had the highest average inflation rate (9%) and Wales the lowest (8.8%); the difference between the two was comparatively

Chart 4
Range of regional inflation rates



(1) Note that this would be obviously true if regions were mutually independent; they are not, however, so the calculation is informative.
(2) Greater London and the Rest of the South East are grouped as one region. The data are based on surveys and the price series excludes mortgage interest payments.

small and does not indicate any major divergence in regional price levels.(1) Nor, for example, has the South East consistently had the highest rate of inflation—the ranking of the regions has varied significantly over the years. Regional price inflation is an area which warrants further attention—for example to investigate whether it exhibits a cyclical pattern.

Unemployment

As well as having the highest regional GDP per head, the South East (including Greater London) is the location of more than 35% of UK activity (see Chart 1). It has only 31% of total unemployment, however. Regional unemployment rates have converged over the last decade. As one consequence, the *relative* position of Greater London, in particular, has deteriorated: by 1993, Greater London had an unemployment rate of 11.6%, compared with 10.2% for the South East as a whole and a UK average of 10.3%. The North (11.9%), North West (10.7%), Northern Ireland (14.1%) and the West Midlands (10.9%) had unemployment rates above the average in 1993—and accounted for 31% of total unemployment. The convergence of unemployment rates has coincided with a widening of the dispersion of regional earnings (see the box on page 330). There has also been a convergence in the proportion of the unemployed classed as long-term (out of work for more than one year). Excluding Northern Ireland—where the proportion has risen over the last decade to 54% in July—the regional range has narrowed: from 13% in January 1983 (28% in the South East, 41% in the West Midlands) to 10% in July this year (32% in East Anglia, 42% in the West Midlands).

Industrial compositions

The regions have very different industrial structures (see Table C), and these have an important influence on the impact of shocks. A relatively high share of the West Midlands' GDP is accounted for by manufacturing, centred around the engineering industry; the North and North West also have relatively high manufacturing shares. The South East as a whole has a large services component: almost half of the output of Greater London is in business, financial and other services. But it also accounts for 25.6% of UK manufacturing output. The public sector contribution to GDP in Northern Ireland is relatively large—almost 15%, compared with a national average of 7.1% in 1992.

Table C
Sectoral distribution of activities in regional GDP(a)

	Manufacturing	Business financial and other services	Retailing and wholesaling	Construction	Other (b)
East Anglia	21.7	26.6	13.7	7.0	31.0
East Midlands	28.9	23.4	14.5	6.3	26.9
Greater London	13.3	47.2	13.9	4.7	20.9
North	29.7	22.5	12.4	6.9	28.5
North West	29.0	26.3	14.8	5.8	24.1
Northern Ireland	19.1	22.3	12.7	6.3	39.6
Rest of South East	18.5	35.1	14.5	6.7	25.2
Scotland	21.5	25.0	14.1	7.6	31.8
South West	18.9	28.8	15.3	6.4	30.6
West Midlands	30.2	26.1	14.0	6.1	23.6
Wales	28.0	21.8	13.8	6.8	29.6
Yorkshire and Humberside	27.4	23.8	15.2	6.5	27.1
United Kingdom	22.3	30.0	14.1	6.2	27.4

(a) Data refer to 1992.
(b) 'Other' includes transport and communication, education and health, public administration, agriculture, mining and quarrying, and an adjustment for financial services.

Relative regional performance—both cyclical and longer-term—is clearly strongly influenced by industrial structure. During the 1979–81 recession when manufacturing output was particularly hard hit, the West Midlands experienced the biggest fall in output (see Table D). This was largely because within manufacturing the automotive sector was particularly affected—the output of cars and commercial vehicles fell by over 20% between 1978–82—and a large part of the West Midlands' manufacturing industry was dependent on that sector. Similarly, output fell sharply in the North West. Manufacturing employment fell by over 17% in both regions during 1979–81. The South East, however, suffered more acutely during the latest recession, because of the contraction of the financial and business services sector.

Table D
Cumulative changes in output by regions in recessions

Percentages

	1974–75	1979–81	1990–92
East Anglia	-0.2	-1.2 (a)	-1.2
East Midlands	0.1 (a)	-3.4	-3.0
Greater London	-0.7	-7.3	-4.4 (b)
North	—	-2.7	0.3
North West	-1.4	-7.5 (b)	-3.6
Northern Ireland	-0.2	-4.9	4.1 (a)
Rest of South East	-2.2 (b)	-3.9	-4.5 (b)
Scotland	-0.6	-3.6	0.8 (a)
South West	-3.5 (b)	-1.7 (a)	-1.9
West Midlands	-0.8	-10.2 (b)	-2.6
Wales	4.6 (a)	-6.5	-1.4
Yorkshire and Humberside	-2.0	-5.9	-1.0
United Kingdom	-0.7	-2.8	-2.8

(a) One of the two regions least affected by the recession.
(b) One of the two regions most affected by the recession.

Longer-term national trends—such as the rising share of services to total output between 1970 and 1992 (from 42% of GDP to over 60%), and the decline of manufacturing over the same period (from 33% to 21%)—also affect regional growth rates. But there is some evidence to suggest that growth does not depend merely on a region's industrial composition. Slow-growing regions generally have a larger proportion of slow-growing industries, but it also appears that growth in particular industries tends to be slower in some regions than in others.(2)

Current conjuncture

During the 1990–92 recession, output fell in all regions except Scotland, Northern Ireland and the North; the fall was most severe in the south of the country (see Table D). The GDP data for 1992 showed real growth in all regions except the South East, the East and West Midlands, and the South West. More recently, national output has strengthened significantly. This section investigates how the various

(1) Although regional differences in price levels may exist.
(2) See Taylor, J, 'Regional economic disparities: causes and consequences' in Bowen, A and Mayhew, K (ed) *Reducing Regional Inequalities* (Kogan Page, 1991).

Table E
Synopsis of recent regional performance

Percentages in italics

	CBI survey of manufacturing output	BCC survey of manufacturing sales	BCC survey of services	CBI survey of investment	CBI survey of exports	Change in unemployment rate	Change in employment	Price expectations: CBI	Price expectations: D&B (1)	Reward CPI inflation	House price increases (2)
Compared at:	1994 Q3	1994 Q2	1994 Q2	1994 Q3	1994 Q3	1994 Q2 on 1993 Q1	1994 Q1	1994 Q3 on 1993	1994 Q3 on 1993	Aug. 1994 on Aug. 1993	1994 Q3
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8a)	(8b)	(9)	(10)
East Anglia	+	+	+	+	+	-	0	+	+	*4.2*	0.7
East Midlands	-	+	-	+	+	-	-	-	+	*3.3*	-0.4
North	-	+	+	+	-	-	+	+	+	*4.1*	-1.7
North West	-	+	0	-	-	-	-	-	+	*3.5*	0.0
Northern Ireland	+	+	0	-	-	-	+	-	+	*4.5*	8.2
Scotland	-	+	-	+	-	-	-	-	+	*2.6*	0.7
South East	+	+	+	+	-	-	-	+	+	*2.1*	0.7
South West	-	+	+	+	-	-	-	+	+	*3.3*	0.8
Wales	-	+	-	-	-	-	-	+	+	*3.7*	-1.7
West Midlands	+	+	-	+	+	-	-	+	+	*3.8*	0.6
Yorkshire and Humberside	+	+	+	+	+	-	-	-	. .	*5.1*	-1.6
United Kingdom	+	+	+	+	+	-	-	+	+	. .	0.0

. . not available.

Comparison is with previous quarter unless otherwise stated. Columns (1)–(5) refer to balances of survey expectations. The signs in columns (1)–(8) indicate the direction of change in the series relative to previous period: positive signs in columns (1)–(5) and (7)–(8) indicate a strengthening; a negative sign in column (6) indicates a fall in unemployment. The CBI survey covers 1,139 manufacturing firms; the BCC (British Chambers of Commerce) surveys cover 3,498 firms in manufacturing and 4,437 in services.

(1) Dun and Bradstreet survey.
(2) Source: Halifax Building Society.

regions have fared within this overall picture of strengthening recovery.

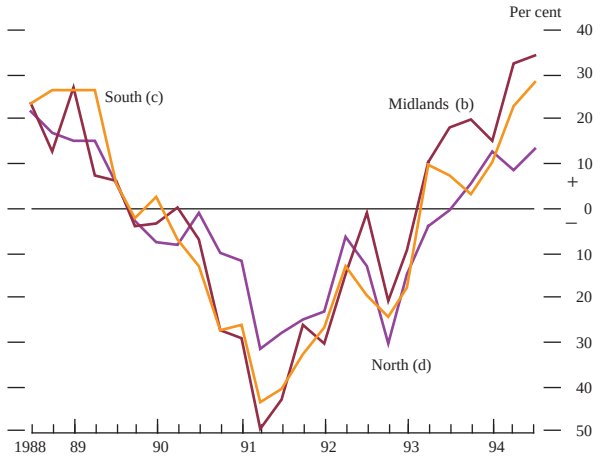
Activity

Output in the manufacturing sector fell by more than in services during the recession of the early 1980s. Manufacturing generally experiences greater cyclical variation than services, and the latest data show manufacturing growing more rapidly: it rose by 3½% in the year to the second quarter, compared with 2.9% for services.

Such a pattern of growth will influence the regional pattern of the recovery. Actual output data are available only up to 1992, but there are extensive survey data covering 1993 and 1994.(1) This evidence suggests that most regions' growth rates are rising, but that the southern and Midland regions—particularly the South East, East Anglia and the West Midlands—are recovering faster than elsewhere (Table E). In the CBI/BSL survey of regional trends in August, for the first time since July 1988 manufacturing firms in all 12 regions reported increases in output, orders and optimism compared with the preceding four months. For the South East, the survey showed that output had risen at its fastest rate since 1988.

Chart 5 illustrates the pattern of manufacturing output revealed by the surveys, aggregating the regions into larger blocks. The position in both the South and the Midlands has strengthened recently—the Midlands has the highest positive balance of respondents, but improvement has been somewhat faster in the South recently—but the North remains a little weaker. Manufacturing output is clearly strengthening; because of its composition, the South is doing comparatively well despite its low share in overall output. For example, output is growing faster in lighter

Chart 5
CBI reported output by region(a)



Note: all regions weighted by share of GDP.

(a) Balance of respondents reporting an increase in output.
(b) Includes East Midlands and West Midlands.
(c) Includes South East, South West and East Anglia.
(d) Includes North, North West and Yorkshire and Humberside.

(1) This article draws on data published before 5 October.

The Bank's Agents

The Bank of England monitors economic developments throughout the United Kingdom via its regional network of Agents.

The nine Agents are located close to the main business centres: in Birmingham, serving the West and East Midlands; in Bristol, for the South West and South Wales; in Glasgow, for Scotland; in Leeds, for Yorkshire and Humberside, and Lincolnshire; in Liverpool, for Merseyside, West Lancashire, North Wales and Northern Ireland; in London, for East Anglia and the South East; in Manchester, for Greater Manchester, Central and East Lancashire, and North Derbyshire; in Newcastle, for the North East and Cumbria; and in Winchester, for Central Southern England.

The Bank also maintains contacts with larger companies whose headquarters are in London from its Head Office in Threadneedle Street.

The Bank's Agents liaise with companies and other organisations across their regions. Their contacts cover all sectors of the economy, including both large and small businesses, trade organisations, enterprise agencies and universities; between them, they visit around 4,000 contacts each year.

The Agents have two main roles:

- intelligence gathering, designed to complement the wider analysis of the economy undertaken by the Bank. Direct contacts with individual companies provide additional insight into developments and trends in the real economy, which help the interpretation of statistical evidence and broaden the Bank's understanding. As well as contributing to the Bank's regular reporting round, the information-gathering role can include undertaking survey work on particular issues, such as that on changes in firms' target rates of return (reported in the August *Bulletin*[1]).
- explaining and discussing the monetary policy stance with industrial and commercial contacts, and seeking their feedback and views on its impact.

The Agents regularly report their findings and assessment of the regional economic situation, highlighting both general trends and specific developments. This work is primarily geared towards consideration of the national economic picture, but there is also a significant regional dimension. In addition, the Agents organise a series of regional industrial visits during the year for the Bank's Directors and economists.

(1) See the article on investment appraisal criteria and the impact of low inflation.

electronic engineering—relatively strongly represented in the South—than in heavier mechanical engineering.

The reports from the Bank's Agents confirm this picture of recovery across all regions and some emphasise the improvement in the South East and Midlands. And recent survey evidence from the British Chambers of Commerce indicates that over the last year activity in the Thames Valley has increased faster than in the rest of the country—both in services and the manufacturing sector. The services sector is reported to be particularly strong in the West Midlands; that region's growth in manufacturing sales is also above the national average. The strength of the service sector there may reflect its close links with manufacturing: there has traditionally been significant sectoral interdependence among the region's manufacturing industries (car, metal goods, mechanical engineering) and with its business service sector.

Housing market

Regional house prices provide another indicator of activity. In 1993, house prices fell across England and Wales: in northern regions by 2.2%, in southern regions by 3.5%, in the Midlands by 3.4% and in Wales by 1.3%. By contrast, in Scotland and Northern Ireland prices rose. So far this year, there has been only a modest increase in house prices. For the United Kingdom as a whole, prices rose by 1.0% in the first three quarters of 1994. The increase in southern regions was stronger than the average for the South East.

House price increases in the South may be particularly important in the recovery, since the area has a high incidence of negative equity. Bank estimates suggest that almost 50% of the total value of negative equity is in the South East; in the second quarter of 1994, more than 14% of households in the area had negative equity—of an average £6,900. The comparable national figures were 7.4% of households and average negative equity of £5,500. It is clear therefore that the regional composition of house price increases will have a major influence on the picture on negative equity: price rises in the South East will have a proportionately larger impact in reducing the total.

Consumer confidence

The July Gallup survey of consumer confidence indicated no change for the United Kingdom as a whole, compared with three months earlier. The survey pointed, however, to an increase in overall spending, with growth between the first and second quarters highest in the South East (up 0.6%), the South West (1.0%), Yorkshire and Humberside (0.6%) and the West Midlands (0.7%) (see Table F). Reports from the Bank's Agents have suggested for over a year that retail sales are growing faster in the South; retailing activity in Scotland, by contrast, appears flat. Although consumer

Adjustment in the labour market

The flexibility of labour markets and of real earnings have an important bearing on how an economy responds to shocks. If labour mobility is low and wages adjust slowly to regional inequalities in unemployment, those inequalities are more likely to persist and a shock to a particular region—or one having different effects on different regions—will have more lasting effects on both employment and output. Historically, the processes tending to equilibriate regional unemployment in the United Kingdom have been seen as quite weak, suggesting that labour markets have been relatively inflexible. There has recently, however, been an unprecedented convergence in regional unemployment rates.

Labour mobility

The statistical evidence suggests that the mobility of labour between regions in the United Kingdom is only around a third that in the United States. The OECD reports that in 1986 1.1% of the UK population changed its county of residence; the figure in the United States for movement between states was 2.8% (though there are some obvious problems of comparison, such as how to reflect the distances involved).

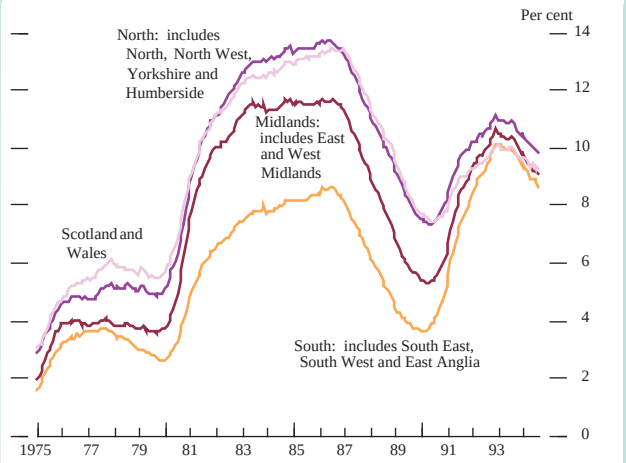
More detailed work shows that lack of mobility is a particular characteristic of the manual work sector in the United Kingdom: though it is largely manual workers who experience persistently high unemployment, the bulk of regional migration is by non-manual workers. The research suggests that manual workers in the United Kingdom are 5½ times less likely to migrate between regions than those in the United States; for non-manual workers, the US figure is only about 50% higher.(1) The lack of mobility seems to be associated with the form of housing tenure—council tenants have migration rates a quarter those of owner-occupiers.(2) There is a particularly high share of public housing tenure in the North—at 27.8%, compared with only 13.5% in the Rest of the South East.

If movement between regions does not play the principal role in the economy's response to regional differences in wages and unemployment rates, then the adjustment in the labour market must be by other means. This might be either through a reduction in real wages to preserve a given level of employment or, if real wages are rigid, through a reduction in employment.

Unemployment

Until the last few years, there was a persistent regional pattern in UK unemployment. The ranking of regions in Great Britain by unemployment rates between 1970 and 1988 was relatively stable: characteristically, the North had the highest rate and the South the lowest. Over the period, the West Midlands was the region whose relative position declined most. The chart illustrates the changes in regional unemployment over the period—which largely followed the cyclical pattern, though there was a greater dispersion in unemployment during the recession in the early 1980s.

Regional unemployment rates in Great Britain(a)



(a) Weighted by workforce in each region.

Since 1988, however, there has been a marked convergence of unemployment rates. This convergence has been associated with an improvement in Scotland's relative position and with a worsening of the South East's. Indeed since 1992, the South East has had an unemployment rate higher than the UK average. To a large extent, this development has reflected the pattern of GDP growth and the nature of the latest recession—which was less concentrated in manufacturing than the previous one—and has not necessarily indicated increased mobility or labour market flexibility.

Earnings

At the same time as the dispersion of unemployment rates has narrowed, earnings dispersion has increased. This has been partly the result of changes to the pattern of earnings increases in different sectors. In the 1980s, relative earnings in financial services rose and this was reflected, for example, in the relative earnings of the South East. Generally between 1980 and 1993, the ratio of the highest regional average earnings to the lowest rose from 1.2 to 1.5.

Relating the lower dispersion of unemployment to the rise in earnings dispersion is not straightforward. First, regional labour immobility makes it unlikely that unemployment rates are converging because of migration flows in response to larger regional wage differentials. And second, while the greater dispersion of earnings may be associated both with a closer matching of pay to productivity and with structural changes in wage-setting—and so be evidence of greater flexibility—it may not specifically reflect stronger *regional* influences. It may be that the fall in unemployment dispersion reflects the industrial and regional impact of the last recession, whereas the rise in wage dispersion results more from structural changes in wage-setting.

(1) Source: Hughes, G A, and McCormick, B, (1987), 'Housing markets; unemployment and labour market flexibility in the UK', *European Economic Review*.
(2) Source: McCormick, B, 'Migration and regional policy'; Bowen, A, and Mayhew, K, (1991), *Reducing regional inequalities*.

Table F
Consumer confidence and spending[a]

1994	'Sentiment' index [b] April	'Sentiment' index [b] July	Quarterly spending growth [c] April	Quarterly spending growth [c] July
East Anglia	12	9	1.1	0.5
East Midlands	12	13	0.8	0.5
North	4	4	0.5	-0.1
North West	10	10	0.9	0.4
Scotland	4	5	0.3	—
South East	19	19	0.8	0.6
South West	21	18	1.4	1.0
Wales	6	7	0.5	0.2
West Midlands	9	3	0.9	0.7
Yorkshire and Humberside	15	7	0.9	0.6
Great Britain	13.0	13.0	0.6	0.5

(a) Based on Gallup/BSL quarterly survey; covers 2,000 respondents.
(b) Index based on aggregation of a number of questions, including on consumers' optimism (past and future), inflation expectations, financial situation, major purchases and unemployment.
(c) Based on historical relationship between the survey results in the past and the change in consumer expenditure.

confidence is still fragile, business confidence is reported to be picking up a little in the northern regions as well.

Regional labour markets

As Table G shows, in the year to August unemployment fell in all regions. The largest percentage falls were in the West Midlands, North West, South East and South West. The dispersion in unemployment rates was low by historical standards during the recent recession (see the box on page 330); recently, it has diminished further. Unemployment rates in regions other than East Anglia, the North and Northern Ireland were between 8.9% and 10.8% in the 1990–92 period. By August this year, the range had narrowed to between 8.2% and 9.5%.(1)

Table G
Regional unemployment rates, August 1994[a]

Percentages in italics

	Unemployment	Change on one month earlier	Change on year earlier
East Anglia	*7.1*	-0.1	-1.1
East Midlands	*8.7*	-0.1	-0.9
Great Britain	*9.1*	-0.1	-1.2
North	*11.2*	-0.1	-0.9
North West	*9.5*	-0.1	-1.3
Northern Ireland	*13.0*	-0.1	-1.2
Scotland	*9.2*	-0.1	-0.6
South East	*8.9*	-0.2	-1.4
South West	*8.2*	-0.2	-1.3
Wales	*9.5*	-0.1	-1.0
West Midlands	*9.4*	-0.1	-1.6
Yorkshire and Humberside	*9.4*	-0.1	-0.9
United Kingdom	*9.2*	-0.1	-1.2

(a) The rates given are seasonally adjusted.

In the West Midlands, unemployment fell by 1.6 percentage points in the year to the end of August reflecting higher activity, though unemployment remains relatively high there (Table G). For the first time on record, Scotland's unemployment rate was below the UK average between January 1992 and July of this year—when it returned to the average.

While unemployment rates have converged, regional differences in the growth of nominal earnings have increased (see Table H). In 1993, earnings growth was lowest in East Anglia, at 1.6%—compared with over 5% in the South East, South West and West Midlands.

Table H
Nominal earnings growth by region[a]

	1981	1982	1991	1992	1993
East Anglia	16.5	8.0	8.7	8.5	1.6
East Midlands	14.8	8.8	9.3	7.1	3.0
North	13.9	7.6	9.9	9.0	4.0
North West	17.6	8.3	11.6	7.8	4.6
Scotland	16.8	9.6	8.4	8.6	4.7
South East	15.0	11.2	9.1	7.0	5.1
South West	15.5	8.7	10.0	7.3	5.1
Wales	16.0	7.1	11.1	7.4	3.7
West Midlands	14.3	9.1	10.8	6.4	5.1
Yorkshire and Humberside	15.1	9.5	9.4	7.2	4.4
Great Britain	15.4	9.6	9.8	7.4	4.2

Source: Department of Employment.

(a) Hourly earnings excluding overtime; percentage change on a year earlier.

These developments in regional labour markets are generally consistent with the picture on growth. The largest falls in unemployment have been in the South East and West Midlands—where activity seems to have picked up most—and this has been reflected in earnings growth. In the North, activity has also been strengthening, but the recovery began a little later. Employment there has increased marginally,(2) but unemployment remains above the national average, reflecting the long-term shake-out in traditional industries. Northern Ireland continues to have the highest unemployment, although the rate is falling; activity has changed little there over the last year.

Regional prices

According to the Reward Group's regional consumer price data, those areas with the strongest recent growth in activity have not—in all cases—had the highest inflation rates.(3) In the year to August, inflation was highest in Northern Ireland and Yorkshire and Humberside, and lowest in the South East and Scotland—see Table E. The range of regional inflation rates seen has not been uncommon over the last decade and there is considerable variation from survey to survey. The question of what determines the dispersion of regional inflation rates is an area for future research.

The Bank's Agents suggest that price pressures are weaker in the retail sector than in production. There are clear pressures on manufacturers—a view supported by recent survey evidence. Table J shows the inflation expectations given by the CBI Regional Trends survey and the Dun and Bradstreet survey of business expectations; both are of manufacturing firms. It is notable that the trends in the CBI survey point to subdued price expectations in the North West and Northern Ireland—regions where consumer price inflation appears strong—as well as in Yorkshire and Humberside and the East Midlands. Price expectations have increased significantly in the South East and East Anglia, though from a low starting-point. The Dun and Bradstreet

(1) There may of course be considerable disparities in unemployment within regions.
(2) For the United Kingdom as a whole, the Department of Employment data—with which this is consistent—have recorded falls in employment, while the Labour Force Survey data have recorded increases.
(3) The Reward Group's national consumer price index displays a close relationship with the RPI rate of inflation (excluding mortgage interest payments).

Table J
Regional inflation expectations[a]

	CBI [b]		Dun and Bradstreet [c]	
	1993	1994 Q3	1993	1994 Q3
East Anglia	9.3	21.0	-10.5	30.0
East Midlands	10.8	8.0	-2.3	28.0
North	-12.5	5.0	-6.5	21.0
North West	2.8	1.0	—	24.0
Northern Ireland	12.0	8.0	. .	. .
Scotland	6.3	3.0	-10.5	19.0
South East	6.3	17.0	-3.8	24.0
South West	3.8	5.0	-8.5	27.0
Wales	3.8	19.0	—	—
West Midlands	9.5	10.0	-6.5	27.0
Yorkshire and Humberside	11.8	9.0	. .	. .
United Kingdom	5.3	12.0	-20.0	25.0

. . not available.

(a) Based on CBI and Dun and Bradstreet surveys of percentage of respondents reporting an increase in prices minus percentage reporting a decrease.
(b) Refers to following four months.
(c) Refers to following three months.

survey points to an upward trend in price expectations in all regions,(1) particularly in East Anglia, the West Midlands and the South West.

Conclusions

The UK regions differ significantly in their cyclical patterns: activity is more cyclical in some than in others. There are, in addition, sometimes timing differences between regional cycles, though these tend to be marginal and there is little evidence of an enduring ‘leading region’. Negative equity in the housing market has had a sharper impact in some regions than in others. But the last recession and the current recovery have led to convergence in regional rates of unemployment, and regional growth rates have been quite similar over the last year or so.

A number of questions remain open for future work. What determines regional price behaviour? To what extent is a region’s performance dependent on its industrial structure and to what extent is there a pure ‘regional’ effect? How good are the available survey series as leading indicators of the actual path of activity?

In the current general economic recovery, the South is particularly buoyant, and the Midlands relatively strong. The strength of the South—and of the South East in particular—appears to reflect the presence of some of the relatively fast-growing manufacturing industries, such as electrical engineering, and the recovery in financial services. Unemployment has fallen in all regions. The regional inflation picture is quite difficult to interpret, but there are warning-signs in the form of rising inflationary expectations across the country.

The examination of regional developments is useful in forming a judgment of the national monetary and economic position. A good example is provided at present by the concentration of negative equity in the South East; changes in house prices in this region will have a substantial impact on the national picture. At present, all regions are growing and the recovery seems well-balanced.

(1) Too much emphasis should not be placed on the magnitude of changes in the balances in this survey, since it is relatively volatile. Its trend, however, is more significant.

Regulating investment business in the Single Market

By Professor Richard Dale.[1]

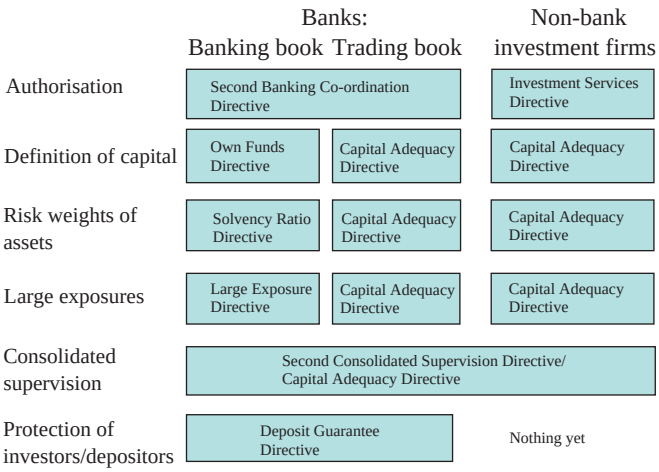
In this article, Richard Dale examines the regulatory framework for investment business put in place by the Capital Adequacy Directive (CAD) and other Directives, and focuses on the attempt to establish a 'level playing-field' for banks and other financial institutions conducting this business in the Single Market. He argues both that there is a general case for having differences in the regulatory approach towards banks and non-banks, and that—in attempting to establish a common treatment to apply to both types of institution—the CAD in fact introduces competitive distortions that favour securities financing at the expense of traditional bank lending.

Professor Dale was a Houblon-Norman fellow[2] at the Bank between February and August this year. The views expressed in this article are his, rather than those of the Bank.

As part of its single market programme, the European Union has adopted two sets of Directives covering banking and securities business. On the banking side, these consist of the Second Banking Co-ordination Directive (2BCD), which allows banks to engage in a wide range of financial activities throughout the European Union, and a number of other Directives aimed at providing a common regulatory framework. The Investment Services Directive (ISD) aims to give non-bank investment firms the same opportunities for conducting business in the European Union as banks already enjoy under the 2BCD, while the Capital Adequacy Directive (CAD) fulfils a similar function to the bank regulatory directives, by providing a common framework for the regulation of investment firms as well as the securities activities of banks (see Chart 1).

The purpose of this article[3] is to examine the new regulatory framework for European securities markets, focusing in particular on the capital adequacy requirements and the attempts of policy-makers to establish a 'level playing-field' between banks and non-bank investment firms. The issues to be addressed include: the appropriateness or otherwise of a regulatory objective of competitive equality; the extent to which the Directives are successful in achieving this objective; and the possibility that the mechanisms designed to achieve competitive equality may give rise to other market distortions. The first section deals with some general issues relating to the regulation of banks and investment firms, the second describes the CAD's 'trading book' concept, the third assesses the capital adequacy rules of the CAD and the final section summarises the key policy issues arising out of the previous discussion.

Chart 1
The family of EU Directives



The regulation of banks and securities firms

Banks and securities firms have contrasting operational characteristics which underline the need for different regulatory regimes.[4] Traditional banking involves the acquisition of long-term non-marketable loans which are typically held on the bank's balance sheet until maturity. By contrast, investment firms experience rapid asset turnover as

(1) Richard Dale is Professor of International Banking and Financial Institutions at Southampton University.
(2) The Houblon-Norman Fund, established by the Bank in 1944, finances academic research into subjects relevant to central banking. More details of the Fund were given in an article in the August 1993 *Quarterly Bulletin*.
The author acknowledges useful comments on his research work during his fellowship from a number of individuals in the Bank, including in particular Andrew Bailey of the Banking and Market Services Division.
(3) An expanded version of this article is to be published in the *Journal of International Banking Law*.
(4) See Haberman, G, 'Capital requirements of commercial and investment banks: contrasts in regulation', *Federal Reserve Bank of New York Quarterly Review*, autumn 1987.

a result of their market-making, underwriting and trading activities. The main business risk for banks is credit risk (the risk of default by borrowers), whereas for investment firms it is market risk (the risk of fluctuations in the prices of securities held). Furthermore, securities firms are evaluated on a liquidation basis and their accounting is mark-to-market, while banks are evaluated as going concerns and their accounting is often based on original cost. Finally, banks rely largely on potentially volatile, unsecured short-term deposits for their non-capital funding, whereas securities firms have a much higher proportion of secured financing.

These differences in the business characteristics of banks and securities firms have important policy consequences when considering the *need* for regulation, the *objectives* of regulation and the appropriate *techniques* of regulation.

Need for regulation

So far as the need for regulation is concerned, it is widely accepted among regulators, practitioners and academics that banks are uniquely vulnerable to contagious collapse. This inherent vulnerability arises out of the liquid nature of banks' liabilities (deposits) and the illiquid nature of their assets (commercial loans), as well as the fact that banks' assets are generally worth significantly less in liquidation than on a going-concern basis.(1) In order to prevent costly bank runs, national authorities provide protection to depositors through either formal deposit insurance schemes or less formal support operations. But because the prospect of such protection tends to undermine market discipline by making depositors less careful where they place their money (the so-called moral hazard problem), regulators seek to constrain risk-taking by banks in order to limit the claims on the deposit insurance fund and/or the taxpayer.

For investment firms, the case for official regulation is much less clear. The traditional approach has been to focus primarily on the risk to investors. However, investment firms can be (and often are) required to segregate investors' cash and securities in special accounts, so that in the event of a firm's insolvency its clients' assets are protected from the claims of general creditors. If that is done, it is difficult to see why additional protective measures are required in the form of capital adequacy requirements. The investor protection argument for regulatory controls becomes even less persuasive if investors also enjoy the benefits of an investor compensation scheme.

There is a second rationale for regulating investment firms, based on the need to reassure counterparties, including banks and other creditors, who might otherwise be reluctant to deal with such firms. Settlement procedures have an important role here because if settlement is on a delivery versus payment (DVP) basis, counterparty risk and associated regulatory concerns can be much reduced. Beyond this, it is worth pointing out that investment firms are well placed—because of their liquid assets—to arrange secured financing which does not give rise to full counterparty risk exposure, and that in the absence of capital adequacy requirements this is no doubt how most of their borrowing would be arranged. Finally, concerns about counterparty risk do not provide a strong case for *official* regulation. If investment firms perceive it to be in their interests to reassure counterparties about their financial strength, they will presumably find means of doing so. Indeed, this has been the impetus behind the self-regulation of its member firms by the New York Stock Exchange since well before the US Securities and Exchange Commission was established in 1934. Credit rating agencies may also fulfil a self-regulatory function, as they do in the case of unregulated US holding companies that issue debt to fund their securities subsidiaries.

The third and most important argument for the regulation of investment firms is founded on the view that the default of unregulated investment firms could cause systemic problems. Official concerns over the potential for systemic disturbances were, for instance, reflected in a recent OECD study of risks in securities markets,(2) which noted that 'the extreme systemic threat arising from a collapse of securities prices is that default by one or more large securities dealers will lead to further defaults and that the failures will extend into the core of the banking system and cause a breakdown in the flow of payments in settlement of financial transactions throughout the world'.

This proposition, suggesting as it does that the default of an investment firm may involve social costs equivalent to the collapse of a bank, deserves careful scrutiny. The assets of a non-bank investment firm consist largely of marketable securities and there will therefore be little difference between their value on a going-concern basis and in liquidation, in marked contrast to banking assets—which are worth considerably less in liquidation. This means that a troubled investment firm will generally be able to wind down its business in an orderly manner, meeting its obligations by prompt asset disposals at close to book value. On the liabilities side too, investment firms are generally less vulnerable than banks, because much of their funding is secured and in any case cannot be immediately withdrawn, as can bank sight deposits. To the extent that funding is curtailed, an investment firm will generally be able to contract its way out of trouble. In short, investment firms are much less vulnerable to contagious liquidity and solvency crises than are banks.

The real problem is not the vulnerability of investment firms, but the vulnerability of banks within a financial market regime characterised by increasing integration of banking and securities business. Banks may be exposed to securities market risk because they have lent to investment firms, because they engage in securities business off their own balance sheets ('universal banking'), or because they have securities subsidiaries or affiliates. The risks associated with bank lending to non-related investment firms can in principle be dealt with through regulatory limits on large exposures:

(1) See Diamond, D, and Dybvig, P, 'Bank runs, deposit insurance and liquidity', *Journal of Political Economy*, June 1983, pages 401–19, and 'Banking theory, deposit insurance, and bank regulation', *Journal of Business*, January 1986, pages 55–68.
(2) *Systemic Risks in Securities Markets*, OECD, 1991, page 15.

once these are in place there is no reason why the failure of an investment firm should pose a greater solvency threat to banks than would the failure of any other firm. Of course, investment firms may experience industry-wide difficulties in times of extreme market volatility, but that is no different from industry-wide problems experienced by, for instance, the property sector.

Where, however, banks themselves undertake securities business, or belong to financial groups that include an investment firm, the solvency of the bank is inextricably linked to its securities operations. This is obviously the case if the bank itself engages in securities activities, but it is also true if it does so at one remove through a related investment firm, since it is inconceivable that the related entity could default without irreparably damaging the credit standing of the bank. In effect, therefore, the bank's capital stands behind its securities unit.

The evolution of mixed banking and securities businesses may therefore create a situation in which the heavy social costs associated with bank failures are carried over into the securities markets. Arguably, it is the mixing of banking and securities business within banking groups, rather than the special characteristics of investment firms, that provides a rationale for the regulation of the latter. This observation is particularly important in the European context, since it is the diversified banking model that has been adopted by the relevant EU financial market Directives.

Objectives of regulation and regulatory techniques

While the case for regulation is clearly stronger for banks than for investment firms, it is also true that the regulation of the two kinds of financial institution has quite different *objectives*. One of the main purposes of bank regulation is to prevent failures and to sustain banks as going concerns—reflecting the fact that if a bank is forced to liquidate its (non-marketable) assets, it may do so (if at all) only at a heavy discount which could leave depositors, or the deposit insurance scheme, exposed to heavy losses. By contrast, an investment firm with impaired capital is expected to shrink its balance sheet immediately by selling marketable assets, and in the extreme may be required to wind down its business completely. In other words, contraction and ultimately closure may be the first priority for a securities regulator faced with a troubled investment firm.

Reflecting this important difference in regulatory objectives, banks and investment firms are also subject to different regulatory *techniques*. Both must conform to specified capital adequacy requirements, but the emphasis for banks is on solvency, whereas for investment firms it is on liquidity or 'liquid capital'. In the case of banks, capital is expected to be permanent, in order to support the institution as a going concern, whereas for securities firms it may be temporary, reflecting the latter's ability to scale down its activities as well as its fluctuating need for capital resources.

Furthermore, securities regulators—unlike bank regulators—do not regard consolidated supervision as indispensable, partly because investment firms are considered to be less vulnerable than banks to cross-infection from a troubled parent or affiliate.(1) Finally, because banks are inherently illiquid, they typically have access to a lender of last resort. Investment firms, on the other hand, do not have the need for a lender of last resort because they can generally contract their way out of funding troubles.

In summary, the regulatory needs of banks and non-bank investment firms are very different. Where, however, banking and investment business are mixed within financial conglomerates, regulators are faced with the difficult task of devising a regulatory framework that is compatible with these divergent needs.

Globalisation

The globalisation of banking and securities markets adds a further dimension to the regulatory problem. Globalisation in this context means three things: the cross-border delivery of financial services to foreign residents; the penetration of foreign financial markets by branches and subsidiaries of multinational institutions; and transactions between banks and investment firms from different countries that give rise to inter-jurisdictional counterparty risk.

Banking and securities regulators are presented with a number of formidable difficulties associated with globalisation. Systemic risk may be increased by the risk of contagious financial disorders originating in poorly regulated financial centres. Depositors, investors or counterparties may be exposed to foreign jurisdiction risks which they are not in a position to monitor or control. And the co-existence of uneven national regulations and global markets may severely distort competition between financial institutions.

There are several possible approaches to dealing with these 'geographic interface' problems. One would be to allow—and perhaps even encourage—regulatory competition between rival financial centres, in the hope that regulatory standards would eventually converge around some socially optimal level.

The major weaknesses of such an approach are that it does not deal with the danger of cross-border financial contagion, that it may confuse depositors, counterparties or investors who have to deal with multifarious regulatory regimes, and that it leaves open the potential for serious competitive distortions associated with uneven regulation. Accordingly within the Single Market, regulatory competition has been rejected in favour of a regime that imposes minimum standards of prudential regulation on all banks and investment firms.

In formulating these minimum standards, however, European regulators have had to deal not only with the geographic interface problem—which presents itself in a particularly

(1) Thus while US bank holding companies are subject to consolidated supervision by the Federal Reserve Board, the Securities and Exchange Commission's regulatory mandate covers only registered broker-dealers and does not extend to holding companies or unregistered affiliates.

Regulatory regimes for banking and securities business

Four main structures of regulatory regime were available to those negotiating the CAD to deal with banking and securities business. At one extreme, there is the separation model, exemplified by the US arrangements under the Glass-Steagall Act. At the other, there is the traditional universal banking model. This box briefly outlines the four models:

- **Glass-Steagall model**

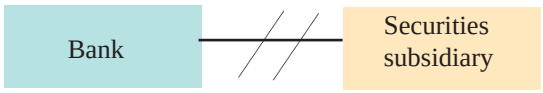
Under the separation model, banks are not permitted to undertake securities business or to own securities firms. The banking and securities industries are separately regulated in accordance with industry-specific capital adequacy rules (*functional regulation*).

- **Universal bank model**

Mixed banking and securities firm

Under the universal bank model, which has been the traditional banking regime in much of continental Europe, securities and banking business are freely combined within the banking entity. In this case, the risks involved in the two activities are pooled, and there is a single regulatory authority which applies a common capital adequacy regime to the combined business (*institutional regulation*).

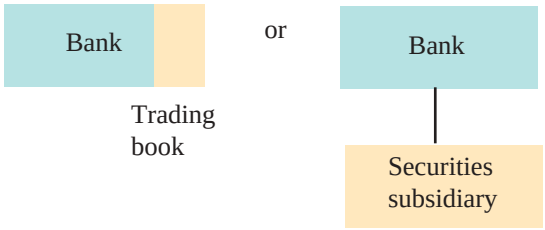
- **Firewall model**



Between the above extremes, there is a compromise option which seeks to segregate the risks associated with banking and securities business undertaken by financial conglomerates. The mechanism to achieve this is a requirement that the two businesses be conducted through different legal entities separated by 'firewalls' (restrictions on intra-group transactions), whose purpose is to prevent risk being transmitted from the securities unit to the banking unit.

The firewall approach has been applied to the so-called 'Section 20' subsidiaries of US banks—that is, subsidiaries that have limited powers to undertake securities business within the terms of the Glass-Steagall Act.

- **EU trading-book**



The trading-book approach permits banks to engage freely in securities activities either directly or through securities subsidiaries. In either case, securities activities, as defined by the trading book, are subject to a capital adequacy regime separate from that for the banking business.

acute form where all barriers to cross-border financial activity are removed—but also with two others: the 'functional interface' problem that exists where banks are free to undertake securities business either directly or through securities subsidiaries, and the 'institutional interface' problem that arises where mixed banking and securities businesses co-exist with specialist non-bank investment firms. The new European regulatory framework has therefore had to accommodate the different regulatory regimes and financial structures of individual Member States, as well as the divergent regulatory cultures of the banking and securities industries.

The trading-book concept

The trading-book concept was devised by European policy-makers to resolve the various regulatory difficulties noted above. In order to appreciate the significance of this central mechanism within the new regulatory framework, some reference to the negotiating background is necessary.

A key objective of those negotiating the CAD was to ensure competitive equality between banks and non-bank investment firms in respect of their securities activities. The main problem was that those countries with a long tradition of universal banking favoured a highly conservative capital adequacy regime designed to safeguard the solvency of banks, while other countries—including the United Kingdom—were concerned that if bank-type regulation were imposed on non-bank investment firms, the latter would be placed at a competitive disadvantage *vis-à-vis* their non-European rivals.

The options that were available to the CAD negotiators can be considered in the context of the main regulatory regimes used for banking and securities business (see the box above).

Originally it was intended that the CAD would apply to a particular class of financial institutions—namely, non-bank investment firms. But in order to meet the conflicting concerns of negotiating parties, it was agreed that the capital adequacy rules should be applied on a functional basis to cover certain types of risk taken on by both banks and investment firms. For this purpose, each institution would need to segregate its securities 'trading book' from the rest of its business, and the trading book alone would then be subject to the more permissive capital adequacy rules appropriate to securities trading. In this way, a level playing-field would be established between mixed banking and securities firms and non-bank investment firms.

Article 2(6) of the CAD defines the trading book to include the following positions, which must be marked to market daily: (a) proprietary positions in financial instruments held for the short term or for resale, whether this be for trading, arbitrage, market-making or hedging purposes;
(b) exposures resulting from unsettled transactions, free deliveries and over-the-counter derivatives; and
(c) exposures resulting from repurchase agreements and securities borrowing, subject to a number of conditions designed to draw a clear distinction between these trading activities and conventional secured lending by banks—which does not fall within the trading book.

Annex V of the CAD states that the capital of both banks and investment firms shall be defined in accordance with the Own Funds Directive (OFD)—that is, the banking definition of capital. However, national authorities are given the option of permitting banks and investment firms to use an alternative definition of capital in respect of their trading book. The alternative differs from the banking definition in the following key respects:

- A new class of short-term subordinated debt is eligible for inclusion in regulatory capital. This must have an initial maturity of at least two years (compared with a minimum of five years under the OFD). As an additional safeguard, such debt must incorporate a 'lock-in' clause, under which neither principal nor interest can be repaid if this would result in the institution's regulatory capital falling below the required minimum.

- The ceiling on the amount of subordinated debt that can be included in regulatory capital is more generous than under the banking rules of the OFD. Whereas the OFD sets this ceiling at 50% of Tier 1 (essentially equity) capital and 25% of total regulatory capital, the CAD establishes a ceiling of 60% of total regulatory capital backing the trading book. However, for both banks and investment firms, the CAD ceiling on subordinated debt may be raised to over 70% (250% of Tier 1 capital) if the authorities judge this to be adequate prudentially and if—in the case of investment firms—specified 'illiquid assets' are deducted from capital.

Apart from allowing a more liberal use of subordinated debt in regulatory capital, the trading-book regime also includes less stringent capital adequacy requirements than those applicable to banks, as described below.

As a way of securing an agreed capital adequacy framework that meets the demand for a level playing-field between banks and investment firms, the trading-book concept is ingenious. On closer examination, however, this shift towards functional regulation is open to serious objection.

Most fundamentally, the idea of segregating one part of a bank's business—its securities trading operations—and applying separate and distinct definitions of capital and capital adequacy to the different parts, appears to make little prudential sense. As explained above, the primary objective of bank regulation is to protect a bank's solvency so as to sustain it as a going concern, but the primary purpose of securities regulators is to ensure that an investment firm can wind down its operations in an orderly manner if need be—hence the emphasis on liquid assets. The CAD's alternative definition of capital allows more liberal use of subordinated debt to support a bank's trading book, but to that extent the burden of absorbing losses on the trading book may have to be born by the equity capital that supports the rest of the bank's business.

In this context, the mandatory 'lock-in' provision applicable to short-term subordinated debt does not provide the protection that is evidently intended: a bank which is forced to invoke this clause in respect of its trading book (in effect defaulting) would immediately become suspect in the eyes of the marketplace, thereby risking a deposit run. Accordingly, a bank would feel compelled to make good any capital shortfall arising on its trading book so as to prevent the triggering of the lock-in. The presence of 'outside' short-term subordinated debt to back the trading book therefore increases the solvency risk for the bank, because such debt cannot in practice be used to absorb losses on the trading book. On the other hand, a parent bank that provides 'inside' subordinated debt to its securities subsidiary would have to hold bank capital against this exposure. In short, there is little purpose in segregating a bank's securities assets for capital adequacy purposes if the risks in this part of the business cannot also be segregated from the bank.

A second objection to the trading-book concept is that while it segregates *assets* used for trading purposes, as well as the regulatory capital used to back such assets, it does not segregate non-capital *liabilities*. This means that a mixed banking and securities business is free to use its deposit base to fund its securities trading book. The difficulty here is that because bank deposits (including wholesale deposits) generally benefit from deposit protection and/or other official safety net arrangements, deposit rates do not incorporate a risk premium that adequately reflects the risks a bank incurs. In a sense, banks' risky activities are subsidised. This separation of risk-bearing from risk-taking is one reason why banks are subject to such extensive regulation.

If banks are permitted to use protected deposits to fund their trading book, then the trading operations are also being 'subsidised'. That in turn provides incentives for excessive risk-taking within the trading book—risks that will eventually have to be borne, if not by the bank itself, then by the deposit insurance fund or the taxpayer. The moral hazard problem and the associated need for comprehensive regulation is then extended from the bank to its securities arm. It may be added that, from a quite different perspective, non-bank investment firms that do not have access to deposit funding are placed at a competitive disadvantage *vis-à-vis* banks.

These difficulties could in principle be avoided, or at least alleviated, by funding rules that prevented or limited the use of deposits to support a bank's trading book and instead required funding in the form of outside 'risk money', the cost of which would depend on the perceived risk characteristics of the institution concerned. In this way, greater market discipline would be imposed on banks' securities operations and the burden on regulators thereby reduced. However, for such a funding rule to be effective, it would be necessary to require banks' securities activities to be conducted through separately incorporated entities.

Finally, the trading-book concept can be criticised on the grounds that it is open to regulatory arbitrage in the form of switches between the banking and trading books. The authors of the CAD were clearly alert to this possibility, which is why such careful attention was given to the definition of trading-book assets, particularly reverse repurchase agreements. Nevertheless, given the existence of very large incentives because of the differential capital rules (see below), banks have a powerful inducement to present their longer-term investments as trading assets. It should be emphasised in this context that any financial instruments (defined in the ISD's Annex B to include all 'transferable securities') that are held with the *intention* of ultimate resale or for short-term gains can be classified as trading-book assets. The subjective nature and generality of this definition suggests that policing the boundary between the banking and trading books will be both costly and difficult.

Capital requirements under the CAD

There are six categories of capital requirement imposed on investment firms by the CAD: initial capital (Article 3), position risk requirements for debt (Annex I) and for equities (Annex I), settlement and counterparty risk (Annex II), foreign exchange risk (Annex III), 'other risks' (Annex IV) and large exposures (Annex VI). Apart from the initial capital and other risks, these requirements are additive. However, whereas Annexes I, II and VI apply to the trading book only, the remaining requirements apply to the firm as a whole (see Charts 2 and 3). This section uses the example of the position risk requirements for debt to highlight the differing capital requirements applied to traditional bank lending and securities financing under the CAD.

The CAD divides the position—or market—risk on both debt and equity instruments into two components in order to calculate the required capital. The first is *specific* risk, representing the risk of a price change in the instrument as a result of factors related to the issuer; and the second is *general* risk, representing the risk of a price change resulting (in the case of a debt instrument) from a change in the level of interest rates, or (in the case of equities) from a broad movement in the equity market unrelated to the specific attributes of individual securities. The requirements for specific and general risk are then added—this being the so-called 'building-block' approach.

The capital requirement for general market risk is intended to capture the risk of loss arising from changes in market

Chart 2
Capital Adequacy Directive

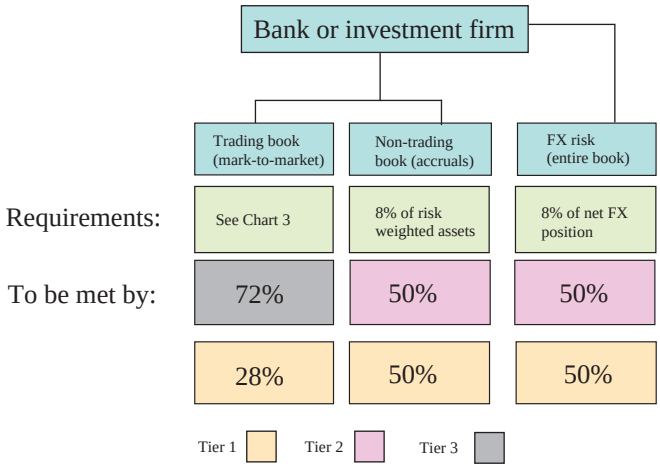
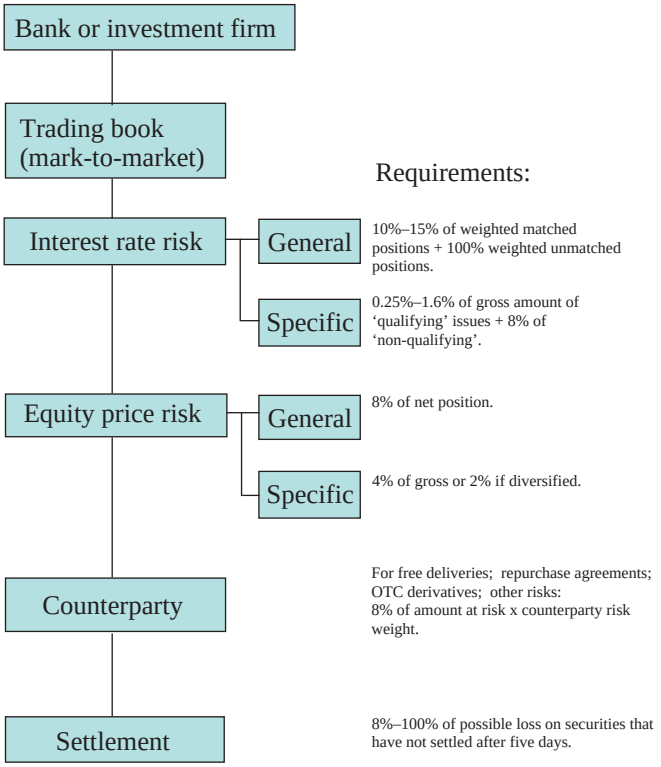


Chart 3
Capital Adequacy Directive



interest rates. For this purpose, positions in debt securities are slotted into one of 13 maturity bands, according to residual maturity for fixed-rate instruments and next repricing date for floating-rate instruments. These positions are then weighted by a factor designed to reflect their price sensitivity to changes in interest rates. Floating-rate instruments, which are the closest substitute for bank loans, have a very low or zero risk weighting, depending on the interest refixing period. Furthermore, the CAD allows substantial reductions in the capital requirement for general market risk where long and short positions are matched. In comparing the differential treatment of bank loans and debt securities, it is therefore more appropriate to focus on specific risk.

When calculating specific risk requirements for debt, securities are divided into three classes: central government, 'qualifying' and 'other'. Central government issues carry a zero risk weighting, qualifying securities carry a weighting of 0.25%, 1% or 1.6% depending on their residual maturity (since default risk is a function of time), while other securities are subject to a penal risk weighting of 8% regardless of residual maturity. These weighted positions (whether long or short) are then summed to arrive at the capital requirement for specific risk.

Given a range of risk-weightings from zero to 8%, the classification procedure for debt securities is of crucial importance to investment firms. Yet the most important distinction—that between 'qualifying' and 'other' items—is far from clear cut. Qualifying items must be: (a) listed; (b) considered by the lending institution to be 'sufficiently liquid'; and (c) carry a default risk 'comparable to or lower' than those assets specified in Article 6(1)(b) of the banking Solvency Ratio Directive (SRD) that carry a risk weighting (under that Directive) of 20%—a category which includes all claims on OECD commercial banks. The classification is subject to scrutiny by national supervisors; they may themselves classify securities as 'qualifying' if conditions (b) and (c), but not (a), are met, provided that the securities concerned have been rated at the required level by a recognised credit rating agency—*unless* this last requirement is judged inappropriate 'in the light of, for example, the characteristics of the market, the issuer, the issue or some combination of these characteristics'. (This waiver is designed to embrace large blue-chip borrowers whose debt is unrated.)

Taking the three primary criteria applied to qualifying items in turn: the first (ie listing) can be waived; the second ('sufficiently liquid') is subjective; and the third—a test of default risk—is highly elastic because the benchmark risk level used (Article 6(1)(b) of the SRD) embraces claims on the entire range of OECD banks whose credit ratings vary from sub-investment grade to AAA. Therefore, given both the fuzziness and the importance of the definition of qualifying items, there exists considerable scope for competitive distortions arising from uneven treatment of similar instruments.

Much will depend on the manner in which these provisions of the CAD are implemented by the national authorities. The current UK plans for implementation, for instance, propose that any debt issue that is rated below investment grade by at least one 'relevant' credit rating agency should not be treated as qualifying.(1) The effect will be that an investment-grade debt security with a residual maturity of under six months will attract a capital charge of as little as 0.25% when carried on a bank's trading book, whereas a bank loan to the same borrower with the same maturity will attract a minimum capital charge of 8% (100% risk weighting x 8% capital charge under the SRD). For longer-term debt securities with over one year's residual maturity, the capital charge differential is somewhat less, at 1.6% versus 8%; but it is still large enough to have major consequences for the competitiveness of individual institutions, for the relative cost of funds of qualifying versus non-qualifying issuers and for the competitive position of different segments of the securities markets.(2)

More specifically, under the United Kingdom's application of the CAD rules, banks will have an overwhelming incentive to provide securitised loans that can be held in their trading books rather than conventional bank loans that are subject to the bank capital requirements of the SRD. Only if a debt issue has junk-bond (ie non-investment grade) status will a bank be indifferent on capital adequacy grounds between a purchase of bonds and a bank loan—the capital charge in both cases being 8%. An important qualification here is that, in order to be included within the trading book, a security must be held with the intention of resale or short-term gains.

One implication of the discrepancy between the capital adequacy regimes is that for most large borrowers (ie those of investment grade status) securities market financing will become cheaper relative to bank borrowing. Indeed, the difference in capital charges under the SRD and the CAD will give considerable added impetus to the process of securitisation that is already under way in European and global financial markets. In so far as securitisation reflects the greater competitiveness of securities as against bank financing, there need be no cause for concern; but to the extent that the process is due to arbitrary differences in the regulatory treatment of securitised versus bank debt issued by the same class of borrower, important inefficiencies and distortions are introduced into credit markets. In short, the CAD establishes a major regulatory bias in favour of securitised debt that could adversely affect traditional relationship banking.

(1) See, for example, the Securities and Futures Association's Board notice 200, 'The implementation in the UK of the EC Capital Adequacy Directive', Schedule 3, August 1994.

(2) Assume that 8% regulatory capital cover is required for loans and (say) 1% for securities. Assume further that 50% of this capital is provided in the form of equity and that the target return on equity is 10%. A universal bank will then need to earn 0.4% on its loan assets, but only 0.05% on its securities assets, in order to meet its target return on equity. From a borrower's point of view, the implied difference in funding costs between bank and securities financing is 35 basis points. To the extent that regulatory capital is more permissively defined for securities holdings than for bank loans, this disparity becomes larger still.

Summary and conclusions

The liberalisation of trade in financial services has presented European regulators with two interrelated problems. First, host countries wish to be assured that foreign investment firms operating on their territory, or delivering cross-border services to their residents, are subject to minimum standards of prudential regulation in their home country. Second, the initiatives designed to achieve such minimum standards should not discriminate between different corporate structures: banks should be treated in the same way as non-bank investment firms, and securities subsidiaries of banks should be treated in the same way as banks that undertake securities activities on their own balance sheets.

The central difficulty with this negotiating agenda has been that banks and investment firms have traditionally been subject to very different regulatory regimes—and for good reasons (see the first section above). The CAD represents an attempt to square the circle by imposing functional regulation on similar activities of banks and investment firms, as defined by their trading books. This approach achieves broad competitive equality between banking and investment institutions—subject to one important exception—but it also creates a number of other problems.

First, the tug-of-war between bank and securities regulators has resulted in compromise capital requirements for the trading book that, in terms of the definition of capital, the treatment of underwriting, the large exposure rules and the position risk requirements, are much closer to the regulatory model of securities markets than of banking. Since banks must ultimately bear the risks associated with their own trading books or those of their securities subsidiaries, this could mean some dilution of the solvency protection afforded to banks. The CAD imposes only minimum capital adequacy requirements and it is, of course, open to national authorities to apply higher requirements where these are felt to be necessary.(1) Nevertheless, competitive concerns may tend to discourage unilateral prudence of this kind.

Second, because banks are free to use their deposit base to fund securities operations—whether undertaken on their own balance sheets or through subsidiaries—the moral hazard problems associated with banking are carried over into securities markets. Deposit funding of securities business also gives banks an important competitive advantage over non-bank investment firms—a major source of unevenness in an otherwise level playing-field.

Third, by conferring on investment firms the same privileged credit standing as that accorded to banks—automatic 'qualifying' status for their debt issues and concessionary risk weightings for institutions incurring counterparty risk or large exposures to them—the message may be conveyed to financial markets that investment firms enjoy the support of the official safety net and lender of last resort arrangements that traditionally have been confined to banks.

Finally, it is a remarkable paradox that in seeking to establish a level playing-field between banks and investment *firms*, the CAD severely tilts the playing-field when it comes to banking and securities *business*. The capital requirements applicable to bank loans are much higher than those applicable to debt securities of equivalent default risk and maturity held on the trading book (by a factor of no less than 32 times in the case of short-term qualifying securities). And while it is true that in countries such as the United Kingdom a differential capital requirement has existed previously in favour of securities business when undertaken by investment firms, under the CAD regime banks will have a powerful incentive to shift their business from traditional banking to securitised lending. This added impetus to securitisation may or may not be a desirable outcome, but it is surely unsatisfactory that such an important market development should be the unintended by-product of a new regulatory framework, rather than the result of a conscious policy decision.

In conclusion, several consequences will follow from the introduction of the CAD regulatory regime. Banks will become somewhat riskier on account of their securities activities—not because securities business is itself inherently riskier than banking, but because it involves greater reliance on subordinated debt as capital. Second, securities activities will tend to expand relative to conventional banking business because of the preferential capital requirements applied to the trading book. Third, mixed banking and securities businesses will tend to displace non-bank investment firms, reflecting the former's funding advantage. Finally, as banks increase the scale of their securities activities it will become more difficult for national authorities to separate banking from securities business in fulfilling the lender of last resort function.

(1) In this context, the Bank of England, for instance, applies target risk-based capital ratios to individual banks within a broad range whose lower bound is above the Basle and SRD minimum requirement of 8%.

The developing Single Market in financial services

Over recent months, the Bank has had discussions with a range of firms in the financial sector to gauge their views on the development of the Single Market in financial services. Although the sample was too small to be fully representative, most of their opinions were widely shared. This article[1] *summarises those views, but it should not be taken to represent the Bank's own assessment.*

Introduction

As the Edinburgh European Council declared in December 1992, the programme of European legislation proposed in the 1985 White Paper as necessary to underpin the Single Market was successfully completed according to timetable 'in all essential respects'.[2]

The process of bringing the Single Market into effect, however, still continues. As one part of this, over 500 European measures are having to be transposed into national law. This was acknowledged at the time of the Edinburgh European Council by the internal market ministers of the Member States, who invited the Commission 'during 1996, to provide an overall analysis of the effectiveness of measures taken in creating the Single Market, taking particular account of their impact on the aims of promoting throughout the European Union a harmonious and balanced development of economic activities . . .', and in addition to 'consider the impact on improving the competitiveness of European business in world markets'.

Over recent months, the Bank has canvassed the perceptions and concerns of financial sector participants on how the Single Market in that sector has developed so far. It has held informal discussions with some 25 firms—including banks, building societies, securities firms, insurance companies and brokers, fund managers, lawyers and accountants—as well as some of the trade and professional associations. These discussions have focused on the way in which the Single Market has affected the firms and sectors; the impact of the Single Market legislation, its benefits, drawbacks and identifiable gaps; and the remaining hurdles, either in the form of incomplete implementation or non-regulatory barriers.

In reporting these views, it is fully recognised that they derive from a small and no doubt not fully representative sample. A number of reactions were, however, widely shared; and there were in addition some interesting individual views. For that reason, they seem worth reporting; but this article seeks neither to make an overall assessment nor to express the Bank's views.

General reactions

Single Market legislation

There was general agreement among the practitioners that although the bulk of the financial services legislation had been agreed and was in the process of being implemented in most Member States, it was too early to reach firm conclusions on its impact. The 'passport' Directives for insurance, for example—which establish that an authorisation from the regulator in a firm's home state enables that firm to operate throughout the Union without further authorisation—had only just entered into force. For securities business, the Investment Services Directive (ISD) and Capital Adequacy Directive (CAD) were not due to be implemented for another 18 months. Only in banking had the Single Market legislation been in effect for a significant time—though even there for less than two years. The balance of opinion on its effects was mixed: some contacts noted, for example, that as yet there was little sign of a reduction in the influence of banks in their domestic markets.

Most contacts thought—perhaps not surprisingly—that it was impossible accurately to isolate the impact of the Single Market programme from other influences, such as technological developments, new service delivery mechanisms and market innovation, all of which were seen as important. In addition, the formal completion of the Single Market at the end of 1992 had broadly coincided with the low point of the economic cycle in Europe. This had almost certainly held back firms' European expansion plans and, in the view of some, had led to increased competition across the European Union's financial services sector. German unification had also had a marked impact on the sector, which was similarly difficult to isolate.

On the other hand, it was universally acknowledged that the '1992' concept, the intensive legislative negotiations and the expectations which these had generated had prompted most firms to consider their strategy towards Europe more actively. In some cases, this had led to retrenchment rather than expansion, but in others it had reinforced an existing focus on Europe as a single business area. This second

(1) Prepared by Gordon Thomson and Michael Taylor of the Regulatory Policy Division of the Bank's Financial Stability Wing, assisted by Nick Walsh in the Wing's Supervision and Surveillance area.
(2) Details of the main elements of the programme in financial services were given in the article, 'The EC Single Market in financial services', in the February 1993 *Bulletin*.

effect was perhaps most marked in the case of US institutions, which in many cases had been spurred on by 1992 to incorporate in at least one Member State or to reorganise their European activities so as to exploit an existing European-incorporated subsidiary, rather than to concentrate business in branches of the parent company. The evidence suggested that US firms had been particularly vigorous in their response to the opportunities in the Second Banking Co-ordination Directive (even if this was largely as a means of rationalisation); in the words of one contact, 1992 had created 'a climate for change'.

The measures (agreed in 1987) to abolish all remaining exchange controls in eight Member States by mid-1990 and in the other four states progressively thereafter were seen as by far the most significant feature of the whole programme. Without the liberalisation of capital movements, it was thought that much of the rest of the legislation would have been ineffective.

There was, though, less certainty about the effect of the other main feature in the financial services programme—the 'passport'. Most contacts thought the concept a good one; but there was thought to be a danger of firms seeking out the lowest regulatory requirements, and there was some scepticism about the passports' practical benefits.

For retail (private customer) business, in the view of many it was often not viable to offer services either cross-border or through a branch, because consumers favoured familiar domestic products and institutions. As a result, many firms inclined towards acquisition or to cross-border alliance giving reciprocal access to each party's customer base. The latter strategy has been particularly evident in the banking sector.(1)

As for wholesale (interprofessional) business, where the markets have become increasingly global over the past decade, there was some concern that the effect of the rules associated with each passport—in particular, the new notification requirements—might be to constrain, rather than liberalise, market access. This concern was not confined to new business but also extended to the treatment of existing activities. In addition, some firms that had sought to make use of the passport—for example to allocate the group's capital more efficiently—had encountered significant practical difficulties: it often proved costly to unravel existing group structures, especially in terms of tax; some had also met pressure to maintain their local incorporation.

Concern was also expressed that some Directives might be being more strictly implemented in some Member States than in others. A number of contacts suggested that there had been cases of countries acting, if not against the letter of the Single Market legislation, against its spirit; and they stressed the importance of effective enforcement arrangements.

Contacts contrasted the approach to implementation in some Member States—where Directives were transposed into national law on the basis of broad principles—with that elsewhere, including in the United Kingdom. In their view, the former approach often allowed greater leeway and this increased the importance, when transposing European legislation into national law, of ensuring that the delicate compromises reflected in the Directives were fully safeguarded.

On the question of whether there were any obvious gaps in the Single Market programme that could be filled by future EU legislation, the areas most frequently mentioned were:

- pensions liberalisation (especially in the light of the stalemate over the proposed Pension Funds Directive, which itself was seen as only a limited first measure);
- minimum harmonisation of insolvency law (against the background of the continued lack of agreement on the EU Bankruptcy Convention and on the draft Directives on the winding-up of credit institutions and insurance companies;
- a further extension of the passport for collective investment schemes in transferable securities (UCITS), beyond the amendment Directive currently under negotiation;
- a passport for legal services;
- some minimum harmonisation of auditors' liability; and
- a minimum mutual recognition of borrowing and lending techniques in the real estate sector.

Some also mentioned taxation, but there was almost unanimous opposition to the idea of an EU withholding tax on savings, which was considered distortionary and potentially damaging to the competitiveness of EU financial services companies.

Of the legislation still being negotiated, most concern was expressed about the so-called 'horizontal' Directives (those applying to more than one sector)—particularly in the consumer field—which threatened to undermine financial services proposals already agreed. The draft Directives on data protection and distance selling were the examples most often cited.

Remaining barriers

The Bank's contacts saw four main types of remaining barriers to the Single Market—regulatory; fiscal; cultural and structural; and legal and technical.

(1) The question was explored more fully in the article on cross-border alliances in banking and financial services in the Single Market in the August 1993 *Bulletin*.

Although *regulatory* barriers were not considered in themselves an insuperable obstacle to the operation of the Single Market (in many cases firms had chosen local incorporation in individual Member States prior to 1992 as a simple solution), contacts offered a number of examples of rules which disadvantaged non-residents. These included restrictions on lawyers practising in other Member States (despite the Mutual Recognition of Diplomas Directive), on the sale of certain financial products in particular Member States and on foreign participation in various local business arrangements (such as mortgage refinancing). Contacts also mentioned more general differences in legislation governing certain activities (eg mutual funds) or—on what were considered public interest grounds—in relation to conduct of business rules. This last feature of the passport Directives was widely seen as a weakness which could become increasingly important as Member States continued to implement the Directives, because it could undermine the basic division of responsibilities between home and host states.

On *fiscal* matters, in the view of some the lack of harmonisation constituted an important barrier; for some others, it was a 'background aggravation'. Several instances were cited of firms' operations being inhibited by the complexities or differences of tax systems in different Member States. Multinational companies who wished to move their employees between Member States or to create more efficient centralised pension arrangements seemed to face particular problems. Another common complaint was that certain Member States were slow to reimburse tax to non-residents.

Whereas regulatory and tax problems were seen as soluble in time, *cultural and structural* barriers were thought more difficult to overcome. A number of examples were cited: customers' preference for domestic firms and products (this included Member State governments' preferences when tendering for privatisation business); a perception that foreign institutional forms and products (for example, UK building societies and unit trusts) were little understood; various 'traditional' practices, such as the close links—often cemented by cross-shareholdings—between industry and domestic financial services firms; differences of attitude among shareholders to the importance of dividends; differences in the form of pension provision (which it was thought would change slowly and only in response to domestic demographic pressures); a cultural bias in continental Europe towards a banking rather than a trading approach; and, in some markets, the level of state involvement. All these created obstacles to the provision of services by foreign firms, whether cross-border or through local establishment.

Finally a number of *legal and technical* barriers were identified—again often arising from different traditions. Examples included: differences in labour legislation (which often made it difficult to recruit teams of staff locally or, after an acquisition, to change existing staff contracts); in insolvency law (where in one country, for example, contracts made less than a year before a bankruptcy are automatically declared invalid); in property law and the law on netting; and in national consumer protection legislation.

It was also noted that legal concepts often had widely-differing applications across the European Union. Differences between Member States' definitions of 'public liability', for example, meant that contracts or insurance policies needed to be designed for each individual market. Similarly, contacts cited claims-made policies (where the insurer is liable only for claims first made during the period of cover, regardless of when the injury or damage occurred) and exclusion clauses as examples which could be voidable either on public policy grounds or where a master policy is in a different language.

In summary, many contacts considered that the practical benefits of the Single Market's legislative programme *so far* had been relatively limited. It was felt, however, that this should not deter the Commission either from giving implementation, monitoring and enforcement of the legislation high priority or—selectively—from extending the programme. On the second issue, some viewed the subsidiarity test which, following agreement at the Edinburgh European Council, is now obligatory on the Commission when it considers any new legislative proposal, with mixed feelings. Though it was designed to prevent action being taken unnecessarily at EU level, they were concerned that it might be used by Member States to thwart the proper functioning of the Single Market.

Turning to wider issues, and in particular the impact of the Single Market legislation on London's position as a financial centre, the general view was that the 1992 programme should, and probably did, represent more of an opportunity than a threat. London continued to enjoy advantages of language and—particularly for US institutions—a broadly familiar regulatory framework; the main trend so far among third-country institutions wishing to benefit from the Second Banking Co-ordination Directive's passport was for them to centre their EU operations in UK-incorporated subsidiaries. However, there was a warning that there was no room for complacency: several contacts noted the government-sponsored campaigns in Germany and France to attract new business to their own financial centres. London needed to remain a free and open market, and to keep abreast of or in advance of other centres in such things as clearing and settlement systems; and financial regulation needed to be implemented in a way that did not impose unnecessary burdens on financial practitioners.

As for a strategy on economic and monetary union, the overwhelming response was that although this had earlier been a subject for careful consideration and forward planning among financial services firms, there now seemed less likelihood of an early move to Stage 3. There was, however, considerably less agreement about the prospective impact on London if the United Kingdom were not to be in the first wave of countries moving to a single currency.

Views of specific sectors

Banking

The primary piece of Single Market legislation affecting the banking sector is the Second Banking Co-ordination Directive (2BCD). It is the 2BCD which confers a passport on credit institutions, ie the right to establish branches or to provide services cross-border throughout the European Union once authorised by their home supervisory authority. There are a number of accompanying Directives which set minimum standards in respect of capital adequacy, large exposures and consolidated supervision.

Although the 2BCD has been in force in the majority of Member States since January 1993 and its geographical scope was extended to cover most EFTA countries from January this year by the European Economic Area (EEA) agreement, banks considered that its impact had been limited. Some pointed to increased competition, but this was generally either from existing players in the domestic market or, particularly in the credit card and payments area, from affiliates of companies traditionally operating outside the financial sector.

Wholesale banking business has in any case long been international in orientation; in the retail sector cultural barriers remain strong, with customers often reluctant to deal with foreign institutions even for basic banking services. So banks have not seen the passport as an opportunity to create new pan-European branch networks, and future expansion was thought more likely to be by acquisition, which would permit a local identity to be preserved. Despite the costs and effort involved, the most common use of the passport to date has been to convert existing subsidiaries into branches of a single European operation, so permitting a more efficient allocation of capital. Third-country (most notably US) banks, as well as securities firms with an existing banking subsidiary in the European Union, have been at the forefront of this trend.

Contacts perceived a number of difficulties with the 2BCD. The requirements on an institution that is taking advantage of the passport to notify the host state's supervisory authority of the services it is already providing in that state was seen as excessive or unnecessary; there were suggestions that some Member States were questioning banks' claims and demanding fresh notifications. There was a further problem surrounding the definition of a cross-border service: Member States were applying different interpretations of when a service qualified and therefore required notification; the resulting uncertainty was seen as a significant barrier to trade.

Finally, the passport relates to services rather than products. It was suggested that since there is no express provision in the Directive obliging Member States to allow banks to sell a particular financial product in their jurisdictions, some countries were continuing to restrict competition by prohibiting certain types of product—sometimes, it was thought, on the grounds of the 'general good'. Bans on the provision of interest-bearing current accounts and on collective investment schemes transacting foreign exchange business with banks incorporated in another Member State were cited frequently as examples.

Building societies

A common perception emerging from the discussions with building societies was that the Single Market had had little impact so far, and that cross-border business was negligible. Although they were classed as credit institutions and eligible for the passport, and although house finance was one of the activities included in the passport, building societies generally considered that they operated at a disadvantage in continental Europe compared with their UK bank competitors. The concept of a building society and its mutual status was not well understood. Prospective house-buyers were reluctant to do business with foreign institutions, still less those of an unfamiliar type. And unlike most banking activities, the housing finance market was characterised by significant differences among Member States in property and insolvency law, and in tax treatment. In at least one Member State, for example, tax relief on mortgage payments applied only to customers of domestic institutions, whereas in another a higher rate of mortgage registration tax was applied to borrowing from a finance house than from a bank.

Building societies also perceived some constraints on expansion into Europe from their domestic building society legislation. At European level, there was widespread agreement—despite the inclusion of housing finance in the 2BCD—about the need for a measure which brought full mutual recognition of funding and lending techniques. This, it was recognised, would have to be a long-term aim, as national property law would be difficult to change.

Securities houses

With the Investment Services Directive (ISD)—the counterpart to the 2BCD in the securities field—not due to come into force until 1 January 1996, securities firms had little to say on the effects of the Single Market to date. Since the major firms already deal cross-border, particularly for wholesale business, few were expecting major changes to the environment even after ISD implementation. But as with banks, some might take the opportunity to convert their existing European subsidiaries into the branches of a single entity (US institutions were thought likely to be at the forefront of any such moves).

On the other hand, a number of the ISD's provisions caused concern. Contacts viewed the notification requirements, which mirror those in the 2BCD, with apprehension. The Directive was also seen as leaving a number of barriers in place. In addition, the delay before implementation was thought to risk a slowing-down in the process of liberalisation by some Member States.

An additional concern was that the ISD would allow Member States to continue to require their investors to deal

in securities only on a regulated market. This so-called 'concentration' rule was considered a potentially significant barrier to the provision of cross-border services, for example in over-the-counter instruments (even though the Directive requires Member States that apply the rule to allow investors to 'opt out'—by electing to have transactions executed away from a regulated market). Finally, firms were concerned about how conduct of business rules would operate when they sought to use the passport. Although there are general guidelines on the rules that can be imposed, these allow a good deal of flexibility in interpretation. Some firms thought that the example of 2BCD implementation suggested some Member States might simply apply all their existing conduct of business rules, so reducing the ISD's market-opening potential.

Fund managers

Fund managers have in principle had slightly longer than other sectors to reap benefits from the Single Market legislation: the UCITS Directive, which provided the 'passport' for marketing certain collective investment schemes, came into force in most Member States in 1989. Contacts, however, judged the freedoms reflected in this Directive to be quite limited, and hoped that an amendment currently under negotiation would liberalise the area further. This amendment is designed to extend the marketing freedoms to money-market and cash funds, funds of funds(1) and 'feeder funds';(2) and to allow third-country branches to administer funds in the Member State in which they are located and EU-incorporated institutions to provide cross-border administration of funds. From January 1996, the ISD will also provide non-bank fund managers with a passport for this business equivalent to that available to banks (under the 2BCD) since the beginning of 1993.

On balance, therefore, fund managers shared the perception that the Single Market had not so far had a significant impact. Their expansion into Europe had been motivated more by client requirements and by tax considerations (some double-taxation treaties between EU countries facilitate the sale of offshore funds) than by the Single Market programme. Moreover, locally-incorporated subsidiaries had to date often been viewed as the only practical route for this business.

Although some fund managers had seen significant growth in sales of investment services in Europe in recent years, they felt that it was not easy to operate efficiently on a pan-European scale. The preference of customers in some Member States for bond rather than equity-based products had not assisted UK firms, with their equity management skills; but the privatisation programmes under way in some Member States should provide increased opportunities. The complexities of custody regulations in some countries, and of tax systems in others, instances of tax disadvantages for those investing in foreign UCITS and the widely-differing structures of pension funds were all seen as barriers to business. Most expressed disappointment that the proposed Pension Funds Directive (viewed as a limited first measure towards full liberalisation) had created such difficulties during negotiation. They now hoped that pensions reform—particularly in some of the larger Member States—would open up the market.

There was also general concern about the potential burden of host country conduct of business rules, which it was felt were likely to differ considerably between Member States, even when all the securities markets legislation was in place.

Insurance companies and brokers

As the so-called 'Third-Generation Directives' providing a passport to life and non-life insurers were due to come into force on 1 July 1994, insurers and brokers were inclined to suspend judgment on the Single Market's legislative programme in insurance as a whole. General views on the previous generation of Directives—intended to liberalise large-risk business on the non-life side and own-initiative life business—were that the former had had some effect, but the latter virtually no influence on cross-border activity.

There was general agreement that a local presence was essential in markets where companies had an interest—particularly for mass (ie consumer and small business) risks—and that to avoid potential practical problems local incorporation was the best route. Even then, however, barriers were seen to remain: idiosyncrasies in national contract law and in legal concepts—as well as widely-differing tax arrangements—meant that products needed to be tailored to each market. In addition, differences in the way insurance was sold and solvency margins were calculated and—particularly in life insurance—conservatism on the part of customers made it difficult for new firms to enter the market.

Contacts viewed the UK insurance market as open. Although US, Japanese and Scandinavian insurers had for various reasons concentrated on competing in their home territories, the large French, German and Swiss insurers had proved particularly active in the United Kingdom, in some cases benefiting from what were perceived to be more favourable tax regimes at home and dividend policies which enabled a faster accumulation of reserves.

Some thought that the Single Market had come at an unfortunate time for UK insurers, coinciding with problems and major internal restructuring at Lloyd's, and with losses in areas such as mortgage indemnity insurance. These factors, combined with UK insurers' relatively modest capital compared with their major continental competitors, continued to inhibit expansion into Europe.

Product innovation and other technological changes were considered potentially important for the future. Indeed, though some thought that there would be no significant

(1) Funds which invest solely in the units of other funds.
(2) Funds which invest solely in one other (master) fund.

benefits from the passport in the short term, others considered that the approach taken, for example, by direct insurance companies (which transact business with their clients directly, rather than through an intermediary, with attendant savings on infrastructure and other overheads) could be successful as the benefits of the passport Directives fed through.

Brokers noted that their position was still uncertain and that there were no common EU rules on, for example, establishment. Some countries had traditionally banned brokers. There were, however, opportunities for 'niche' business, for example in risk management and captive insurance.(1)

The legal profession

Contacts pointed to the rapid increase in the number of multinational law firms operating in continental Europe since the late 1980s—prompted by general, if not universal, liberalisation. But despite hopes following the agreement of the Mutual Recognition of Diplomas Directive in 1988, liberalisation had in practice been disappointing. Implementation of the Directive was held to have been either slow or incomplete, particularly concerning the arrangements for tests before lawyers can practise elsewhere. As a result, the main effect of the Directive had been to ease the transfer between legal professions of Member States with similar legal systems.

But the Diplomas Directive was aimed only at establishing the freedom to practise of individual lawyers. There was general support for a further measure to ease the more extensive export of legal services. To this end, the Council of Bars and Law Societies of the European Community had produced a draft text for Commission consideration to allow law firms from one Member State to set up branches freely in another without having to integrate fully into its legal profession. Some Member States' preference for compulsory integration after a transitional period was considered unnecessary and inappropriate for cross-border legal services.

Summary

The firms whose views are reported in this article, although drawn widely from within the financial services sector and closely-related activities, by no means covered the whole range. In addition, any conclusions on the Single Market's development at such an early stage in the programme—and given its implementation initially against the background of Europe-wide recession—can only be tentative.

The frequency with which similar opinions and assessments were expressed was notable, however. Although those contacted expressed widespread support for the aims of the Single Market and for its principal features, such as the passport, this was qualified by misgivings about some of the procedures proposed. Contacts also often referred to remaining barriers—regulatory, fiscal, legal and structural/cultural.

Many practitioners were confident that the regulatory and fiscal concerns would either be surmounted over time or would diminish. Structural and cultural barriers were seen, however, as more deep-seated, with limits on the extent to which policy actions could overcome them.

Yet there was a clear feeling that there was plenty of scope to improve the Single Market programme now. The key areas were seen as implementation and enforcement; repeated emphasis was given to Member States' differing approaches to implementation as a cause of competitive inequalities. Not surprisingly, therefore, effective policing of the legislation by the Commission was seen as a necessity, despite doubts about the Commission's resources. The need for adequate enforcement emphasised that the Single Market programme was not completed at the end of 1992; rather, it was seen as a continuing process the full effects of which could take many years to work through.

(1) Captive insurance companies are set up to insure or re-insure all or part of the risks of their parent company.

The net debt of the public sector: end-March 1994

This article continues a series begun in the March 1986 Bulletin *(page 74) and last updated in the November 1993* Bulletin *(page 513). Since November 1988, the analysis of the public sector position has been combined with the long-standing series of articles analysing the national debt and its distribution. The article has been compiled with the help of the Central Statistical Office and others. Its main points are:*

- *The net debt of the public sector and market holdings of the national debt rose by around £47 billion and £49 billion respectively in 1993/94. As a proportion of GDP, both measures increased by 5.4 percentage points—to 38.4% and 41.8% respectively.*

- *In the 12 months to the end of March 1994, general government consolidated gross debt as a proportion of GDP (calculated on a Maastricht basis) rose by 5.9 percentage points to 48.4%.*

The net debt of the public sector

This article analyses developments in the net debt position of the public sector to the end of March 1994. The net debt position is important for several reasons. First, it reflects the cumulative effect of past fiscal policy; and trends in the ratio of public sector net debt to GDP give a guide to the effect of the current fiscal stance. The interest payments on the debt are a current payment for past expenditure and can influence fiscal policy. If interest payments rise, other government spending net of receipts—ie the primary deficit—would need to be reduced to meet a given target for the public sector borrowing requirement (PSBR). Second, since the government's debt is mainly denominated in nominal terms, inflation reduces its real value. This effect is reflected in the net debt to GDP ratio, which provides an additional guide to the stance of fiscal policy.

It is provisionally estimated that the net debt of the public sector(1) was £252.0 billion at the end of March 1994 (see Table A), compared with a revised figure of £204.8 billion 12 months earlier. The increase of £47.2 billion (23.0%) over the year is the largest in value terms since the series began in 1970. 1993/94 was the fourth successive year in which there was an increase; the overall percentage rise during that time was 67.9%. The continued increase reflects the move from debt repayment in the late 1980s and early 1990s to a period of government borrowing.

As a proportion of GDP, the net debt of the public sector rose by 5.4 percentage points to 38.4% in 1993/94 (see Chart 1). The PSBR for 1993/94 was £45.4 billion (see Table B), compared with £36.2 billion in the previous financial year. (For the principal reasons why the figures for changes in net debt are not the same as those for the borrowing requirement, see the box on page 349.)

Table A
Net public sector debt(a)

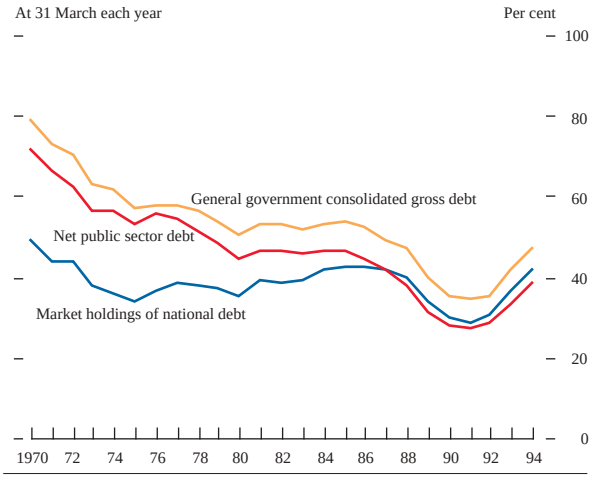
£ millions, nominal values; *percentages in italics*

31 March	1993	1994	Changes 1993–94
Central government			
Market holdings of national debt	225,457	274,243	48,786
as percentage of GDP	*36.4*	*41.8*	
Net indebtedness to Bank of England Banking Department	437	729	292
Savings banks	1,438	1,444	6
Accrued interest and indexing on national savings	3,831	3,534	-297
Notes and coin in circulation	18,520	21,448	2,928
Other	221	171	-50
Total central government gross debt	249,904	301,569	51,665
Local authorities			
Total gross debt	49,227	49,582	355
less:			
Central government holdings of local authority debt	41,527	40,980	-547
Local authority holdings of central government debt	81	125	44
General government consolidated gross debt	**257,523**	**310,046**	**52,523**
as percentage of GDP	*41.5*	*47.2*	
Public corporations			
Total gross debt	16,950	19,632	2,682
less:			
Central government holdings of public corporation debt	15,955	18,691	2,736
Local authority holdings of public corporation debt	11	64	53
Public corporation holdings of central government debt	2,595	2,745	150
Public corporation holdings of local authority debt	910	945	35
Public sector consolidated total debt	**255,002**	**307,233**	**52,231**
as percentage of GDP	*41.1*	*46.8*	
Public sector total liquid assets (Table C)	**50,165**	**55,228**	**5,063**
as percentage of GDP	*8.1*	*8.4*	
Net public sector debt	**204,837**	**252,005**	**47,168**
as percentage of GDP	*33.0*	*38.4*	
Memo item:			
General government consolidated gross debt (Maastricht basis)	**255,353**	**307,894**	**52,541**
as percentage of GDP (ESA) (b)	*42.5*	*48.4*	

(a) Data from 1970 to 1994 are published in the *Bank of England Statistical Abstract 1994*, Part 1 Table 17.1.
(b) See footnote (3) on page 349.

(1) Full definitions are at the end of the article. All figures are at nominal value unless otherwise stated.

Chart 1
Measures of public sector debt relative to GDP



Concern about the trend in the debt ratio was one reason why the Government introduced measures in the March and November 1993 budgets to tighten fiscal policy by nearly 2% of GDP in 1994/95 and a further 1% by 1996/97. It is planned to reduce the PSBR from 7.0% of GDP in 1993/94 to around 3% by 1996/97, and to achieve a broad balance by 1998/99. These plans mean that the ratio of net public sector debt to GDP is forecast to rise much more slowly in the near future, and to peak at just below 45% in 1996/97 before starting to decline.

A £51.7 billion increase in the gross debt of the central government was the principal factor behind the rise in the public sector's debt (see Table A). The main counterpart to the increase in central government debt was, following substantial gilt sales, an increase in market holdings of the national debt—to £274.2 billion, their highest ever level.

Table B
Composition of the PSBR

£ millions; *percentages in italics*

	1992/93	1993/94
Central government borrowing requirement (CGBR):		
on own account	42,370	47,888
for on-lending to local authorities	-7,266	-659
for on-lending to public corporations	1,184	1,521
CGBR	**36,288**	**48,750**
Local authorities' net borrowing from markets	1,443	-2,124
Public corporations' net borrowing from markets	-1,496	-1,181
Public sector borrowing requirement (PSBR)	**36,235**	**45,445**
Alternative analysis:		
CGBR on own account (CGBR[O])	42,370	47,888
Local authority borrowing requirement (LABR)	-5,823	-2,783
Public corporations' borrowing requirement (PCBR)	-312	340
As percentage of GDP:		
CGBR	*5.9*	*7.4*
CGBR(O)	*6.8*	*7.3*
LABR	*-0.9*	*-0.4*
PCBR	*-0.1*	*0.1*
PSBR	*5.8*	*7.0*

Official holdings of the national debt also rose, by £9.3 billion.(1) Apart from the national debt, the only other movement of any significance was an increase of £2.9 billion in notes and coin in circulation, partly the result of Easter's falling at the beginning of April (ie just after the period end).

Private and overseas holdings of the debt of the rest of the public sector increased by £0.8 billion to £8.5 billion, continuing the trend seen in the previous year. Local authorities again made a debt repayment (of £2.8 billion), while market holdings of their debt rose, by £0.9 billion. Public corporations had a borrowing requirement of £0.3 billion in 1993/94; market holdings of their debt fell by £0.1 billion.

An increase of £5.1 billion in public sector liquid assets (see Table C) partly offset the rise in public sector gross debt. It reflected substantial increases in asset holdings by local authorities and central government. Assets held by local authorities—mostly in the form of bank and building society deposits—rose by £2.9 billion, following the surge in their capital receipts in November and December 1993 before the ending of the temporary relaxation of the rules governing the spending of receipts.

Table C
Public sector liquid assets

£ millions, nominal values

31 March (a)	1993	1994	Changes 1993–94
Central government			
Official reserves	27,153	28,908	1,755
Commercial bills, including bills held under purchase and resale agreements	4,957	5,388	431
British government stock held under purchase and resale agreements	1,209	3,097	1,888
Treasury bills held under purchase and resale agreements	846	1,112	266
Loans against export credit and shipbuilding paper	1,276	890	-386
Bank deposits	1,631	1,749	118
Instalments due on British government stocks	3,386	1,250	-2,136
Total	40,458	42,394	1,936
Local authorities			
Bank deposits	3,485	4,949	1,464
Building society deposits	2,870	3,855	985
Other short-term assets	1,932	2,424	492
Total	8,287	11,228	2,941
Public corporations			
Bank deposits	1,194	1,380	186
Other short-term assets	226	226	—
Total	1,420	1,606	186
Public sector total liquid assets	**50,165**	**55,228**	**5,063**

(a) Data from 1970 to 1994 are published in the *Bank of England Statistical Abstract 1994*, Part 1 Table 17.1.

Central government assets increased by £1.9 billion. The rise was partly the result of a £1.8 billion increase in the foreign exchange reserves. In addition, the money-market assistance provided by the Bank rose; the main element in this was an increase of £1.9 billion in the facilities offered to banks, building societies and gilt-edged market-makers (GEMMs) through gilt sale and repurchase agreements. This

(1) Debt held by the National Debt Commissioners (other than for the national savings stock register), certain other central and Northern Ireland government funds and accounts, and the Bank of England. An adjustment has been made for gilt-edged stocks (with a nominal value of £3,097 million) held by Issue Department of the Bank of England under sale and repurchase agreements (which would otherwise be treated as official holdings) on the basis that, in economic though not in legal terms, underlying ownership of these securities rests with the market.

increase was offset by a fall of £2.1 billion in the amount outstanding on partly-paid gilts (only one such stock—the 7% Treasury 2001 'A'—was outstanding at end-March 1994, compared with three at end-March 1993). Bank deposits accounted for the rise of £0.2 billion in public corporations' liquid assets.

General government debt

During Stages 2 and 3 of Economic and Monetary Union, the Maastricht Treaty requires Member States to avoid excessive government deficits and debt levels.(1) Although the Treaty does not specify what constitutes an excessive deficit, it does establish reference levels—which are 3% of GDP for deficits and 60% of GDP for gross debt levels.

There are a number of reasons why the setting of such levels was considered desirable. First, if an excessive deficit in one country were to lead to an unsustainable fiscal position, this would put pressure on other governments to 'bail out' the state in excessive deficit. (To eliminate this possibility, the Treaty includes a 'no bail out' clause.) An excessive deficit in one country might also have 'spill-over' effects in other countries: added pressure on the government bond yields of the deficit country could, in a world with internationally mobile capital, lead to pressure on yields elsewhere.

Countries are required to report their actual and planned deficits and debt levels to the European Commission at the beginning of March and September each year.(2) For the United Kingdom, the ratio of general government debt to GDP (ESA)(3) at end-March 1994 was 48.4% (compared with 42.5% a year earlier), while the deficit was 7.8% of GDP (ESA). No comparative data on debt levels have been published formally, but estimates of Member States' debt figures—together with data for the other G7 countries—have been produced by the Commission (see Table D).

Reconciliation

There are several reasons why the borrowing requirement figures, which relate to transactions,(1) are not the same as changes in net debt:

- Changes in exchange rates affect the value of foreign currency liabilities and assets independently of transactions.
- When British government stocks are issued (or bought in ahead of redemption) at a discount or premium, the borrowing requirement is financed by the actual amount received or paid out, while the level of debt is deemed to increase or decrease by the nominal value.
- The borrowing figures include the uplift on index-linked British government stocks only when it is paid out; but the figures for debt outstanding include it as it accrues over the life of the stock.

Summary reconciliations of the central government borrowing requirement/debt repayment and the changes in the national debt covering the years 1991/92 and 1992/93 were published in the *Consolidated Fund and National Loans Fund Accounts 1992/93 Supplementary Statements*.(2)

(1) Exceptionally, the interest (including index-linking) on national savings certificates and SAYE contracts is counted in the CGBR and PSBR as it accrues, because it can be withdrawn by holders on demand.
(2) Published by HMSO, ISBN 0–10–205294–8.

Table D
General government debt

Percentage of GDP (ESA)

End-December	1991	1992	1993
Belgium (a)	129.5	131.9	138.4
Canada (b)	80.0	87.5	92.3
Denmark	64.2	68.4	80.6
France	35.5	39.5	44.1
Germany	42.1	44.8	48.9
Greece (c)	103.9	110.2	121.2
Ireland	97.0	94.5	99.0
Italy	101.4	108.0	118.1
Japan (b)	67.7	71.1	74.7
Luxembourg (d)	6.2	7.3	10.0
Netherlands	79.0	79.7	81.4
Portugal	69.4	61.7	66.4
Spain	45.2	48.2	55.9
United Kingdom	35.8	41.8	48.8 (e)
Actual (f)	*35.7*	*41.9*	*48.5*
United States (b)	58.9	62.0	63.9

Source: Unless stated otherwise, *European Economy, Annual Economic Report 1994*.

(a) Social security debt not included.
(b) Ratio of gross public debt to GDP. Data from *OECD Economic Outlook 55*, June 1994.
(c) Military debt not included.
(d) Not consolidated. Social security debt not included.
(e) Commission estimate of the figure at end of financial year (31 March 1994); the actual figure at that date is given in the text.
(f) As at end-December.

The national debt

The remainder of this article is concerned only with the national debt.

The change in debt outstanding (Table E)

The total nominal value of the national debt increased by £58.1 billion during the financial year 1993/94,(4) compared with an increase of £34.3 billion in the previous year. Market holdings of the national debt rose by £48.8 billion (21.6%) during the year, £3.5 billion more than in the previous year. Official holdings rose by £9.3 billion to £32.7 billion, although this was still below the record levels seen in 1991 and 1992.

(1) Article 109e(3) of the Treaty on European Union.
(2) The UK data are published by the Central Statistical Office shortly before each submission date in a news release which includes a summary reconciliation between the deficit and changes in debt levels.
(3) The data for Member States are compiled on a common basis, as defined in the European System of Integrated Economic Accounts (ESA). In accordance with the ESA, IMF interest-free notes are excluded from the calculation of general government debt for the European Union. As they are regarded as a liability of the National Loans Fund, however, they are included in government debt in the remainder of this article. By contrast, the category of general government debt for the European Union includes certain miscellaneous items, totalling £3.3 billion at end-March 1994, which are neither part of the national debt nor included elsewhere in the net public sector debt data. Furthermore, the definition of GDP used for the purposes of the European Union calculation differs from that used elsewhere in this article.
(4) Includes a net increase of £2.8 billion in capital uplift over the financial year within the nominal value of the index-linked issues of government stock. This is £0.3 billion higher than the rise in the previous year. Accrued uplift at the time of further issues of existing stock, totalling £2.4 billion, more than offset a slower rise in the retail price index between July 1992 and July 1993 (the relevant dates for the calculation of the uplift) than in the previous 12 months.

Table E
Market and official holdings of national debt(a)

£ millions, nominal values

Percentage of market holdings in italics

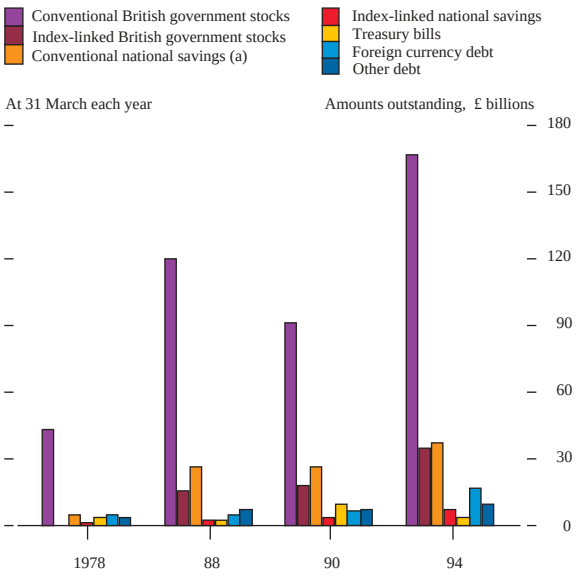
	End-March 1993		End-March 1994	
Market holdings				
Sterling marketable debt:				
Government stocks: index-linked	27,483	*12.2*	34,709	*12.7*
other	126,528	*56.1*	166,806	*60.8*
Treasury bills	4,826	*2.1*	3,077	*1.1*
Sterling non-marketable debt:				
National savings: index-linked	6,287	*2.8*	6,800	*2.5*
other	32,591	*14.5*	36,572	*13.3*
Interest-free notes due to the IMF	4,745	*2.1*	5,441	*2.0*
Certificate of tax deposits (b)	2,385	*1.1*	2,134	*0.8*
Other	1,719	*0.8*	1,843	*0.7*
Total	206,564	*91.6*	257,382	*93.9*
Foreign currency debt: (c)				
North American government loans	1,097		1,000	
Floating-rate loans	2,593		2,631	
Ecu Treasury bills	2,878		2,723	
Ecu bond	1,998		1,945	
Ecu Treasury Note Programme	1,999		3,890	
7¹/₈% 1997 bond	2,062		2,018	
7¹/₄% 2002 bond	1,992		2,021	
Multi-currency revolving credit facility	3,997		385	
Debt assigned to the government	277		248	
Total	18,893	*8.4*	16,861	*6.1*
Total market holdings	225,457	*100.0*	274,243	*100.0*
Official holdings	23,324		32,654	
Total debt	**248,781**		**306,897**	

(a) Data for 1970 to 1994 are published in the *Bank of England Statistical Abstract 1994*, Part 1 Table 17.2.
(b) Includes a negligible amount of tax reserve certificates.
(c) Sterling valuation rates:
End-March 1993: £1 = US$1.5062, Can.$ 1.8925, ECU 1.2510, DM 2.4254.
End-March 1994: £1 = US$1.4845, Can.$ 2.0531, ECU 1.2853, DM 2.4776.

Analysis by instrument (Chart 2)

Within the total of national debt in market hands, the share accounted for by gilts increased by 5.2 percentage points. Much of the rise seen in 1992/93 in the proportion of foreign currency debt was reversed in 1993/94; its share fell to 6.1%. These were declines also in the proportions of national savings products and sterling Treasury bills (down by 1.5 and 1.0 percentage points respectively).

Chart 2
Composition of market holdings of national debt



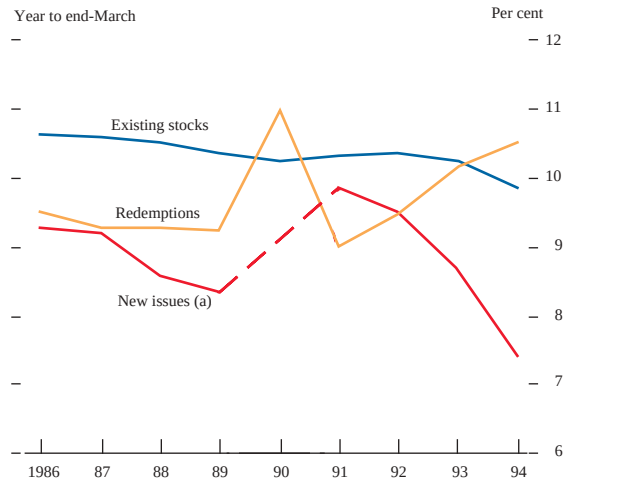
(a) From 1981, investment accounts are included within national savings.

Gilt-edged stocks

During 1993/94, the Government issued a record £53.7 billion nominal of stocks, of which £7.1 billion were index-linked stocks (including £2.4 billion of accrued uplift at the time of issue).(1) Seven new stocks were created; all were conventionals, with six fixed-rate stocks (6% Treasury 1999, 7% Treasury 2001, 6³/₄% Treasury 2004, 7³/₄% Treasury 2006, 6¹/₄% Treasury 2010 and 8% Treasury 2013), and one floating-rate stock (Floating-Rate Treasury Stock 1999). This last was the first floating-rate gilt to be issued on which the coupon is fixed quarterly in accordance with the prevailing level of the London interbank bid rate (LIBID) minus ¹/₈%. (Three issues of variable-rate gilt-edged stocks were made in 1977 and 1979, the interest on which was linked to Treasury bill tender rates.) Additional issues were made of a further 24 stocks, of which 12 were index-linked and four (with a nominal value of £4.2 billion) were new tranches. £33 billion of the new gilts were offered for sale via the 11 auctions for which payment was made during the year; stocks of a similar value were issued on a partly-paid basis.

Six conventional stocks with a total nominal value of £7.3 billion were redeemed. The average coupon on the conventional stocks issued during the year, weighted by size of stock, continued to decline—falling from 8.7% to 7.4% (see Chart 3). The fall in the average coupon on stocks issued was consistent with a reduction in inflationary expectations over the year. The average coupon on the conventional stocks redeemed rose to 10.5% from 10.1%. The weighted average coupon on conventional stocks that remained outstanding throughout the year was 9.9%, compared with 10.2% in the previous year.

Chart 3
Average coupon on conventional British government stocks



(a) No British government stocks were issued between November 1988 and December 1990.

(1) Details of individual issues (excluding uplift on index-linked stocks) may be found in the quarterly series of *Bulletin* articles on the operation of monetary policy, in particular in the tables entitled 'Issues of gilt-edged stock' in the August 1993 *Bulletin*, page 351; November 1993 *Bulletin*, page 467; February 1994 *Bulletin*, page 10; and May 1994 *Bulletin*, page 111.

The average maturity(1) of all dated stocks in market hands fell from 10.8 years at end-March 1993 to 10.6 years at end-March 1994 (see Table F and Charts 4 and 5). Excluding index-linked stocks, the average fell to 9.1 years, from 9.4 years at end-March 1993. The average amount of stock to be redeemed annually during the next five years has risen to £11.2 billion (nominal amount, excluding uplift on index-linked stocks), in part reflecting higher annual repayments towards the turn of the century (see Table G).

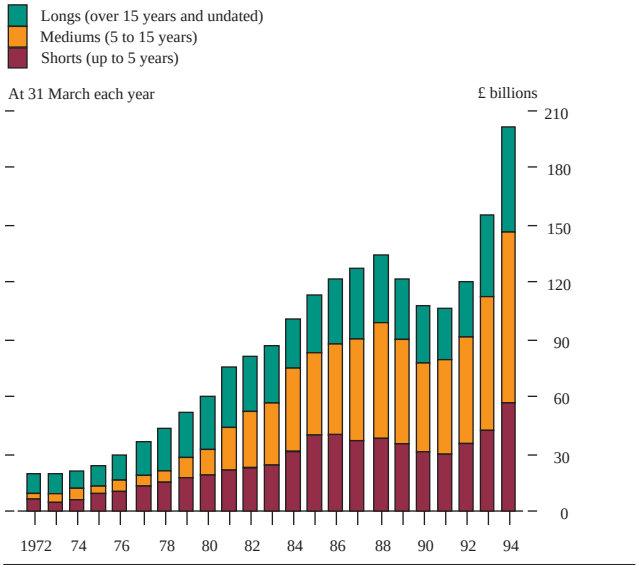
Table F
Average life of dated stock in market hands

Years to maturity at end-March:

	1990	1991	1992	1993	1994
Assumptions (a)					
Latest possible redemption:					
All dated stocks (b)	10.2	9.9	10.0	10.8	10.6
Excluding index-linked stocks	8.4	8.0	8.4	9.4	9.1
Earliest possible redemption date for stocks standing above par on 31 March					
All dated stocks (b)	10.1	9.6	9.8	10.5	10.4
Excluding index-linked stocks	8.2	7.7	8.1	9.0	8.9

(a) No conversion options were available between 1990 and 1994.
(b) Index-linked stocks are given a weight reflecting capital uplift accrued to 31 March.

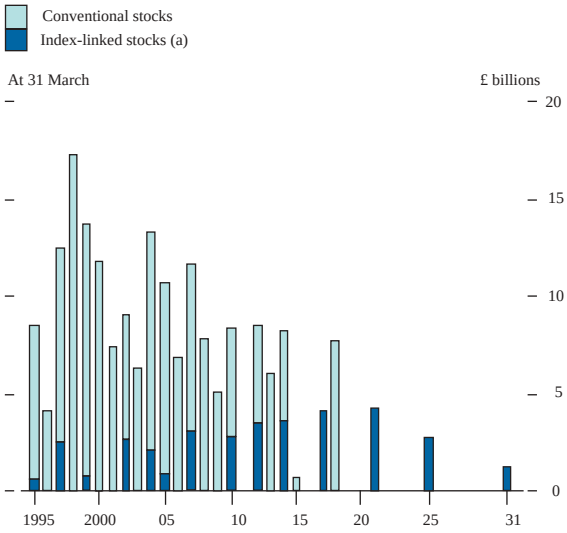
Chart 4
Breakdown of market holdings of British government stocks



The yield spread between short and long-term conventional stocks narrowed during the year, as average yields on short-dated stocks rose by 0.36 percentage points to 7.08%, while yields on medium and long-dated stocks fell by 0.23 and 0.67 percentage points to 7.48% and 7.68% respectively. The yields on long-dated index-linked stocks fell marginally to 3.46%.

At end-March 1994, the total market value of fully-paid dated stocks (including index-linked) held by the market was greater than their total nominal value, but the ratio of market to nominal value fell over the financial year to 1.05 from

Chart 5
Maturities of dated stocks



(a) Figures include accrued uplift up to 31 March.

Table G
Average amount of stock in market hands to be redeemed annually over the following five years

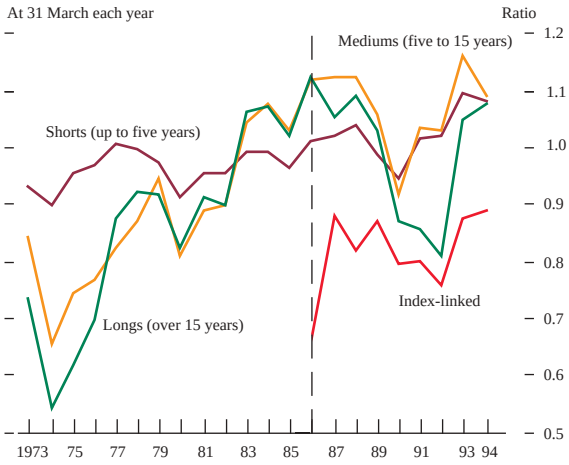
£ billions, at end-March

	1990	1991	1992	1993	1994
With no conversions (a)	6.2	6.0	7.2	8.5	11.2

(a) No conversion options were available between 1990 and 1994.

1.07 (see Chart 6). The ratio for short-dated stocks fell from 1.09 to 1.08 and that for medium-dated stocks from 1.15 to 1.09; the issue of new lower-coupon stocks, which traded closer to nominal value, was the main reason behind the fall for medium-dated stocks. The ratio for long-dated (excluding undated) stocks increased from 1.05 to 1.07. The ratios also increased for undated stocks—from 0.41 to 0.44—and for index-linked stocks, from 0.88 to 0.89.(2)

Chart 6
Market value/nominal value ratios of fully-paid dated British government stocks in market hands



Data before 1986 include index-linked British government stocks within the three main maturity bands.

(1) The aggregation of index-linked and non index linked stock for the purpose of measuring average maturity presents a conceptual difficulty (see the December 1982 *Bulletin*, page 540). This calculation, which gives index-linked stocks a weight reflecting the capital uplift accrued so far, assumes that stocks will mature on their latest maturity. There were no conversions of short-term convertible stocks into medium or long-term stocks during 1993/94.
(2) Calculated for index-linked stocks on the basis of the nominal value and accrued uplift to date.

National savings

National savings rose by £4.2 billion in 1993/94. Excluding accrued interest and index-linked increments[1]—which are not included in the national debt—national savings' contribution rose by £4.5 billion.

As in recent years, the largest rise was seen in national savings certificates (up £1.2 billion in 1993/94), followed by Income Bonds and the newest national savings product, Pensioners' Guaranteed Income Bonds (introduced in the first quarter of 1994), each with a contribution of £0.9 billion. Net sales of premium bonds of £0.8 billion more than trebled the contribution they made in 1992/93. Smaller contributions were made by Capital Bonds (up £0.4 billion) and the Investment Account (£0.3 billion). There were only small changes in other national savings instruments.

Other sterling debt

Market holdings of Treasury bills declined by £1.7 billion in 1993/94, as the amount sold at the weekly tenders continued to fall. The amount of 91-day bills on offer was doubled to £200 million in August 1993 and the 182-day tender suspended. Some direct issues were also made at other maturities. Of the other instruments included in the national debt, the only other sizable change was an increase of £0.7 billion in sterling liabilities to the International Monetary Fund (IMF), in the form of interest-free notes.

Foreign currency debt (Table E)

During the year, the sterling value of foreign currency debt held by the market fell by £2.0 billion. This was mainly because of the early repayment (starting in December 1993) of most of the tranches of the ECU 5 billion three-year multicurrency revolving credit facility arranged in August 1992. Repayment of the final tranche of ECU 500 million was made in April this year.

The Ecu Treasury note programme continued, with four tenders during the year raising a total of ECU 2.5 billion (£1.9 billion); these partly offset the repayment of the revolving credit facility. The three-year notes were first issued in January 1992, and start to mature next year with the expiry of the 1995 Note.

Analysis by holder (Tables H and J)

All sectors increased their holdings of sterling national debt.[2] Insurance companies and pension funds[3] showed the largest rise, of £14.8 billion. This was more than accounted for by a rise of £15.1 billion in their gilt holdings, while their Treasury bill holdings fell slightly. 'Other holders' (which include industrial and commercial companies) also increased their holdings of gilts, by £13.0 billion; in addition their holdings of non-marketable debt rose by £0.3 billion, but they reduced the Treasury bills they held by £0.1 billion.

Table H
Distribution of the sterling national debt: summary[a]

£ billions

	Amounts outstanding at 31 March		Change in
	1993	1994	1993/94
Market holdings			
Public corporations and local authorities	2.2	2.5	0.3
Banking sector	11.3	16.3	5.0
Building societies	4.3	5.8	1.5
Institutional investors:			
Insurance companies and pension funds	87.4	102.2	14.8
Other	1.8	2.0	0.2
Overseas residents	32.6	44.0	11.4
Individuals and private trusts	46.7	51.1	4.4
Other (including residual)	20.3	33.5	13.2
Total market holdings	206.6	257.4	50.8
Official holdings	22.0	31.2	9.2
Total sterling debt	**228.6**	**288.6**	**60.0**

(a) See Table J for a more detailed analysis. Data for 1970 to 1994 are published in the *Bank of England Statistical Abstract 1994*, Part 1 Table 17.3.

Total debt held by overseas residents is estimated to have risen by £11.4 billion, with government stocks and non-marketable debt accounting for £11.2 billion and £0.7 billion respectively (the latter being the IMF interest-free notes). These increases were partly offset by a fall of £0.5 billion in holdings of Treasury bills. The combined holdings of debt by banks[4] and building societies increased by £6.5 billion: their holdings of gilts rose by £7.4 billion but, as in most other sectors, their Treasury bill holdings fell—by £0.9 billion. There was a rise of £4.4 billion in the debt held by individuals and private trusts, the result mainly of increased holdings of national savings instruments (£4.0 billion) and a £0.4 billion rise in gilts held.[5] Holdings by public corporations and local authorities rose by £0.3 billion, with gilts accounting for £0.2 billion.

(1) Accrued interest, index-linked increments and bonuses outstanding on national savings certificates and Save As You Earn contracts, and non-capitalised interest on the National Savings Bank investment account, totalled £3.5 billion at 31 March 1994, compared with £3.8 billion a year earlier.
(2) The Bank conducted a survey of Central Gilts Office (CGO) members at 31 March 1993 to improve its knowledge of the sectoral distribution of holdings of government stocks at that date. A summary of the survey was included in the article, 'The gilt-edged market: developments in 1993', in the February 1994 *Bulletin* (pages 55–9). The estimate of the sectoral holdings in that article cannot, however, be directly reconciled to the gilts data in Tables H and J, since these include maturity data in arriving at the market value of holdings. A further survey of CGO members was undertaken at 31 March 1994 and it is intended in future to repeat the survey at the end of each calendar year.
(3) Figures for pension funds are based on the Central Statistical Office's regular statistical enquiries to a stratified sample of larger funds, with an allowance for smaller funds. The Central Statistical Office is planning to carry out a comprehensive survey of self-administered pension funds this year. The figures for 1988 onwards may need to be reconsidered in the light of the results.
(4) Exceptionally in this analysis excluding Bank of England Banking Department.
(5) These are broad estimates derived from the stock register and other sources. These were some 829,000 identified accounts on the stock register for individuals and private trusts at end-March 1994, a decline of almost 100,000 over the year.

Table J
Estimated distribution of the sterling national debt: 31 March 1994

£ millions, nominal values (a)

Market values in italics (b)

	Total debt	Percentage of market holdings	Treasury bills	Stocks (c) Total	*Market value*	Up to 5 years to maturity	Over 5 years and up to 15 years	Over 15 years and undated	Non-marketable debt
Market holdings									
Other public sector:									
Public corporations	2,332		19	336		168	168	—	1,977
Local authorities	125		6	119		60	29	30	—
Total	2,457	1.0	25	455	*488*	228	197	30	1,977
Banking sector: (d)									
Discount market	319		28	291		234	57	—	—
Other	15,974		1,043	14,745		5,680	7,271	1,794	186
Total	16,293	6.3	1,071	15,036	*16,093*	5,914	7,328	1,794	186
Building societies	5,836	2.3	447	5,384	*5,803*	4,370	829	185	5
Institutional investors:									
Insurance companies	69,246		9	69,237	*72,847*	6,206	33,274	29,757	—
Pension funds	32,883		118	32,765	*31,949*	2,846	16,448	13,471	—
Investment trusts	1,075			1,075	*1,156*	75	638	362	—
Unit trusts	898			890	*958*	153	570	167	8
Total	104,102	40.4	127	103,967	*106,910*	9,280	50,930	43,757	8
Overseas holders:									
International organisations	6,051		—	610	*586*	174	436	—	5,441
Central monetary institutions	15,032		184	14,848	*15,958*	8,294	6,554	—	—
Other	22,933		98	22,835	*24,454*	10,998	9,311	2,526	—
Total	44,016	17.1	282	38,293	*40,998*	19,466	16,301	2,526	5,441
Other holders:									
Public trustee and various non-corporate bodies	586		171	411	*438*	85	233	93	4
Individuals and private trusts (e)	51,106			11,875	*12,676*	4,097	5,380	2,398	39,231
Industrial and commercial companies	5,149		954	2,588	} *25,023*	12,750	8,972	4,372	{ 1,607
Other (residual)	27,837			23,506					4,331
Total	84,678	32.9	1,125	38,380	*38,137*	16,932	14,585	6,863	45,173
Total market holdings (d)	257,382	100.0	3,077	201,515	*208,429*	56,190	90,170	55,155	52,790
Official holdings (d)	31,207		722	7,992	*8,029*	2,246	4,139	1,607	22,493
Total sterling debt	**288,589**		**3,799**	**209,507**	***216,458***	**58,436**	**94,309**	**56,762** (f)	**75,283**

Owing to the rounding of figures, the sum of separate items will sometimes differ from the total shown.

— nil or less than £1 million.

(a) For explanations see the notes accompanying the similar tables on pages 439–40 of the November 1992 *Bulletin*.
(b) Some of these estimates are based on reported market values: certain others rely on broad nominal/market value ratios.
(c) A sectoral analysis of gilts holdings from 1970 to 1994 is published in the *Bank of England Statistical Abstract 1994*, Part 1 Table 17.4.
(d) Official holders include the Bank of England Issue Department and, exceptionally, the Banking Department.
(e) Direct holdings only; explained in the notes.
(f) Of which undated stocks amounted to £3,194 million.

Notes and definitions

The national debt

The *national debt* comprises the total liabilities of the National Loans Fund. The total excludes accrued interest (including index-linked increases) on national savings, Consolidated Fund liabilities (including contingent liabilities, *eg* coin), liabilities of other central government funds (notably the Issue Department's note liabilities, Northern Ireland government debt and stocks issued by certain government funds), and sundry other contingent liabilities and guaranteed debt.

The national debt includes the whole nominal value of all issued stocks, even where there are outstanding instalments due from market holders; in such circumstances a counter entry is included in public sector liquid assets. The nominal value of index-linked gilt-edged stocks has been raised by the amount of index-related capital uplift accrued to 31 March each year where applicable. Definitive figures for the national debt will be published in the *Consolidated Fund and National Loans Fund Accounts 1993/94 Supplementary Statements*. Provisional figures (some of which are revised in this article) are from *Financial Statistics*, September 1994.

Market holdings of the national debt, etc

Market holdings exclude holdings by other bodies within the central government sector (principally the funds of the National Investment and Loans Office, the Exchange Equalisation Account, government departments and the Issue Department of the Bank of England) and by the Banking Department of the Bank of England (together called 'official holders'). The term 'market' includes local authorities and public corporations as defined for national income statistics (see below). Exceptionally in these articles, Issue Department holdings under purchase and resale agreements are included in market holdings; such holdings are therefore included in Table C as a central government liquid asset.

Gross domestic product (GDP)

The percentage data shown are based on the average measure of GDP at current market prices in four quarters centred on 31 March, adjusted to remove the distortion caused by the abolition of domestic rates and the introduction of the community charge.

Net indebtedness to the Bank of England Banking Department

The Banking Department's holdings of central government debt (principally sterling Treasury bills and British government stocks) less its deposit liabilities to the National Loans Fund and Paymaster General.

Savings banks

This comprises deposits on ordinary accounts of the National Savings Bank.

Notes and coin in circulation

Excludes holdings by the Banking Department of the Bank of England which are subsumed within the figure for 'Net indebtedness' (see above).

Other central government gross debt

Comprises market holdings of Northern Ireland government debt (principally Ulster Savings Certificates) and the balances of certain public corporations with the Paymaster General.

General government consolidated gross debt

This includes not only market holdings of the national debt (*qv*) but any market holdings of other central government debt. In addition it includes all local authority debt. All holdings of each other's debt by these two parts of the public sector are then netted off to produce a consolidated total—which is the total of general government debt held outside the general government.

Public sector consolidated total debt

This includes not only market holdings of the national debt (*qv*) but any other market holdings of central government debt. In addition it includes all local authority and public corporation debt. All holdings of each other's debt by these three parts of the public sector are then netted off to produce a consolidated total, which is the total of public sector debt held outside the public sector, and of which further estimates (and a fuller analysis) are published each year by the Central Statistical Office in Table S1 of *Financial Statistics*.

The net debt of the public sector

This is derived from the consolidated debt of the public sector by deducting the public sector's holdings of liquid assets.

Official reserves

These are at the official dollar valuation (see notes and definitions to Table 8.1 in the February 1994 *Bulletin)* converted into sterling at the end-March middle-market closing rate.

Instalments due on British government stocks

The national debt includes the whole nominal value of all issued stocks, even when there are outstanding instalments due from market holders; a counter entry is, therefore, included in assets.

PSBR

Figures are taken from *Financial Statistics*, September 1994.

The external balance sheet of the United Kingdom: recent developments

This article examines changes to the net external asset position of the United Kingdom during 1993 (using figures published in the 1994 CSO Pink Book). It focuses on changes in the pattern of capital flows during the year and on the impact of valuation changes to existing assets, and includes an international comparison of external balance sheets.

Introduction

The United Kingdom had net external assets of £20.3 billion at the end of 1993, compared with a revised balance of £10.6 billion at the end of 1992. This increase in net external assets was achieved despite a current account deficit and reflected a positive revaluation of UK net assets, largely the result of asset price movements (see Table A). The net asset position (the balance of gross stocks of assets and liabilities of over £1.3 trillion) is, however, subject to revisions—as illustrated by the £16 billion downward revision to the 1992 figure since the 1993 Pink Book.

Table A
UK external assets and liabilities[a]

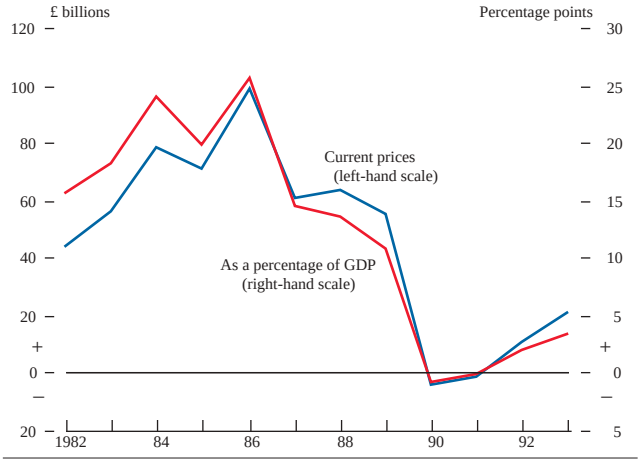
£ billions

	Stock end-1992	Identified capital flows	Net valuation effect (b)	Total change in stock	Stock end-1993
Non-bank portfolio investment:					
Assets	227.2	50.0	33.1	83.0	310.2
Liabilities	140.5	24.1	20.6	44.7	185.2
Direct investment: (c)					
Assets	143.7	17.3	5.2	22.5	166.2
Liabilities	121.8	9.5	-0.4	9.1	130.9
UK banks'(d)(e) net liabilities in:					
Foreign currency	14.3	3.7	-7.2	-3.5	10.9
Sterling	32.4	-8.2	-0.7	-8.9	23.5
Public sector					
Reserves (assets)	27.9	0.7	1.2	1.9	29.8
British government stocks (liabilities)	28.8	13.4	4.7	18.1	46.9
Other net public sector assets	-5.3	2.4	-0.4	2.0	-3.4
Other net assets	-45.0	-36.2	-4.0	-40.2	-85.2
Total net assets	**10.6**	**-8.3**	**18.0**	**9.6**	**20.3**

(a) The sign convention is not the same as in the balance of payments: a transaction that increases an itemised stock is + and one that decreases it is -.
(b) Residual component.
(c) UK banks' external borrowing from overseas affiliates is treated in the published data as an offset to outward direct investment, but it is treated here as part of the banks' net foreign currency liabilities.
(d) Estimated take-up of UK banks' bonds appears indistinguishably from foreign investment in other UK company subsidiaries in the published data, but is treated here as part of banks' net foreign currency liabilities. Banks' holdings of foreign currency bonds are treated as foreign currency lending.
(e) UK monetary sector plus certain other financial institutions.

Net capital inflows totalled £8.3 billion in 1993. There were massive inward and outward portfolio investment transactions during the year. The record purchases of overseas securities by UK residents (mainly banks and securities dealers), which seem to have been financed mainly by foreign currency borrowing from overseas, were subject to significant revaluations largely as a result of price

Chart 1
Net identified external assets at current prices and as a percentage of annual GDP



increases. The increased holdings of securities also provided additional interest and dividend receipts which contributed to net investment earnings of £3.1 billion in 1993, down on 1992's £4.3 billion of earnings.

Capital flows

The United Kingdom's capital account transactions in 1993 were dominated by activity in the securities markets. Both net outward and net inward portfolio investments were at record levels—at £85 billion and £40 billion respectively. Gross turnover also soared. Banks reported a threefold average increase in their own transactions in overseas bonds between 1992 and 1993.

Balance of payments data can offer only limited insights into the intentions of investors, because they record flows which in the event establish equilibriating exchange rates and asset prices in the market. But a number of features of market conditions may have contributed to the scale of activity.

First, as both market and official short-term interest rates fell, investors sought ways to improve returns. The higher returns available from longer-term maturities proved attractive, and this encouraged securities markets' activity. Second, there was a sharp increase in borrowing by sovereign authorities—both to fund government deficits and to replenish foreign exchange reserves in the wake of the

intervention within the European exchange rate mechanism. Around $45 billion worth of international foreign currency bonds were issued by European governments in the first half of 1993, and $28 billion in the second half. These high-quality sovereign bonds with a zero capital adequacy weighting were particularly attractive to banks, which were generally facing weak loan demand. The need of a number of governments—particularly in Europe—to sell high volumes of debt also encouraged them to introduce changes to their instruments and markets to make them more attractive to international investors.

Given London's importance as an international financial centre, both its banks and securities dealers—in their role as financial intermediaries—benefited from the active financial markets. Banks' fee income from overseas for securities transactions, for instance, increased by 50% in 1993 to £280 million.

Banks and securities dealers recorded sharp increases in their net purchases of overseas securities, particularly bonds. Banks purchased £34 billion of bonds and securities dealers £39 billion—both threefold increases on the previous annual records. This surge in portfolio investment was associated with a sharp increase in their net short-term borrowing. In total, UK residents—mainly banks and securities dealers—borrowed around a net £60 billion from overseas in 1993, easily a record (see Table B).(1) This suggests that the portfolios of both banks and securities dealers were at least in part financed by short-term borrowing.

Table B
UK balance of payments: transactions data

£ billions
Increase in UK assets (-)/increase in UK liabilities (+)

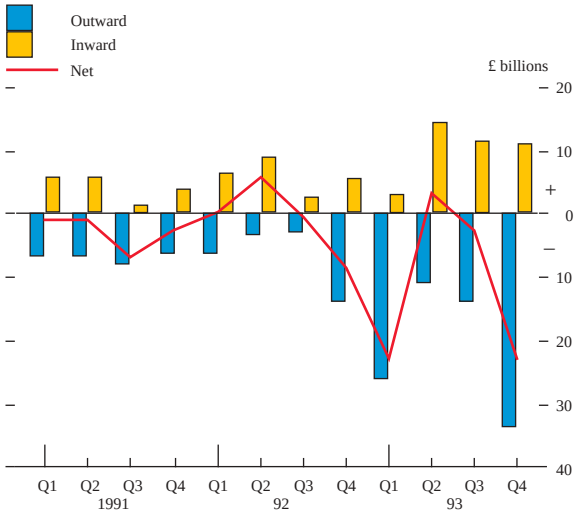
	1989	1990	1991	1992	1993
Current balance	-22.5	-19.0	-8.2	-9.8	-10.3
Long-term capital:					
Public sector (a)	-3.4	-0.6	7.0	7.7	14.6
Private sector (b)	-21.3	3.2	-19.0	-13.8	-68.0
	-24.7	2.5	-12.0	-6.1	-53.5
Balance	**-47.2**	**-16.5**	**-20.1**	**-15.9**	**-63.8**
Short-term capital (c)	22.4	8.4	13.7	13.1	33.7
Banks' transactions (d)	16.4	7.3	9.6	-5.0	28.8
Balance before reserves and errors	**-8.3**	**-0.7**	**3.1**	**-7.9**	**-1.3**
Reserves	5.4	-0.1	-2.7	1.4	-0.7
Errors and omissions	**-2.9**	**-0.8**	**0.4**	**-6.5**	**-2.0**

Columns may not sum to totals because of rounding.

(a) Includes overseas purchases of gilts and long-term government borrowing.
(b) Includes direct and portfolio investment excluding overseas investment in gilts.
(c) Includes all non-bank and government capital flows other than long term as defined above.
(d) Banks' net deposits, ie excludes banks' portfolio direct investment.

Foreign-owned securities dealers appear to have financed some of their investment by borrowing from their overseas parents, including through repurchase agreements. The existence of a positive yield curve—particularly in dollars, but also in sterling—made such transactions attractive, especially combined with an expectation that short-term interest rates would remain low (in the case of US rates) or fall (in the case of European rates). The market corrections in February this year followed the rise in US short-term interest rates and were associated, in the UK balance of payments accounts, with a sharp reversal of investment flows.

Chart 2
Portfolio investment(a)



(a) Includes banks' investment. + = increase in liabilities.

In contrast to banks and securities dealers, life assurance and pension funds concentrated their overseas securities investment in equities. But outward investment in equities, although strong at £8 billion, did not exceed the record years of 1989 and 1991. Instead institutional investors were heavy purchasers of UK securities.

Inward portfolio investment into the United Kingdom was also at record levels in 1993. The funding of the public sector borrowing requirement (PSBR) provided a steady supply of gilts during the year; and falling UK interest rates, a positive outlook for inflation and, for most of the year, a broadly stable exchange rate made gilts attractive to overseas investors, whose net purchases were a record £13 billion.

Overseas investors also made record net purchases of UK company securities (£25 billion). Companies took the opportunity of falling interest rates and rising share prices to raise funds in the securities—and particularly the equity—markets and repay bank borrowing.(2) And they responded to the strong rally in fixed-interest sterling markets by significantly altering the currency profile of their bond liabilities in favour of sterling fixed-rate bonds. In the year to the end of 1993, the outstanding proportion of sterling denominated fixed-rate to total UK corporate bonds increased from 17% to 23%. (By June this year, it had reached 26%.) In contrast, the proportion of yen and Swiss franc denominated bonds fell from 14% to 9%.

(1) Table B presents balance of payments data in a form that highlights the distinction between short and long-term capital. This form of presentation has not traditionally been used for the UK accounts but is common elsewhere, and is used by a number of countries eg Japan.
(2) More details on this can be found in the article on company profitability and finance in the August *Bulletin*, pages 241–9.

UK companies also raised capital in other markets. According to data collected by the Bank of England and included in the balance of payments statistics, UK companies raised a total of $1.6 billion in the US markets, with American Depositary Receipts—a vehicle used to allow trading in overseas equities in the US markets—particularly prominent. This year, some companies have also issued equity securities on the National Association of Securities Dealers Automated Quotations (NASDAQ). UK companies were also significant issuers in the euromedium-term note (EMTN) market; 1993 was notable for the number of issues structured to the needs of investors using derivatives. According to data from the Bank of International Settlements, outstanding UK EMTN issues doubled to $19.6 billion in the year to the end of 1993 (and reached $28 billion by the end of June 1994).

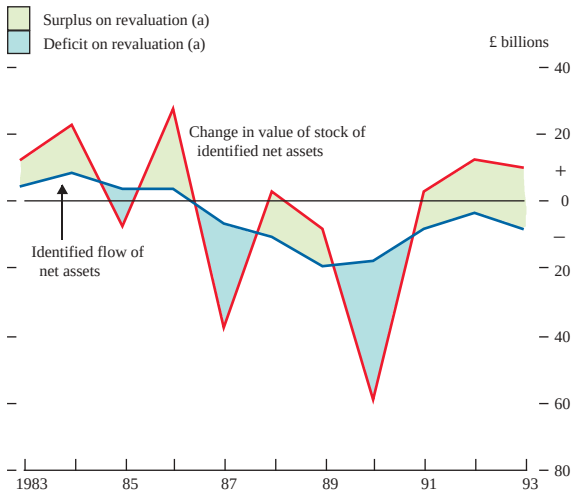
The apparent recovery in inward direct investment capital flows reflected the recovery in the earnings of UK direct investment enterprises (see the section on investment income below) and the retention of a significant proportion of these earnings. By contrast, gross outflows of share and loan capital into direct investment enterprises were at their lowest since 1984, perhaps reflecting the corporate sector's focus on balance-sheet restructuring rather than expansion. Similarly, gross inflows were below those seen in recent years, when the development of the Single Market may have encouraged a surge of direct investment activity. Nonetheless, the trend—evident since 1990—of net inflows of share and loan capital continued.

Effects of revaluation and an international comparison of external balance sheets

A current account deficit has to be financed by net capital inflows. Other things being equal, these will reduce net external assets by a reduction in gross external assets, an increase in gross external liabilities or some combination of the two. Net external assets are, however, also affected by changes in the valuation of gross external assets and liabilities. In 1993, revaluation effects of some £18 billion more than offset the negative impact of the £8 billion needed to finance the current account deficit. As a result, the United Kingdom's stock of net external assets rose to £20 billion.

Revaluation effects may be the result of changes in exchange rates or securities prices, or of other factors such as write-offs and revaluations of direct investment. It is difficult precisely to reflect the effect of changes in exchange rates and asset prices in the official statistics, and so there is an element of uncertainty in the estimate of the net asset position. Table C estimates the impact of revaluation factors and relates them to identified capital inflows. The estimate for the exchange rate revaluation effect is disaggregated into components for portfolio investment, direct investment and other net assets (lending to overseas residents and the effects on the official reserves and central government assets). Since precise figures are unavailable because of a lack of information about currencies of denomination and the types of investment involved, the estimates should be regarded only as indicative.

Chart 3
Contributions to changes in net external assets



(a) Residual component-difference between change in recorded net stock and identified net flows.

Table C
Change in identified net external assets

£ billions

		Average (a) 1982–89	1990	1991	1992	1993	1994 H1
A	Current balance (deficit -)	-4.1	-19.0	-8.2	-9.8	-10.3	-2.4 (b)
B	Identified capital flows (inflows -) (c)	-1.9	-18.2	-8.6	-3.4	-8.3	-1.4
C	Revaluations	4.7	-41.4	11.5	15.7	18.0	6.4
	of which:						
	Exchange rates		*-20.8*	*10.3*	*45.6*	*4.0*	*1.8*
	Portfolio investment		*-19.0*	*3.2*	*27.7*	*0.2*	*1.0*
	Direct investment		*-14.2*	*6.4*	*27.6*	*3.0*	*2.7*
	Other net assets		*12.4*	*0.7*	*-9.7*	*0.8*	*-1.9*
	Securities price effect		*-14.1*	*9.9*	*-13.3*	*12.7*	*23.7*
	Other (d)		*-6.5*	*-8.7*	*-16.5*	*1.3*	*-19.2*
D	Change in identified net assets (increase +)	2.8	-59.6	2.9	12.3	9.6	4.9
E	Net asset level (end-year)	55.0	-4.6	-1.7	10.6	20.3	25.2 (e)
F	Balancing item (f) (inflows/credits +)	2.3	0.8	-0.4	6.5	2.0	1.0

(a) End-year net asset level refers to end-1989.
(b) Seasonally adjusted.
(c) Note the difference between this sign convention and that of the balance of payments statistics.
(d) Including revaluations to direct investment stocks relating to write-offs, profitable disposals of assets etc as well as residual error.
(e) This is a preliminary estimate of the net stock position at the end of the second quarter of 1994.
(f) F=B–A.

Since 1990, when there was a negative effect of £41 billion, revaluation effects have been positive. Sterling's depreciation in 1992 following the suspension of ERM membership led to a very large positive revaluation of the sterling value of assets denominated in foreign currencies; in 1993, by contrast, the exchange rate revaluation effect was small because sterling's effective exchange rate was broadly unchanged between year-ends. In 1992, sterling's depreciation resulted in a £27.7 billion upward exchange rate revaluation of net portfolio investment assets. But the rally in sterling securities markets (particularly relative to overseas markets) following the suspension of ERM membership led to a negative price revaluation effect of £13.3 billion, as the value of UK gross liabilities held by

overseas residents increased by a larger amount than UK external assets. By contrast in 1993, the positive revaluation on portfolio investment of about £13 billion seems to have been almost wholly the result of changes in securities prices.

Preliminary estimates for the first half of this year indicate a £6.4 billion positive revaluation. Again the dominant factor was a positive securities price effect: this probably reflected the relatively sharp decline in UK sterling bond prices in the first half of 1994. The size of the effect, however, should be regarded with caution since the portfolio levels data may be subject to significant revisions. The exchange rate effects were in line with those in 1993, with a positive effect as a result of the slight depreciation of sterling over the first half of the year.

The net external asset positions of the United States, Japan, Germany and France—as well as the United Kingdom—are set out in Table D. Their different current account performances and the effects of revaluations—mainly caused by exchange rate fluctuations—have led to a sharp divergence in their net external positions since the mid-1980s.

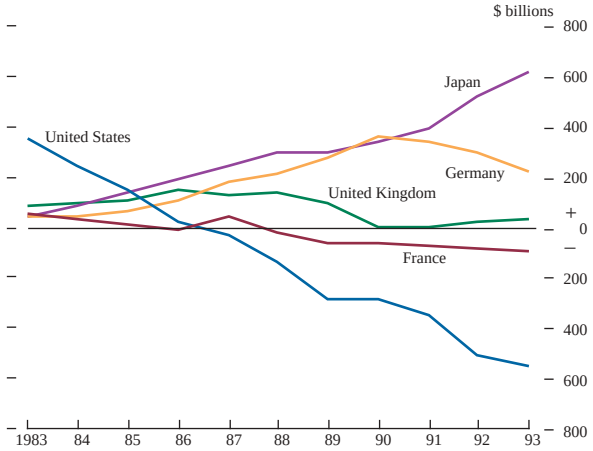
Table D
International comparisons of external net asset positions(a)

End-years	1981	1985	1990	1991	1992	1993
United States						
$ billions	374.3	139.1	-291.9	-349.5	-507.9	-555.7
Percentage of GNP	12.3	3.4	-5.3	-6.1	-8.4	-8.7
Japan						
$ billions	10.9	129.8	328.1	383.1	513.6	610.8
Percentage of GNP	1.0	10.0	10.3	10.6	13.7	14.4
Germany						
$ billions	29.2	53.3	356.8	328.1	286.0	211.6
Percentage of GNP	4.0	9.0	21.8	18.7	16.5	13.0
France						
$ billions	56.4	6.1	-71.2	-74.5	-89.0	-98.7
Percentage of GNP	11.6	1.0	-5.7	-5.8	-7.1	-8.3
United Kingdom						
$ billions	62.2	104.0	-8.9	-3.2	16.0	30.1
Percentage of GNP	11.9	22.4	-0.8	-0.3	1.8	3.2

(a) The data underlying this table are taken from national sources, the IMF *International Financial Statistics Publication* and the *Financial Accounts of OECD countries: France*. National sources may use disparate methodologies.

The fall in the value of Germany's net external asset position in recent years has been accompanied by its current account moving into deficit since 1991. The appreciation of the Deutsche Mark against the US dollar from 1988 onwards has further reduced its net external asset position. Unlike Germany, Japan—although its currency has also appreciated—has continued to run significant current account surpluses in recent years. As a result, whereas in 1990 its net asset position was broadly similar to Germany's, by the end of 1993 Japan's net assets were almost $400 billion higher. US net external liabilities have continued to increase, as the current account has remained in deficit. And current account deficits between 1987 and 1991 have resulted in France's moving from a broadly neutral position in 1985 to having net liabilities of $100 billion by the end of last year.

Chart 4
International comparisons of external net asset positions(a)



(a) See footnote to Table D.

Investment income

UK net investment income earnings declined slightly in 1993 from the record figures in the previous year, but remained significantly above the position in the early 1990s. As Table E shows, the decline in net earnings was attributable to the performance of net direct investment earnings. Both inward and outward gross earnings rose in 1993, but the growth of inward earnings was larger. The earnings of foreign-owned enterprises in the United Kingdom increased as activity picked up; most notably, after four years of poor returns foreign-owned banks increased their earnings by £3.2 billion compared with 1992. This recovery was mainly the result of a fall in provisions against bad debts and of the favourable conditions in the capital markets. By contrast, UK-owned banks overseas recorded only mixed results, mainly because of subdued earnings in Europe.

Table E
Investment income (II)

£ billions

	Annual average 1982–89	1990	1991	1992	1993	1994 H1
Earnings on assets						
Portfolio (a)	2.6	4.7	5.5	8.3	9.9	5.1
Direct	9.5	15.6	12.8	13.3	16.7	9.8
Other non-bank private sector	1.8	3.8	4.3	4.0	4.8	2.5
Public sector (b)	1.1	1.8	1.8	1.6	1.4	0.9
UK banks' spread earnings on external lending	1.8	0.1	0.3	1.8	2.0	1.9
Total	**16.7**	**26.0**	**24.7**	**29.0**	**34.8**	**20.2**
Payments on liabilities						
Portfolio (a)	1.4	5.8	6.5	6.4	6.6	3.5
Direct	6.8	7.0	4.5	5.1	10.5	4.4
Other non-bank private sector	1.9	4.7	5.7	6.9	8.1	5.0
Public sector (c)	1.8	2.5	2.6	3.1	3.3	2.1
Banks' cost of net liabilities	1.5	5.0	5.6	3.2	3.2	0.8
Total	**13.3**	**25.0**	**24.9**	**24.7**	**31.7**	**15.7**
Net II earnings	**3.4**	**1.0**	**-0.2**	**4.3**	**3.1**	**4.4** (d)
Net II excluding spread earnings	1.6	0.9	-0.5	2.5	1.1	2.5

(a) Non-bank private sector.
(b) Including official reserves.
(c) Including gilts.
(d) Not seasonally adjusted.

Banks' earnings from foreign exchange services to overseas residents

The importance of the foreign exchange market in the United Kingdom has been shown in surveys of foreign exchange turnover, most recently in 1992.(1) The Central Statistical Office (CSO) therefore asked the Bank to investigate the possibility of producing estimates of banks' foreign exchange service earnings consistent with IMF guidelines, for use in the current account of the balance of payments. The IMF guidelines, included in the fifth edition of its balance of payments manual (published in 1993), contain a recommendation that the spread between the midpoint and the buying or selling rate on foreign exchange transactions should be regarded as a service charge.

Until the end of 1991, banks provided data on their foreign exchange earnings from overseas residents (though these were not consistent with the new IMF guidelines). During the last Banking Statistics Review in 1990, however, bank representatives stressed the difficulties in estimating the split of earnings between overseas and UK residents, and hence the poor quality of the data provided. As a result, the split was not included in the new reporting form on balance of payments current account transactions introduced in 1992 (although data on explicit fees and commissions received from overseas residents for foreign exchange trading was included).

It was clear as a result that, to meet the IMF recommendation, the Bank would have to rely on information additional to that provided through the regular reporting system. It was decided to produce a benchmark estimate using the Bank's 1992 survey of foreign exchange turnover. As that survey was carried out in a month which the Bank for International Settlements (BIS)(2) described as fairly normal on the exchanges, it was reasonable to apply an average spread to the turnover data to produce a reliable estimate of service earnings. Deriving the benchmark estimate was still not straightforward, however: decisions had to be made about the type of business (spot and outright forward), the size of the spread (five basis points was settled on), and the type of counterparty (non-bank overseas residents) to include.

The results were highly sensitive to these decisions—particularly the exclusion of trading between UK banks and banks resident overseas. The BIS report stated that banks in smaller centres tend to hedge their positions in bigger centres; if so, banks in London are probably providing hedging services to other financial centres. Ideally, those services should be included in the estimate, but the banks contacted were unable to offer any indication about the scale of the activity. It is likely that including even a small proportion of this business would have significantly increased the estimates of service earnings; for that reason, the figures probably understate UK banks' foreign exchange service earnings from transactions with overseas residents.

The benchmark estimate suggested that, at £125 million, foreign exchange service earnings from overseas residents constituted around 30% of total bank earnings from foreign exchange dealings in the second quarter of 1992. In considering how to produce regular quarterly estimates, the Bank decided against simply applying a constant 30% factor to banks' total foreign exchange earnings, because research suggested that market volatility affected the relationship between service earnings and total earnings. Consequently, a quarterly standard deviation measure of exchange rate volatility for the major currencies was developed, which is taken into account when the quarterly estimates are produced.(3)

(1) See the article, 'The foreign exchange market in London,' in the November 1992 issue of the *Bulletin*.
(2) See the 'Central Bank Survey of Foreign Exchange Market Activity in April 1992', BIS Monetary and Economic Department, published March 1993.
(3) Copies of the full report produced for the CSO may be obtained by writing to the Balance of Payments Statistics Group, Monetary and Financial Statistics Division, Bank of England.

Total UK earnings on overseas direct investments once again benefited from robust economic growth in North America—the location of approximately 40% of UK direct investment.

There was an improvement in the net earnings of non-bank portfolio investments on the positive position in 1992. As the rate of return on assets was broadly unchanged between 1992 and 1993 (see Table F below), the higher gross earnings were the result of the massive build-up of holdings of overseas securities after the suspension of sterling's ERM membership. The rise in earnings was paralleled by higher payments on the 'other overseas liabilities' of the non-bank private sector, ie short-term borrowing abroad. The most significant element in this was increased payments by non-bank UK financial institutions and probably represented the financing of security positions. But even net of these borrowing costs, portfolio earnings increased (by £0.4 billion).

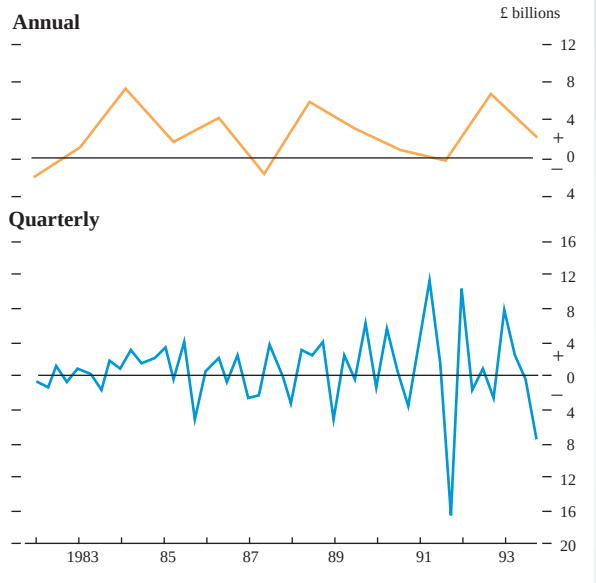
As in 1992, banking sector earnings contributed significantly to strong net investment income earnings in 1993. Banks recorded net interest and dividend receipts—rather than payments—for the first time since 1986. An important factor was a shift in the relative importance of the various sources of banks' overseas earnings—with securities income forming an increased proportion, reflecting the record purchases of overseas securities described above.

The benefit to banks' overseas earnings of their greater involvement in securities markets is illustrated in Chart 5, which shows their 'turn'—their investment earnings less their cost of funding. The data, based on a method developed within the Bank, were published in the British

Measurement issues

The 1994 CSO Pink Book included revisions to the data published a year earlier. The revisions to the current account deficits in 1990, 1991 and 1992 widened each by between £0.5 billion and £1.2 billion, in part because of improved estimates of the interest payable on overseas residents' holdings of gilts. The net asset position at end-1992 was revised down by £16 billion to £10 billion. And the net statistical discrepancy in 1992 was increased from under £1 billion to £6.5 billion. Although larger than in last year's Pink Book, the discrepancy remained considerably smaller than the corresponding balancing items published in the late 1980s. The volatility of the quarterly net statistical discrepancy suggests, however, that gross errors and omissions remain significant (see the chart).

Balancing item: annual and quarterly



The United Kingdom is not unique in having such a statistical discrepancy. The annual report of the International Monetary Fund's (IMF's) balance of payments statistics committee, published in April, highlighted the problem of measuring a balance of payments in a world of increasingly free capital movements. Between 1990 and 1992, there was a recorded deficit in the world current account of around $100 billion a year; in the same period, the world had a recorded excess of capital inflows over outflows of between $80 billion and $150 billion a year.

Both at a global and European level, efforts are being made to improve the quality and comparability of balance of payments data.

At a world level, in 1992 the IMF created a balance of payments statistics committee to take forward the recommendations contained in its studies into current and capital account discrepancies. One of that committee's priorities has been to improve the data on portfolio investment. The capital account study had revealed serious problems in the measurement of transactions flows and in the associated stock and investment income estimates. As a practical step forward, it had recommended a benchmark portfolio investment survey co-ordinated by the Fund. The committee has set up a task force to prepare for such a co-ordinated survey of assets (and if feasible, liabilities) at the end of 1997. The Central Statistical Office (CSO) and the Bank will both be represented on the task force.

For the participating countries, a comprehensive benchmark survey of assets should improve the quality of outward portfolio investment stock data, and so investment income data. In addition, the Bank's experience with benchmark surveys—such as the recent survey of gilts holdings(1)—suggests that the knowledge gained can help to improve the coverage of transactions data by correcting persistent reporting errors. A co-ordinated survey across countries, providing a breakdown of assets by the country of residence of the debtor, should bring additional benefits to the participating countries: by exchanging comparable data (so far as confidentiality constraints permit), participants should be able to improve their estimates of non-resident holdings of their liabilities (inward portfolio investment)—even if the survey does not set out to cover inward investment.

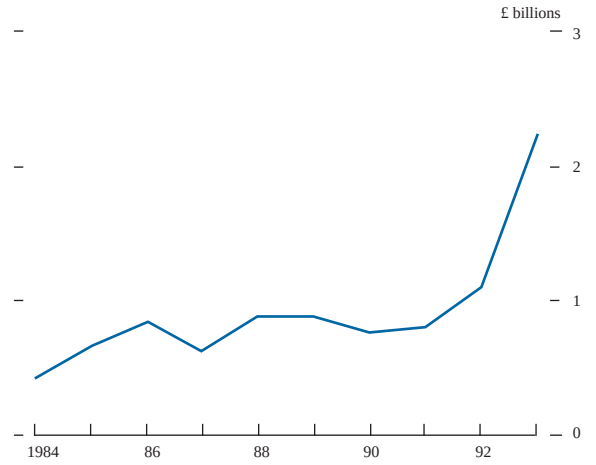
The survey should help to reduce the worldwide discrepancy on the portfolio investment account, and encourage a more consistent approach between countries, not only for the treatment of stock data but also for transactions data. It should also help spread best practice; and comparison of its results may well highlight bilateral discrepancies. But there will clearly be costs both for the compilers and reporters, and these will need to be contained.

In Europe, a European Monetary Institute (EMI) task force on balance of payments capital flows and stocks is reviewing the methods used by European balance of payments compilers. The objective is to produce meaningful aggregates for the European Union, based on the method set out in the fifth edition of the IMF balance of payments manual. Where difficulties arise over how to apply the IMF method, the task force is considering a standard European approach. The Bank and CSO are again both represented on the task force.

The Bank is contributing to this work particularly in the area of portfolio investment. To help European compilers, it has established a database of financial terminology which includes descriptions of different types of instrument and sets out how they should be treated in the balance of payments accounts. The database combines capital market knowledge with balance of payments method: it is intended as a practical aid to the work of European balance of payments compilers and a stimulus to greater consistency of approach. It has been created primarily for European compilers, but interest has also been expressed elsewhere. Although the Bank provides recommendations on the appropriate treatment of the instruments covered, the final decisions are made by the task force.(2)

(1) Details of the survey were included in an article on developments in the gilt-edged market in 1993 in the February *Bulletin*, pages 98–102.
(2) A copy of an article describing the Bank's database (originally published in the IMF's balance of payments newsletter) is available from the Balance of Payments Statistics Group, Monetary and Financial Statistics Division, Bank of England.

Chart 5
Banks: portfolio investment income net of funding costs[a]



(a) Source: British Invisibles 'City Table' 1994.

Invisibles' 1994 City Table.[1] They show a very sharp increase in banks' net earnings from portfolio investment in 1993; since 1991, these earnings have now almost tripled to £2.2 billion. Although the method used to produce the data could usefully be refined further, the underlying message from the figures appears clear: that the UK banks' funding of longer-term assets with short-term liabilities had a significant beneficial effect on the current account position in 1993.

Estimates for 1994 H1 put net investment income at £4.4 billion. A main factor behind this strong performance was the recovery in UK direct investment earnings. Net earnings of £5.4 billion on direct investments were only £0.8 billion below the total for 1993 as a whole; this result probably reflected economic recovery in foreign markets. UK banks have continued to report net interest and dividend receipts and, as in 1993, net receipts on interest rate swaps.

Capital gains and full rates of return

Table F sets out estimated investment income and full rates of return in recent years. The investment income rate of return is calculated by taking earnings as a percentage of the stock of investment. The full rate of return includes investment income earnings plus any capital gains, again expressed as a percentage of the stock. In 1993, the full rates of return on all assets declined significantly; they had been unusually high in 1992 because the depreciation of sterling that autumn had boosted the sterling value of foreign currency assets and liabilities. Over the last five years, the investment income rates of return for total assets and liabilities have proved remarkably similar.

Table F also highlights the recent tendency for income returns on UK portfolio investment liabilities to be higher than those on assets. Among other factors, this may reflect the preference on the part of UK investors for lower-earning capital-uncertain portfolio investments. Over a long period, however, the full rates of return on portfolio assets and liabilities have been similar, implying that the capital gain on assets has been greater than that on liabilities. In an efficient market, the expected full rates of return, expressed in sterling, should be equal at the margin.

Table F
Estimated investment income[a] and full[b] rates of return on identified assets and liabilities

Percentage points

Assets

	Total		Portfolio		Direct		Banks			
							Foreign currency		Sterling	
	II	Full	II	Full	II	Full	II	Full	II	Full
1989	7.7	17.4	3.3	18.7	13.4	11.9	8.1	17.3	12.6	13.7
1990	8.7	-5.4	4.1	-20.2	12.8	2.5	9.3	-4.5	13.8	14.2
1991	8.1	10.0	3.8	13.7	10.1	6.8	9.8	8.6	15.3	10.3
1992	5.9	18.1	4.2	15.9	8.9	16.7	6.0	21.3	11.1	6.5
1993	5.4	8.4	3.8	12.0	9.7	12.9	5.7	5.8	7.4	8.4

Liabilities

	Total		Portfolio		Direct		Banks			
							Foreign currency		Sterling	
	II	Full	II	Full	II	Full	II	Full	II	Full
1989	7.8	16.9	5.6	18.2	9.3	9.4	7.8	18.2	11.3	10.0
1990	8.5	-1.0	6.7	-3.9	6.2	-4.8	9.0	-4.1	12.9	12.6
1991	8.1	8.8	6.2	13.5	3.8	1.4	9.3	8.4	13.7	10.9
1992	5.6	16.5	5.1	16.1	4.2	-1.5	5.6	21.3	9.2	7.1
1993	5.2	6.7	4.0	12.6	8.0	7.7	5.4	4.9	6.1	6.4

(a) II earnings as a percentage of the stock.
(b) II earnings plus stock revaluations as a percentage of the stock.

(1) Banks' portfolio investment funding costs are not directly reported and had to be imputed. The method used was set in the press release issued when the City Table was published. Essentially, the stock of investment to be funded is allocated between banks' own foreign currency capital, securitised borrowing from overseas and a residual amount. Capital is regarded as interest-free; interest on securitised borrowing is estimated by the Bank; and the rate of interest applied to the residual amounts is assumed to be equal to the implied rate of interest on banks' total foreign currency borrowing and deposit liabilities to overseas residents.

Sustaining the recovery

*The **Governor** discusses[1] the contribution that the successful conduct of monetary policy can make to sustaining economic growth. He explains how policies aimed at achieving stability will also promote employment. And he outlines the reasons behind the decision to raise interest rates by ½% to 5¾% on 12 September.*

I am very glad to be here this evening—for two reasons. The first is that my visit gives me the opportunity to learn at first hand about economic conditions in this part of the country. The Bank attaches great importance to its direct contacts with industry—through the involvement of industrialists on our Court of Directors, through senior executive visits around the country such as this one and through our network of industrial agents, including Robin Webster in Newcastle. The information that we gather in these ways plays a significant part when we come to formulate our monetary policy recommendations.

My second reason is that this dinner gives me the opportunity to explain to you the reasons for last week's interest rate rise. But before I come on to that, I should like to say a few words about the economy more broadly.

It should go without saying that what we are ultimately seeking to do through monetary policy is to promote the economic prosperity of this country—the growth of output and employment. That is our whole aim in life. The debate, as I have said many times before, is about the *means* to that end, not about the end in itself; and for that we need to try to understand the *nature* of the pressures we are facing.

As a starting-point, I should like to distinguish between longer-term, structural pressures on the one hand and shorter-term, conjunctural pressures—those associated with the business cycle, if you like—on the other.

You here in the North East know as much about structural pressures as anyone! You have for decades lived through the rise and fall of great companies and industries under the impact of changing demands, changing technologies and changing production techniques, driven on by increasingly global competition. You know what that means in terms of economic and social stress. Those same pressures have affected—and are now increasingly affecting—the whole of the industrial world, including many of the service industries as well as manufacturing.

I know it's cold comfort, but in the longer term we all stand to gain from these developments. The world as a whole, for example, is clearly better off as a result of cheaper and more effective satisfaction of consumer needs; and rising real incomes, say, in countries like China and India with their huge populations are not only good in themselves, but they necessarily generate increasing demand for goods and services from other countries. Innovation and competition within free and fair markets make for a powerful positive-sum game. But it involves a process in which production can readily move from one location to another in search of cost advantages or in response to changing patterns of demand. And that process is a potentially difficult one in the short and medium term for established producers and for the countries in which they operate.

To survive—let alone prosper—companies and industries exposed to the full force of competition need constantly to update and innovate, and to improve their productivity. This often itself involves new production techniques, employing a smaller and typically more highly skilled workforce. At the macroeconomic level, this can improve a country's potential growth rate; but it also poses the threat of increasing unemployment—structural unemployment—especially among the less highly skilled, unless other companies and industries can be created or expanded to provide new jobs.

The problem of structural unemployment represents an enormous challenge to economic management—especially in Europe. I have in fact been very encouraged by the evidence I have seen of economic regeneration here in the North East—you have had some notable successes in attracting new activities. And that is true of this country as a whole, at least by comparison with some of our European partners. But there is nevertheless even here a huge overhang of structural unemployment already, and the pressure of competition continues to grow.

Now there is, frankly, not a great deal that monetary policy can do directly—and I emphasise directly—to improve the problem of structural unemployment. But an unstable monetary regime can make it worse. The direct remedies for structural unemployment lie for the most part in improving the adaptability and flexibility of the economy—through microeconomic, supply-side actions, for example improved education and training (including retraining), the removal of unnecessary burdens and constraints on business activity, and in improvements in the working of the labour market.

Most of these questions are outside the Bank of England's particular area of competence—except in one respect: we do

(1) In a speech on 22 September to the CBI northern regional annual dinner.

certainly have a role to play in helping to ensure that the financial system, including the banking system, is effective in supporting the wider economy. In this area we have been, as you know, putting a particular effort recently into trying to improve the relationships between the banks and the small business community. And we are persisting in those efforts because we believe that small businesses make an important contribution to the flexibility of the economy and to the problem of structural unemployment.

But the Bank's *main* business—its mainstream monetary policy—is concerned with a quite different problem. Its role is to provide a stable macroeconomic environment—specifically, price stability—as the context within which people and businesses can plan for the medium and longer term. To do this, we use interest rates to try to ensure that monetary conditions remain stable. This in turn helps to ensure that the economy grows at a sustainable pace and helps to prevent the emergence of inflationary imbalances between aggregate demand and the capacity of the economy to meet that demand. In this sense, monetary policy is concerned with conjunctural problems—and with trying to moderate the swings in the business cycle.

Where we are starting from recession, with the economy operating somewhere below capacity—as was certainly the case in this country in 1991–92—then it is perfectly true that monetary policy can, consistently with its stability objective, encourage the economy to grow at above its trend rate for a time, bringing down *cyclical* unemployment without that rekindling inflationary pressures. In principle, this can continue up to the point at which the economy is operating at full capacity, at which point the expansion has to be slowed down to the trend rate if inflation is not to revive. But in practice of course we do not know within a wide margin what the trend rate is, or how to measure full capacity—so that we have to operate pragmatically, watching carefully for early signs of re-emerging inflation as evidence that we are approaching full capacity, at least in some sectors of the economy, and allowing time for capacity in those constrained sectors to improve. And we have to be ready to moderate the expansion gradually, well before we overshoot. I will return to this in a moment.

The relevant point for the time being is that even to this degree we are talking only about the *cyclical* component of unemployment. We are not talking here about its *structural* component, though of course I understand that if you are unemployed you are not much interested whether it is for a structural or cyclical reason.

To the extent that monetary policy is successful in achieving greater stability over the cycle, it can contribute *indirectly* to improving the supply capacity of the economy and reducing the level of structural unemployment. Productive capacity and the associated labour force are more likely to be made prematurely—and permanently—redundant in a boom-and-bust environment, during the downturn; and new investment is more likely to be encouraged in the longer term by the prospect of steadier and more sustained expansion. To this degree, monetary policy has a crucially important role to play. But it cannot, as is sometimes implied, be used to attack the problem of structural unemployment directly—pumping up demand without regard to the existing supply capacity of the economy. That would be a sure recipe for the re-creation of inflation and a further round of go-stop.

What we are trying to do then, through monetary policy, is to deliver stability in this broader sense through permanently low inflation—defined by the Government as 1%–4%, and within the lower part of that range by the end of the present parliament. That objective and the reasons for it are, I believe, now very widely understood and supported.

In large part, that public understanding and support reflects the still relatively recent, bitter experience of what happens if inflation and the business cycle *are* allowed to get out of hand. But public understanding has also been helped, I believe, by the greater openness with which monetary policy is now conducted—through our own *Inflation Report* and through the publication of the minutes of the Chancellor's monetary policy meetings. What these procedures have demonstrated—to the satisfaction of all but a few dyed-in-the-wool sceptics—is that monetary policy decisions are essentially technical economic decisions and not dominated by short-term political considerations. They have also shown just how difficult and uncertain those technical decisions are. This has contributed over the summer to as good a public debate about the appropriate stance of monetary policy as I can readily recall.

The fact is that the immediate conjunctural situation is now more favourable than it has been for a generation. Inflation during the past year—whether you are talking about producer input or output prices, unit labour costs or any one of a range of measures of retail prices—has been as low as most of us can remember. Activity on the other hand has gradually accelerated, with gross domestic product rising by $3\frac{3}{4}$% in the year to June (or 3% excluding North Sea oil). This is well above anyone's guess at the trend rate of growth, and unemployment has steadily declined. Meanwhile the expansion has become better balanced, with some slowing in the growth of consumer spending and a flat secondary housing market leaving room for stronger growth of investment and net exports.

Why then has there been so much discussion about interest rates, and why did we raise them last week? The reason—and this was clearly reflected in the serious public debate, which is what so much impressed me—is that we were not just looking at what was happening last month or this; we were looking at what needed to be done to hold on to this favourable economic conjuncture looking out over the next two years.

Now the plain truth is that nobody really knows—at least with any precision or great certainty. The people to steer clear of are those who tell you it is obvious what is going to happen and obvious what should be done.

There were indicators pointing to some, moderate deterioration in inflation further ahead, which meant that we could not be wholly confident of achieving the Government's objective of the lower half of the target range for inflation by the end of the parliament. The data I have already referred to suggested output was growing faster and from a higher base than we had previously thought. This brought us closer to the point at which the economy would begin to encounter capacity constraints; and there were signs—perhaps a bit more than straws in the wind—of lengthening delivery times and associated price increases in some of the intermediate goods sectors. There were also, among business survey respondents, stronger expectations of price increases; and they were faced with a rise in commodity prices earlier this year.

There were, of course—as there always are—pointers in the other direction. I have already mentioned the flat housing market and slower growth in consumer spending. The monetary indicators themselves, especially broad money growth and the growth of bank lending, remained subdued. And there is further fiscal tightening still to come from the 1993 Budgets.

It is not surprising that, in weighing up this conflicting evidence, different commentators should emphasise different elements in the overall picture and reach different conclusions. What was striking to me, though, was how many outside commentators were already arguing for a prophylactic move during the summer—far more than one would normally expect in this country at this stage of an expansion.

In the end, of course, the judgment was a matter of balancing risks and, for our part, the risks did not appear symmetrical. Especially in the light of past failures to control inflation, any suggestion that the authorities were prepared once again to take risks on that side was likely to bring forward price—and possibly pay—increases which would make the prophecy of inflation self-fulfilling. The risk, on the other hand, that an interest rate rise now would seriously stall the overall expansion seemed comparatively small. In fact, a degree of moderation at this stage seemed just as likely to encourage business confidence in the sustainability of the expansion, and encourage business investment, as to dampen them; though that, I accept, of course can be argued either way.

So it was not, as you see, an easy decision and it was not taken lightly or wantonly. That is why—with the decision effectively taken at the meeting on the Wednesday—it was decided, wholly reasonably in my view, that we should reflect before going ahead. The Chancellor confirmed the decision on the Friday and, with no particular reason to delay, the Bank implemented it straight away on Monday morning.

The precise timing came as a surprise to the financial markets. Many people had come to expect a tightening at some point, but they had mostly concluded from the most recent data—even before the Wednesday meeting—that we would not in fact move this month. And they were confirmed in that view when we gave no indication of an intention to move through our money-market operations on the Thursday and Friday. I can understand that some of them felt they had been misled. But with the best will in the world, the process of advice and debate cannot reasonably be tied to reaching a decision to a precise timetable; and the Bank cannot be expected either to telegraph the intention to move or to implement policy changes to a timetable set solely by market expectations.

We will of course be continuing to monitor the flow of data. But unless it all goes in one direction—which would be surprising—we may not be sure for some time whether last week's move was either necessary or sufficient. But I am as confident as I can be that, by acting to raise interest rates in a carefully-considered and quite deliberate way, without any of the customary prompts—no financial market crisis and no sequence of unfavourable indicators patiently explained away until the evidence became overwhelming—the Chancellor has given us the best chance of creating the conditions in which the economy can continue to prosper. And that is as much as one can hope for. There can be no guarantees.

It was too much to hope that the business community would actually welcome the move—though some came courageously close to that. But if, by acting sooner rather than later, we can keep the economy growing at a sustainable pace and avoid the need to bring it eventually to a grinding halt, I will still hope one day to persuade you that timely increases in interest rates are not a cause for gloom and despondency, but a natural part of a benign process of stabilisation. I recognise that it may take us a little time!

Recent developments in supervisory practice

In a wide-ranging survey, Brian Quinn—Executive Director, Financial Stability in the Bank—suggests[1] *that the recent coincidence of a much more competitive environment and a pronounced cycle in economic activity has played an influential part in supervisory developments.*

He argues that economic cycles tend to produce exaggerated swings in banks' profits; successful moderation of the cycle—by the early and judicious use of macroeconomic policy—might be the most important development in regulatory practice. Banks could in addition make their own contribution, by improving their risk analysis; and he sounds a note of warning against lenders rationalising away the lessons learnt in the recent cycle.

He also draws attention to the increase in financial criminal activity, and suggests that a recent UK innovation to improve the exchange of information among regulatory and criminal-prosecution authorities might serve as a model for wider international co-operation in this area.

Introduction

An examination of your programme over these last two days suggests to me that much of the ground which might be covered in any talk on recent developments in supervisory practice may already have been dealt with by others. I certainly would not want to place myself in head-to-head competition with the other speakers.

However, as some of you may be aware, the recent reorganisation of the Bank of England has left me occupying the position of Executive Director of the Financial Stability Wing in the new, restructured Bank—a somewhat risky and exposed position you might reasonably think. That role encourages me to look a little wider, and today gives me an opportunity to do just that.

Some of you may also know that I have been chairman of the supervisory sub-committee of the former Committee of EC Governors (latterly the Council of the EMI) for these last five years. This enables me to look beyond the United Kingdom so far as the banking sector itself is concerned. However, I would wish to stress that any views I offer today are entirely my own.

Finally, as the United Kingdom and some European countries emerge from what was a particularly difficult economic cycle, it might be interesting to spend a little time talking about what that experience may have taught us. The connection between developments in the economy in general and the performance of banks has seldom been clearer, and prompts some thoughts on the implications of the current and prospective stance of macroeconomic policy in a number of countries. There are grounds for both encouragement and for concern in what I think I see.

Recent developments in the real and financial economy

The last few years have witnessed a powerful combination of forces leading to strains in the banking sector and in financial markets generally.

There seems to have been no let-up in the developments in technology which allow financial institutions to come forward with new and increasingly complex products. The conduct of merger and takeover bids—to take just one example—has been transformed by the imaginative use of derivative instruments; and, of course, the players in capital markets have expanded to cover a much wider range of financial and non-financial institutions. These markets have, as a result, become wider; whether they have become deeper is, however, another matter.

On the other side of the market, the consumers of financial goods and services are enjoying probably unparalleled benefits in the variety and sophistication of what is available. As a quick glance at the daily newspapers will confirm, retail customers as well as wholesale have a much wider choice of products. The liberalisation of financial markets and banking systems has also meant that access to these sectors is probably freer than ever before. Taken together, these factors have generated a distinct change of gear in competition, with a general downward effect on the prices and margins available to the manufacturers and distributors of financial goods and services. This much is well recognised and has been the subject of much comment.

A further factor has been an economic cycle the length and amplitude of which has in many countries been greater than in any period since the last World War. In the upswing of

(1) In a speech at the Financial Times' conference on international banking in Madrid on 30 September.

this cycle, economic conditions existed which encouraged banks and other financial institutions to deploy the new technology and their enhanced marketing skills to maximum effect. The feel-good factor among borrowers, personal and corporate, was more than matched by the keenness of existing and new participants in the financial sector to capture market share. Part of the perceived wisdom of the time was that deregulation would result in a relatively small number of very strong financial institutions which would gobble up, or wipe out, the opposition. No-one could afford to be left behind in such a climate. There was particular enthusiasm for capturing the new entrepreneurs, the small and medium companies that were established in this period of optimism.

As margins in commercial lending came under increasing competitive pressure, banks sought to maintain earnings by shifting capacity in other directions—notably into trading activities, especially in foreign exchange and capital markets. Non-banking institutions, particularly but not exclusively securities companies, had at about the same time identified securities trading as an attractive source of income. This was intended to replace their traditional revenue streams, which were themselves rendered less sustainable by the abolition of fixed commissions and the growth of competition in this sector. There was, in a word, convergence by both banks and non-bank financial companies on designing and trading financial products. In this environment, it now seems quite unsurprising that derivatives should have expanded at the pace which we have observed in the last decade.

Much has been said and written on the subject of derivatives: the reservations and concerns of supervisors do not need repeating by me. Nevertheless, the Bank of England is among those ready to acknowledge that these products also have the potential to make markets more efficient, and to bring financial and welfare gains to both those who supply and those who use them. They have also had important spin-offs, the most important of which—from a regulator's viewpoint—is a much more detailed understanding of risk. Derivatives in particular have stimulated work on the analysis and pricing of risk. The results of this work are capable of being applied to credit risk as well as to the various classes of market risk. I will leave to Gene Ludwig[1] the task of speaking in greater depth about the challenge to supervisors of dealing with derivatives and concentrate instead for a moment on the particular subject of credit risk.

The experience of recent years has demonstrated yet again—as if it were necessary to do so—that banks' understanding of credit risk has been, to put it politely, somewhat imperfect. The EMI supervisory sub-committee recently embarked on a study of evolving conditions in the banking sector in EU countries over a period of years, the first stage of which indicated clearly that credit problems were by far the most important factor leading to difficulties among member banks. The work also demonstrated that the downward trend in lending margins, so evident in US and UK commercial banking sector in the last five years, is being repeated in a large number of European countries. Furthermore, the incidence of bad and doubtful debts—which in the recent recession were in some countries at a level unprecedented since the war—strongly suggests that bankers in several countries had allowed the risk/reward ratio to get seriously out of kilter. Risk management manuals seem to have been left to gather dust in too many cases where the pressure of competition from both inside and outside the sector appeared to threaten the loss of critical customer mass.

The supervisory response

Against this background it is not, I think, too self-serving for banking supervisors in G10 and EU countries to claim that the steps they took to increase capital standards among banks were timely. I might also note in an aside that later suggestions that these higher standards would lead to a credit crunch which would stifle the recovery from recession have been falsified by continuing low demand for credit and ample bank capital. However, it would be quite wrong for the supervisors to think that they were as a result spared the need to look hard again at the analysis of credit risk and to assess the implications for banks' pricing and provisioning policies.

Supervisors are making serious efforts to stay abreast of developments in risk management more generally. The adoption of complicated, mathematically defined risk models has posed new challenges, to which we are having to respond by specialisation of staff very similar to that which is taking place in banks and other financial services companies.

The Bank of England has established a small, expert traded-markets team whose working time is devoted exclusively to understanding the models employed by the major financial companies to determine the pricing of their products and the capital required to support the risks involved. The Basle Committee is approaching the question of market risk in the same way and has these past months been looking, through a similar group of experts, at the models and techniques used by firms throughout the G10. We are now in the process of testing these models and the results could be important input to the choice of capital adequacy requirements which the G10 supervisors will propose in their current work on market risk.

Work of this kind inevitably takes a supervisor not only into increasingly greater detail both as regards the particular parameters and variables in these models, but also into further and further refinement of approach. Where should this end? I accept that moves along limited sectors of a particular yield curve can produce differences in risk. But does it really matter all that much?

There is a feeling of *déjà vu* in saying this. The original Basle capital accord was, you may remember, criticised for

(1) Mr Ludwig, the Comptroller of the Currency at the US Office of the Comptroller of the Currency, also addressed the conference.

its excessive simplicity. We have never sought to argue that that approach was anything other than broad-brush in its analysis of risk. But it was easily comprehensible, capable of leading to straightforward and relatively inexpensive reporting requirements and broadly right—not a bad package in my view.

There is clearly a trade-off between accuracy in detail and cost, and I am by no means persuaded that the right approach is to follow the analysis of market risk into finer and finer gradations so that the regulatory regime captures every risk variation. It is surely right that supervisors should understand as well as they possibly can what risk models mean; but I have long believed that having understood that, the supervisor should be wary of being drawn into fine judgments between counterparties or classes of instrument. That is for the banker and securities company; otherwise business decisions may be excessively influenced by regulatory requirements. There is also the risk that such an approach may result in being unable to see the wood for the trees.

All of this seems to me to point to two broad conclusions: first, that we should have in our minds the whole-bank, or portfolio, approach in looking at an institution's risk profile; and that we should be trying to identify the main parameters or determinants of risk in proprietary models, and to concentrate on these in order to keep our approach broadly right. This is perhaps as level a playing-field as we should be aiming for. It would be dangerous if we were to believe that market risk—any more than credit risk—could be reduced to a series of equations and coefficients. Important as these features are, and vital as it may be for supervisors to understand them fully, decisions are ultimately a matter of judgment exercised by management; hence the importance attached by supervisors and regulators to the qualitative aspects of risk management.

Economic cycles and bank problems

I argued earlier that the coincidence of a deregulated, much more highly competitive environment and a pronounced cycle in economic activity can spell trouble for financial institutions and particularly for banks. It is by now received wisdom that during the upswing—and particularly when asset values are rising quickly—bad credit and bad market decisions tend to be obscured; and in a severe and protracted downswing, a reversal in the circumstances not only reveals those errors of judgment but can also create solvency problems for institutions which may have behaved in a way that could be considered prudent in normal circumstances.

Such was certainly the experience in the United Kingdom in the downswing of the cycle in the years 1990–92. A significant number of small banking institutions in particular saw what were initially temporary problems of liquidity gradually turn into problems of asset quality, as the recession hit particular sectors of the economy especially hard and stretched out over an unprecedentedly long period. This experience corroborated work done in the Bank suggesting that cycles in the economy have been generating increasingly pronounced cycles in bank profits.

A principal factor at work here is the timing difference between the reporting of income from a bank loan and the provisions which subsequently have to be raised when the same asset becomes impaired. This coincides with the interruption in the revenue stream when the asset moves from performing to non-performing. A further distortion arises from the boost given to nominal income during the inflationary phase of the cycle from the deployment of shareholders' funds.

Ironing out these distortions not only dampens the amplitude of the swings in bank profits but—when corrected for inflation—shows a fairly stable real pre-tax rate of return on equity in the mid-teens, with even the suggestion of a slight upward trend. Of course, it does not necessarily follow that these unadjusted movements in profits are generated only by the cycle—bad credit decisions would create these swings in reported profits even in stable conditions—but the data make it quite clear that these decisions are at least coincident with the movement of the economic cycle and probably caused partly by it.

The results of this work do not, on the face of it, support the view, widely held, that there is excess capacity in some absolute sense in the UK banking sector—at least among the largest banks. It may, however, be that in the face of excess capacity banks have shifted the use they make of this capacity into the manufacture and distribution of other financial services, thus maintaining real profitability. This tallies with the diversification of UK commercial banks into housing finance, investment and insurance products, where a branch network and a capacity to process bulk transactions is valuable.

Over the period covered by this work, encompassing two complete cycles in economic activity, the number of small banks and financial institutions has steadily reduced. Some 60 have gone out of business, or merged, or been absorbed by others. Of course, a number of other powerful forces have been at work leading to concentration in the financial services sector. For example, the larger banks may have moved into the sectors previously served by the smaller banks, both to make use of their spare 'soft' capacity and in response to increased competition in their own customer bases. But there is at least a question as to whether the process of consolidation has been hastened by the cycle. As I indicated earlier, smaller banks—particularly those dependent on wholesale funding—saw what started as a liquidity squeeze change into solvency problems during the last recession, and it is possible that some of these institutions, which serve the needs of particular sections of the business communities, may have been driven out of business unnecessarily or prematurely.

It is also worthwhile asking ourselves whether the macroeconomic policy mix could have been another factor influencing the performance of the financial institutions.

The relative roles played by fiscal and monetary measures in the conduct of macroeconomic policy also appear to have changed over a number of years. In particular, fiscal policy appears to have been carrying less of the burden than monetary policy in the management of the economy. There are several reasons for this, including: the difficulties of making timely changes in the fiscal stance, given the political difficulties and parliamentary procedures involved; the fall from fashion of budgetary adjustments as a means of fine-tuning economic activity in these circumstances; and the prevailing counterinflationary thrust of macroeconomic policy in recent years. In these circumstances, changes in short-term interest rates have carried more and more of the weight in the policy mix.

The question here is whether changes in short-term interest rates, sometimes of an unexpected magnitude, have produced larger variations in the value of financial assets than would have been the case if fiscal and monetary policies were making a more equal contribution to the adjustment process. Such general questions, of course, need much more thorough examination. The ingredients of a change in fiscal policy can clearly affect particular classes of asset with special force; one would also have to look at the changes in the portfolios of banks' assets over a period of years to see whether they were becoming more or less susceptible to changes in short-term interest rates.

But intuitively it seems plausible that the use of an instrument which is explicitly counterinflationary in its purpose should have a more direct and more substantial effect on the value of financial assets than changes in general taxation or expenditure. This would be especially likely if the changes in interest rates were an unexpected or delayed response to developing problems in the economy.

Some tentative lessons

Let me try to draw out some tentative conclusions from these observations for banks and financial regulators.

First, economic cycles are bad for your health. They tend to produce exaggerated swings in bank profits and, through their effects on credit judgments, generate uncertainties about the value of bank assets which must find reflection in the capital markets' valuations of banks' shares. Moderation in the economic cycle, particularly if combined with a general low inflationary environment, should substantially reduce the differences between banks' reported performance and their underlying performance. This could lead to a lower real cost of capital.

Banks can make their own contribution to any such development by improving their risk analysis—both as it bears on credit risk but also in the area of market risk, given the change in the composition of bank activities. They should also be giving consideration to provisioning policy with a view to smoothing out the differences between reported and actual profits over the life of the loan book; or, alternatively, taking account of these timing differences in setting their own capital ratios for operating or budgetary purposes. Bank supervisors should take this into account in judging whether banks are making an adequate provision for loss and have adequate capital.

A mix of macroeconomic policy which achieves broad balance between fiscal and monetary policy could also make it easier for banks to achieve greater stability in bank earnings. Changes in short-term interest rates that anticipate, rather than lag, the performance of the economy could also contribute to a reduction in the amplitude of the cycle and a more even pattern of bank earnings.

A lower real cost of capital for banks, combined with the use of techniques which enable risk to be reflected better in the pricing of banks' goods and services, should in the long term enhance their capacity to compete more effectively with non-banks.

Such a scenario paints a rather attractive picture and one which goes against what I perceive is a degree of gloom concerning the long-term prospects of commercial banks. If it is not exactly the sunlit uplands, it at least suggests that bankers are not necessarily marching into the Valley of Death! But it is, of course, both naive and unrealistic to think that the rest of the world will stand watching while banks take advantage of any such improvement in the economic environment. Secondly, I regret to say that I feel I cannot assume that banks will not find other ways of digging holes for themselves. As I have already indicated, the supervisors of both banks and securities companies continue to watch developments in derivatives with close interest, and are not prepared to take on trust assertions that market risk models provide adequate insulation against unexpected and significant loss. Models are only as good as the modellers—and modellers are not infallible.

Nor can it be assumed that banks will not dig the same hole for themselves as they have in the past. While it may be true that the significant changes in economic conditions in recent years may have overwhelmed even normally prudent lending behaviour, it is hard to escape the feeling that the banks themselves failed to observe the necessary disciplines in their lending operations.

Indeed there are already some signs in the United Kingdom that the lessons of the recent cycle may be being forgotten. In conditions where the demand for credit is still very slack and where banks have ample capital to support the expansion of their balance sheets, there are signs that margins on any new credits being arranged are now very fine. Perhaps even more disturbing, the conditions on loan covenants are being relaxed for these credits.

One has to be careful of overreacting to these signs. It may be that the banks' risk analysis has already improved to the point where the pricing of credits, especially to high quality borrowers, makes good prudential sense. There was also criticism of the commercial banks for relying excessively on security, so it is also possible that the non-price terms and conditions attaching to credits have been relaxed for good reason reflecting the quality of the borrower. But you will

understand if I remain to be persuaded by such arguments. I am rather more inclined to suggest that the lessons of the recent cycle may already be being rationalised away.

The prevention of crime in the financial system

Another threat to the world's banking system, and one which does not at first sight appear to be close to the interests of supervisors and regulators, is the growing use of the financial system by criminals.

It is, of course, true that banking supervisors and financial regulators have been directly involved in efforts to keep the launderers of the proceeds of drugs and other serious crimes out of the financial system. The Basle Committee of Supervisors in 1988 issued guidelines designed to assist banks in detecting the laundering of drug money. These guidelines have since been incorporated into reporting procedures in G10 member countries. But the evidence grows that criminal activity of other kinds—including most notably fraud—is showing up more commonly in the financial institutions of the developed countries. Part of this increase involves financial institutions in countries where the systems of regulation and supervision have only recently been established and do not yet incorporate the safeguards found in the developed world.

But it also has to be said that criminals in the more developed countries seem to have concentrated their attention in recent years on either defrauding authorised financial institutions, or using these institutions to perpetrate fraud or other crimes on third parties. Such a development, it seems to me, could become every bit as damaging to the world financial system as imprudent behaviour of the kind that led to the formation of the Basle Committee.

The establishment and work of the Special Investigations Unit of the Bank of England strongly suggests that such behaviour is on the increase; and one hears similar stories from a number of other countries. The UK authorities have responded to this by the formation of the Financial Fraud Information Network (FFIN), which combines not only representatives of the supervisory and regulatory bodies in the United Kingdom, but also of the police authorities and other official agencies involved in the detection and prosecution of crime. This body—which is chaired by the head of the Bank of England's Special Investigations Unit—has been in existence now for almost two years, and has led to enhanced information flows between those represented and to a number of cases where co-operation among these agencies has been effective in preventing or pursuing criminal activities in the United Kingdom.

I am not aware that a similar arrangement exists in other countries, and I do wonder whether there might be scope not only for national models of this kind but also for international co-operation which could be founded on the work of bodies like FFIN in the United Kingdom. The precise form of the model would, of course, be a matter for the national authorities in each case, but I feel that it must be possible to combine variety in national arrangements with more effective co-operation between regulators, supervisors and the criminal-prosecuting authorities in a number of countries.

European regulatory developments

Much time and energy is being spent at present by European banks, securities companies and regulators in preparing for the implementation of the Capital Adequacy Directive (CAD) which—with its companion Investment Services Directive—represents a major element in the programme of Single Market legislation.

I do not think it is appreciated how complicated and far-reaching the introduction of the CAD will be. It should do more to achieve a consistent prudential framework for the securities and foreign exchange operations of financial institutions than any other single measure; it provides a conceptually level playing-field. I say 'conceptually' because there will doubtless be national variations in how the Directive is implemented and, in particular, in the extent to which the CAD is seen not only as a minimum but also as a norm. It would be regrettable and contrary to the spirit of the Directive if the opportunity was not taken to do some equalising of the capital standards with which European banks and securities companies have to comply. But that still leaves scope for legitimate differentials not only between countries but also within countries. I do not think it follows at all that capital requirements above the CAD minimum in a single country or in a given activity necessarily bring a competitive disadvantage. One simply has to look at the rating agencies' rankings—and the resulting funding costs—to make the point.

The CAD also contains a provision for amendment which could allow supervisors to take account of progress made in the deliberations of the Basle Committee of Supervisors in the same areas. The task here is for the Basle Committee to make progress with its own proposals sufficiently quickly to enable them to be taken into account before banks and securities companies have to commit the significant resources which will be needed to comply with the CAD itself. I hope that this can be done. I hope too—but am less confident—that the securities supervisors can resolve their own internal differences, so that the common framework being sought in Europe is identical with, or at least consistent with, that being adopted in the other main financial centres. The banking and securities supervisors had a near-miss on this subject over two years ago. Perhaps enough time has elapsed since then to hope that that near-miss can be converted into a docking operation, if I may mix my aerospatial metaphors.

Payments and settlements

I should not fail in any talk addressing recent regulatory developments to note the progress being made in reinforcing payments and settlements systems in a number of countries.

Payments regulators in the European Union are already well advanced on work designed to produce payment

arrangements across the European Union that are fully compatible with the conduct of a single monetary policy and, ultimately, a single currency. Much work is also going on among the G10 payments experts on multilateral payments developments. Finally, settlement arrangements in equity and bond markets in London are being substantially overhauled to reduce the risk of operational failure in these markets. I am aware that this is not the sexiest of subjects, and know of at least one chairman of a large bank who congratulated himself on having completed a career in banking without allowing himself to be drawn into payments matters. No such luxury is afforded to bank chairmen these days.

Conclusion

It is not the job of the supervisor or regulator to seek to eliminate losses or failure in financial institutions. To try to do so would be not only to court certain failure but would be wrong in principle. As I see it, it is our job to identify and, where possible, measure risks; to put in place a framework that provides a degree of protection to investors and depositors; and to satisfy ourselves that the managers of financial institutions are aware of the risks in their business and have put in place arrangements to control them.

Doing this job is, I can assure you, quite demanding enough. Current and recent changes in the financial system mean that the precise nature of the challenge can change without much warning. We are told—and I believe correctly—that the underlying risks themselves have not changed, only the form. That is, however, of limited comfort. This means the vehicle of the risk can be all-important, and supervisors and regulators, I have tried to argue this afternoon, must make every effort to stay up with the game. Technological developments, in particular, present an ever-changing challenge—whether one is talking about financial risk or about criminal activity in the banking system.

But there is another, probably more important, force at work which regulators and supervisors have little power to influence, and that is the economic environment in which financial agents of all kinds carry out their business. If the economic cycle could be moderated through the early and judicious use of macroeconomic policy, this could be the single most important development in regulatory practice. It may sound strange to say so, but recent changes in short-term interest rates before the economies in several countries have entered a new boom phase might possibly mark a change in the longer-term fortunes of banks, securities companies and those who use their products.