

# Financial market developments

- *International bond issuance rose sharply in the first quarter of 1996 and yields in major bond markets began to rise.*
- *The rise in equity prices was interrupted in the first half of the quarter, but resumed by the end of March.*
- *The sharp increase in turnover on derivatives exchanges may, like that in the first half of 1994, be a short-lived reflection of interest-rate uncertainties.*

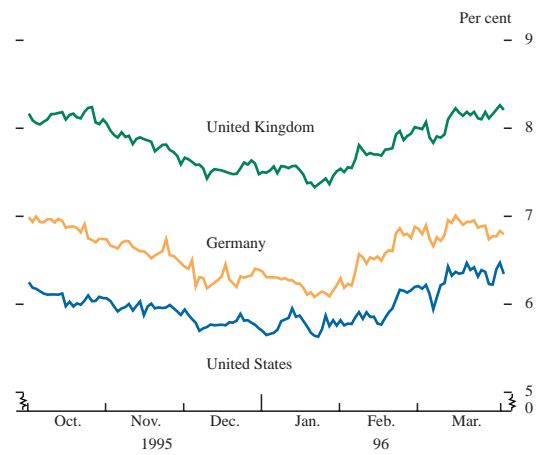
## Background

The long rally in bond prices ended in the first quarter; but neither this, nor slowing growth in some of the major economies at the end of last year, prevented a sharp rise in international bond issuance. The average spread between ten-year AAA-rated corporate debt and government bond yields narrowed—in the United States by 13 basis points and in Germany by 20 basis points. In the first half of the quarter, equity prices also fell back—although in this case the reversal appears to have been temporary. The publication of exceptionally strong US non-farm payrolls data on 8 March—which had not been anticipated by the markets—may be part of the explanation for the turnaround in bond yields. The underlying inflation background is currently very different to that at the time of the last major turnaround in bond prices in February 1994. Concerns late last year over the US government's budgetary problems and the Japan premium have receded.

After widespread reductions towards the end of 1995, there were fewer changes in official interest rates in the G7 economies during the first quarter. Estimated ten-year nominal spot rates reached a low-point around 18 January; thereafter they began to rise in the major bond markets. But the scale of the rise varied considerably. By the end of the quarter, they had risen by around 70 basis points in the United Kingdom and United States and by 49 in Germany (Chart 1).<sup>(1)</sup> But in France and Japan they were actually down slightly at the end of the quarter, albeit having risen initially for a time during January and February. The implied volatility in futures markets of several major government bonds rose during the first quarter. This broadly coincided with the increase in ten-year bond yields.

Spreads against ten-year German government bond yields did not move decisively in one direction in the first quarter.

**Chart 1**  
Estimated ten-year nominal spot rates



The United Kingdom, United States and Canada saw spreads worsen against Germany, while Japan, France and Italy registered quite large improvements—the spread between Italian and German government bond yields narrowed by 42 basis points compared with the end of the fourth quarter. Despite rising during February, spreads against Germany in some of the higher-yielding EU economies had fallen by the end of March. In Sweden spreads fell 28 basis points; they declined by 63 basis points in Spain, although this was influenced by the result of the general election.

## Primary bond markets<sup>(2)</sup>

### International issues

Merger and acquisition activity and, until recently, a secondary market rally, helped to support issuance in the international bond markets. Issuance of all major forms of international bonds rose in the first quarter of 1996 to a record \$191.9 billion—an increase of 49.0% since the fourth quarter and 70.2% since the same period last year (see

(1) See the article 'G7 yield curves' by Neil Cooper and Jim Steeley on pages 199–208 of this *Bulletin*.

(2) This issue of Financial Market Developments contains bond issuance and syndicated credits data from the IFR database, replacing the Bank's ICMS database. Fuller coverage in IFR means that the back data differ in some cases, particularly for US data and most especially for syndicated credits where the recorded flows are now substantially larger.

**Table A**  
**Total financing activity:<sup>(a)</sup> international markets by sector**

\$ billions; by announcement date

	1994		1995				1996
	Q3	Q4	Q1	Q2	Q3	Q4	Q1
<b>International bond issues</b>							
Straights	83.8	83.8	88.6	91.9	100.2	97.7	143.4
Equity-related	5.9	4.0	3.0	7.6	7.7	5.8	11.7
of which:							
Warrants	1.0	1.4	1.3	0.7	1.5	3.2	4.0
Convertibles	4.9	2.6	1.7	6.9	6.1	2.6	7.7
Floating-rate notes	29.5	29.3	21.0	23.5	30.4	25.2	36.8
<b>Total</b>	<b>119.2</b>	<b>117.0</b>	<b>112.7</b>	<b>123.0</b>	<b>138.3</b>	<b>128.7</b>	<b>191.9</b>
<b>Credit facilities (announcements)</b>							
Euronote facilities	53.6	64.1	71.9	70.3	68.8	64.6	78.1
of which:							
CP (b)	10.9	6.2	6.8	8.9	6.4	18.6	23.3
MTNs	42.7	57.9	65.1	61.4	62.4	46.0	54.8
Syndicated credits	145.2	158.6	172.4	202.3	131.9	182.7	163.5
<b>Total</b>	<b>198.8</b>	<b>222.7</b>	<b>244.3</b>	<b>272.6</b>	<b>200.7</b>	<b>247.3</b>	<b>241.6</b>
Memo: amounts outstanding							
All international							
Bonds (c)	2,020.8	2,036.3	2,188.5	2,225.3	2,199.7	2,224.9	2,230.4
Euronotes(b)	378.7	406.1	461.6	517.1	555.8	595.2	647.5
of which, EMTNs	259.4	292.0	347.1	397.5	426.4	461.0	504.6

Sources: IFR, Euroclear, BIS.

(a) Maturities of one year and over. The table includes euro and foreign issues and publicised placements. Issues which repackaged existing bond issues are not included. Figures may not add to totals because of rounding. Bond total includes issues from MTN programmes.

(b) Euroclear figures.

(c) BIS-adjusted figures, including currency adjustment. Includes issues of fixed-rate bonds and floating-rate notes.

Table A). US entities were the largest borrowers, accounting for 17.3% of all new issues. The first quarter is generally strong, with 10% to 15% of issuance attributable to a seasonal increase in activity (fourth-quarter issuance is normally 10% down for similar reasons). Adjusting for seasonal factors, the increase in the first quarter of 1996 was more subdued—but still of the order of 20%. The size of the increase compared with the same period last year is surprising—particularly given the uncertainty that the end of the rally may have created for both issuers and investors. It is also interesting to note that issuance was not concentrated in the early part of the quarter—before the rally ended—but fairly evenly distributed through January, February and March.

The sharp increase in issuance compared with the same period last year was widely distributed across the major categories of borrower: central governments increased issuance by just over 100%, companies by 79.8% and banks by 56.3%. Banks remained the largest single class of issuer in absolute terms, accounting for 40.2% of total international issues in the first quarter. The average maturity of all new issues was little changed, remaining around 6½ years which has been typical during the 1990s. Compared with the same period of last year, issuance of new floating-rate notes (FRNs) rose by 75.1% to \$36.8 billion. Issuance of straights has also increased sharply over the past year, so the ratio of FRN to fixed-rate bond issuance rose only slightly to 25.7%.

The long rally in 1995 boosted use of the euromedium-term note (MTN) markets, with issuance up 48.4% on 1994 as a whole. In line with the heavy issuance of international

bonds, activity in the MTN market was fairly strong in the first quarter of 1996 reaching \$54.8 billion. On average, around 90% of the notes issued are denominated in US dollars. One of the world's largest borrowers, the US government-sponsored enterprise Sallie Mae, set up a global MTN programme worth \$20.0 billion in February.

### Emerging markets

After the collapse in emerging-market issuance in the first quarter of 1995, issuance recovered during the remainder of last year to reach \$19.2 billion in the final quarter. Possibly linked to the uncertainty characterising bond markets in early 1996, emerging-market issuance was up only 4.5% to \$20.1 billion in the three months to March. For the second consecutive quarter, Argentinian entities were the largest group of borrowers, and Mexico has been among the three largest borrowers in this sector since the third quarter of last year. The relative weakness of emerging-market issuance so far in 1996 contrasts with the strength of international bond issues more generally and suggests that these markets are more vulnerable to increased uncertainty—even though new techniques are being developed by emerging market issuers to deal with currency conversion and settlement risk. For example, some new US dollar eurobonds have coupon and principal linked to the zloty/dollar exchange rate. Since the beginning of last year, Salomon Brothers' Brady bond index has risen steadily, reaching a peak in January this year. Over the first quarter as a whole, the index rose by over 11.2%; it increased by 43.3% compared with the depressed figure in the first quarter of last year.

**Table B**  
**Currency composition of international bond issues**

Per cent

Currency denomination	1994	1995	1996				
	Year	Year	Q1	Q2	Q3	Q4	Q1
US dollar	38.4	39.2	36.5	36.7	40.8	42.2	37.8
Yen	17.2	18.4	13.8	22.8	19.1	17.2	11.8
Deutsche Mark	10.9	13.9	12.6	16.4	11.7	15.0	16.4
Sterling	6.5	4.3	5.7	4.0	3.5	4.3	7.7
French franc	5.4	2.7	4.2	2.9	1.7	2.3	5.9
Swiss franc	4.5	6.1	6.5	5.8	6.8	5.3	4.5
Italian lira	3.6	2.4	4.9	1.6	1.5	1.7	2.8
Ecu	1.6	1.8	2.6	0.2	2.7	0.2	0.8
Other	11.9	11.2	13.2	9.6	12.2	11.8	12.3
<b>Total (US\$ billions)</b>	<b>482.0</b>	<b>502.6</b>	<b>112.7</b>	<b>123.0</b>	<b>138.3</b>	<b>128.7</b>	<b>191.9</b>

Source: IFR Omnibase.

### Issuance currencies

Among the major currencies, the sharp rise in primary market activity in the first quarter was reflected in higher issuance in Deutsche Marks, sterling and French francs, although the share of US dollar and yen issuance declined. Deutsche Mark issuance, in particular, was driven by the continuing existence of attractive swap rates for five-year maturity issues. Yen issuance, on the other hand, was depressed by unattractive swap rates, among other things. In Japan, capital market liberalisation continued with the introduction of an asset-backed securities (ABS) market and the announcement of a bond repo market. These markets are not entirely new to Japan: ABS transactions in Japan had been done previously, but tended to involve off-shore,

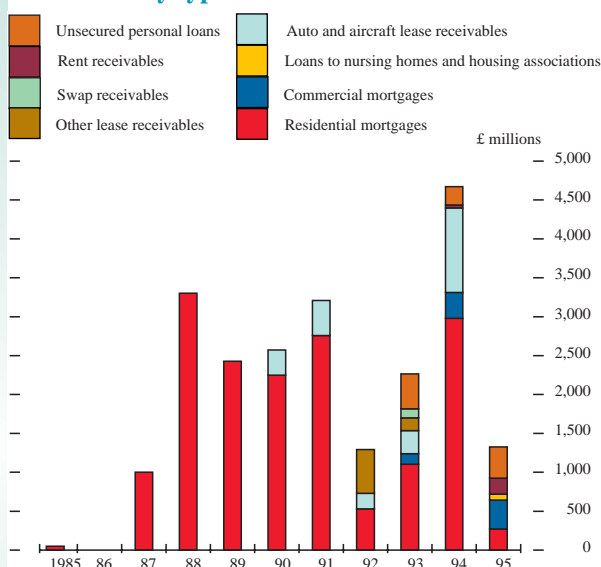
## Developments in the UK asset-backed securities market in 1994/95

This box reviews developments in the UK asset-backed securities (ABS) market during 1994/95.<sup>(1)</sup> These instruments—securities supported by a pool of loans (or other receivables such as leasing proceeds)—transform otherwise illiquid loans into marketable securities. The interest and principal payments on the underlying pool of loans provide the cash flow required to pay interest to the holder of the security and to redeem it on maturity. A major attraction of such issues is that, provided certain regulatory criteria are met,<sup>(2)</sup> they allow the institution that originated the loans to remove the assets from its balance sheet.

The first UK issue of asset-backed securities was made in 1985. The market has developed erratically since then and, as Chart A shows, the past two years have been no exception. In value terms there were a record number of new issues in 1994. The 18 launched were worth £4.7 billion, although this figure includes one lease-backed issue of almost £1 billion supported by aircraft receivables. During 1995, the value of new issues fell dramatically: the 15 issues were worth only £1.3 billion. As a result, the value of securitisation issues outstanding had fallen to just over £5.4 billion by the end of 1995.

This fall reflected changes in the source of securitisation over the past two years. During the early 1990s, several major banks and building societies developed the records and monitoring systems necessary to undertake securitisation. This development process culminated in several large issues in late 1993 and during 1994.

**Chart A**  
ABS issues by type of asset



However, as Chart B shows, these originators have refrained from using the market in 1995. Other originators, including some corporates, have taken their place, although with much smaller issues.

The lack of issues originated by the major banks and building societies during 1995 probably reflected, among other things, their increasing capital strength. This reduced the incentive to develop alternative sources of finance such as securitisation: although it had the advantage of increasing the return on capital,<sup>(3)</sup> it

(1) See the article 'Asset-backed securitisation in the United Kingdom' by C Ian Twinn in the May 1994 *Quarterly Bulletin*, pages 134–43.

For the purposes of this box the term asset-backed securities is again taken to include mortgage-backed and lease-backed securities.

(2) For banks, these criteria are laid out in the Bank's notices BSD/1989/1, BSD/1992/3 and S&S/1996/8.

(3) Since, if the assets are removed from the balance sheet, no capital is required but fee income is still generated from origination and servicing.

special-purpose vehicles. Also, the established Gensaki market in Japan fulfils a similar role to repo, but is subject to a trading tax.

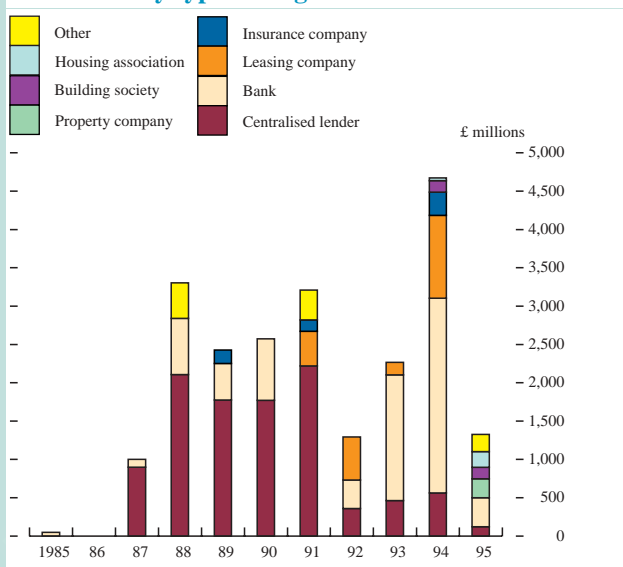
### *Sterling issues*

The first quarter of 1996 saw substantial issuance of sterling bonds. Total fixed-rate and zero-coupon issuance (including EMTNs) in the quarter was £4,993 million, compared with total issuance in 1995 as a whole of £10,100 million. £4,884 million of this issuance was in Eurosterling form, of which £1,276 million was short-dated, £2,418 million was medium-dated, and £1,190 million at the long end. Over half of this was by banking institutions, with £2,009 million issued by non-bank entities. There were only three domestic bond issues over the quarter, totalling £109 million; £50 million of this was a special-purpose vehicle issue, secured on a loan stock issued by Manchester City Council.

The quarter saw the first bond issue related to the Private Finance Initiative for £165 million by Road Management Consolidated plc. The bond will fund the design and construction of the upgrade of two trunk roads; coupons on the bonds will be covered by the receipt of shadow tolls based on traffic usage. Since the project is an upgrade rather than a new build, the bond issue has been enabled by the existing known levels of demand for these roads. The issue is guaranteed by a US insurance company and is rated AAA. A £228 million issue in four tranches was launched by a special-purpose vehicle secured on the lease payments underlying the assets of one of the former British Rail rolling stock companies.

Floating-rate issuance was high in the first quarter at £3,730 million, compared with £4,269 million in 1995 as a whole; this in part reflected market uncertainty about the direction and volatility of interest rates, as FRNs are more actively issued and traded in such circumstances.

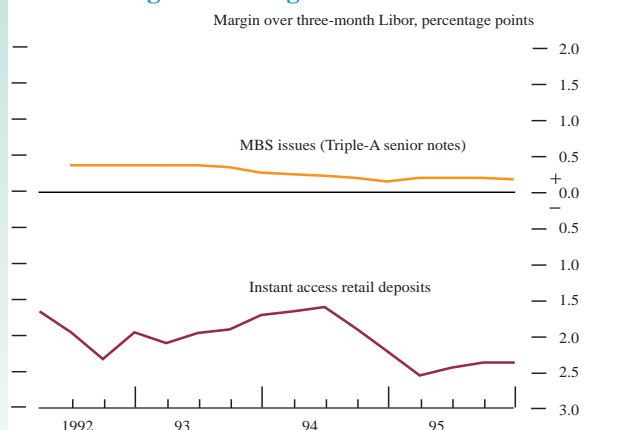
**Chart B**  
ABS issues by type of originator



remained relatively expensive in terms of the marginal cost of funds, as Chart C shows. Nevertheless, the fact that these lenders carried out issues is important given that they hold the majority of assets that might be securitised and there are significant sunk costs involved in undertaking a first issue.<sup>(4)</sup>

Perhaps the most significant other development was the launch during 1995 of the first issues backed by credit-card receivables. This created the opportunity for institutions in the UK credit-card market to securitise large parts of their lending. The recent removal of the general limit on the volume of revolving-credit assets that may be treated, for supervisory purposes, as taken

**Chart C**  
Cost of marginal funding



off a bank's balance sheet, could provide further impetus to this.<sup>(5)</sup>

Anecdotal evidence suggests that the demand by investors for securitisation issues remained healthy, albeit among a still relatively specialist investor base. Some companies have continued to buy shorter-maturity ABSs as substitutes for money-market instruments while pension funds and insurance companies have continued to invest in longer-maturity securities. But the secondary market has remained illiquid possibly reflecting the bespoke nature of UK issues.

The volume of new ABS issues will probably remain limited in the short term, with growth being concentrated in a few asset types such as credit-card receivables. However, the involvement of some of the major high street banks and building societies in recent years may presage more broadly-based growth in the future.

(4) The recent takeovers of some of the centralised mortgage lenders—such as Nationwide's purchase of UCB's mortgage arm and Abbey National's purchase of FNFC and HMC—may be significant for similar reasons.

(5) The relaxation is one of the changes to the Bank's policy concerning the securitisation of revolving credits outlined in its amending notice on the subject issued in April (S&S/1996/8).

£1,400 million floating-rate issuance was in the form of mortgage-backed securities issued by special-purpose vehicles; £1 billion of this was in several tranches to refinance the purchase of a centralised lender's mortgage book by a subsidiary of Birmingham Midshires Building Society. All other FRN issuance over the quarter was made by banks and building societies.

Part of the demand for fixed-rate bonds came from corporate-bond PEPs, where more substantial purchases have been seen this quarter. The first quarter saw sales of £515 million, up from £290 million in the previous quarter; sales of £225 million came in March, as investors make their tax dispositions before the end of the tax year. Otherwise, issuance volumes were driven in part by issuers making use of advantageous swap rates to fund in desired currencies or to meet interest-rate targets, in part for acquisition funding, and also as part of the ongoing restructuring of the utilities' balance sheets.

The Bank sought market views during the quarter on a proposed liberalisation of the sterling commercial paper and MTN regimes, whereby issues of debt securities may be made exempt from the deposit-taking prohibition in the Banking Act. Key features of the proposed regime include the removal of the five-year maximum maturity limit, and removal of the £100,000 minimum denomination requirement where the securities to be exempted are themselves listed on a European Economic Area exchange and have an initial maturity of more than three years. In the first quarter, total outstanding sterling commercial paper rose by £733 million to £7.1 billion. Outstanding sterling MTNs rose by £1.3 billion over the quarter to stand at £17.1 billion at the end of March.

#### Ecu issues

In the United Kingdom, regular monthly tenders of one billion of Ecu Treasury bills continued during the first



quarter of 1996, comprising ECU 200 million of one-month, ECU 500 million of three-month and ECU 300 million of six-month bills. The tenders continued to be strongly oversubscribed, with issues being covered by an average of 2.8 times the amount on offer, compared with an average of 2.4 times during 1995. Bids were accepted at yields up to 19 basis points below the Ecu Libid rate of the appropriate maturity. There are currently ECU 3.5 billion of Treasury bills outstanding which have been sold to the public. Secondary-market turnover in the first quarter averaged ECU 1.9 billion per month; turnover for 1995 as a whole averaged ECU 2.2 billion per month, which was very similar to the average levels in 1993 and 1994.

ECU 500 million of a new three-year Ecu Treasury Note, the fifth in the programme of annual new issues, was auctioned on 16 January. Cover at the auction was 4.3 times the amount on offer and accepted bids were in a tight range of 5.18%–5.21%. The settlement date for the new issue coincided with the redemption of the second Ecu Treasury note, which had ECU 2.0 billion in size outstanding with the public. The total of notes outstanding with the public under the UK note programme thus fell from ECU 6.5 billion to ECU 4.5 billion over the first quarter.

The French Government issued ECU 1.6 billion in bonds and notes during the fourth quarter, taking its outstanding debt up from ECU 21.2 billion to ECU 22.8 billion (excluding stock bought back or held for repo purposes) by the end of the first quarter of 1996. The Italian government issued ECU 1 billion of notes, but the total outstanding fell from ECU 22.6 billion to ECU 21.6 billion by the end of the first quarter of 1996. In addition, the total of Italian government Ecu eurobonds outstanding remained at ECU 7.4 billion.

### International syndicated credits

In contrast to the high levels of activity on the international bond markets, syndicated credit activity appears to have weakened in early 1996. In the first quarter, provisional estimates suggest that total international syndications fell by 10.5% to \$163.5 billion. As in the bond markets, seasonal patterns can be identified in the data. These suggest that credits tend to rise in the first half, but will be depressed in the second—particularly in the third quarter. However the size of seasonal fluctuations quarter to quarter are much smaller than in the bond markets; for example, the seasonally adjusted flow of credits in the first quarter is only about 3% less than the unadjusted data.

The decline in business in the first quarter of 1996 may have reflected a lack of suitable lending opportunities. Moreover, the signs are that spreads, which fell to very low levels last year, levelled out in the first quarter of 1996 and the market may have been providing access for lower credit-rated borrowers. The availability of low-margin lending is linked to the continued strong capitalisation of the banks. Nevertheless, the decline in first-quarter business

may have reflected a lessening of enthusiasm by banks for business with such low profitability.

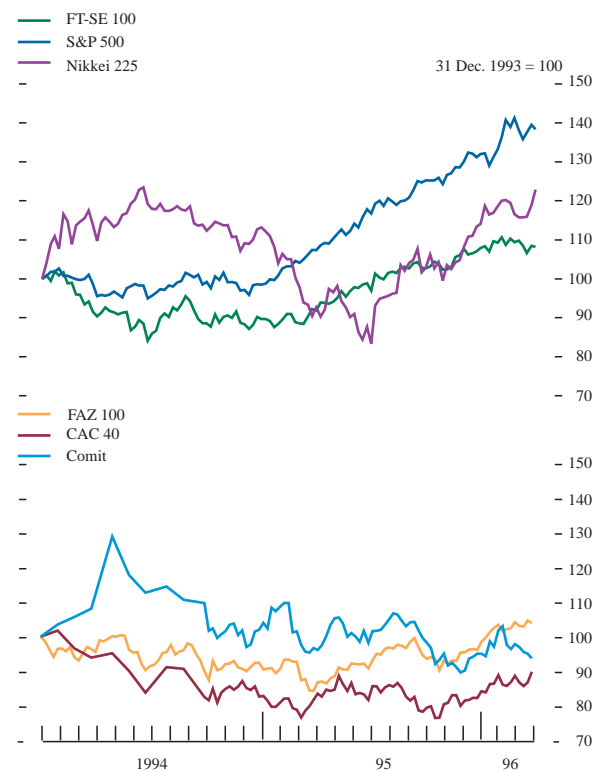
## Equity markets

### Prices

US equity prices, as measured by the Standard & Poors' 500 index, rose 4.8% during the first quarter (Chart 2). Strong

Chart 2

### Equity indices<sup>(a)</sup>



(a) End-week prices; data to 29 March 1996.

company earnings reports and economic data, which pointed towards a cut in interest rates, boosted prices through January and February. The index climbed to a series of all-time highs, culminating in a high for the quarter of 661.45 on 12 February. The second half of the quarter saw increased uncertainty over the prospects for the economy and for a further rate cut, especially following the announcement of a much higher-than-expected increase in non-farm payrolls on 8 March: the S&P index fell 3% on that day alone. But this reversal proved short-lived and much of the loss had been recovered by the end of March.

In contrast with the stronger US market, the FT-SE 100 share index rose only 0.3% over the first quarter. Although partly affected by movements in overseas markets, the UK equity market was influenced more directly by domestic factors, with both positive and negative implications for prices. Prices were boosted by buying of potential bid targets, fuelled by a number of takeovers and mergers announced during the quarter. However, sentiment was dampened by worries over the political outlook and by the implications of a public health alert in the beef industry towards the end of

## Dividend yields and future equity returns

A considerable body of evidence suggests that the level of equity dividend yields, in the United States, can help predict future returns on equity, with low current yields being associated with low future equity returns.<sup>(1)</sup>

Although both the reasons for, and significance of, this relationship in the United States has been the subject of much debate, there has been little study of this phenomenon in other countries.

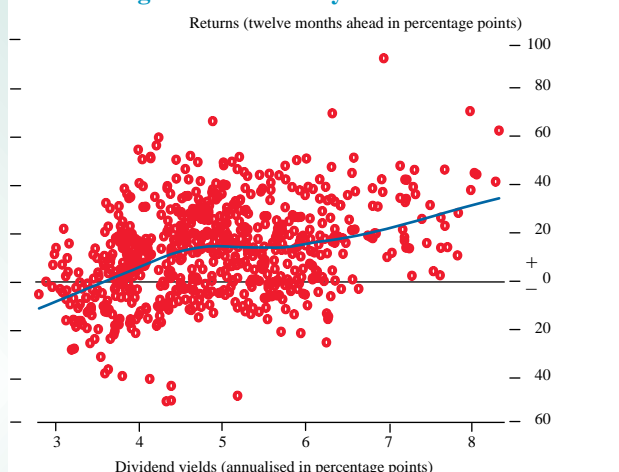
Work in the Bank has examined the historical relationship between equity prices and dividend yields using long runs of data for the five major economies. Although one might believe that different markets behave very differently, the results across countries were remarkably similar. For all countries, the current level of dividend yields did seem to have some ability to predict future equity returns, and that ability increased the longer the return horizon used (ie dividends predicted returns over the following twelve months better than they predicted one month ahead returns).

Another result that seemed to be consistent across countries was the non-linearity of the relationship between dividends and future returns. The charts for the United Kingdom and United States below (results for Japan, Germany and France were similar) show a scatterplot of dividend yields versus equity returns over the subsequent twelve months, along with a curve of best fit (fitted using non-parametric estimation techniques). The curves indicate that it is only very high and very low dividends which are associated with high/low future returns: at intermediate levels, there is little or no relationship (ie the curves are flat).

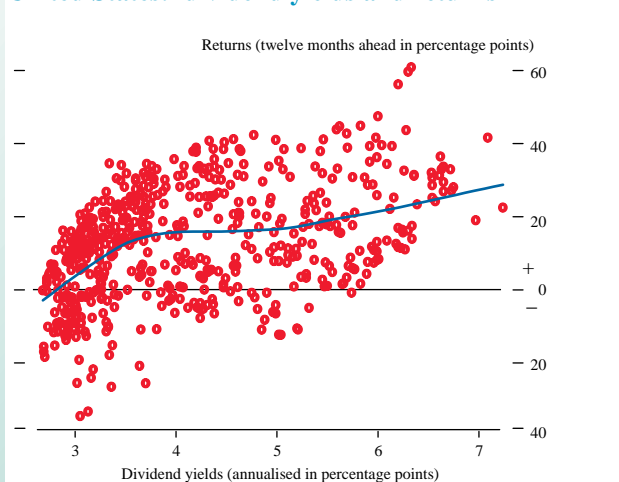
Why do yields help predict future price movements? There are a number of theories to explain why low yields help predict future equity prices, but the two main themes are either that yields help capture information about required returns (ie that when yields are low it indicates that investors require lower returns in the future—perhaps because of lower risk premia) or that

they help indicate when market sentiment has moved equity prices away from ‘fundamentals’ and so a correction is necessary. Unfortunately, it is not yet possible to distinguish between these two explanations, though the non-linear relationship shown here may give clues as to the most plausible explanation.

**Chart A**  
United Kingdom: dividend yields and returns



**Chart B**  
United States: dividend yields and returns



(1) See for example Fama, E & French, K (1988), 'Dividend yields and expected stock returns', *Journal of Financial Economics*, 22, pages 3–25.

the quarter. A reduction in UK official interest rates of 25 basis points on 18 January surprised the equity market and the FT-SE 100 rose 1.2% on the day. A second cut in UK interest rates on 8 March was overshadowed by the downturn on that day in the US bond and equity markets.

Japanese equity prices, as measured by the Nikkei 225 index, rose 7.7% over the quarter. The index rallied late in the quarter, led by a perception among domestic investors

that the government would resolve the financial uncertainty surrounding problems in Japan's housing loan companies.

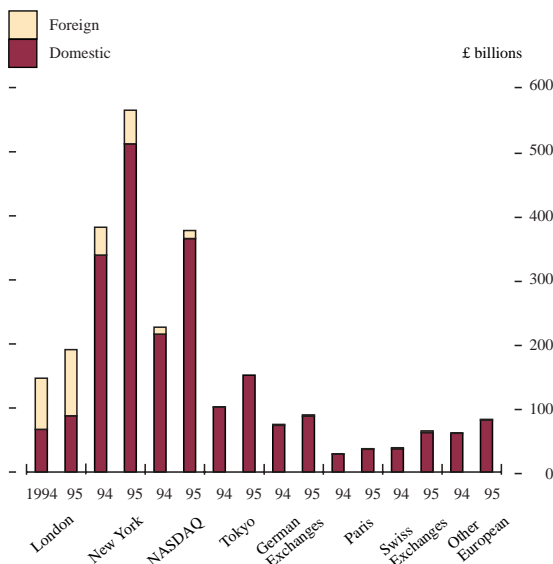
The continental European equity markets were generally buoyant during the first quarter, with all the major continental indices, except those in Italy, outperforming the FT-SE 100 over the quarter. In Germany, the FAZ index rose 8.1%, on expectations that monetary policy in the near future was likely to be expansionary, and with a stronger dollar improving the prospects for German exporters. The

French equity market, also encouraged by hopes of lower interest rates in Germany, rose 9.2%. Italian and Spanish equity markets focused on domestic political developments, the Italian Comit index falling 1.5% and, in Spain, the General index rising by 6.7%. The Swiss and Dutch markets which, due to the international nature of their listed companies, tend to be more sensitive to US markets, rose by 10.6% and 9.5% respectively, with the Swiss market also boosted by the merger of Ciba and Sandoz, two large pharmaceutical companies.

**Turnover**

Equity turnover worldwide increased markedly throughout 1995. This increase is particularly striking when the fourth quarter of 1995 is compared with the fourth quarter of 1994 (Chart 3). The New York Stock Exchange saw turnover

**Chart 3**  
Turnover of domestic and foreign equities on major stock exchanges<sup>(a)</sup>



(a) Turnover in the fourth quarter of year indicated.

some 50% higher than in the fourth quarter of 1994; one reason for this may have been buying by mutual funds, which was reported to have been high. NASDAQ saw an even bigger increase, with turnover up nearly 70%. Turnover on the Tokyo Stock Exchange increased by some 50%, with foreign-investor interest reported to be strong. The London Stock Exchange recorded an increase of 30% in equity turnover, evenly balanced between domestic and foreign shares. Continental exchanges also recorded improved volumes, albeit from relatively low bases; turnover on the Swiss Exchange was particularly notable, with a rise of nearly 70% from the fourth quarter of 1994 to the fourth quarter of 1995.

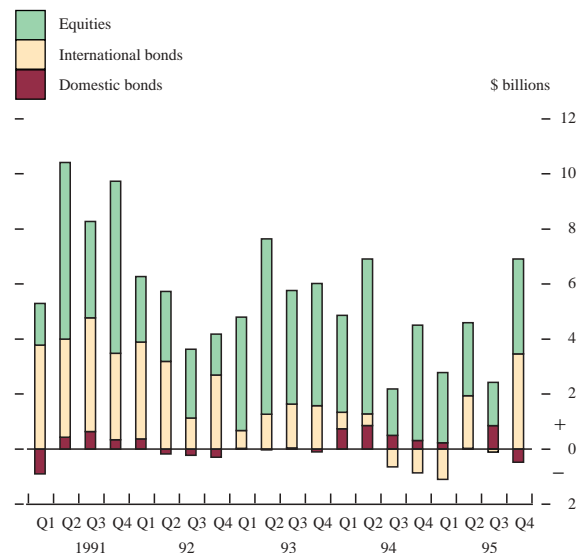
**Equity issues**

\$41 billion of international tranches of equity issues were placed in 1995, but 45% of these were placed in the fourth quarter alone. The disappointing performance in the first three quarters compared with 1994 was attributed to

difficult issuing conditions in the emerging markets and a slowdown in privatisations in western Europe. However, privatisations in the OECD countries are increasingly being placed internationally: almost 50% of privatisations brought to the markets were sold to international investors in 1995, compared with 28% in 1994. In particular, there was an increase in issues from large German corporates in an attempt to tap the equity markets before the privatisation of Deutsche Telekom.

In the United Kingdom, net issues of international bonds by companies in 1995 totalled \$4.2 billion compared with a net redemption of \$0.5 billion in 1994. In contrast, equity issues were down in 1995 to \$10.3 billion from \$15.1 billion in 1994 (Chart 4). Total net issues of domestic bonds were also down from \$2.4 billion in 1994 to \$0.6 billion in 1995.

**Chart 4**  
Net issues of domestic bonds, international bonds and equities by UK companies



(a) Turnover in the fourth quarter of year indicated.

In the first quarter of this year, £2,153 million was raised in further equity issues by UK companies, of which £856 million was raised in rights issues. Thirty-nine companies joined the Official List, of which 21 raised capital totalling £876 million. £126 million was raised in further and new issues by Alternative Investment Market (AIM) companies in the first quarter—more than was raised on this market in its first six months, and an encouraging further step forward for this fledgling market.

The UK financial sector has provided the largest number of companies for the Official List over the last ten years, with the majority of these being new investment funds. The general trend in the United Kingdom has been a large number of small listings. Over the past ten years, companies capitalised at up to £50 million represented about two thirds of the total new listings, and companies capitalised at £20 million or less represented 25% to 50%. In particular, in 1995 there were a number of transfers to the Official List from the Unlisted Securities Market.

### Other developments

On 11 January, the London Stock Exchange issued a consultation document, which sought views from its members and other interested parties on the introduction of an electronic order book in some, or all, stocks. The document outlined three broad options for consideration: an order book, together with the provision of a block trading mechanism for larger transactions; an order book for some stocks and a quote book for others; or some combination of the current market-making system interacting with an order book. In the light of the diversity of responses received, the Exchange announced on 21 March its intention to consult further on the details of the implementation of an order book with a parallel block trading mechanism, initially for FT-SE 100 stocks only, but to be extended to other liquid stocks subsequently if there is market demand. This second round of consultation will be launched in May for completion in early summer. The 'Sequence 6' technology is expected to be on-stream from 27 August as planned, but the new trading services will not be introduced until at least Spring 1997 to allay market concerns about the concentration of IT development demands.

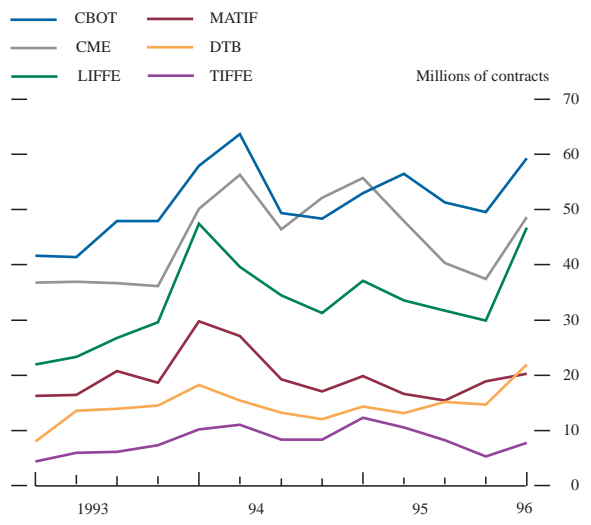
During the first quarter, Tradepoint Financial Networks plc ('Tradepoint')—the competing exchange launched in September—announced three initiatives to increase its capital base and widen its market reach. On 31 January, Tradepoint and Bloomberg signed an agreement whereby authorised Bloomberg terminal users worldwide will be able to trade directly on Tradepoint, subject to regulatory considerations; on 14 March, Tradepoint announced its intention, subject to market conditions, to seek admission to AIM in April via a placing to new and existing institutional investors; and on 25 March, it announced an increase in the number of UK equities tradable on the market to over 900. Trades on Tradepoint during February totalled £31.8 million, compared with £8.6 million in October 1995, its first full month of operation.

### Derivatives markets

Turnover on the major derivatives exchanges in the first quarter of 1996 rose markedly compared with the previous quarter, reflecting uncertainty regarding the future direction of interest rates in the US and European markets. It is unlikely that this sharp increase in turnover will be sustained in the second quarter: the underlying growth in volumes is probably more subdued and, as in early 1994, the surge in turnover can be linked to short-run turbulence in the bond markets.

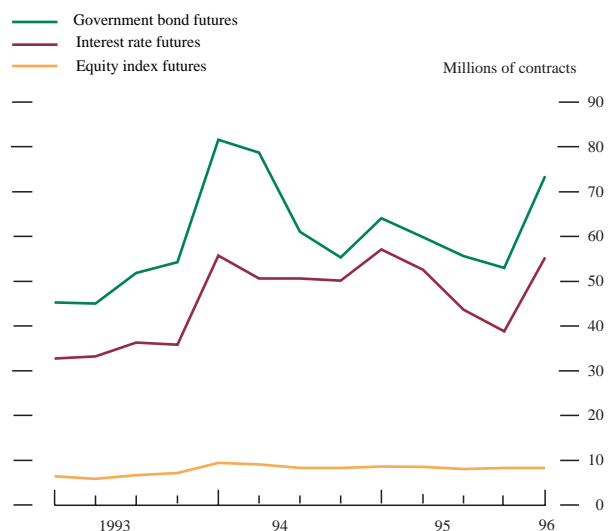
Total volumes on the London International Financial Futures Exchange (LIFFE) increased by 56% during the first quarter with all LIFFE's major contracts posting increases. Reflecting the increased uncertainty associated with the end of the bond-market rally, LIFFE traded 18 million contracts in February, a record month for the exchange with a 53% increase on February 1995. Indeed, other than in the first quarter of 1994, LIFFE traded more actively than in any previous quarter (Chart 5); and the

**Chart 5**  
Quarterly turnover on major derivatives exchanges



exchange's Bund futures contract became Europe's most actively traded contract.

**Chart 6**  
Quarterly turnover of futures by type<sup>(a)</sup>



(a) Turnover in the major futures contract listed on the CME, CBOT, LIFFE, DTB, MATIF and TIFFE.

Elsewhere, turnover on the Deutsche Terminbörse (DTB) rose 49% during the quarter, whilst volumes on *Marché à Terme International de France* (MATIF) rose only 7%. During the quarter, the DTB overtook MATIF to become the second largest exchange in Europe in volume terms. The DTB also became the first overseas exchange to receive approval to install terminals in the United States, enabling DTB products to be traded directly from outside Europe. Access will only be possible during normal DTB hours. Plans for closer co-operation between the German and French stock and derivatives exchanges—based on the French equity trading system (*Nouveau Système de Cotation*) and the DTB's electronic system for the futures market—will not now go ahead. However, MATIF members will continue to have remote access to DTB German government bond futures and options contracts.



In the United States, volumes on the Chicago Mercantile Exchange (CME) and the Chicago Board of Trade (CBOT) rose 30% and 20% respectively, over the quarter. Turnover in the CME's Eurodollar futures contract rose 42%, proportionally more than the CBOT's T-Bond futures contract, which rose 26%, to retake its position as the world's most actively traded contract. Despite the historic rivalry between the two Chicago-based exchanges, current cost pressures led to the forming of a Joint Strategic Initiatives Committee to discuss closer collaboration, for example on common banking facilities. But the possibility of a full merger, although more probable now than has ever been the case, still remains unlikely.

In the East Asian time zone, volumes on TIFFE, Japan's largest derivatives exchange, rose 47% on the previous quarter. The CME and SIMEX, the Singapore International Monetary Exchange, extended their mutual offset agreement to encompass SIMEX's Euroyen futures contract. This is seen as a response to the LIFFE/TIFFE link, which started in April, and will enable LIFFE to trade TIFFE's Euroyen contract in the European time zone.

During the quarter, LIFFE started to list Euromark and short-sterling interest-rate contracts for March 1999 delivery. The new contracts, based on three-month deposit rates, will mature after the planned introduction of the single European currency. Provision has therefore been made for settlement against euro interest rates upon each respective currency's possible participation in EMU. If EMU is delayed, or if a particular country is not a full participant, the relevant contracts will settle as now. The new contract specification will also apply to LIFFE's Eurolira contract in due course. MATIF has also made provisions for its PIBOR futures contract. The movement towards a single currency is probably the biggest single challenge facing Europe's derivatives exchanges. The transition will mean a loss of 'first mover' advantage for exchanges and could lead to intense competition to capture market share of contracts based on the new currency. The introduction of a single currency would obviously also have implications for the OTC derivatives markets.

### OTC derivatives markets

The most recent International Swaps and Derivatives Association's (ISDA) survey indicated rapid growth in the

## Table C OTC derivatives

Active UK banks' credit exposures at end period (£billions)

*Percentages in italics*

	1993		1994		1995	
	H1	H2	H1	H2	H1	H2
<b>Interest rate related contracts:</b>						
Notional principal	1,849	2,333	3,300	3,356	3,927	3,783
Replacement cost (a)	34	44	37	38	51	61
<i>as a percentage of notional principal</i>	<i>1.8</i>	<i>1.8</i>	<i>1.1</i>	<i>1.1</i>	<i>1.3</i>	<i>1.6</i>
Credit equivalent exposure (b)	39	49	46	47	62	70
<i>as a percentage of balance sheet</i>	<i>4.9</i>	<i>6.6</i>	<i>5.3</i>	<i>5.6</i>	<i>7.3</i>	<i>8.1</i>
Credit risk (c)	10	12	11	12	15	17
<i>as a percentage of risk-weighted assets</i>	<i>2.3</i>	<i>2.9</i>	<i>2.5</i>	<i>2.6</i>	<i>3.5</i>	<i>4.0</i>
<b>Foreign exchange related contracts:</b>						
Notional principal	1,141	1,066	1,447	1,400	1,428	1,404
Replacement cost (a)	31	23	39	27	39	32
<i>as a percentage of notional principal</i>	<i>2.7</i>	<i>2.2</i>	<i>2.7</i>	<i>1.9</i>	<i>2.7</i>	<i>2.3</i>
Credit equivalent exposure (b)	48	40	62	50	63	57
<i>as a percentage of balance sheet</i>	<i>6.1</i>	<i>5.3</i>	<i>7.2</i>	<i>6.0</i>	<i>7.3</i>	<i>6.7</i>
Credit risk (c)	12	11	15	12	16	14
<i>as a percentage of risk-weighted assets</i>	<i>2.9</i>	<i>2.5</i>	<i>3.4</i>	<i>2.8</i>	<i>3.8</i>	<i>3.4</i>

(a) The current market value of contracts (when positive).

(b) The sum of the replacement cost and the potential future exposure.

(c) The credit equivalent exposure weighted according to counterparty risk weighting.

OTC markets in 1995. The survey showed that notional outstandings in interest rate swaps, currency swaps and interest-rate options at end-1995 totalled \$18 trillion, an increase of almost 60% compared with the end-1994 figure and an increase of almost 30% compared with end-June 1995. However, aggregate statistics on UK banks active in derivatives markets (Table C) show more modest year-on-year growth than the ISDA survey figures: the combined notional principal in interest-rate and foreign-exchange related contracts increased only 9.1% over 1995 and actually fell by 3.1% in the second part of last year.

In the first quarter of 1996, indications are that turnover in the OTC derivatives markets grew in line with exchange-traded derivatives. European markets were reportedly particularly active, in anticipation of interest rate cuts. However, volumes in fixed-income instruments subsided towards the end of the quarter after the release of US economic data. These figures caused a change in the previously bullish market sentiment to one of 'wait and see'. Activity remains concentrated in 'plain vanilla' products (swaps, FRAs and so on) as opposed to 'exotics'.