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Monetary and Economic Department

INTERNATIONAL BANKING AND FINANCIAL MARKET DEVELOPMENTS

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Requests for publications should be addressed to:
Bank for International Settlements, External Services Section, Centralbahnplatz 2, CH-4002 Basle.
Telefax numbers: (41) 61/280 91 00 and (41) 61/280 81 00

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* Queries concerning the contents of this commentary should be addressed to Jean Kertudo (Tel. +41 61 280 8445) or Serge Jeanneau (Tel. +41 61 280 8416). Queries concerning the statistics should be addressed to Rainer Widera (Tel. +41 61 280 8425).

I

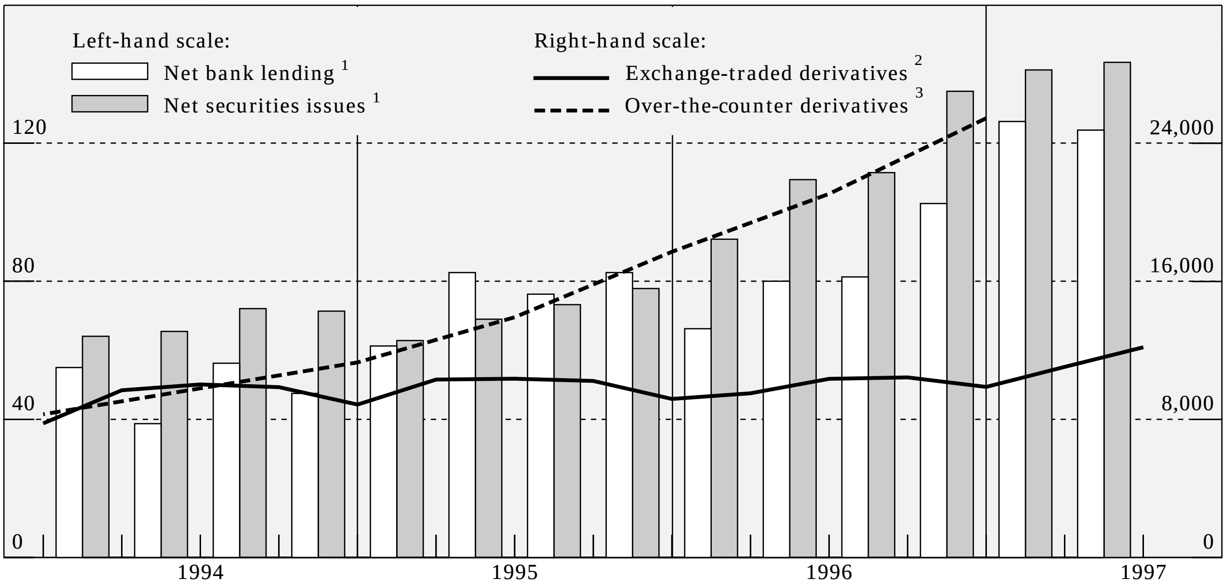
OVERVIEW OF RECENT INTERNATIONAL BANKING AND FINANCIAL MARKET DEVELOPMENTS

Even before the severe turbulence of October, there was evidence of growing strains in the world financial system during the third quarter of 1997. With equity indices in most industrial countries testing new peaks, stock markets were subject to abrupt, even if temporary, corrections. Similarly, bilateral exchange rates between the dollar, on the one hand, and the yen and the Deutsche mark, on the other, followed uneven courses. Changing expectations concerning European economic and monetary union (EMU) and the level of core European interest rates tended at times to unsettle the convergence process taking place in Europe. In addition, the extension of the Thai currency crisis to other South-East Asian markets, following the floating of the baht in early July, prompted a portfolio shift away from financial assets in the region. Surprisingly, long-term interest rates in industrial countries were little affected by these developments. Not only were there limited upward pressures on the level and volatility of bond yields in core markets, but the underlying convergence between high and low-yielding assets was not fundamentally called into question (see the graph on page 15). Subdued inflation and fiscal consolidation may have helped isolate fixed income markets from the volatility of foreign exchange and equity markets.

At the same time, a number of factors contributed to sustaining activity in the international segment of the world securities markets in the third quarter of 1997. First, the wide range of techniques available enabled the international market to retain its competitive edge over domestic counterparts in accommodating the accelerating pace of securitisation. The shift by investors away from traditional savings instruments fuelled intermediaries' heavy recourse to the market, while the improvement in the credit quality of North American and European banks facilitated the marketing of

Activity in international financial markets

In billions of US dollars

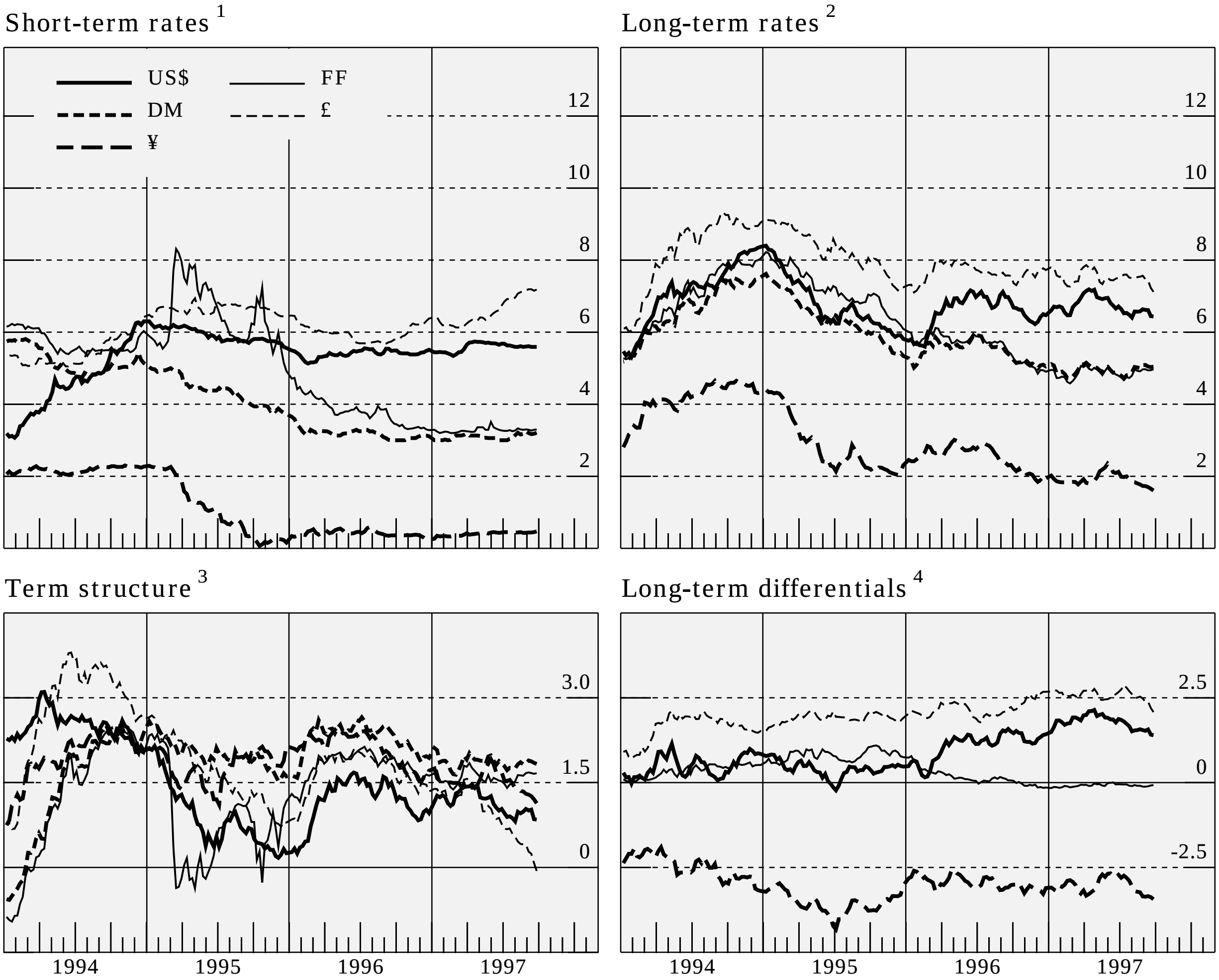


[1] Four-quarter moving averages. [2] Notional amounts outstanding of currency, interest rate and equity index futures and options. [3] Notional amounts outstanding of currency and interest rate swaps and other swap-related derivatives; semi-annual data only.

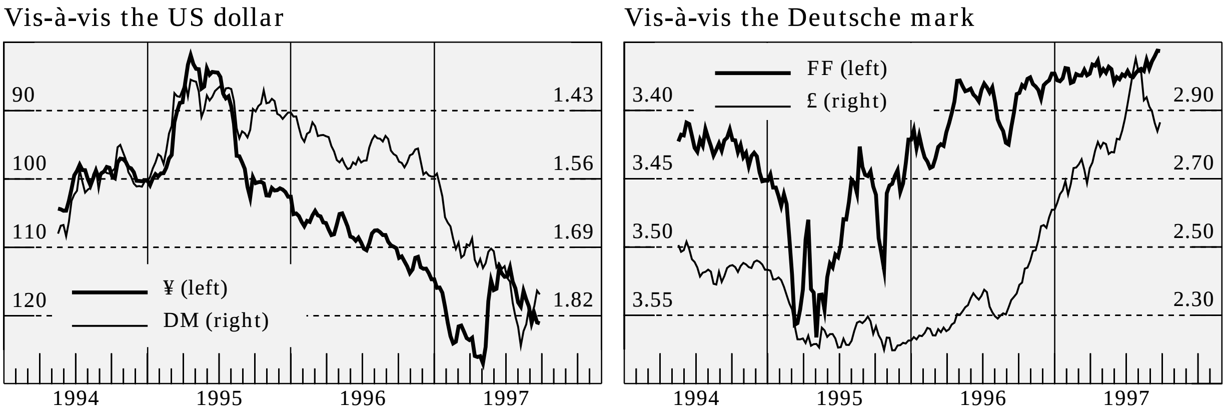
Sources: Bank of England, Euroclear, Euromoney, Futures Industry Association, International Financing Review (IFR), International Swaps and Derivatives Association (ISDA), International Securities Market Association (ISMA), national data and BIS.

International short and long-term interest rates

Weekly averages, in percentages and percentage points



Bilateral exchange rates



[1] Three-month euromarket interest rates. [2] Yields in annual terms on the basis of five-year interest rate swaps.
[3] Long-term rates minus short-term rates. [4] Vis-à-vis German long-term rates.
Source: BIS.

their issues. The favourable capital treatment given to certain subordinated bank issues under the European Capital Adequacy Directive also contributed to the upturn in capital raising by the financial sector. Secondly, despite fluctuating expectations concerning EMU, the scheduled introduction of the euro continued to act as a catalyst for cross-border European borrowing and investment. Thirdly, with monetary policy in Europe expected to remain sufficiently accommodative to support economic growth and budgetary adjustment in individual countries, and with the persistence of economic weakness in Japan, the supply of loanable funds in the international market continued to be abundant. Fourthly, notwithstanding the South-East Asian currency crisis, the ongoing search for yields by international investors in the context of ample liquidity facilitated the absorption of a large volume of emerging market issues. Investors' appetite for risk also opened the eurobond market to a wider range of non-investment-grade borrowers and allowed the further replacement of Brady debt by uncollateralised long-term issues.

Taking the first nine months of 1997 together, the 19% annual rate of expansion in the stock of international securities outstanding stands in sharp contrast with the weaker growth of domestic securities and bank credit markets in the industrialised world. Meanwhile, detailed international banking statistics available up to the middle of the year point to a sustained pace of aggregate lending growth (13% on an annual basis), both in interbank business and in lending to non-bank customers. While the Czech and Thai currency crises in May were reflected in some loss of momentum in lending to emerging market economies, overall international banking activity in the first half of the year was supported by sizable transfers of intra- and interbank funds. In particular, German and Swiss banks were keen to expand their international network during this period, which should be seen in the broader context of the functional and geographical concentration currently taking place in the world financial industry.

A number of market and official initiatives taken during the third quarter were aimed at addressing the regulatory issues raised by the globalisation of finance. In July, for instance, the Group of Thirty (G-30) released a report focusing on its implications for national supervision and systemic risk.[1] The report noted that advances in disclosure, risk management techniques and capitalisation had reduced some aspects of systemic risk, but that the operations of major financial institutions and markets had outgrown national accounting, legal and supervisory frameworks. The document highlighted concerns about the speed with which a shock to the financial system could be transmitted given the already high level of concentration in many market segments. Consistent with the views of a number of supervisors, the G-30 believes that the establishment of a supranational regulatory body

Estimated net financing in international markets[1]

In billions of US dollars

Components of net international financing	1995	1996			1997			Stocks at end-
	Year	Year	Q3	Q4	Q1	Q2	Q3	June 1997
Total international[2] bank claims[3]	644.0	590.3	202.0	222.6	360.5	223.6	..	9,949.3
minus: interbank redepositing	314.0	180.3	142.0	87.6	175.5	108.6	..	4,774.3
A = Net international bank lending[3]..........	**330.0**	**410.0**	**60.0**	**135.0**	**185.0**	**115.0**	**..**	**5,175.0**
B = Net money market instruments	**17.4**	**41.1**	**-3.9**	**18.5**	**7.1**	**5.3**	**9.7**	**179.5**
Total completed bond and note issues	587.4	871.2	203.1	263.0	240.8	247.8	270.6	
minus: redemptions and repurchases	293.3	372.3	91.8	105.2	110.2	101.1	116.1	
C = Net bond and note financing	**294.1**	**498.9**	**111.3**	**157.9**	**130.7**	**146.7**	**154.4**	**3,224.3**
D = Total international financing[4]	**641.5**	**950.0**	**167.4**	**311.3**	**322.8**	**267.0**	**..**	**8,578.8**
minus: double-counting[5]	96.5	190.0	42.4	36.3	47.8	12.0	..	1,063.8
E = Total net international financing	**545.0**	**760.0**	**125.0**	**275.0**	**275.0**	**255.0**	**..**	**7,515.0**

[1] Changes in amounts outstanding excluding exchange rate valuation effects for banking data and euronote placements; flow data for bond financing. [2] Cross-border claims in all currencies plus local claims in foreign currency. [3] See notes to Table 1 of the statistical annex. [4] A + B + C. [5] International bonds purchased or issued by the reporting banks, to the extent that they are taken into account in item A.

[1] See "Global Institutions, National Supervision and Systemic Risk", Group of Thirty, Washington, DC, 1997.

EMU-related initiatives in the third quarter of 1997

There were several announcements in the third quarter of 1997 concerning conventions for euro-denominated financial instruments. In July, the International Swaps and Derivatives Association (ISDA) issued an EMU Continuity Provision designed to protect counterparties in swap transactions from some of the consequences of EMU. The document states, inter alia, that events such as the introduction of the European single currency will not give counterparties the right to reject the terms of a transaction agreed prior to the event.

In the same month a group of experts established by the European Commission called for a further harmonisation of issuance and market practices ahead of the introduction of the single currency. Most notably, the group endorsed a coordination of EU government bond issuance and the harmonisation of trading conventions. The group also recommended a redenomination of government and non-government debt according to the "bottom up" approach.[*] In August, one euromarket clearing house warned about the risk of confusion resulting from the lack of progress on the harmonisation of redenomination methods and called on the authorities to agree on common rules for such a redenomination.

In August, ISDA also published two new reports on the impact of EMU on price information and on the legal issues raised. The first report surveys actions taken since the association urged the various providers of price information (price sponsors) in June to announce their future strategies.[**] The report welcomed the support provided by the European Monetary Institute (EMI) and the work already done by many existing national price sources, as well as the Association Cambiste Internationale (ACI) and the European Banking Federation (EBF).[***] However, it noted that formal detailed plans had been received from only a few national price sponsors. ISDA attributed this to the fact that details of EURIBOR had only been agreed on 31st July and that price sponsors had been reluctant to announce their plans until the shape of that possible successor rate had become clear.[****] It underlined the importance of making formal statements as soon as possible given the need to prepare legal and computer systems in advance of the start of EMU. The second report focuses on the legal issues raised by the switch. It does not envisage major difficulties if existing rates are retained for national currencies or are replaced by individual euro rates. It considers that the legal situation is less clear, however, in the case where a national rate is abolished and replaced by a successor rate calculated for the entire EMU zone, or where an EMU-zone successor is designated for broadcasting on screens but the national rate continues to be quoted elsewhere for domestic purposes. ISDA therefore intends to develop contractual provisions addressing these legal uncertainties.

Lastly, in September, the guidelines earlier agreed by clearing houses and trade groups (including Cedel, Euroclear, the International Primary Market Association and ISDA) on the trading conventions of euro-denominated financial instruments won the support of the European Commission and the EMI. The conventions cover issues such as bond quotations, day counts for accrued interest and the harmonisation of business days.[*****]

[*] Two methods of redenomination are being considered. Under the "bottom up" approach, each individual investor's total holdings of bonds would be converted at the official conversion factor. Under the "top down" method, conversion would be applied to the minimum unit of denomination of the issue. [**] See the previous issue of this commentary, page 24. [***] In September, the EMI announced that the European Central Bank would produce an overnight rate index and that the EBF would publish it. [****] On 31st July, the ACI and the EBF formally announced plans to provide sponsorship for a EURIBOR rate. [*****] In May, the associations had proposed that the day count for bonds be on an actual/actual basis, that quotations be in decimals (rather than in fractions) and that settlement of cross-border transactions be on a t+3 business day cycle. It also proposed that business days should correspond to the opening schedule of the TARGET system. However, no standardised practice was recommended for coupon frequency.

would not be a practical means of strengthening supervision worldwide. However, its proposal for developing voluntary standards specific to global institutions might not be entirely compatible with current official efforts aimed at creating a level playing-field through minimum standards applicable to the entire financial industry.[2]

Finally, recent market developments and initiatives should be seen in relation to two important deadlines. One is the proposed introduction of the single European currency on 1st January 1999. While raising numerous issues across market segments, such as trading conventions and the determination of benchmark rates for euro-denominated instruments (see the box above), adjustments to the changeover will have repercussions which will extend well beyond the countries expected to

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[2] See, for instance, the Basle Core Principles released in September 1997 by the Basle Committee on Banking Supervision, which are referred to on pages 10 and 11 below.

form part of the initial single currency area. The other deadline is the coming of the new millennium, which will require changes to a large number of computer applications. In a press statement released on 8th September, the central bank Governors of the Group of Ten countries warned of the possibility that certain applications may fail to operate smoothly on 1st January 2000. They recommend that all financial institutions develop appropriate contingency plans for dealing with any interruptions to counterparty trades and payments. The Basle Committee on Banking Supervision has drawn up a technical paper on this issue for banks (see page 11). Moreover, the Committee on Payment and Settlement Systems is working on the creation of a special section on the BIS Web site to provide information on the state of preparedness and testing of payment and settlement systems in this respect.

II

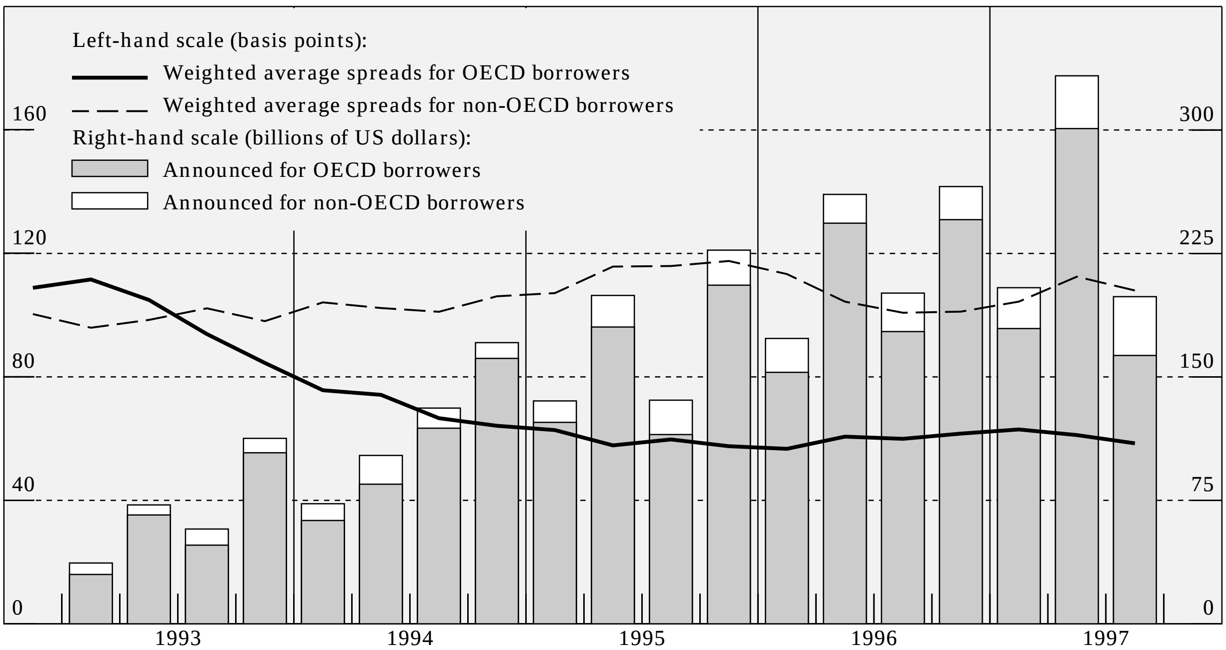
THE INTERNATIONAL BANKING MARKET

Main features

In the *third quarter of 1997*, activity in the international syndicated credit market decelerated from the record level seen in the second quarter (from $332.9 billion to $198.7 billion). In spite of several multi-billion dollar transactions, there was a lower volume of facilities related to mergers and acquisitions within the industrial world. However, the volume of facilities for borrowers from developing countries reached an all-time high of $30.3 billion. Asian entities alone accounted for $14.1 billion, which was the largest amount of syndicated banking funds ever extended to developing countries in Asia. A number of factors explain this contrast between the apparent buoyancy of Asian syndicated banking business and the spreading of the Thai currency crisis to other South-East Asian countries (as described in the box on page 12). First, one-third of the facilities were for Chinese borrowers, which were not significantly affected by the turmoil. Secondly, while a number of arrangements were reported to have been postponed following the deepening of the crisis in September, several others were launched before the situation became critical. Finally, despite slight increases in lending spreads for borrowers from a few Asian countries, implicit support from some authorities may have acted to sustain the pace of activity.

Detailed international banking statistics now available for the *second quarter of 1997* show that, despite a contraction in the growth of aggregate lending, business continued to expand at a fairly rapid pace during this period. Interbank lending seems to have been supported by the reallocation of funds between and within banking groups involved in restructuring operations and by greater foreign exchange volatility. Meanwhile, the non-bank sector tended to withdraw deposits denominated in Deutsche marks and yen, following a temporary return to such assets in the first

Announced facilities in the international syndicated credit market and weighted average spreads *



* Four-quarter moving average of spreads over LIBOR on US dollar credits.
Sources: Euromoney and BIS.

The BIS data on announced international syndicated credit facilities

The BIS data on announcements of international syndicated credit facilities have hitherto excluded all facilities for which refinancing was mentioned as the main purpose. In view of the increasing importance of such business in cross-border bank lending, and given the widespread use of multipurpose arrangements combining refinancing with other features, the coverage has been broadened to include all refinancing facilities. The data published by the BIS henceforward comprise credit facilities that satisfy the following criteria:

– the facilities must be granted by syndicates consisting of at least three financial institutions acting as arranger/co-arranger, lead manager/co-lead manager, manager/co-manager, participant or member of a tender panel;

– the nationality of at least one of the syndicate banks must differ from that of the borrower;

– as regards the terms of the announced loans, only signed facilities with a maturity of at least one year and for an amount equivalent to at least $1 million are included;

– facilities must take the form of one or a combination of the following instruments: term loan, revolving credit, co-financing facility, export credit, bridge facility, construction loan, mezzanine loan or multiple options facility.

The new data on announced international syndicated credit facilities are presented with a breakdown by nationality of borrower and are available from the beginning of 1992.

It is important to bear in mind, however, that while the syndicated loans data provide an up-to-date picture of borrowing and lending conditions in an important segment of the international banking market, the series are not fully comparable with the main BIS international banking statistics. First, facilities may be used only as a backup for other types of fund-raising activity and may therefore remain undrawn or only partially used. Secondly, even when the facilities are used by borrowers, there may be a considerable delay in actual drawings. Thirdly, in some instances the funds are used to replace past banking debt, without any increase in borrowers' total banking indebtedness. Finally, syndicated loans are but one of the various forms of international bank lending. In particular, no account is taken of short-term interbank and trade credit and bilateral loans, which are often predominant in countries' relations with the international banking system.

quarter. This meant that, on an assets-minus-liabilities basis, reporting banks provided large new resources in currencies other than the dollar to non-bank entities located in major financial centres.

At the same time, detailed country data suggest that the spillover of the Czech and Thai currency turmoil in May to other emerging market countries was limited in the second quarter. In particular, international bank lending to Asian countries other than Malaysia, Taiwan and Thailand showed no sign of abating. Although the focus on economic fundamentals seems to have been more prominent, the continuing heavy flows of banking funds to a wide range of countries, such as Brazil and Turkey, points to the persistence of ample liquidity.

Business with countries inside the reporting area

After allowing for short-term swings in positions outstanding, there were two important developments in international banking activity within the reporting area in the second quarter of 1997. The first was the increase of intra- and interbank transactions. To an even larger extent than in the first quarter, expansion in this market segment was related to movements of funds between affiliated banking offices. This was most particularly the case for Swiss and German banks, which have strongly expanded their international business recently, including through acquisitions. There was also a rebound in the activity of Japanese banks in the international interbank market, following two years of almost uninterrupted retreat. While currency movements seem to be the main reason, the expansion of euroyen borrowing and lending by Japanese banks may have contributed to this recovery.

The second major feature was the shift between the first and second quarters of the year from net deposit-taking to net lending in banks' business with the non-bank sector in major financial centres. Apart from US residents, who continued to accumulate bank deposits in offshore centres and in the euromarket, there was a fairly widespread switch out of bank deposits among international

Main features of international lending by BIS reporting banks[1]

In billions of US dollars

Components of international bank lending	1995	1996				1997		Stocks at end-June 1997
	Year	Year	Q2	Q3	Q4	Q1	Q2	
Claims on outside-area countries	**120.8**	**125.2**	**28.2**	**35.6**	**39.9**	**40.4**	**30.9**	**1,170.7**
Claims on inside-area countries	**506.5**	**453.4**	**17.5**	**171.2**	**180.2**	**298.6**	**176.1**	**8,502.0**
Claims on non-banks	189.5	308.9	82.3	57.0	116.9	74.6	62.3	2,717.7
Banks' borrowing for local onlending[2]	3.0	-35.8	10.0	-27.8	-24.3	48.4	5.2	995.0
Interbank redepositing	314.0	180.3	-74.8	142.0	87.6	175.5	108.6	4,789.3
Unallocated	**16.7**	**11.7**	**4.5**	**-4.8**	**2.5**	**21.6**	**16.6**	**276.5**
Gross international bank lending	**644.0**	**590.3**	**50.2**	**202.0**	**222.6**	**360.5**	**223.6**	**9,949.3**
Net international bank lending[3]	**330.0**	**410.0**	**125.0**	**60.0**	**135.0**	**185.0**	**115.0**	**5,175.0**
Memorandum item: Syndicated credits[4]	**697.7**	**900.8**	**260.9**	**200.9**	**265.6**	**204.2**	**332.9**	

[1] Changes in amounts outstanding excluding exchange rate valuation effects. [2] Estimates of international borrowing by reporting banks, either directly in domestic currency or in foreign currency, for the purpose of local onlending in domestic currency (see also notes to Table 1 of the statistical annex). [3] Defined as total international claims of reporting banks minus interbank redepositing. [4] Announced new facilities.

investors in the second quarter, primarily reflecting a disaffection for Deutsche mark holdings. At the same time, bank lending to non-bank entities was sustained, with renewed borrowing by Japanese entities. Some of the new borrowing may also have been related to the strong purchases of foreign securities by Japanese investors. In the absence of a sufficiently detailed currency breakdown, it is impossible to determine whether such funding involved the playing of interest rate differentials between the yen and other currencies.

Business with countries outside the reporting area

Bank lending to outside-area countries moderated in the second quarter of 1997. There was, in particular, a 30% cutback in the volume of new credit channelled to developing countries in Asia. At $15 billion, however, banking flows to the region remained high by historical standards, with the slowdown entirely due to the drying-up of funds to Malaysia, Taiwan and Thailand (see Annex Tables 5A and 5B). Strains appear to have already developed in the case of Malaysia and Thailand following the first major attack on the baht in May, but the reduced pace of bank lending to Malaysia may also have reflected official efforts aimed at curbing credit growth. In contrast, Indonesia and the Philippines, which had both introduced measures earlier in order to correct domestic and external imbalances, remained subject to sizable inflows of banking funds. Thus, the turnaround in the investment climate which took place in the wake of the floating of the baht at the beginning of July may have had a particularly abrupt impact in these two cases. Similarly, new bank lending to Korean entities was sustained in the second quarter, despite domestic financial problems. The steady volume of banking flows into the country may be seen against the backdrop of official support to guarantee the continued funding of troubled domestic companies. At the same time, new lending to China rose sharply, with Hong Kong remaining the main channel of intermediation.

Elsewhere in the developing world, reporting banks' lending activity was subdued. There was, in particular, a further reduction in the volume of banking flows to Latin American countries, which would have been even more pronounced had it not been for the renewed increase in banking flows to Brazil. This country accounted for over two-thirds of the $3.6 billion rise in reporting banks'

Banks' business with countries outside the reporting area*

In billions of US dollars

Outside-area country groups	1995	1996				1997		Stocks at end-June 1997
	Year	Year	Q2	Q3	Q4	Q1	Q2	
Total assets	**120.8**	**125.2**	**28.2**	**35.6**	**39.9**	**40.4**	**30.9**	**1,170.7**
Developed countries	24.6	20.0	0.1	9.1	6.5	4.3	8.7	201.0
Eastern Europe	3.3	10.9	0.2	1.5	6.5	4.3	3.3	96.6
Developing countries	93.0	94.3	27.8	25.0	27.0	31.8	18.9	873.1
Latin America	16.4	21.7	3.7	6.4	11.4	6.0	3.6	275.1
Middle East	-7.5	0.1	0.5	5.7	-2.1	3.6	-0.6	73.8
Africa	-2.2	-0.6	0.2	-0.8	1.3	0.8	0.9	50.2
Asia	86.3	73.2	23.5	13.7	16.5	21.5	15.0	474.2
Total liabilities	**96.4**	**91.8**	**28.3**	**8.6**	**25.3**	**32.2**	**26.2**	**1,024.2**
Developed countries	18.8	18.5	6.3	4.9	1.5	6.2	8.3	191.5
Eastern Europe	9.2	2.7	-0.1	-0.3	3.8	4.2	4.2	55.1
Developing countries	68.5	70.7	22.1	4.1	19.9	21.8	13.7	777.6
Latin America	43.0	21.9	17.7	1.8	-1.3	5.4	19.0	246.2
Middle East	8.1	16.6	-3.2	3.8	6.9	5.6	-6.1	215.8
Africa	0.4	2.7	2.0	0.0	1.2	2.8	3.4	53.9
Asia	17.0	29.5	5.6	-1.6	13.1	8.1	-2.5	261.7

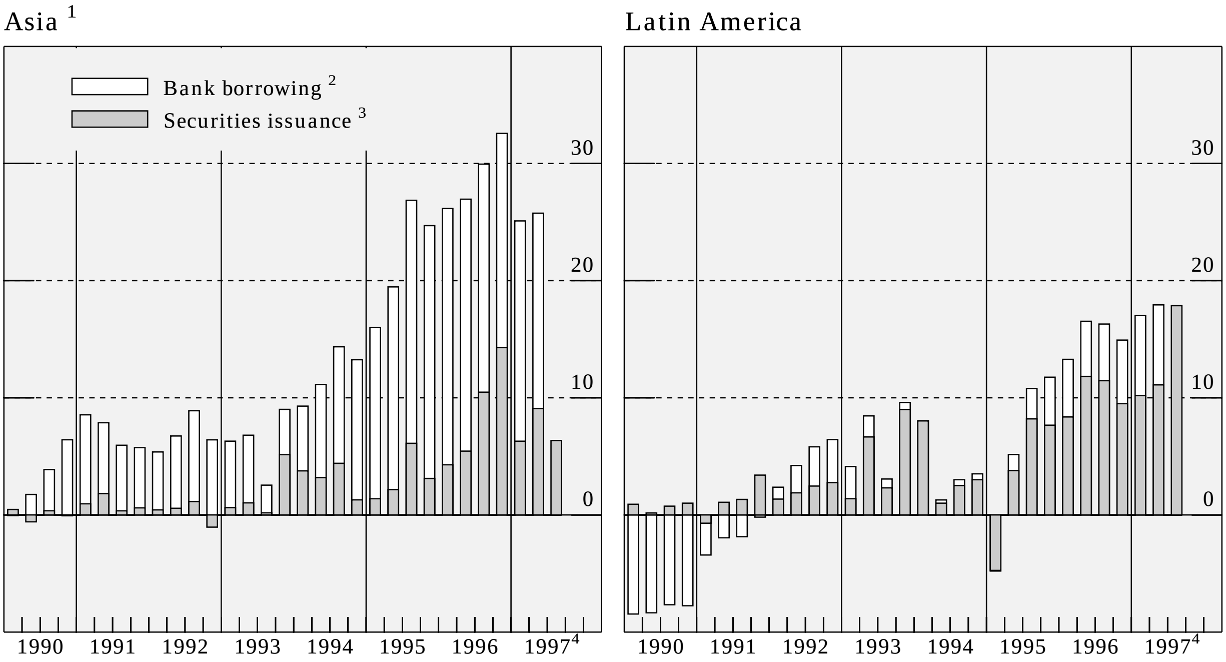
* Changes in amounts outstanding excluding exchange rate valuation effects.

outstanding claims on the region.[3] The financing of a large and growing current account deficit may have been facilitated by measures taken by the Brazilian authorities in April to preserve the incentives for capital imports through a tightening of monetary conditions and an easing of restrictions on foreign borrowing. Meanwhile, international bank lending to Argentina, Chile and Mexico came to a standstill. This should be seen in the longer-term context of fiscal consolidation, as well as these countries' greater reliance on foreign direct investment (including foreign banks' acquisition of domestic financial institutions), portfolio equity flows and international securities issuance to finance external imbalances. These policies appear to have led to a far greater diversification of funding sources than in Asia.

There was also a further weakening in bank credit to Eastern Europe from the record amount reached in the fourth quarter of 1996 (to $3.3 billion). The new funds were primarily channelled to Russian Federation entities, notably in the form of a large syndicated credit extended to a gas company, but also through purchases of government paper by reporting banks. The currency crisis which affected the Czech Republic was not on balance reflected in any withdrawal of foreign banking funds from that country in the period under review. The extension of a large syndicated loan appears to have compensated for the reduction on other accounts (in particular claims denominated in local currency). In contrast, reporting banks reduced their exposure to Hungary and Poland. While reflecting a reduced current account deficit and strong equity inflows in the case of Hungary, the turnaround in the case of Poland was related to the currency pressure which developed in the wake of the Czech koruna crisis and which was accompanied by a reduction in reporting banks' exposure on the country.

[3] Moreover, according to the BIS half-yearly statistics on the maturity, sectoral and nationality distribution of international bank lending, 63% of the Brazilian banking debt outstanding at the end of 1996 was due to mature in 1997, compared with 56% for Argentina and 46% for Mexico.

International bank and securities financing in Asia and Latin America
In billions of US dollars



[1] Excluding Hong Kong, Japan and Singapore. [2] Exchange-rate-adjusted changes in BIS reporting banks' claims vis-à-vis Asian and Latin American countries (four-quarter moving average). [3] Net issues of international money market instruments, bonds and notes. [4] Data on bank borrowing are not yet available for the third quarter of 1997.
Sources: Bank of England, Euroclear, Euromoney, IFR, ISMA, national data and BIS.

Developed countries were the only group of outside-area countries where international bank lending accelerated, from $4.3 billion in the first quarter to $8.7 billion. There were strong flows to Australia and a record volume of lending to Turkey. At $2.3 billion, banking flows to the latter were more than sufficient to finance the country's current account deficit, possibly being boosted by rising domestic interest rates and moderate currency depreciation. In contrast, measures taken in the spring by the Bank of Greece to discourage capital inflows appear to have been successful in bringing bank lending to Greece to a halt.

Structural and regulatory developments

Consistent with the continuing attempts to strengthen *prudential standards* worldwide, the Basle Committee on Banking Supervision released in September the Core Principles for Effective Banking Supervision (the Basle Core Principles).[4] This document is a revised version of a consultative paper issued in April 1997. It establishes a set of 25 principles intended to serve as a basic reference for supervisory and other public authorities worldwide in the supervision of all the banks within their jurisdiction. In the course of the same month, the Committee also released three other documents. The first is the final version of a paper on the management of interest rate risk issued in consultative form in January 1997.[5] It re-emphasises the need for banks to maintain adequate risk management principles in all their activities and identifies specific agreed principles that supervisory authorities should consider in evaluating banks' management of interest rate risk. The

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4 See "Core Principles for Effective Banking Supervision", Basle Committee on Banking Supervision, Basle, September 1997. The earlier document was described on page 13 of the August 1997 issue of this commentary.

5 See "Principles for the Management of Interest Rate Risk", Basle Committee on Banking Supervision, Basle, September 1997.

second contains modifications of the January 1996 amendment to the Capital Accord incorporating market risks, including the removal of the floor for capital charges for specific risk[6] used under the internal model approach.[7] The third release discusses the challenge represented by the year 2000.[8] The paper was prepared to serve as a reference on the issue for central banks and other banking supervisors. Appendices discuss technical details and describe the components of a successful action plan.

In the area of *payment and settlement systems*, efforts made by the "Group of 20" commercial banks to introduce a Continuous Linked Settlements (CLS) system were furthered by the establishment in July of a joint UK company (CLS Services) charged with developing a foreign exchange settlement system where both legs of foreign exchange transactions will be settled simultaneously. The project follows a series of other industry initiatives made in response to official concerns about the risks incurred by banks in settling their foreign exchange trades and central banks' call for action to reduce these risks.[9] Although other schemes are being considered (including a contract for difference being developed by one major US commercial bank), the CLS system received an additional stimulus from the recent announcement of a joint venture with ECHO and Multinet.

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6 Specific risk includes event and default risk as well as day-to-day variations in the market value of a portfolio that cannot be explained by actual market movements (i.e. idiosyncratic risk).

7 See "Modification of the Basle Capital Accord of July 1988, as amended in January 1996", Basle Committee on Banking Supervision, Basle, September 1997.

8 See "The Year 2000, A Challenge for Financial Institutions and Bank Supervisors", Basle Committee on Banking Supervision, Basle, September 1997.

9 See "Settlement Risk in Foreign Exchange Transactions", Report prepared by the Committee on Payment and Settlement Systems of the central banks of the Group of Ten countries, Basle, March 1996.

The South-East Asian currency turmoil

Following a first major assault on the baht in May and sustained downward pressures in the subsequent weeks, the Thai authorities abandoned the pegging of their currency on 2nd July. Thereafter, the upheaval rapidly spread to other countries in the region, also affecting their equity markets. The main underlying causes have been well publicised. These include overly rigid exchange rate regimes and associated macroeconomic and financial imbalances. In particular, excessive expansion of bank credit in a context of loose supervisory arrangements has accentuated existing weaknesses in local financial systems. These events raise a number of important issues.

There is first and foremost the question of why the evidence of growing economic and financial imbalances was ignored for so long by the market. Several reasons have been given for the persistence of large-scale inflows to the region. One was the apparent firm commitment by the national authorities to preserving the external value of the domestic currency, which maintained the attractiveness of local assets. Another was the ongoing process of deregulation, which in the short term acted as an incentive to further inflows. A third factor was the progressive broadening of the range of investors in a context of ample global liquidity. A fourth was the lack of adequate consideration of actual foreign exchange exposures.

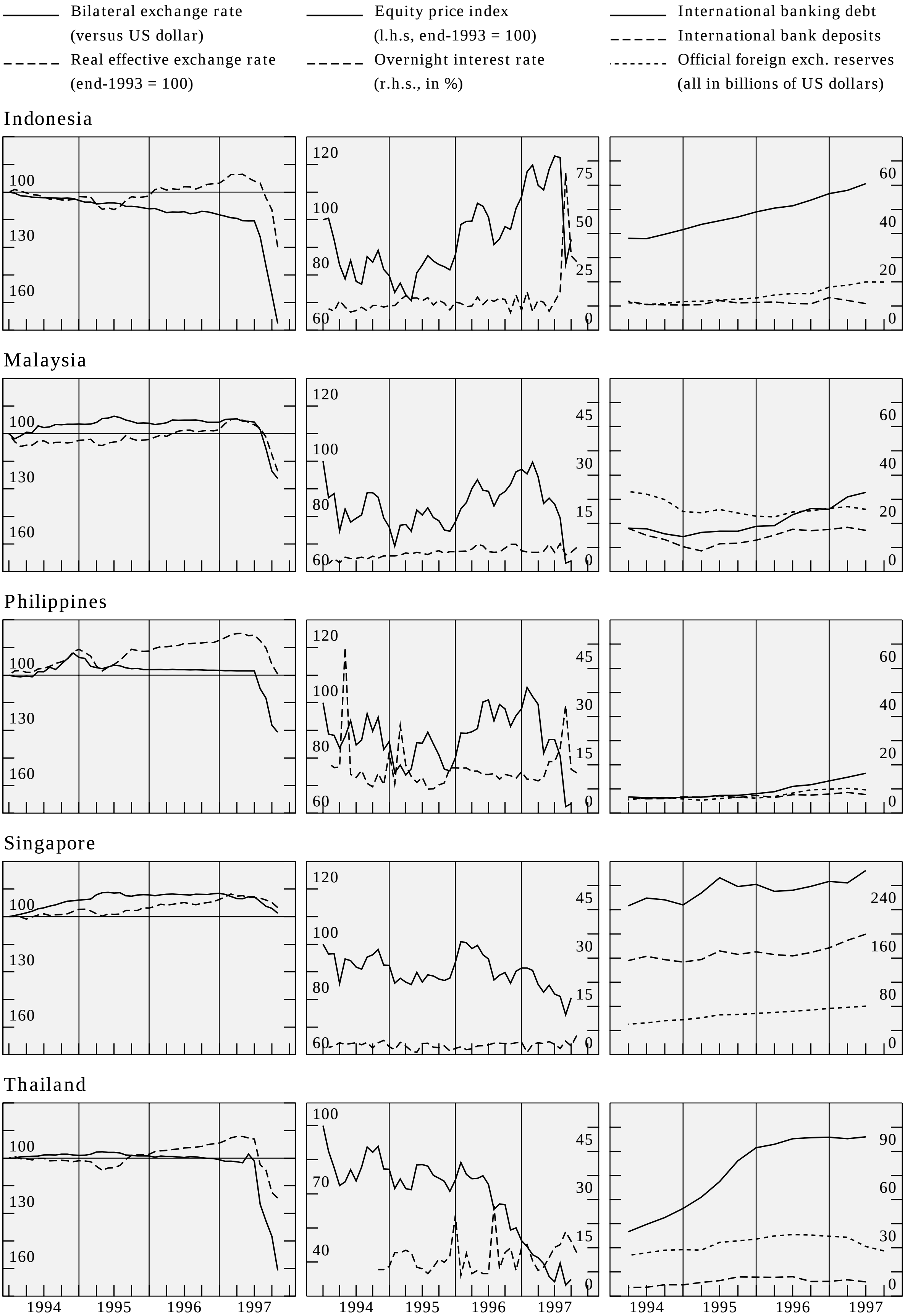
Indeed, strains were already apparent in 1995 and 1996, when currency pegging and the appreciation of the dollar from its trough of ¥80 in April 1995 to a peak of ¥127 in May 1997 resulted in a significant real appreciation of local currencies on a trade-weighted basis (see the graphs on the next page). Another indicator of growing market stress, and one which had been widely publicised in the case of Thailand, was the sharp rise in short-term external banking debt in the course of 1995 and 1996.[*] In May, the abrupt strengthening of the yen against the dollar and the upward pressure on long-term yen interest rates seem to have forced a reconsideration of international investment strategies, with a reversal of long positions in local instruments.[**] Once triggered, the fall of domestic currencies was exacerbated by leads and lags in trade-related transactions and repayment or hedging of foreign currency debt by a wide range of actors. In the process, the crisis revealed that substantial purchases of local assets had been funded by foreign borrowing. In addition, the drying-up of liquidity in currency derivatives shifted supply and demand imbalances to the cash market, thereby reinforcing the downward pressures on the currencies.[***] Initial policy responses created additional uncertainty among foreign investors.[****] At the same time, the rise in domestic interest rates weakened further the position of local intermediaries, thus raising fears of a deepening of financial problems.

Another important issue is the extent of the propagation of the crisis. Although Indonesia, Malaysia and the Philippines seem to have shared with Thailand, albeit in differing degrees, some weaknesses in economic and financial fundamentals, one key factor of transmission was the fear of a loss of competitiveness resulting from the depreciation of the baht. The subsequent contagion to Singapore and Hong Kong should also be seen in relation to their role as regional offshore financial centres. The large exposure of a number of banking groups in the region, Japanese banks in particular, suggests broader potential repercussions.[*****]

In contrast to the Mexican crisis of 1995, which was heavily biased towards public sector debt, the recent South-East Asian currency turmoil involved a wide spectrum of actors and instruments. While this reflects the general tendency towards a diversification of funding sources and the greater reliance on private sector financing, it also means that it will be increasingly difficult for official financial assistance to insulate creditors and debtors from the adverse consequences of poor investment decisions.

[*] See earlier issues of this commentary, as well as the BIS half-yearly publication on "The Maturity, Sectoral and Nationality Distribution of International Bank Lending". [**] There were, in addition, market reports of hedge funds taking short positions at a very early stage, thereby accentuating the downward pressures on the currencies. [***] It also revealed large-scale interventions by the Thai authorities on the forward market. [****] For example, in May, the Thai authorities responded to pressures on the baht by sharply increasing official rates and by informally prohibiting baht lending to non-resident entities. These measures, and additional ones such as a ban on certain OTC currency and interest rate contracts, were institutionalised in June. They effectively insulated the onshore and offshore baht markets. In August the Malaysian central bank imposed restrictions on non-residents' access to the offshore ringgit forward market. The Indonesian central bank announced similar measures in September. [*****] According to the latest BIS half-yearly publication, Japanese banks accounted at the end of 1996 for 35% of international banking claims on Asia (including Hong Kong and Singapore) and for 53% of those on Thailand alone.

Selected South-East Asian financial indicators



Sources: Bloomberg, Datastream, IMF, national data and BIS.

III

THE INTERNATIONAL SECURITIES MARKETS

Main features

In the third quarter of 1997, total announcements of stand-alone international bonds and paper issued under euronote facilities declined slightly from the record reached in the second quarter, to $261.4 billion. However, net of repayments of past debt but including money market paper, total issuance of international securities was, at $164.1 billion, $12.1 billion higher than in the previous quarter. There was a sharp rebound in financing for European borrowers, but US entities also increased their recourse to the market and Japanese issuers returned to net borrowing. Although the financial turbulence that emerged in Asia and Eastern Europe in May led to some contraction in business from these areas, there was a marked increase in issuance by Latin American names owing to large swaps of government debt and more active business by financial institutions in the region. Investors continued to demonstrate a strong preference for US dollar securities, with the share of that currency rising to 56% of net flows. At the same time, the persistent disaffection for the Japanese

Main features of international debt securities issues[1]

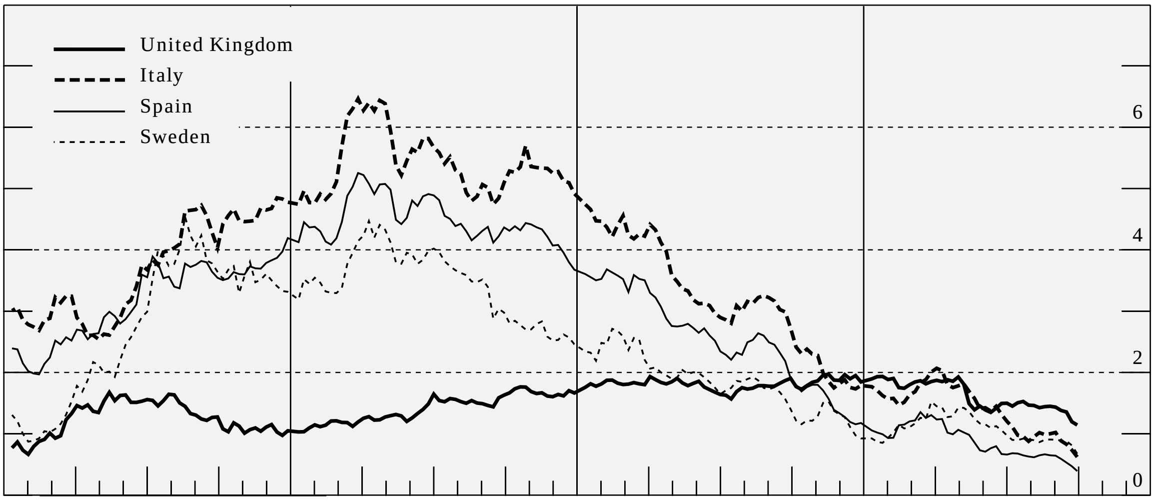
In billions of US dollars

Instrument, nationality, currency and type of issuer	1995	1996			1997			Stocks at end-Sept 1997
	Year	Year	Q3	Q4	Q1	Q2	Q3	
Total net issues	**311.5**	**540.0**	**107.4**	**176.3**	**137.8**	**152.0**	**164.1**	**3,515.9**
Money market instruments[2]	17.4	41.1	-3.9	18.5	7.1	5.3	9.7	187.8
Bonds and notes[2]	294.1	498.9	111.3	157.9	130.7	146.7	154.4	3,328.1
Developed countries	264.4	407.2	79.2	128.4	106.4	105.3	122.3	2,808.6
Europe[3]	*177.0*	*237.6*	*38.8*	*75.7*	*74.1*	*63.9*	*77.3*	*1,671.3*
Japan	*8.2*	*14.7*	*6.9*	*1.6*	*2.4*	*-1.8*	*6.4*	*351.3*
United States	*59.3*	*136.3*	*28.2*	*42.5*	*22.1*	*35.3*	*39.9*	*488.6*
Canada	*10.2*	*8.4*	*3.3*	*4.0*	*3.7*	*3.9*	*0.3*	*187.2*
Offshore centres	1.7	16.3	1.9	6.8	3.9	4.8	5.5	48.8
Other countries	30.1	91.6	23.4	30.5	18.9	27.7	31.1	334.7
International institutions	15.3	24.9	2.9	10.7	8.6	14.3	5.2	323.8
US dollar	74.1	262.1	46.6	86.4	55.4	82.8	92.7	1,476.5
Yen	108.4	81.2	24.5	19.0	14.1	9.9	4.5	524.0
Deutsche mark	55.1	54.9	10.6	12.6	14.0	11.3	16.6	346.7
Other currencies	74.0	141.8	25.7	58.4	54.3	48.0	50.3	1,168.7
Financial institutions[4]	183.8	343.8	72.7	113.6	90.0	80.5	105.8	1,550.5
Public sector[5]	93.3	123.6	23.6	42.0	32.0	43.7	30.0	1,120.2
Corporate issuers	34.4	72.6	11.1	20.8	15.8	27.8	28.3	845.3
Memorandum items:								
Stand-alone international bonds	**119.1**	**274.9**	**60.1**	**91.5**	**54.8**	**71.1**	**70.6**	**2,466.6**
Bonds issued under EMTN programmes	**61.3**	**199.2**	**45.3**	**55.6**	**52.4**	**41.5**	**47.3**	**475.7**

[1] Flow data for international bonds; for money market instruments and notes, changes in amounts outstanding excluding exchange rate valuation effects. [2] Excluding notes issued by non-residents in the domestic market. [3] Excluding Eastern Europe. [4] Commercial banks and other financial institutions. [5] Governments, state agencies and international institutions.

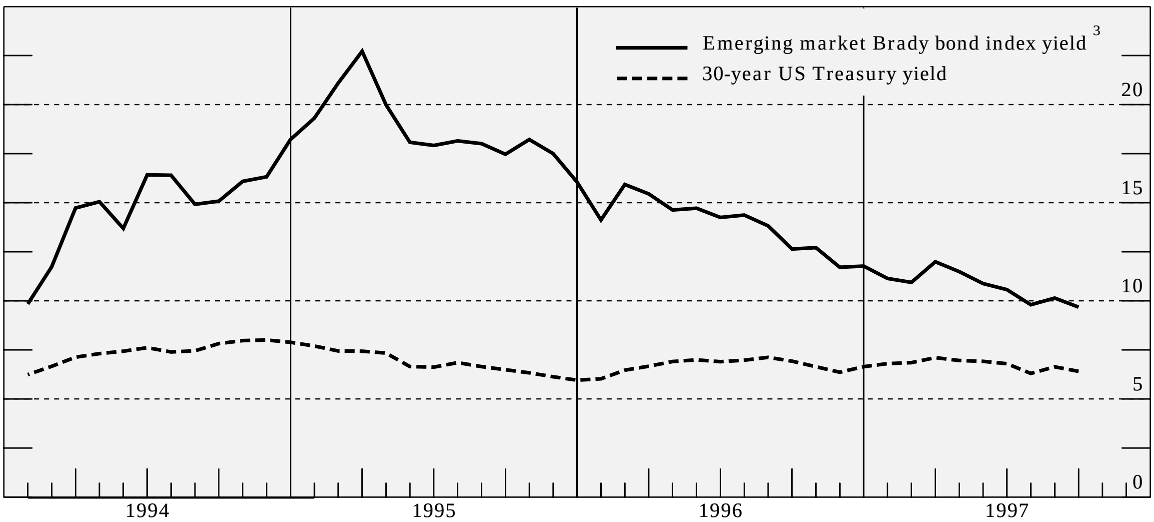
Sources: Bank of England, Euroclear, Euromoney, IFR, ISMA and BIS.

Yield differentials vis-à-vis long-term German government bonds [1]



Yield differentials vis-à-vis long-term US government bonds [1]

Emerging market bond yields versus 30-year US Treasury yields [2]



[1] Weekly averages, in percentage points. [2] Monthly data, in percentage points. [3] Yield stripped of collateral backing.

Sources: Datastream and J.P. Morgan.

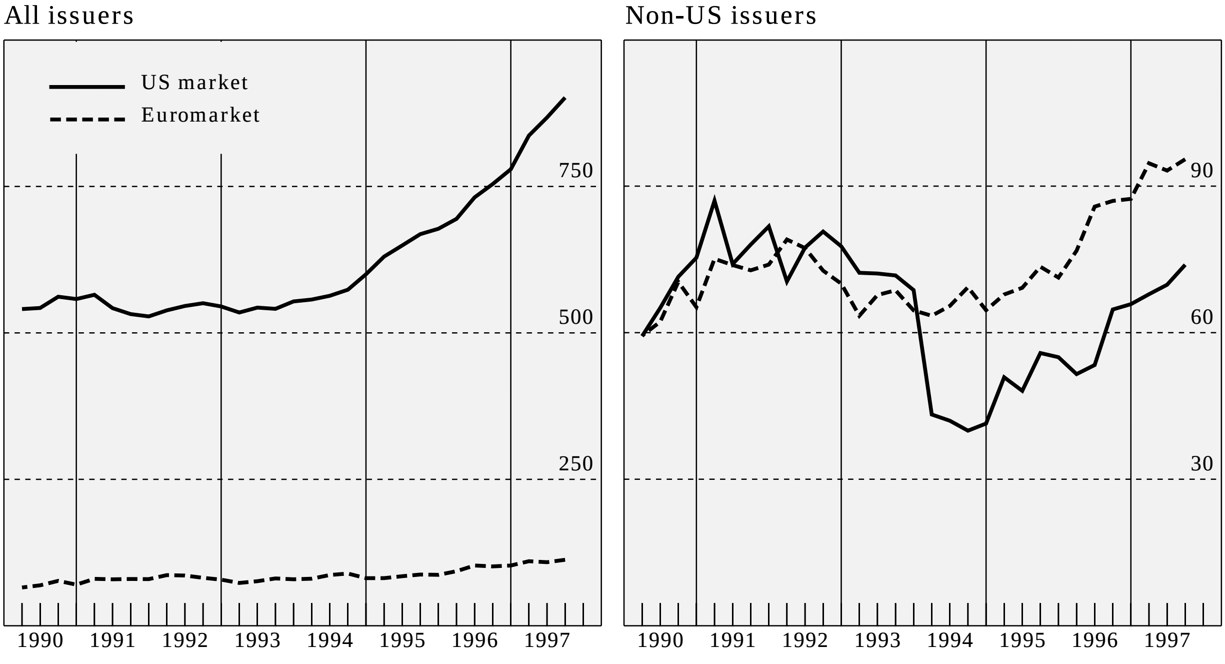
currency meant that the share of the yen in net financing declined for the fourth consecutive quarter, to 3%. The use of emerging market currencies was also substantially reduced, although some new developing country borrowers found a highly positive reception.

The Asian financial crisis reportedly led to some reallocation of portfolios away from the area, without fundamentally calling into question the broad-based search for higher returns seen in earlier periods. Market prices show that risk premia continued to narrow (see the graph on page 15), with the spreads on outstanding Latin American Brady bonds returning to the low levels prevailing in late 1993/early 1994. Moreover, investors were willing to commit their funds for longer periods (see the graph on page 21). This was most apparent in Latin America, where a number of large long-term sovereign issues were made in the context of Brady bond swaps. The main exception to this trend was for issues originating from Asia, where the average maturity declined from an already high level. Investors were also more willing to consider high-yielding instruments encompassing features such as low ratings, junior capital status, derivatives-related payoffs or recently introduced securitisation mechanisms. This development was particularly pronounced in Europe, where profit opportunities based on the convergence of interest rates have become more limited and where the planned introduction of the single currency has led to a realisation that credit risk will replace currency risk as the main tool for outperforming benchmarks.

In spite of the overall buoyancy of markets, some participants voiced concerns that the shift towards higher-yielding debt and the resulting popularity of complex structures may have induced investors to overlook credit and liquidity risk considerations. Stronger economic growth, low interest rates and high profit levels have entailed a general improvement in credit quality in North America and Europe; but the rapid increase in the international issuance of lower-rated debt that has taken place in recent years is now being followed by a rise in the number of defaults. Whereas euromarket securities have traditionally been the preserve of borrowers of high credit standing, the recent inroads made by higher-yielding issuers are likely to pose new challenges to investors. Insufficient consideration of the "fine print" of issues may also be the source of unpleasant surprises to non-specialist investors. In particular, the degree of leverage and the extent of underlying

Commercial paper outstanding

In billions of US dollars



Sources: Federal Reserve Board, Euroclear and BIS.

counterparty risks in structured issues or repackagings may not have been fully apprehended. In addition, the search for higher returns through complex or lower-rated securities may have taken place at the expense of liquidity, which would become most apparent in a downward correction. Recent events seem to support this assertion.

Money market instruments/short-term euronotes

In the market for euro-commercial paper (ECP) and other short-term euronotes, there was a recovery in total net new issuance in the third quarter, with the stock of issues rising by $9.7 billion to $187.8 billion. Nonetheless, both US and non-US borrowers continued to rely more heavily on the US CP market, where the stock of paper increased by $34 billion, to $901.7 billion. The slower growth of ECP reflects, among other factors, its narrower investor base and the lower liquidity of several currency segments. The market remains hampered by the relatively small size of the European money market fund industry and the traditionally cautious attitude of euromarket investors, factors that have limited issuance to highly rated sovereigns and financial institutions. However, the widening range of issuers observed at the longer end of the maturity spectrum (see the section below), together with the prospect of a unified pan-European CP market, suggest a possible future widening of the ECP market's borrowing and investment base. It should be stressed, furthermore, that the data do not include short-term paper issued under EMTN programmes. Such issuance amounted to $16.4 billion in the period under review, illustrating the fact that short-term issues are often part of broader financing or refinancing schemes.

Longer-term international securities issues

In the longer-term segment of the international securities markets, foreign exchange volatility meant that issuing conditions varied considerably during the third quarter. While the US dollar benefited throughout the period from favourable interest rate differentials, it received additional support in the early part of the quarter from uncertainties related to the introduction of the euro. The spreading South-East Asian currency crisis contributed thereafter to reinforcing the safe-haven status

Main features of the international bonds and notes market

In billions of US dollars

Instruments, currencies and type of issuer	1995	1996			1997		
	Year	Year	Q3	Q4	Q1	Q2	Q3
Announced issues	**585.1**	**877.1**	**204.7**	**247.3**	**248.8**	**264.7**	**261.4**
Floating rate issues	113.9	224.1	54.6	62.8	60.6	64.2	75.4
Straight fixed rate issues	453.1	601.9	140.7	172.9	181.1	185.3	178.2
Equity-related issues[1]	18.1	51.1	9.4	11.7	7.1	15.2	7.8
US dollar	186.7	395.0	94.2	112.2	105.4	131.9	126.9
Yen	154.4	136.8	37.6	37.9	34.1	30.9	36.2
Deutsche mark	80.5	86.8	18.9	18.5	20.1	18.4	21.9
Other currencies	163.6	258.5	53.9	78.8	89.2	83.5	76.4
Financial institutions[2]	270.0	455.1	101.7	137.1	133.5	132.4	144.1
Public sector[3]	179.8	221.4	59.2	57.6	67.3	74.4	58.7
Corporate issuers	135.3	200.6	43.8	52.6	48.1	58.0	58.6
Completed issues	**587.4**	**871.2**	**203.1**	**263.0**	**240.8**	**247.8**	**270.6**
Repayments	**293.3**	**372.3**	**91.8**	**105.2**	**110.2**	**101.1**	**116.1**

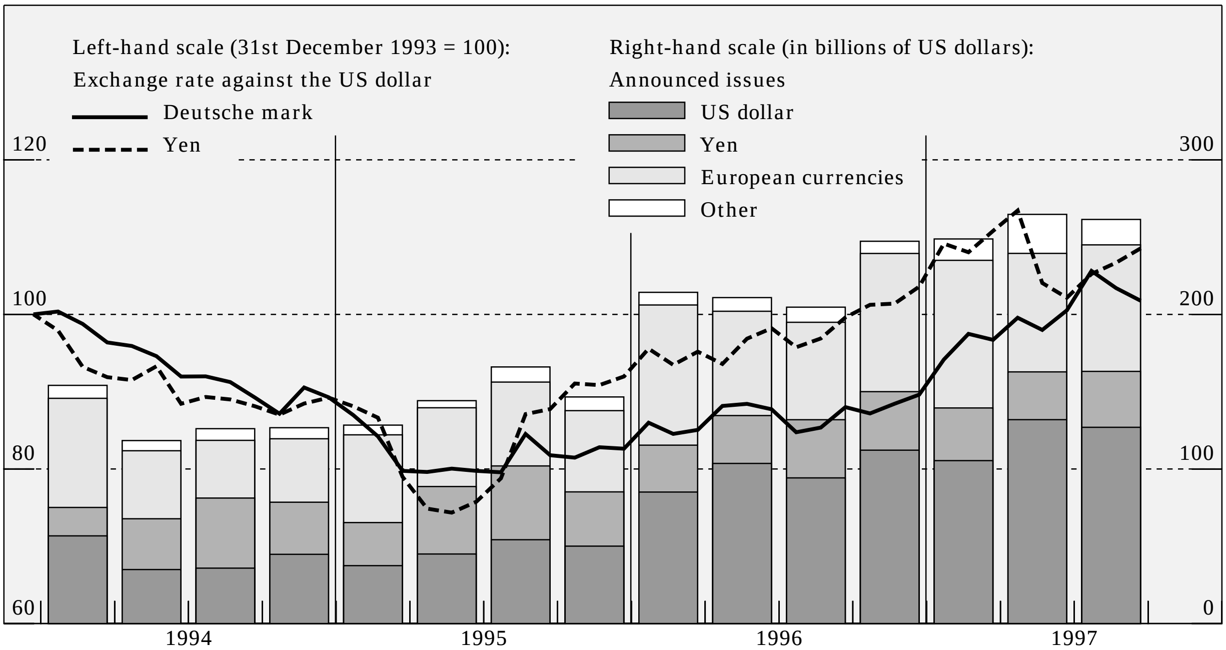
[1] Convertible bonds and bonds with equity warrants. [2] Commercial banks and other financial institutions. [3] Governments, state agencies and international institutions.

Sources: Bank of England, Euroclear, Euromoney, IFR, ISMA and BIS.

of the US currency. However, the easing of currency tensions in Europe, the return to interest rate convergence on the European continent and the entry of sterling onto the convergence path were accompanied by an abrupt weakening of the dollar relative to European currencies.[10] In spite of these swings, data on new issues show that the US currency accounted for almost 50% of announcements, with business boosted by the high volume of emerging market and asset-backed issues (both of which tend to be denominated in dollars). At the same time, the rise in the proportion of floating rate note (FRN) issues indicates a continued desire by some groups of investors for protection against the possibility of a rise in interest rates. Although lead managers were reported to have accumulated heavy inventories by the end of the quarter, favourable overall market conditions combined with the fees generated by high-margin business, such as emerging market and merger-related issues, generated substantial profits. The strong pace of activity in the US dollar sector supported underwriting by US investment banks, whereas the continuing low volume of yen business was reflected in the lower market share of Japanese bookrunners (see the graph on page 20).

The increase in issues by Latin American borrowers was sufficiently pronounced to offset declines in Asia and Eastern Europe, leaving total announcements for emerging market borrowers at a near-record $37.8 billion (see the graph on page 19). The Asian crisis had some impact on the pricing and timing of issues, as illustrated by a temporary widening of secondary market spreads and the delay of several issues, but the effect was particularly short-lived for Latin America. This was illustrated by the announcement that, in August, Mexico would make an early repayment of $6 billion worth of FRNs issued in the aftermath of the country's crisis in 1995 and that, in September, Argentina, Panama and Venezuela would bring to market large issues of 30-year uncollateralised global bonds in exchange for part of their outstanding Brady bonds.[11] While investors were attracted by the opportunity of purchasing instruments offering pure country risk exposure and the absence of

International bond and note issuance and the US dollar exchange rate



Sources: Bank of England, Euroclear, Euromoney, IFR, ISMA and BIS.

[10] From an eight-year high against the German currency.

[11] Venezuela most notably took advantage of the scarcity value of its debt to launch a $4 billion issue.

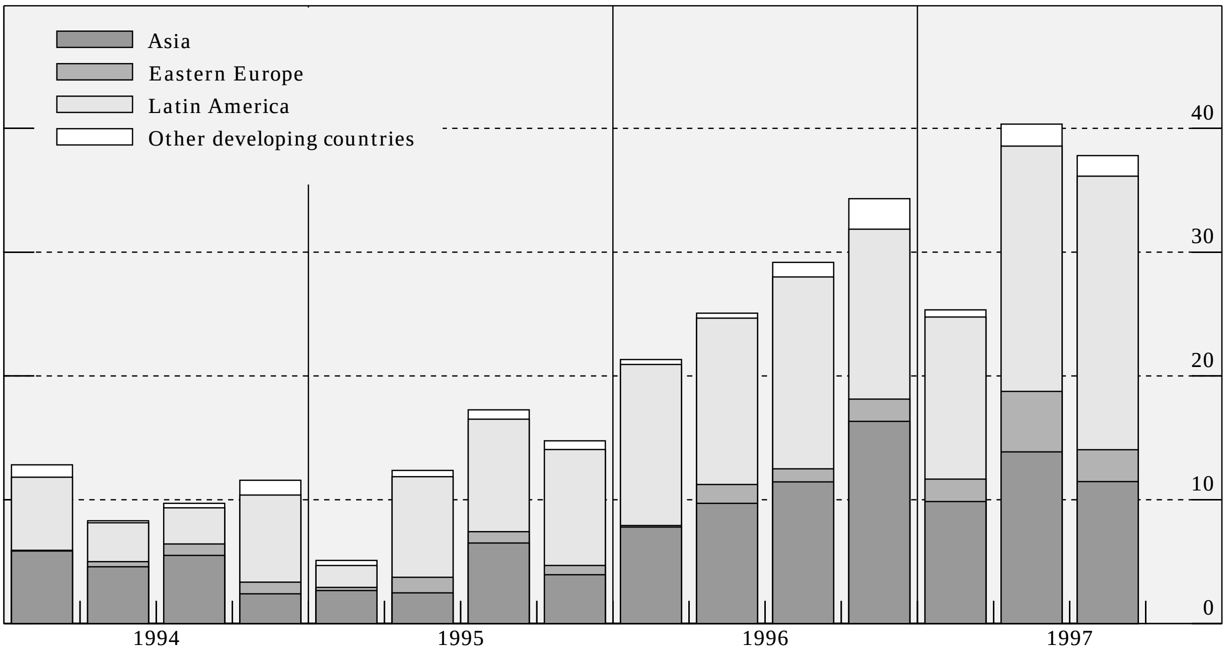
repayment risk,[12] the success of the transactions also illustrated the extent of the perceived improvement in the creditworthiness of these countries. The exchanges will provide a number of benefits to the countries involved, including a reduction in debt servicing costs, a freeing of collateral, a lengthening of the maturity of their debt and the creation of new long-term benchmarks. The combination of debt retirements and accelerated issuance from Latin America means that the value of outstanding international bonds issued by borrowers from the area now exceeds that of the region's Brady bonds ($141.5 billion compared with approximately $125 billion).[13] This is likely to weaken the role of Brady bonds as prime financial indicators for emerging market debt.

In the case of the emerging market countries of Asia, the volume of issuance in the third quarter declined by less than would have been expected given the prevailing economic and financial conditions. As already emphasised in the case of syndicated loans, the Asian financial crisis affected countries with varying lags and in different ways. For example, some transactions were launched before the turmoil spread and some borrowers, benefiting from implicit official support (most notably in Korea), even managed to step up their funding. In the case of Eastern Europe, activity moderated following a record volume of announcements in the second quarter, with investor demand nevertheless supported by continuing high spreads on bonds from countries of the former Soviet Union. Sovereign borrowing continued to dominate issuance from the region, but some Russian and Baltic area banks emerged as active users of the international market.

Another important development during the quarter was the near-doubling of the international issuance of asset and mortgage-backed securities ($33.2 billion). Although much of the upsurge resulted from US-based activity ($22.9 billion), there was also a moderate pick-up in issuance by borrowers established in other countries, especially those where securitisation has been authorised more recently (such as Japan and Switzerland). Thus, Japanese banks introduced various schemes

International bond and note issuance by emerging market borrowers *

In billions of US dollars



* Announced issues based on the nationality of the borrower.

Sources: Bank of England, Euroclear, Euromoney, IFR, ISMA and BIS.

[12] Since the new issues do not incorporate collateral backing or early call options.

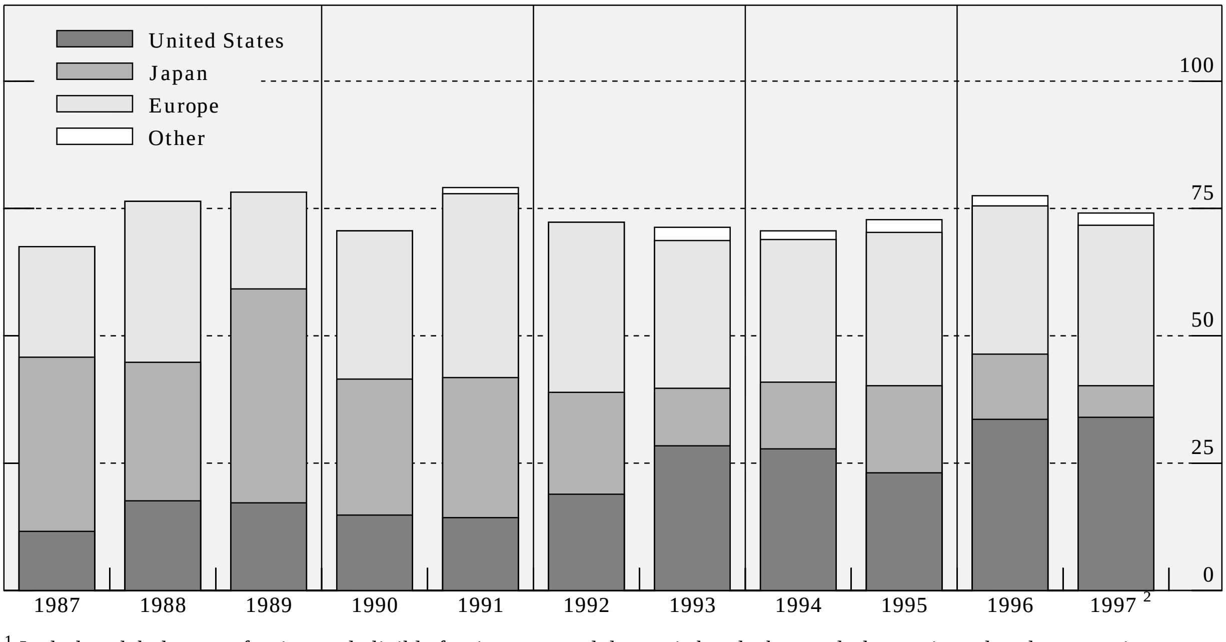
[13] Brazil, Mexico and the Philippines conducted similar operations earlier this year.

aimed at converting part of their performing as well as non-performing loan portfolios into securities, while a Swiss bank launched a large collateralised loan obligation (CLO) that will transfer credit risk to investors through the use of credit-linked notes as underlying assets. The CLO concept was introduced in the United States in the late 1980s and is becoming increasingly popular in the international market.[14] Other recent trends in the ABS market include the incorporation of new types of underlying cash flows[15] and the introduction of several EMTN programmes for the issuance of repackaged European Union or emerging market debt. Although securitisation has made significant progress outside the United States in recent quarters, the international market remains dominated by US issuers (more than two-thirds of issues so far in 1997) and by US dollar denominated structures (almost 80% of issues). Non-US issuers have been hampered by the lack of an adequate or sufficiently clear regulatory structure and the fragmentation of underlying asset markets. As a result, transactions launched by continental European vehicles have tended to be of a one-off nature and often linked to corporate restructuring programmes. Nevertheless, the introduction of the single European currency and further regulatory harmonisation should encourage the development of the ABS market in Europe.

There was also evidence during the quarter of the influence of the future single European currency on the borrowing strategy of a broad range of entities. Thus, as the volume of euro-fungible issues recovered (from $8 billion to $10.6 billion), it included a growing number of non-European borrowers (40% of total issues). Latin American issuers were particularly active, with several deals in Italian lire which included clauses providing for a reduction of the coupons upon the introduction of the single currency, as well as in sterling and in ECUs/euros. Large North American industrial companies also increased their euro-fungible issues. For borrowers from outside Europe, these

Share of international bond issues of the top 20 bookrunners [1]

In percentages



[1] Includes global, euro-, foreign and eligible foreign-targeted domestic bonds, but excludes equity-related transactions.
[2] First three quarters.
Sources: IFR and BIS.

[14] CLOs are securitisations of diversified loan portfolios which are generally issued as private placements. The pool of assets is segregated to provide security for a highly rated tranche.

[15] Such as those produced by toll road operators, motorway service providers and non-performing commercial properties.

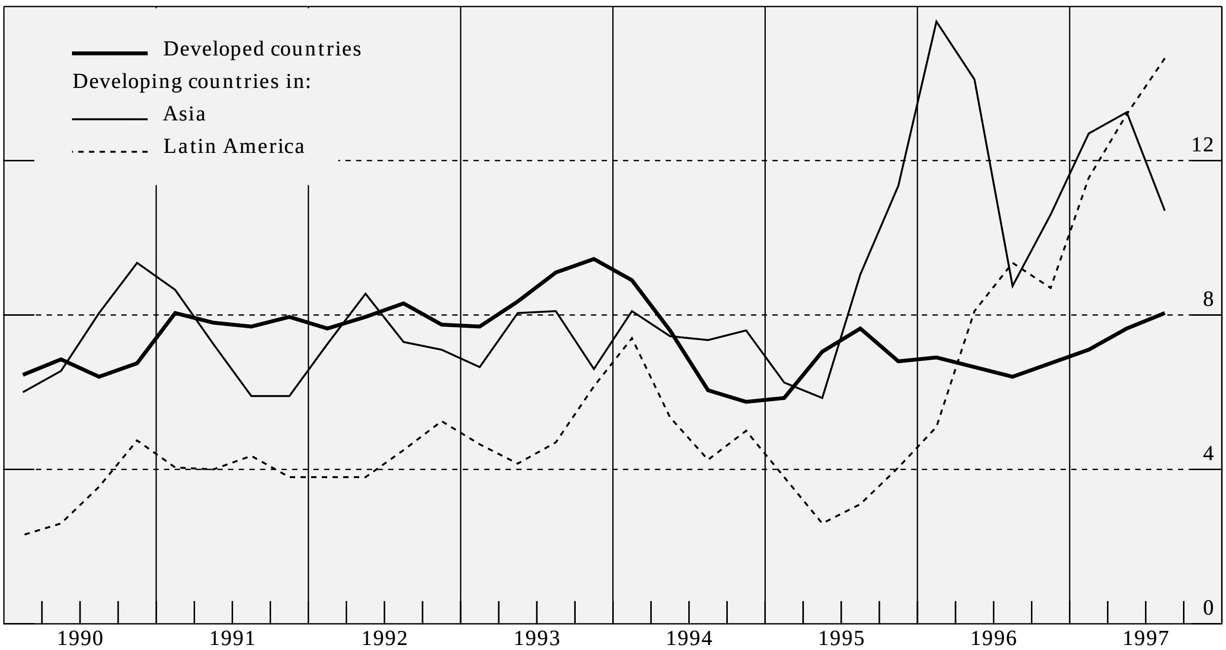
operations form part of a strategic plan aimed at establishing pricing benchmarks in the European market ahead of the competition for savings that is likely to be unleashed by the introduction of the euro. In this context, the provision of liquidity has been considered essential. Thus, while a few borrowers have introduced large euro-fungible debt from the outset, most issuers have launched trades in various European currencies that are convertible into homogeneous euro securities ("parallel" or "tributary" issues). Another means of ensuring liquidity has been the introduction of issues convertible into large domestic ones. For example, Austria launched a guilder bond that will consolidate into an existing domestic government issue upon conversion. At the same time, some of the smaller European sovereigns have begun to diversify their funding outside European currencies. This was the case for Belgium, which introduced its second dollar offering of the year. The forthcoming creation of a large debt market in Europe is also leading non-European intermediaries to bolster their presence in Europe. For example, the large wholesale brokers that are active in the US bond market are now in the process of developing facilities for the trading of European debt issues.

Issuance of global bonds was steady during the quarter, at $31.8 billion. As noted in earlier issues of this commentary, the pattern of such activity has experienced a major shift in recent years. Private sector financial institutions are accounting for a major share of the market, primarily through asset-backed securities sold in the euromarket and in the US private placement market. At the same time, supranational financial institutions seem to have reduced their reliance on large issues. The World Bank, for example, now issues large global bonds only in exceptional cases and focuses on arbitrage-driven EMTN issuance in a wider range of currencies and structures than in the past. Sovereign issuance of global bonds would also have moderated in recent years had it not been for the increase in issuance by emerging market countries, which have viewed the creation of large benchmarks as a key part of their debt management strategies.

Looking at the type of issues, announcements of *fixed rate issues* declined slightly in the third quarter (to $178.2 billion) but net financing continued to follow a rising trend ($109.6 billion). Despite wider swap spreads and a few very large sovereign and corporate deals, issuance in US dollars was somewhat lower. In European currency sectors, Italy launched a DM 3 billion ($1.7 billion)

Weighted average maturity of announced straight fixed rate international bonds *

In years



* Two-quarter moving average of stand-alone bonds and bonds issued under medium-term note programmes.

Sources: Bank of England, Euroclear, Euromoney, IFR, ISMA and BIS.

transaction that was the latest in a series of large benchmarks in European currencies, while Spain launched an ECU 1.5 billion bond (equivalent to $1.7 billion). With yields on Japanese government bonds reaching record lows, investor interest in yen-denominated instruments was muted, but there was a slight return to popularity of dual-currency issues in the course of the quarter as underwriters introduced instruments limiting currency risk. Sterling issuance moderated at the end of the quarter owing to the sharp weakening of the currency caused by speculation that the United Kingdom would join EMU. Meanwhile, announcements of *floating rate notes (FRNs)* increased substantially (to $75.4 billion) and, despite a record volume of repayments, net financing remained strong ($45.6 billion). As in previous quarters, financial institutions were the most important fund-raisers (almost 80% of the total). Japanese names accounted for the major part of the increase in announcements, with, in particular, a few large CLOs and a string of perpetual and, for the first time, dated subordinated issues. The prevailing uncertainty about the evolution of interest rates meant that investors were drawn towards defensive instruments, including very short-term facilities. Notably, the financing arm of a US car manufacturer launched a large dual-tranche issue in Deutsche marks and sterling that provided investors with the same LIBOR spreads but with "natural" hedging in the event of EMU-related instability. Finally, the dip in global equity markets dented the enthusiasm for *equity-related issues*. As a result, the second-quarter rebound in issuance was not sustained and new business contracted by nearly 50% (to $7.8 billion). While the drop was spread across currencies, yen-denominated issuance increased owing to the launch of a few large Japanese bank convertibles. The use of mandatory conversion features enabled Japanese banks to obtain Tier 1 status for the capital thus raised. The issues also included reset clauses offering downward protection but a withdrawal of that protection once a pre-agreed floor is breached.

Structural and regulatory developments

In July, the International Securities Market Association (ISMA) released a report on the practical aspects of achieving an integrated European repo market. ISMA's focus on the repo market stems from its large size, its intrinsic importance for monetary policy and its close links with exchange-traded and OTC derivatives markets. According to ISMA, the short maturity of the repo market and its settlement-intensive nature mean that any problems in the European trading infrastructure would be likely to appear there first. Following discussions with market participants, ISMA concludes that, because of such factors as the complexity of the changeover to the single European currency and weaknesses in cross-border linkages between domestic depositories, there is a higher probability that market activity would be disrupted by a failure of settlements and related ripple effects. In this context, the group calls for the authorities to take rapid action on a number of practical transitional issues (including the harmonisation of market practices, the redenomination of government bonds and the continuity of contracts) and to give due consideration to the impact of the single currency on the integrity and efficiency of existing settlement systems.

The prospective introduction of the single European currency also added to pressures for a harmonisation of domestic and international bond business. For example, in September the Belgian Ministry of Finance removed a ruling excluding institutions located outside Belgium and Luxembourg from primary dealership in Belgian government bonds. Taking advantage of the change in legislation, some foreign banks announced that they were relocating their Belgian government bond trading operations to London. Another example was provided by France, where the authorities are currently considering the implications of the eventual removal of the wall dividing domestic and euromarket issues. The eurobond classification, which requires that at least 50% of a French franc denominated issue be distributed outside France, is likely to be increasingly difficult to apply in the single market. While the authorities recognise that a merger of the two market segments would improve market efficiency, it would also require a review of certain legal aspects such as the current restrictions on the advertising of financial products.

International equities

The international equity market encompasses the underwriting and distribution of stocks by international syndicates of securities firms or banks to investors outside the issuer's domestic market. The three main types of placement are: (i) offerings of common or preferred equity in the euromarket, (ii) issues that are targeted at particular foreign markets, and (iii) registered stocks which can be traded on foreign markets as domestic instruments, such as American Depositary Receipts (ADRs).[*] As in the international bond market, some issues are termed "global" since they involve a combination of domestic, euro and foreign tranches. Issues are made on either a public or private placement basis. The listing and trading of international equities takes place on the domestic market of the issuer as well as on foreign markets where a listing has been secured. Because of significant differences in regulatory, accounting and settlement standards, the trading of international equities remains somewhat less efficient than that of international bonds.

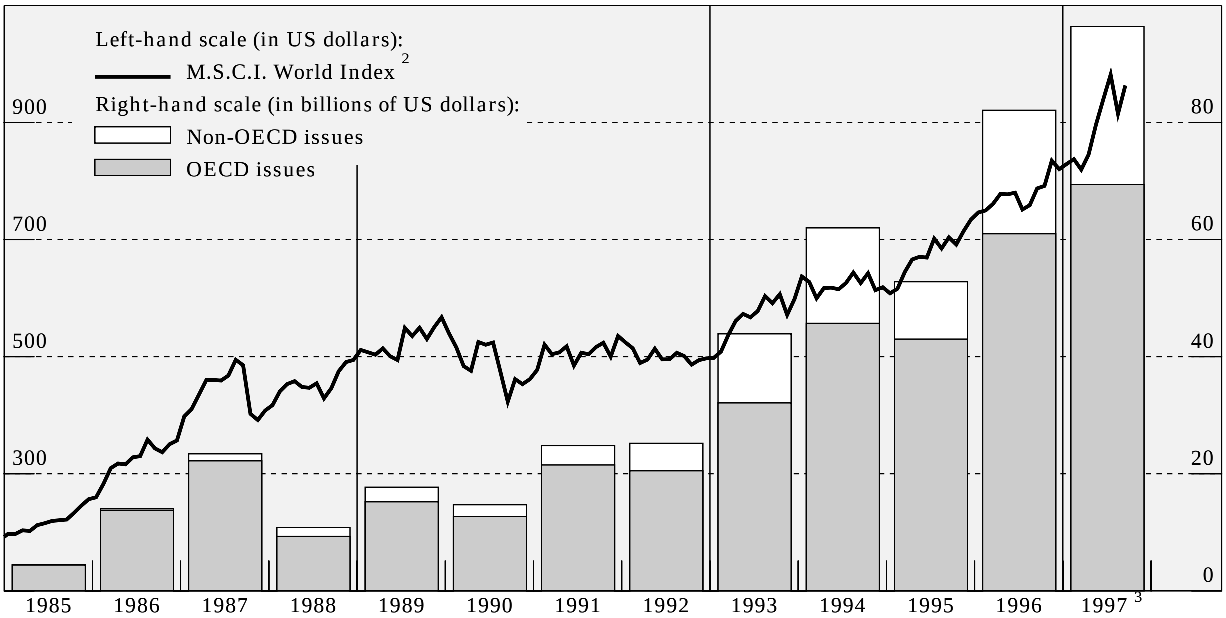
Issuance of international equities has proceeded at an uneven pace since the mid-1980s but the acceleration of the bull market in equities in recent years has encouraged fund managers to diversify, leading to an upswing in issuance. The increase in cross-border offerings also results from a number of structural factors such as the growing sophistication of investors as well as the desire of issuers to obtain the finest pricing and broadest shareholder base. In this context, it is important to note that many large offerings have been made to overcome the constraints imposed by the small size or the saturation of domestic markets. This has been particularly true of privatisation offerings. With governments being less concerned about selling minority or even majority stakes to foreigners, privatisation issues have increasingly incorporated international tranches. This has sometimes provided a substantial boost to market activity.[**] The liberalisation of the regulatory environment in which institutional investors operate, improvements in financial reporting and research, the wider availability of risk management techniques and the greater efficiency of quotation and settlement systems have also been important contributory elements. Because of the need for issuers to be well known and the additional costs involved in launching international issues, the market has tended to accommodate fairly large transactions from recognised issuers. Lesser-known entities from the developed and developing world have nevertheless begun to find ready acceptance in recent years.

Two approaches to placement have evolved. Under the "flexible" method, syndicate members are able to sell their allocations anywhere they wish. This allows offerings to flow where demand is greatest. Under the "ring fence" approach, the syndicate members are not allowed to sell their allocation of shares outside the country or area assigned to them, enabling the lead manager to exert more control over placement and preventing the return of shares to the domestic market. The management of international equity issues, particularly privatisation offerings, can be highly profitable. Competition, however, has led to a decline in fees in recent years. This has created pressures to reduce the size of syndicates and to limit the number of tranches that are offered in multi-tranche syndications.

The settlement of transactions takes place either in the issuer's country of residence or through domestic depositories that maintain a pool of foreign stocks and settle according to local procedures or, increasingly, through international depositories such as Cedel and Euroclear (which are themselves linked to the national systems). The important differences which exist in the settlement procedures of domestic markets, for example as regards timetables and transaction costs, have hindered somewhat the expansion of cross-border equity trading. In recent years, there has been greater attention to the need to reduce the various risks arising from delays and failures in international settlement and to improve the efficiency of settlement arrangements.[***]

[*] More precisely, ADRs are receipts issued by a US bank certifying that they hold a foreign security (principally common stock) on behalf of owners. ADRs were introduced to circumvent the difficulties created by US regulatory requirements for the direct listing of securities and to simplify the payment of dividends. The harmonisation of terms, conditions, negotiability and settlement with those of US securities facilitates secondary market trading. Global Depositary Receipts are the international equivalent of ADRs. [**] For example, in 1996 Deutsche Telekom raised $13.2 billion through a domestic and international initial public offering. In 1997, Telecom Italia, Ente Nazionale Idrocarburi and France Telecom have made offerings of $11 billion, $7.8 billion and $7.1 billion, respectively. [***] Following the stock market crash of 1987, the Group of Thirty recommended inter alia that securities trades should settle within three days of the transaction date, that each country should have a central depository and that settlement should take place on a delivery-versus-payment basis. Most industrial countries have implemented or are in the process of implementing these recommendations.

International equity offerings and equity price developments [1]



[1] Includes primary and certain secondary offerings. [2] Morgan Stanley Capital International. [3] First three quarters of 1997 annualised.
Sources: Datastream, Euromoney and BIS.

In Asia, a number of countries announced or implemented further liberalisation of their financial systems. Japan accelerated its financial reform programme with the announcement of the introduction of cash management accounts and an expansion in the range of business of securities and trust subsidiaries of Japanese banks, both effective as from 1st October. Related to the amendment of the Foreign Exchange and Foreign Control Act, which will come into force in April 1998, the bill to revise the tax treatment of investors in securities issued by Japanese resident entities is being submitted to the Diet. Financial institutions will be required to produce statements confirming the non-resident status of the beneficial owners of securities held in their custody. Lastly, Korea announced a forthcoming easing of restrictions on domestic borrowers' access to international capital markets, with companies no longer being required to have a credit rating of BBB or above.

IV

DERIVATIVES MARKETS[16]

Main features

Although there was only a modest overall increase in global exchange-traded business, a number of exchanges were able to make significant gains in market share in the third quarter of the year (see the graph on page 26). Nevertheless, faced with competition from the thriving over-the-counter (OTC) market and the growing difficulty of introducing contracts that either are not already traded elsewhere or cannot be easily replicated, exchanges are putting greater emphasis on cost-reducing mechanisms, trading alliances and services for the OTC market. With the prospective introduction of the single European currency adding to pressures for restructuring, European exchanges appear to be stealing a march on their US counterparts in several of these technology-driven areas. These developments are likely to have an impact extending well beyond the countries expected to form part of the forthcoming single currency area. Indeed, they could profoundly alter the global balance of power between different exchanges and trading philosophies. They are also likely to further increase the concentration of markets and actors within the industry.

Exchange-traded instruments

The aggregate turnover of exchange-traded financial contracts monitored by the BIS expanded by 2.7% in the third quarter of 1997, to 304.8 million.[17] This third consecutive quarterly increase in activity reflected a number of influences. The buoyancy of industrial country bond and equity markets in July turned to nervousness in August as uncertainty about the global interest rate outlook grew and major currency parities changed course. While ongoing concerns about a possible delay to EMU created dealing opportunities in European fixed income instruments, fears in August about a tightening of European monetary policy provided trading demand in that market segment. Moreover, US interest rate business was sharply boosted in August by indications of accelerating economic growth. Uncertainty about the path of interest rates appeared to lessen somewhat at the end of August and earlier exchange rate trends reasserted themselves. Whereas underlying market conditions led to higher trading volumes in interest rate and currency instruments, this was not the case in the area of equity indices, where business failed to expand. The surprisingly subdued pattern of activity in equity indices is the net result of offsetting trends. While equity index contracts are being used on a wider scale in Europe, trading in the United States has stagnated in recent years. Activity in some US index-linked contracts has been hampered by the higher trading costs arising from the gradual increase in the size of contracts, leading exchanges to introduce modifications aimed at encouraging activity (see below). At the same time, the range of equity products available in the United States has been widening, as illustrated by the rapid increase in popularity of options on single equities.[18]

Looking at the development of trading on individual exchanges, the CBOT remained the busiest market-place in the world in the third quarter. Meanwhile, the combination of weaker activity on the CME and a new quarterly record on LIFFE enabled the latter to recapture its position as second most active exchange. LIFFE has derived significant benefits from the impact of EMU-related

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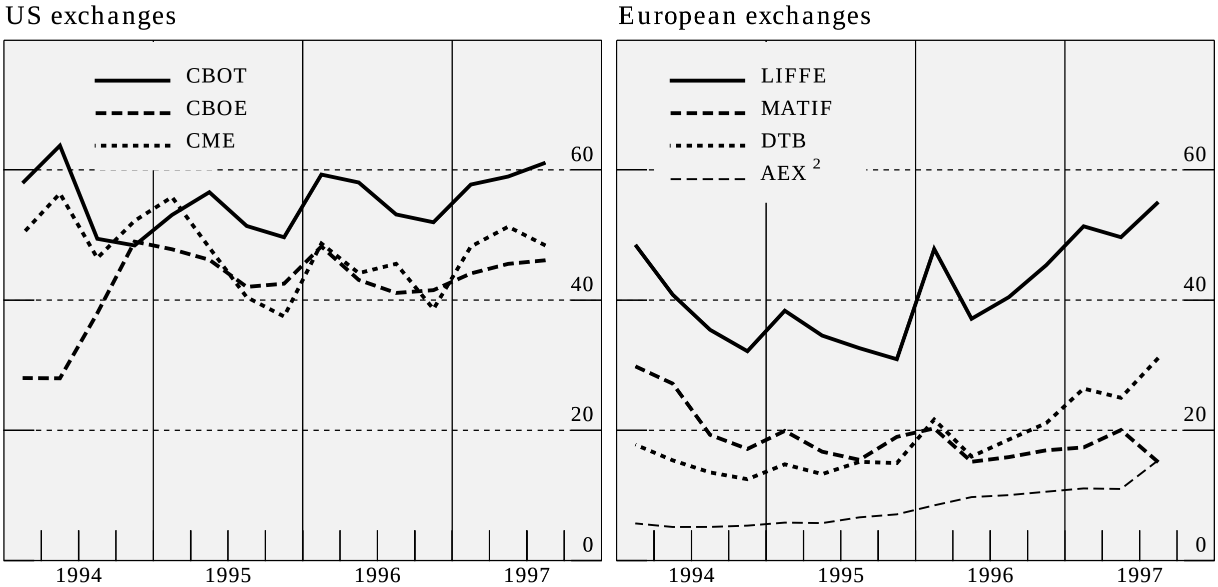
[16] The full names of the various exchanges referred to in this publication are listed on page 34.

[17] The BIS aggregate data on exchange-traded activity include contracts on currencies, interest rates and stock indices. The commentary generally excludes data on options on single equities and commodity products, except in the graphs comparing aggregate trading volume between the various exchanges.

[18] The Futures Industry Association now includes the trading of options on single equities taking place outside the United States in its survey of global market activity.

Derivatives turnover on major US and European exchanges [1]

In millions of contracts, quarterly data



[1] Includes all types of derivative instruments traded on exchanges (i.e. including commodity products and options on single equities). [2] AEX results from a recent merger of exchanges in the Netherlands.

Sources: Futures Industry Association and BIS.

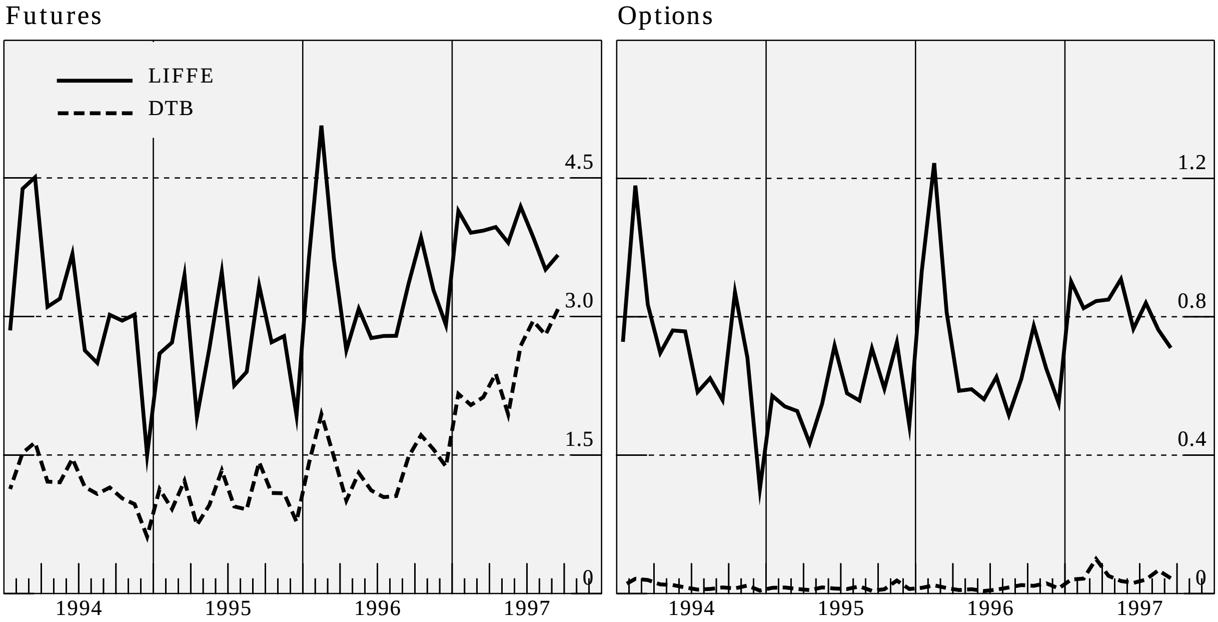
developments on its wide range of European fixed income products. Nevertheless, other European market-places are also experiencing rapid expansion. The DTB, for example, reached a new quarterly trading record, which enabled it to consolidate its second place in Europe. The exchange occupies a dominant position in the trading of instruments on medium-term German bonds, is rapidly catching up with LIFFE in the trading of Bund futures (see the graph on page 27), and is seeing an expansion of its equity business. While some of that success can be attributed to the key role played by German financial assets, trading is also reported to have been encouraged by the installation of terminals abroad and the abolition of reserve requirements on repurchase transactions. The merger of Dutch exchanges early this year has created an important new entity in the European industry. Although AEX has specialised in domestic instruments, its role in the trading of pan-European contracts could be strengthened by the launch of new continental equity indices. Lastly, the MATIF registered some decline in business in the third quarter owing to lower interest rate volatility and a seasonal lull in activity.

In Europe, the battle for market share took a new turn with several initiatives that will, if fully implemented, lead to a close trading alliance between the French, German and Swiss cash and derivatives markets. Thus, in July, the DB, SWX and SBF said that they would cooperate in creating European equity indices, and in September the first two entities announced that they would pool their electronic trading and clearing operations through a joint subsidiary called EUREX. Supplementing these agreements, in September the SBF stated that it would also cooperate in the area of trading and clearing.[19] The new tripartite venture will eventually operate as a single market, with a common product range and a unified screen-based trading facility. The exchanges plan to introduce in early 1998 a family of European equity indices to be used as benchmarks for derivative instruments. This will be followed in spring 1998 (when the euro parities are known) by a range of fixed income

[19] The SBF also announced that it would increase its shareholding in MATIF to 100%. In a partly related development, the CAC 40 index futures contract has been shifted from MATIF to MONEP, with the SBF taking over responsibility for the guaranteeing and clearing of contracts. Links between cash and derivatives markets have already taken place in the German and Swiss market-places and are also in evidence elsewhere in Europe.

Bund futures and options turnover on LIFFE and the DTB

In millions of contracts, quarterly data



Sources: Futures Industry Association and BIS.

derivatives based on the single currency. A final step would link the three countries' cash and derivatives markets. The link between the DTB and SOFFEX should be fairly easy to implement since the architecture of the DTB is derived from that of SOFFEX, but, with trading on MATIF being primarily based on open outcry, the Paris-based exchange will have to make important adjustments to its systems. MATIF plans to offer German and Swiss market participants electronic access to its fixed income contracts by mid-1998. After the launch of the single currency, the exchange intends to maintain dual trading (i.e. open outcry/electronic) of existing euro-denominated products, but all new products will be traded electronically. As part of the linkage agreement, MATIF will terminate the trading of its contracts on five-year German government bonds.

The creation of the continental alliance may have far-reaching implications. First, the availability of remote electronic access and the ability to save on collateral through the netting of margin payments might draw new participants. Secondly, while the alliance's lead in the European equity derivatives sector will be strengthened, competition in the area of European fixed income products will become more acute. LIFFE has hitherto occupied a dominant position in this sector, but the tripartite link will exacerbate the struggle for continental supremacy. Thirdly, competition between LIFFE and EUREX in substitute products will provide the first major test of the relative merits of pit versus electronic trading. LIFFE, which remains the only European exchange firmly committed to pit trading, claims that open outcry provides a more efficient price discovery mechanism, greater flexibility for complex options trading strategies and higher liquidity during periods of market stress.[20] In contrast, the DTB argues that electronic trading is considerably cheaper since it eliminates the need for various intermediaries and physical locations.[21] It also notes that its strong position in European equity derivatives, the sharp gains it has made in the trading of German government bond

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20 However, it is important to note that LIFFE has announced a programme aimed at upgrading its electronic backup and after-hours trading systems. The exchange has also conducted a review of its recent linkage agreements and concluded that it should use electronic methods for links that operate outside its regular trading hours.

21 Some proponents of open outcry have argued that the focus on cheaper execution costs is misleading since liquidity can be a more critical element in obtaining favourable market prices.

contracts and the rapid expansion of its remote access terminals are evidence of the growing liquidity and viability of electronic trading.

Aside from the EUREX initiative, the largest European exchanges once again structured their competitive strategy around the creation of new interest rate products across the yield curve. Thus, the DTB said in July that it was considering the launch of futures contracts on 30-year German government bonds and on euro-denominated government bonds. In September, LIFFE introduced new contracts on medium-term German government bonds (Bobls) that came into competition with contracts already existing on the DTB and MATIF. LIFFE hopes to make the contracts viable by offering guaranteed liquidity through a group of committed market-makers and the provision of basis and spread trading facilities. MATIF was also active, launching in September a futures contract on five-year French government bonds. The new five-year instrument should benefit from a recent modification to the "notionnel" contract, which extended the maturity of deliverable securities (from seven to ten years) and therefore reduced the potential overlap between the two contracts.

In their struggle for market share, the major exchanges often linked the introduction of new contracts to generous financial incentives such as temporary fee holidays. Longer trading hours were also used as a weapon in the battle for supremacy. For example, in August the DTB extended the trading hours of its interest rate contracts by 90 minutes, bringing the closing time in line with some competitive products offered on LIFFE, which, in turn, responded by bringing forward the start of trading of its Bund contracts by half an hour.

Other European derivatives exchanges have so far not indicated a willingness to join the French/German/Swiss alliance. Scandinavian exchanges are planning to create a unified Nordic market for the trading of cash and derivatives market instruments, while a number of others are in a process of internal reorganisation. ÖTOB, for its part, continued its push into transition country instruments, with the introduction of contracts on the Polish Traded Index (PTX). Lastly, FINEX launched futures contracts on three Asian currencies as well as on the US/Canadian dollar exchange rate.

In the United States, the CME redoubled its efforts to attract retail business. Having lost to other US exchanges in a bid to list contracts based on the Dow Jones index,[22] the CME launched in September a small-sized version of its S&P 500 index futures contract, valued at one-tenth of the standard contract ($50 times the index value). In the same month, it received approval to split its standard S&P 500 contracts in half. The reduction in the contracts' underlying values and margin requirements will make them less expensive to trade, thereby expanding their customer base. Aside from the introduction of contracts on the Dow Jones index in early October, the CBOT appears to have devoted its energies to the development of electronic links with the OTC market and with exchanges in other time zones (see the box on the next page). Initiatives aimed at countering OTC competition also included the listing by exchanges of a number of structured securities. Several initiatives were also taken in the field of margining and clearing. In September, the CBOE and the CBOT agreed to streamline margin requirements for clearing members who trade equity index contracts at both exchanges, while the CME submitted a proposal to the CBOT and the Futures Industry Association to create a new independent entity for the guaranteeing and clearing of all products traded on both exchanges.

In Asia, an important development was the introduction by the OSE and the TSE in July of options on single equities. Elsewhere in the region, mention may be made of the introduction in September by the HKFE of an electronically traded HIBOR futures contract. In the same month, the exchange also began electronic trading on an index of mainland investment companies incorporated in Hong Kong. Meanwhile, SIMEX's futures on the Morgan Stanley Taiwan Index appeared to gain in

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[22] During the summer Dow Jones licensed its index to the CBOT and CBOE. With these exchanges putting the finishing touches to the launch of contracts on the index in the fourth quarter, the CME can expect to encounter strong competition.

Recently announced facilities for OTC market products

Derivatives exchanges announced new plans to set up facilities for the clearing of OTC contracts. Thus, in July the LCH said that it was planning to introduce in the first half of 1999 a facility for the clearing of FRAs and interest rate swaps in seven major currencies for maturities of up to ten years. The facility would enable users to offset their margins on contracts they hold at LIFFE. The clearing house would conduct bilateral netting with individual counterparties, liberating regulatory capital and improving the liquidity of the interbank market. The LCH project is therefore substantially more ambitious than earlier projects which focused on administrative functions (such as trade matching and the valuation of OTC transactions) and third-party collateral management. In August, the CBOT announced the introduction in early 1998 by its Chicago Board Brokerage subsidiary, in an alliance with a large broker specialising in OTC transactions, of a facility for the electronic trading of US government securities and repos. This facility could at a later stage be expanded to cover instruments such as FRAs and interest rate swaps. The project's value to market participants resides in its ability to integrate the cash and derivatives markets through lower execution costs and a centralisation of margin and collateral requirements.*

Projects for the clearing of OTC products have until recently met with a lukewarm reception from interbank participants fearful of losing the competitive benefits offered by high credit ratings. However, with the low level of intermediation margins on plain vanilla products, they have been more receptive to facilities allowing a reduction in trading costs. So far, only Cedel's Global Credit Support Service is in operation. The CME's Depository Trust Company, which recently underwent a change of ownership structure, has been finally abandoned, while projects initiated by the CBOT and MEFF RF appear to have been stalled by other priorities. This, however, has not deterred other market participants, as illustrated by the initiation of a project by the Caisse des dépôts et consignations to clear plain vanilla contracts in a number of major currencies.

Initiatives concerning the OTC market have not been limited to exchanges. In September, a well-known risk management software supplier announced the forthcoming introduction of a close-of-day price information service to help banks revalue their OTC derivatives positions, while in October a large Swiss bank launched an electronic system for the trading, pricing and execution of repos in 15 currencies.

* In September, the competition in this area intensified, with the announcement by the NYCE and a broker of a joint venture that would build a new computer platform for trading cash and derivative instruments.

popularity. The exchange already conducts brisk business in Nikkei instruments, for which it extended trading hours on its electronic system from September. The HKFE and SIMEX are making efforts to establish themselves as centres for the trading of derivatives on the financial assets of Asian emerging market countries. The progress of Asian derivatives markets has been hampered so far by national authorities' concerns about excessive volatility, the underdevelopment of financial sectors, the small size of the institutional investment industry and restrictions on foreign participation in securities markets.

Lastly, in Latin America, the BM&F launched in July a new option contract on the average overnight interbank deposit rate, while in September trading of equity index futures was expected to begin on the Caracas Stock Exchange. Discussions were also reported to be taking place in Argentina about the launch, in collaboration with the CBOT, of a financial derivatives market. Proposals include the establishment of a clearing house that would have the backing of an international insurance company and therefore a higher credit risk rating than Argentina's sovereign rating.

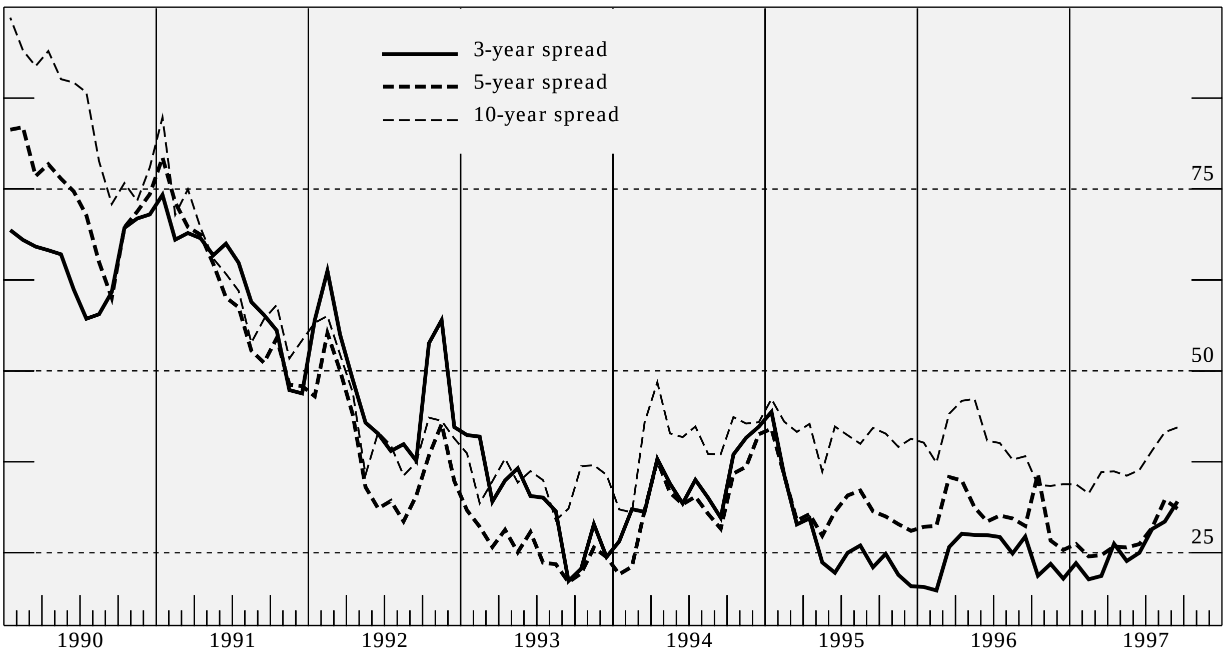
Over-the-counter instruments

Although comprehensive data on over-the-counter market activity are not yet available for 1997, business was reported to be buoyant in most major instruments. In the area of *interest rate products*, swap trading remained active in the US dollar and European interest rates, compensating for a slackening of transactions in Asia. The limited supply of US Treasury paper and the flattening of the US dollar yield curve combined to further widen US dollar swap spreads, supporting swap-related issuance. Trading based on the flattening of the yield curve was also significant in the sterling swaps market. Moreover, uncertainty about the future path of German interest rates created substantial demand for a variety of products based on the level and the shape of the German yield curve. The associated rise in options premia encouraged investors to seek cheaper hedging products such as captions and swaptions. The decision in September by EU finance ministers to announce bilateral exchange rates in May 1998 was followed by a frenzy of convergence trades against German interest rates and between the higher-yielding currencies themselves. The market's perception in September that the United Kingdom was more favourably disposed towards EMU was followed by active convergence trades involving UK or Irish rates. At the same time, greater attention was paid to instruments based on the convergence of interest rate volatility such as forward-starting caps or swaptions. While relatively simple instruments (such as the sale of long-dated call options on higher-yielding securities issues) proved popular, traders successfully introduced more complex strategies that removed the directional element of these instruments.[23] In Japan, the very low level of interest rates and, related to this, the subdued volume of trading in yen swaps and swaptions led intermediaries to offer a wide range of highly structured products.

In the area of *cross-currency derivatives*, the stability of the core European country parities meant that such business was subdued. Nevertheless, some participants took advantage of low implied volatility in the Deutsche mark/French franc segment to place large bets on market turbulence ahead of EMU. Otherwise, activity focused on US dollar/Deutsche mark options as the surge of the dollar against the mark to an eight-year high in August drove up demand for US dollar call/Deutsche mark put options and brought implied volatility to a plateau. At the same time, the sharp swings seen in the US dollar/yen parity since the beginning of the year continued to affect the pricing of related options, with the dollar's return to strength being met by an upward trend in implied volatility. The spike in volatility in early September (when the dollar rose above ¥120) was accompanied by a flurry of premium-reducing structures. In contrast, the sharp rise of short-term interest rates in several East Asian countries led to a drying-up in the trading of currency options.

US dollar interest rate swap spreads over US Treasury yields

Monthly averages, in basis points



Source: Datastream.

[23] A large number of straddles was reported to have been traded. A straddle is an option strategy combining a put and a call (either purchased or sold) on the same underlying at the same strike price for the same expiry date. One of the strategies, involving the purchase of a straddle on Spanish ten-year rates and the sale of a straddle on ten-year Italian rates, enabled investors to go long on the volatility of Spanish rates and short on the volatility of Italian rates.

In the market for *equity derivatives*, the decline of indices from their record levels created strong demand from end-users for hedging products. The turbulence in equity markets occurred against the background of retail investors' ongoing shift out of traditional fixed income products and into equities. This additional source of underlying demand for equity products was reported to have exacerbated market volatility and therefore pushed up the cost of protection. However, the recent large gains made by institutional investors on their equity holdings meant that such entities demonstrated less resistance to paying for the hedging of their exposures. Fund managers that had already met their benchmark returns for the year were also reported to have switched to zero cost collars offering downward protection at the cost of forgoing potential gains.

Warrants on various stock market indices were once again reported to have been highly popular. Investors have apparently been disappointed by the record of intermediaries that follow stock picking strategies and have been more inclined to invest in index tracking products. Such instruments are a particularly attractive means of obtaining exposure to national equity markets or to specific industrial sectors since they remove the need for active selection and permit a rapid and low-cost entry into the desired market segment. They also enable investors to avoid structural impediments such as the need to deal with complex custody and settlement issues and, in the case of some emerging market countries, the lack of currency convertibility. There was also strong interest in warrants on the stocks of European companies that are expected to face restructuring as well as a wide array of products based on baskets of Russian stocks.

Retail demand for guaranteed investment products also appears to have been highly buoyant in the Benelux countries, Scandinavia and Spain. Such products, which have been sold mainly by insurance companies and fund management groups, are targeted at retail investors who are used to investing in fixed income products. They offer protection of invested capital combined with various degrees of participation in equity market gains and are created by the packaging of zero coupon bonds with call options on equity indices. Some market participants have expressed concerns that further heavy flows into guaranteed products could have unforeseen effects on underlying markets. In particular, it is feared that the related heavy writing of options could greatly exceed the liquidity of the cash market, and that any overhang of options positions could lead to market disruptions should a sharp financial market shock occur. Concerns have also been voiced that heavy sales of guaranteed products could lead to a concentration of credit risk exposure as the intermediaries selling them to retail investors seek to hedge their exposures with interbank market dealers.

Data released by the US Office of the Comptroller of the Currency for the second quarter of 1997 reveal that the amount of *credit derivatives* outstanding at US banks rose by 34%, to stand at $25.1 billion. This was about 0.1% of the total value of US banks' derivatives positions, with 75% of the outstanding being accounted for by one intermediary. Regulatory uncertainty and insufficient market liquidity appear to have limited the use of credit derivatives to the creation of structured transactions.[24] Their use is nevertheless growing in market segments where separation of the credit risk from the underlying exposure is sought (such as leasing and reinsurance). There is also growing evidence that the development of new risk management instruments such as credit derivatives is encouraging a change in the lending culture, with emphasis on the efficient management of capital and a focus on risk-adjusted returns.

Structural and regulatory developments

In July, the Financial Accounting Standards Board (FASB) of the United States announced that in the fourth quarter of 1997 it would issue a final amendment to the draft of the new exposure framework it originally published in 1996.[25] The new accounting rules, which are expected to come into effect at the end of 1998, stipulate that companies reporting their accounts in the United

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[24] For a brief overview of the credit derivatives market, see the August 1996 issue of this commentary.

[25] See "Accounting for Derivatives and Similar Financial Instruments and for Hedging Activities", Norwalk, June 1996.

States must disclose on their balance sheets the fair value of all their derivatives positions.[26] Interestingly, the new draft and subsequent decisions have made substantial concessions to end-users. For example, the Board has granted users of derivatives greater freedom in the degree of correlation required for a derivative or cash market instrument to qualify as a hedge and has given firms permission to apply deferred accounting treatment to rollover hedges. Nevertheless, the Chairman of the Federal Reserve Board voiced concerns about the FASB's approach, saying that it should consider an alternative system that would improve the quality of financial reporting of derivatives and other financial instruments. He recommended that current disclosure requirements be expanded to include supplementary financial statements reported on a fair-value basis, suggesting that such disclosure be limited to larger market participants initially and extended to smaller entities over time. This approach, he said, would provide a comparison between fair-value and historical cost statements and would be more transparent than the current framework. Developments in the United States are followed with great interest by other standard-setters such as the International Accounting Standards Committee, which is also expected to propose its own standards in 1998. In addition to the new FASB disclosure requirements, US corporate entities will have to follow new Securities and Exchange Commission rules to be phased in by the year 2000. These rules will require all US companies with publicly issued securities to disclose quantitative details of their market risk positions, including the results of sensitivity analysis and value-at-risk calculations.

[26] Rather than at historical cost in footnotes to financial statements.

Developments in the swap market in 1996

Detailed data on swap market activity during the whole of 1996 were released in October by the International Swaps and Derivatives Association (ISDA). They showed that, in spite of a sharp slowdown in the growth of swap-related interest rate contracts (caps, floors, collars and swaptions), activity remained brisk, with the total stock of outstanding contracts at end-December 1996 rising by 44% relative to end-December 1995, to stand at $25.5 trillion. While the stock of interest rate swaps experienced a slightly more rapid expansion (50%), currency swaps grew at a sustained pace (30%). Swap-related interest rate products covered by the ISDA survey registered a pronounced slowdown in growth (from 136% in 1995 to 27% in 1996).

The survey results showed that non-US dollar interest rate swap business continued to grow more rapidly than US dollar transactions (58% versus 33%), bringing the share of the US dollar in outstandings to 30% compared with 34% a year earlier. The picture for currency swaps was somewhat different, with the US dollar and the yen expanding at a rapid rate but with the Deutsche mark stagnating. In the area of swap-related interest rate products, the expansion of non-US dollar contracts was more than three times as rapid as that of the US dollar segment. According to ISDA, adjusting dollar conversion rates for exchange-traded fluctuations has no material impact on the results.

Derivative contracts traded over the counter[1]

Notional principal amounts, in billions of US dollars

Instruments	1990	1991	1992	1993	1994	1995[2] H1	1995[2] H2	1996[2] H1	1996[2] H2
	New contracts arranged								
Total	**1,769.3**	**2,332.9**	**3,717.0**	**5,516.9**	**8,133.3**	**4,258.5**	**6,910.8**	**8,310.0**	**9,464.5**
of which:									
Interest rate swaps	*1,264.3*	*1,621.8*	*2,822.6*	*4,104.7*	*6,240.9*	*3,428.9*	*5,269.9*	*6,520.5*	*7,157.9*
Currency swaps[3]	*212.8*	*328.4*	*301.9*	*295.2*	*379.3*	*153.8*	*301.3*	*374.0*	*385.1*
	Amounts outstanding at end of period								
Total	**3,450.3**	**4,449.4**	**5,345.7**	**8,474.6**	**11,303.2**	**13,922.9**	**17,712.6**	**21,068.9**	**25,453.1**
of which:									
Interest rate swaps	*2,311.5*	*3,065.1*	*3,850.8*	*6,177.3*	*8,815.6*	*10,817.0*	*12,810.7*	*15,584.2*	*19,170.9*
Currency swaps[3]	*577.5*	*807.2*	*860.4*	*899.6*	*914.8*	*1,039.7*	*1,197.4*	*1,294.7*	*1,559.6*

[1] Data collected by ISDA only; the two sides of contracts between ISDA members are reported once only; excluding instruments such as forward foreign exchange contracts, currency options, forward interest rate agreements and equity and commodity-related derivatives. [2] Data for 1995 and 1996 are not fully comparable with previous periods owing to a broadening of the reporting population. [3] Adjusted for the reporting of both currencies; including cross-currency interest rate swaps.

Source: ISDA.

ABBREVIATIONS USED FOR EXCHANGES

AEX	Amsterdam Exchanges
BM&F	Bolsa de Mercadorias y Futuros
CBOE	Chicago Board Options Exchange
CBOT	Chicago Board of Trade
CME	Chicago Mercantile Exchange
DB	Deutsche Börse AG
DTB	Deutsche Terminbörse (Frankfurt)
FINEX	Financial Instruments Exchange (Dublin)
HKFE	Hong Kong Futures Exchange
LCH	London Clearing House
LIFFE	London International Financial Futures and Options Exchange
MATIF	Marché à Terme International de France
MEFF RF	Mercado Español de Futuros Financieros de Renta Fija (Barcelona)
MONEP	Marché des Options Négociables de Paris
NYCE	New York Cotton Exchange
OSE	Osaka Securities Exchange
ÖTOB	Austrian Futures and Options Exchange (Vienna)
SBF	Société des Bourses Françaises
SIMEX	Singapore International Monetary Exchange
SOFFEX	Swiss Options and Financial Futures Exchange
SWX	Swiss Exchange
TSE	Tokyo Stock Exchange