Financial market developments

Effects of the Gulf crisis

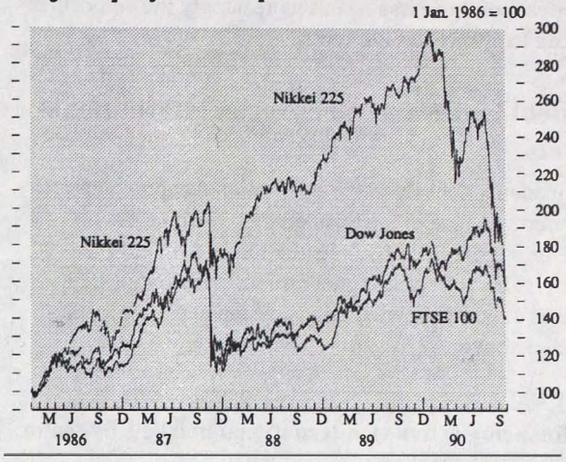
The reaction in financial markets to developments in the Gulf has varied from country to country (see Table A). The fall in equity prices was particularly marked in Japan: the Nikkei index fell from over 30,000 at the beginning of August to just above 20,000 at end-September, though by early November around a third of this fall had been reversed. These falls seem to have been due to the relatively bigger impact of the rise in oil prices on Japan, a substantial oil importer, weakness in the Japanese equity market before the crisis emerged, worries about land prices (which underpin many equity prices) and the previous, exceptionally high, level of price/earnings ratios. At the end of 1989, Japanese equities were trading on a multiple of over 70 times estimated earnings; this had fallen to around 55 times at end-July and 40 times at end-September. These multiples compare with figures of 14 in the United States and 9 in the United Kingdom; corresponding figures for 1985 were 35 in Japan, 14 in the United States and 14 in the United Kingdom. During the last few years, equity prices in the United Kingdom and the United States have followed broadly similar trends, while those in Japan have moved rather differently, apparently being more heavily influenced by purely domestic factors (see Chart 1).

Table A
International financial markets: key indicators

	1990			
	29 June	1 Aug.: pre-invasion	28 Sept.	1 Nov.
United Kingdom				
Equity market: FT-SE 100	2,374.6	2,339.0	1,990.2	2,028.0
10-year government bond yield %	11.7	11.7	12.1	11.6
3-month Treasury bill yield %	14.8	14.8	14.8	13.6
United States				
Equity market: S&P 500	358.0	355.3	306.1	307.2
10-year government bond yield %	8.4	8.3	8.8	8.5
3-month Treasury bill yield %	8.0	7.7	7.3	7.3
Canada				
Equity market	3,544.0	3,569.0	3,159.0	3,085.0
10-year government bond yield %	11.2	10.5	11.2	11.0
3-month Treasury bill yield %	13.5	13.2	12.5	12.4
Japan				
Equity market: Nikkei	31,940.0	30,838.0	20,983.5	24,295.2
10-year government bond yield %	7.0	7.2	8.2	7.5
3-month Treasury bill yield %	7.5	7.6	8.3	8.0
Germany				
Equity market: DAX	1,895.2	1,892.9	1,334.9	1,417.3
10-year government bond yield %	8.7	8.5	9.0	9.0
3-month interbank interest rate %	8.2	8.1	8.6	8.6
France				
Equity market: CAC General	543.7	525.9	415.3	428.1 (a)
10-year government bond yield (OAT) %	9.6	9.5	10.6	10.2 (a)
3-month Treasury bill (BTF) discount rate %	9.6	9.4	9.9	9.5 (a)
Italy				
Equity market: BCI	752.2	721.9	557.6	560.5 (a)
7-year government bond yield %	13.8	14.0	14.6	13.7 (a)
3-month interbank interest rate %	11.3	11.8	10.7	11.6 (a)

(a) 31 October.

Chart 1
Major equity market price indices



The weakness in Japanese equity markets prompted both banks and non-banks to raise long-term finance abroad. The decline in equity values this year has affected Japanese banks, whose unrealised profits on equity holdings have contributed to maintaining their capital ratios (under the BIS capital adequacy agreement, 45% of unrealised profits on equities can count as tier two capital). In response, the banks have reduced their risk-weighted asset growth and raised more capital. The former was reflected in a lower level of activity by Japanese banks in international markets in the second quarter (see the note on page 475). As for the latter, Japanese banks raised $6.7 billion of subordinated debt during the third quarter outside Japan, where funding has become increasingly expensive. The first such issue was in July (and required the lifting of previous restrictions by the Japanese authorities). All the ten subordinated debt issues by Japanese banks in September were lead managed in London and were in dollars.

Difficulties in raising equity and bond finance in the weak domestic markets have also encouraged Japanese non-financial companies to turn to international markets for funds. International equity-related issues swapped into yen have represented a cheaper source of finance for these companies than borrowing from domestic banks. Japanese corporations issued $12 billion in equity-related international bonds, mainly in dollars and Swiss francs, during the third quarter, of which $7.9 billion came after the onset of the Middle East crisis. The counterpart of these capital inflows to Japan will have been partly in a reduction in the current account surplus caused by higher oil prices.

The higher level of oil prices, if maintained, could have implications for the pattern of international capital flows on

a longer-term basis (see page 447). The non-oil developing countries and the Eastern European states are likely to be among the most severely hit by the increase in oil prices.

The liberalisation in Eastern Europe will by itself add to the world-wide demand for capital and in turn to the prospect of real interest rates being higher than they might otherwise have been. So far, the increased demand for capital is most evident in Germany, where the first issue of Unity Bonds was made in July. As yet, domestic investors have been the main buyers of these issues, but increasingly the authorities may need to attract foreign funds.

New debt issues and turnover in international markets

Total financing activity in the international capital and credits markets rose in the third quarter, despite the uncertainties generated by the situation in the Gulf (see Table B). This reflected higher issuance of floating-rate notes, and of equity-related bonds by Japanese companies referred to above.

Table B
Total financing activity: international markets by sector
$ billions, by announcement date

	1988	1989		1990		
	Year	Year	Q4	Q1	Q2	Q3
Fixed-rate bonds						
Straights	160.0	150.0	35.3	41.3	42.2	36.2
Equity-related	41.8	85.1	15.9	11.1	2.5	12.9
of which:						
Warrants	*29.7*	*69.5*	*13.2*	*7.1*	*0.7*	*9.8*
Convertibles	*12.1*	*15.6*	*2.7*	*4.0*	*1.8*	*3.1*
Bonds with non-equity warrants (currency, gold, debt)	1.2	0.5	—	—	0.1	—
Total	**203.0**	**235.6**	**51.2**	**52.4**	**44.8**	**49.1**
Floating-rate notes	23.5	24.2	6.3	9.8	11.0	29.3
Euronote facilities	82.1	67.5	19.8	17.5	17.0	12.6
Syndicated credits	99.8	151.7	50.9	39.8	38.7	40.1
Total	**408.4**	**479.0**	**128.2**	**119.5**	**111.5**	**131.1**

In the syndicated credits market (Table C), the volume of new deals fell steeply immediately after the start of the Middle East crisis. The market was preoccupied with assessing the implications of the freeze imposed on Iraqi and Kuwaiti assets. Activity weakened as the quarter progressed as US and Japanese banks cut back their participation in response to their own difficulties. The Japanese banks have been the largest group involved in loan syndicates in recent years.

Table C
Announced eurocurrency syndicated credits
$ billions

	1988	1989		1990		
	Year	Year	Q4	Q1	Q2	Q3
Major OECD	70.8	98.5	37.7	24.1	20.3	16.3
Minor OECD	18.3	25.8	7.1	9.0	6.5	7.9
Developing countries	9.3	25.0	5.2	6.4	8.3	8.8
Eastern Europe	1.2	2.2	0.8	—	3.6	7.1 (a)
Other	0.2	0.2	0.1	0.3	—	—
Total	**99.8**	**151.7**	**50.9**	**39.8**	**38.7**	**40.1**

(a) Of which borrowing by East Germany accounted for $5.3 billion.

The Middle East crisis initially depressed activity in the primary market for international bonds, while contributing to volatile trading conditions in the secondary market. In subsequent weeks, primary activity remained subdued, partly reflecting the usual seasonal lull. Some sectors were more affected than others and there were no public issues in the French franc, ECU and Canadian dollar markets for almost a month (Table D). However, the issuance of bonds recovered in September. In the secondary market volumes traded were much in line with previous quarters (see Chart 2).

Table D
Currency composition of fixed-rate bond issues
Percentages of total issues announced

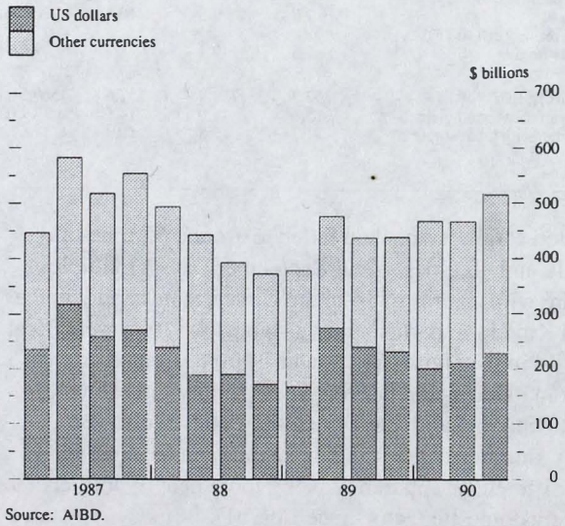
	1989	1990		
Currency denomination	Year	Q1	Q2	Q3
US dollars	51	37	31	42
Swiss francs	8	15	9	12
Yen	10	13	12	14
Deutschemarks	6	6	4	5
Sterling	5	7	6	4
Australian dollars	3	3	4	5
Canadian dollars	5	2	4	4
ECU	5	9	12	4
French francs	2	2	8	4
Other	5	6	10	6

Table E
Fixed-rate bond issues by country of issuer
Percentages by value of total issues announced

	1989	1990		
Country of issuer	Year	Q1	Q2	Q3
United States	6	7	16	10
United Kingdom	6	6	6	7
Japan	41	27	8	32
Germany	3	6	3	3
France	6	7	11	7
Canada	5	8	5	4
Australia	3	1	'2	4
Italy	3	6	5	3
International institutions	10	13	18	13
Other	17	19	26	17

In the eurocommercial paper market, the emphasis on credit quality increased in the third quarter and it became increasingly difficult for lower-rated borrowers to raise funds. In addition, the more difficult environment for banks —with high oil prices threatening slower economic activity, and an increase in demand for capital from Japanese banks—led to a widening of spreads between bank and sovereign government paper. Following the onset of the Middle East crisis the volumes of new euronote facilities

Chart 2
Straight eurobonds: secondary market turnover



Source: AIBD.

International banking developments

The growth of cross-border business of banks in the BIS reporting area continued to slow in the second quarter of 1990, with assets rising by just 0.9% ($45.4 billion) and liabilities by 1.1% ($60.9 billion). Much of this reflected reduced interbank activity within the BIS reporting area, most notably falls in the outstanding positions of banks in Japan. These would have been partly seasonal, but there also seems to have been some slowdown in the underlying growth rate. External lending to countries outside the BIS reporting area also continued to fall in the second quarter, albeit at a slower rate than in the first quarter. The $6.4 billion decline in banks' claims on Eastern Europe was concentrated on the Soviet Union ($4.6 billion).

The reduced activity by Japanese banks is also evident from the BIS analysis by nationality of bank. In aggregate, international claims of Japanese and American banks fell in the first half of 1990 by $52 billion and $68 billion respectively, almost entirely in interbank business. The growth in the period came very largely from continental European banks, notably German and Swedish; an important feature was the rise in lending to non-banks.

The London market

Figures for the external business of banks in the United Kingdom show that this also was depressed during the second quarter of 1990, following a buoyant first quarter (see the table). On both sides of the balance sheet, external aggregates were strongly affected by the slow-down in interbank activity and, in particular, the sizable contraction in cross-border business with banks in Japan; claims on banks in Japan fell by $10.3 billion, more than accounting for a total fall in interbank claims of $2.5 billion. In contrast with the previous quarter, identified cross-border activity with non-banks was muted. US non-bank deposits fell by $2.5 billion, taking the fall since March 1989 to $25 billion.

Total lending to the BIS industrial area fell by $2.4 billion during the second quarter, owing largely to the decline in lending to Japan. Lending to Western Europe (excluding East Germany), grew by $0.8 billion, with particularly strong growth in claims on Italy ($5.8 billion). The main constituent of a further decline in lending to Eastern Europe was a fall in lending to the USSR of $0.7 billion. Lending to Latin America continued to decline, as it has done since the first quarter of 1989, with falling claims on Brazil, Costa Rica, and Mexico together accounting for a fall of $1.8 billion.

The share of Japanese incorporated banks in the external business of UK banks continued to fall in the second quarter, reaching 34.5% of total external claims, down by 1.2 percentage points on the previous quarter. The shares of British and American owned banks were virtually unchanged but the share of 'other overseas' banks, continued to rise (by 2.0 percentage points to 36.2%).

Cross-border business of banks in the United Kingdom

$ billions: changes exclude estimated exchange rate effects

	1988	1989			1990		Out-standing at end-June 1990
	Year	Year	Q3	Q4	Q1	Q2	
Liabilities vis-à-vis:							
BIS industrial area	41.2	58.7	18.3	9.0	16.3	-5.3	691.6
of which:							
United States	*7.7*	*-15.7*	*-2.6*	*1.5*	*-16.2*	*2.2*	*138.8*
Japan	*17.9*	*18.0*	*13.5*	*-3.7*	*4.8*	*-9.7*	*104.4*
'Offshore' banking centres	-2.4	6.6	0.3	-0.8	0.6	-4.0	119.1
Sub-total	38.8	65.3	18.6	8.2	16.9	-9.3	810.7
Outside reporting area							
Developed countries	5.7	6.4	2.3	1.1	1.0	-0.2	33.0
Eastern Europe	1.1	0.4	0.6	—	-1.0	-0.9	8.2
Oil exporters	6.8	3.5	-0.4	-1.7	0.8	0.3	57.7
Non-oil developing countries	-4.3	2.3	2.3	0.8	0.5	2.6	53.3
of which, Latin America	*-1.1*	*-1.1*	*0.6*	*0.3*	—	*0.9*	*6.5*
Sub-total	9.4	12.6	4.8	0.2	1.3	1.8	152.2
Other (a)	16.0	2.1	7.7	2.4	3.3	5.5	97.0
Total (b)	**64.3**	**80.0**	**31.1**	**10.8**	**21.5**	**-2.0**	**1,059.9**
of which, non-bank	*18.0*	*19.4*	*2.5*	*2.9*	*10.5*	*0.4*	*284.9*
Assets (c) **vis-à-vis:**							
BIS industrial area	46.5	50.0	15.7	11.2	23.2	-2.4	696.0
of which:							
United States	*-10.8*	*0.9*	*6.4*	*-0.3*	*-0.8*	*4.0*	*133.3*
Japan	*42.5*	*9.9*	*16.2*	*-1.6*	*-0.6*	*-9.8*	*200.0*
'Offshore' banking centres	-9.0	8.1	3.0	1.7	0.4	5.1	125.2
Sub-total	37.4	58.1	18.7	12.9	23.6	2.7	821.2
Outside reporting area							
Developed countries	-1.9	-2.0	-0.5	0.7	-0.1	1.1	34.1
Eastern Europe	2.3	1.9	0.1	0.3	-0.9	-1.4	22.8
Oil exporters	0.7	-1.4	-0.8	-0.5	-0.2	-0.7	18.4
Non-oil developing countries	-6.5	-3.4	-0.9	-2.1	-3.9	-2.0	39.9
of which, Latin America	*-3.9*	*-2.6*	—	*-1.3*	*-4.2*	*-2.5*	*21.6*
Sub-total	-5.5	-4.9	-2.0	-1.7	-5.1	-2.9	115.2
Other (d)	3.9	4.1	1.5	3.2	0.7	4.2	15.4
Total (b)	**35.8**	**57.3**	**18.2**	**14.4**	**19.2**	**4.0**	**951.7**
of which, non-bank	*5.5*	*13.0*	*5.6*	*2.6*	*9.1*	*2.3*	*234.7*

(a) International organisations, unallocated and international issues of securities.
(b) Includes business not identified by region.
(c) Including securitised lending
(d) International organisations and unallocated.

Partial information for the third quarter of 1990 shows a resurgence of activity, with total international claims rising by $56.6 billion (4.7%), triple the increase in the first half year. A major impetus came from a turnround in the activities of Japanese banks. Following a fall in their business of $27.5 billion in the first half year, there was an increase of $14.1 billion in the third quarter; in both cases, the changes were concentrated on business with their own offices overseas. The business of 'other overseas' banks continued to rise quickly, largely in the interbank market. The third quarter also showed a pick-up in the business of American banks after slow growth in the first half year.

Table F
Announced euronote facilities
$ billions

	1988	1989		1990		
	Year	Year	Q4	Q1	Q2	Q3
Committed	3.7	2.9	0.2	0.1	—	—
Uncommitted	78.4	64.6	19.6	17.4	17.0	12.6
Total	**82.1**	**67.5**	**19.8**	**17.5**	**17.0**	**12.6**
Nationality of borrower						
United States	10.2	11.7	1.0	4.1	2.4	2.0
United Kingdom	11.4	5.8	1.3	0.6	2.9	3.1
Australia	6.6	10.6	3.9	3.2	4.1	0.9
Japan	6.8	8.7	2.5	3.1	0.6	1.0
Other OECD	41.1	25.3	9.7	5.3	6.2	4.8
Other	6.0	5.4	1.4	1.2	0.8	0.8

announced fell sharply, but by end-September the volume of euronotes outstanding, as estimated by Euroclear, had risen sharply from the end-June level (by $14 billion) to a record $110.2 billion, suggesting that borrowers were activating previously established programmes (Table F).

Domestic markets

New issues and turnover

Capital issues in sterling declined in the third quarter (Table G) largely reflecting the weakness in equity prices and the reluctance of issuers to enter a falling market. Sterling bond markets have been depressed by the impact of the Gulf crisis, along with rising UK inflation and the high level of interest rates. Issuance of sterling eurobonds has, however, been supported by several specialist issues, including some £700 million of mortgage-backed securities. There were also a number of FRN issues by banks and financial institutions, including an issue of £250 million by the Halifax Building Society in September. Gross issues of sterling commercial paper totalled £15,906 million in the third quarter, slightly more than in the previous quarter, against redemptions of £15,492 million. The amount outstanding peaked at £5,711 million at end-August but by end-September had fallen back to £5,670 million. The Bank had been notified of 254 programmes by the end of the quarter, and paper has been issued under 208 of these. During the quarter the Bank was notified of one medium-term note programme under the terms of the 11 January 1990 notice, taking the total to five.

Table G
Sterling capital issues: amounts announced[a]
£ millions

	UK borrowers (b)			Overseas borrowers	
	Shares(c)	Fixed-rate debt	Floating-rate debt	Shares and fixed-rate debt	Floating-rate debt
1988	7,177	5,933	5,648	3,681	—
1989	7,175	7,677	5,808	4,648	36
Q1	835	3,304	725	1,205	—
Q2	3,074	1,904	1,500	1,130	—
Q3	2,008	1,902	1,669	1,543	36
Q4	1,798	567	1,915	769	—
1990					
Q1	1,574	1,555	1,300	1,122	350
Q2	1,431	1,631	2,312	550	60
July	466	303	250	—	290
Aug.	783	137	140	—	—
Sept.	105	447	540	—	—
Q3	1,355	888	929	—	290

(a) Further details can be found in the Bank's monthly Capital Issues Press Notice.
(b) Including issues by overseas subsidiaries.
(c) Shares comprise ordinary shares and preference shares including convertible preference shares.

Turnover in equities in London was about £1¼ billion per day during the third quarter, some 8% lower than in the preceding quarter and 20% below the level in the corresponding period in 1989. The fall in equity prices during the quarter, together with uncertainty about the Gulf situation and a poorer perception of the outlook for UK companies, deterred both investors and trading. Within the total, trading in international stocks fell more than in domestic equities. International equity trading accounts for almost half of turnover on the International Stock Exchange (ISE), and London is the world's most active market for foreign equities, its principal attraction being the liquidity it offers. Foreign equity trading in London has also benefited from reduced restrictions on capital flows abroad, and a trend towards increasing the share of foreign securities in investment portfolios.

The crisis in the Gulf has increased uncertainty in world markets, and has therefore tended to add to the demand for products which can be used to help to manage risk and uncertainty. Many futures and options exchanges reported record trading volumes in August; issues of warrants in the over-the-counter market also increased. The oil market is a good example of this, with very large fluctuations in oil prices since August, and considerable uncertainty about the future. In August and September, the total number of contracts traded on the International Petroleum Exchange in London was almost triple that in the same period in 1989.

Average daily turnover on LIFFE in the long gilts futures contract fell to 21,200 contracts in the third quarter, down by 6,000 contracts per day from the previous period, and mirrored a lower level of turnover in the gilts market, where turnover declined from £4.5 billion per day in the second quarter to £3.9 billion per day in the third, partly reflecting seasonal factors. Turnover in the short sterling futures contract on LIFFE fell back to 28,800 contracts per day in the third quarter, down for the second consecutive quarter from the record 36,300 contracts per day in the first quarter of the year. In contrast, trading in German bond futures and options increased sharply, boosted by the uncertainty over the prospective effects of German unification, so that overall LIFFE turnover increased slightly.

For securities houses, the crisis in the Middle East has depressed new issues and reinforced pressures to concentrate on profitability rather than market share. This continues the shift in market attitudes which had already become evident in the previous year. More recently, some houses seem to have been changing the emphasis of their business towards concentrating on niches, while other houses, though continuing to provide a full service in all the main markets, are cutting out some of the minor markets where they do not feel they can earn sufficient return. Moves in these directions have led several banks and finance houses to restructure their securities business in recent months. Among the examples of retrenchment, two houses ceased market

Index arbitrage

Index arbitrage refers to activity designed to exploit anomalies between the price of an index derivative product, usually a futures contract, and the prices of the underlying constituents of the index in the cash securities market. The purpose is to make a profit from what are usually small, temporary price differentials between the cash and derivatives markets. For example, if an arbitrageur sees that the price of the index futures product is expensive by comparison with the prices of the underlying securities (taking into account costs of carry and dividend payments) then he will buy the constituent stocks in the index and simultaneously sell futures contracts on that index. If trades in the cash stocks and the index future are executed simultaneously and are exactly offsetting, subsequent changes in prices should have no net effect on the arbitrageur's profit (though he could lose if one of his counterparties were to fail). Furthermore, cash transactions may take longer to execute than futures transactions, so that synchonisation may not be perfect, which means that index arbitrage is not entirely risk-free. In practice, firms use computers to look for arbitrage opportunities, which can occur in any market conditions, but are more likely when conditions are volatile.

Index arbitrage can help to keep cash and derivative market prices in line—when the arbitrageur sells the future and buys the cash stocks he will bid down the price of the future and bid up the price of the cash stocks. However, some have accused index arbitrage of exacerbating stock market volatility, especially during the 'witching hour'— the period during which index derivatives expire and the ultimate profitability of arbitrage positions is determined; during this period many firms close out their positions (ie transact to offset existing positions and to crystallise their gain or loss). Worries have also been expressed that index arbitrage can lead to mutually reinforcing declines in cash and futures markets.

In the United States, concern over the effect of index arbitrage on market volatility following the 1987 crash led to the introduction of several circuit breakers. The so-called 'sidecar' component of rule 80A of the NYSE delays by five minutes large index trades conducted by computer on the NYSE when the S and P 500 futures contract in Chicago drops more than 12 points from the previous day's close (such a drop is equivalent to a 100 point drop on the NYSE). Another component of rule 80A specifies that if the Dow-Jones Industrial Average index (DJIA) declines or advances by 50 points or more from the previous day's close, all arbitrage trades must be effected in a stabilising manner. Thus when the DJIA falls by 50 points index arbitrage sell orders can only be executed at prices the same or higher than the preceding sale. The rule has been called into action around fifteen times since it was introduced at the end of July. Under rule 80B, if the DJIA falls by more than 250 points from the previous day's close, all trading is halted for an hour. If the DJIA falls a further 150 points (taking the fall on the day to 400 points) after the market reopens then trading is halted for a further two hours. Recently, these circuit breakers have been credited by some market participants with cushioning the US market's fall in the face of Iraq's invasion of Kuwait, but the measures have not yet been in operation long enough to allow any firm judgement. Index arbitrage is currently an issue in Japan where it is practised largely by foreign brokers, who have expertise in computer-assisted programme trading strategies. The authorities and exchanges in Japan have reportedly examined its role in the market's fall since the beginning of the year.

In the United Kingdom, there has been less concern about index arbitrage, which may partly reflect the smaller volume of equity derivative trading in the United Kingdom. In the United States, the volume of derivatives trading is about four times greater than that of the underlying cash markets, whereas in the United Kingdom the ISE estimate it amounts to only about two thirds of that in the underlying markets. On the NYSE, index arbitrage trades account for about 5% of all trading volume, while the ISE estimates that in the United Kingdom not more than 1% of typical underlying UK equity market activity is related to index arbitrage.

The differences in the amount of index arbitrage between the United States and the United Kingdom may reflect the markets' technical, structural, and tax differences. On the technical side, the United Kingdom does not have an automatic execution facility equivalent to 'Superdot' in the United States. 'Superdot' automatically routes the cash side of an arbitrage trade to the appropriate specialists in the cash stocks, who must execute the order within thirty seconds. Effectively, in the United States firms can buy and sell the index in one transaction, rather than making very many individual transactions. In the United Kingdom, the cash side of an index arbitrage order is broken down into many different orders for the individual stocks. Moreover, there have been two main tax disincentives to index arbitrage in the United Kingdom. First, some UK institutions have in the past risked loss of tax exemption if their futures market activities were deemed to be trading (as opposed to hedging). Second, the margin of profit on index arbitrage is usually very small, and share purchases would attract UK stamp duty of 0.5% (currently only registered market makers are exempt but stamp duty will be eliminated once TAURUS is introduced). One structural feature which may discourage index arbitrage in the United Kingdom is that only registered market makers have access to stock-borrowing facilities, which are important if the arbitrageur wants to buy the future and sell the cash stocks, because if he does not already hold the cash stocks then he will need to borrow them to make delivery. Thus the range of potential participants in index arbitrage is smaller in the United Kingdom than in the United States.

making in Swiss franc bonds, one house dropped sterling commercial paper and two houses withdrew from market making in dollar-denominated Japanese equity warrants. On the other hand a number of securities houses created divisions or subsidiaries concentrating on writing or making markets in derivative products, such as options, warrants and swaps. Derivatives have shown much faster growth generally over the last decade than have underlying cash securities and the turbulence in the financial markets resulting from the crisis in the Middle East has served to emphasise their importance.

Derivative markets

In July, the London International Financial Futures Exchange (LIFFE) and the London Traded Options Market (LTOM) announced their decision to merge to form a single exchange, the London Derivatives Exchange. The merger is expected to take place in the early part of next year. A study commissioned by the two exchanges in 1987 estimated total savings resulting from a merger to be in the region of £200 million over a four year period. LIFFE and LTOM's announcement has caused other London exchanges to reconsider the question of amalgamation. In October, the Baltic Futures Exchange (BFE) and the London Futures and Options Exchange (London FOX) announced their intention to merge their operations.

At the end of June, the Association of Futures Brokers and Dealers (AFBD) and the Securities Association (TSA), respectively the Self Regulating Organisations (SROs) for futures and securities business in the United Kingdom, announced that they intend to merge. Specific proposals will be considered by AFBD and TSA members. The proposed merger is intended to improve the co-ordination of regulation between the cash and derivative markets, cut the costs of regulation and help to simplify the regulatory system. Further steps towards regulatory simplification have been made with proposals to introduce a three-tier structure for regulatory rules under the Financial Services Act. The top tier comprises ten Statements of Principle which were issued by the Securities and Investments Board (SIB) in March. In July, SIB published for consultation a second tier of forty 'core rules', which will apply directly to SRO members. The third tier (of detailed rules, codes of conduct and notes for guidance) will be issued by each SRO, and will be tailored to the needs of each investment sector.

Cash markets

Three concrete proposals are being considered under the auspices of the Federation of European Stock Exchanges to facilitate the development of a more unified market in equities in the EC: Euroquote (formerly called PIPE) which is a system to disseminate prices from EC stock exchanges; Eurolist, which is a proposal to list the top European stocks simultaneously on all the EC stock exchanges; and the European Wholesale Market, which is an ISE proposal to provide a single market for cross-border equity trading between professionals.

In the same spirit, the ISE has introduced a real-time stock market index for non-UK European stocks, called the FT-SE Eurotrack 100, as a sister product to the FT-SE 100 Index of UK equity prices. Eurotrack 100 will be calculated in deutschemarks, and will reflect changes in prices of individual stocks and in exchange rates. A second European index, to include UK shares, is planned for next year.

Settlement issues

There have been further steps to improve facilities for settling transactions in the London markets. In October the Bank of England opened the Central Moneymarkets Office (CMO). CMO is an electronic book-entry transfer system for sterling money-market instruments which allows the transfer of those instruments between members of the service, and which provides for the creation of associated payments instructions to be notified to each member's settlement bank for payment on the same day. The CMO increases settlement efficiency by providing electronic transfer of instruments and payment instructions, and reduces risks inherent in the delivery of physical instruments and cheques.

In September the International Stock Exchange (ISE) published a detailed Service Description of TAURUS, the proposed system which will allow investors to hold and transfer securities in electronic book-entry form, that is without the need for physical certificates or stock transfer forms. At the same time, the ISE also published criteria for membership of the system, a technical specification and indicative charges for dematerialised settlement.