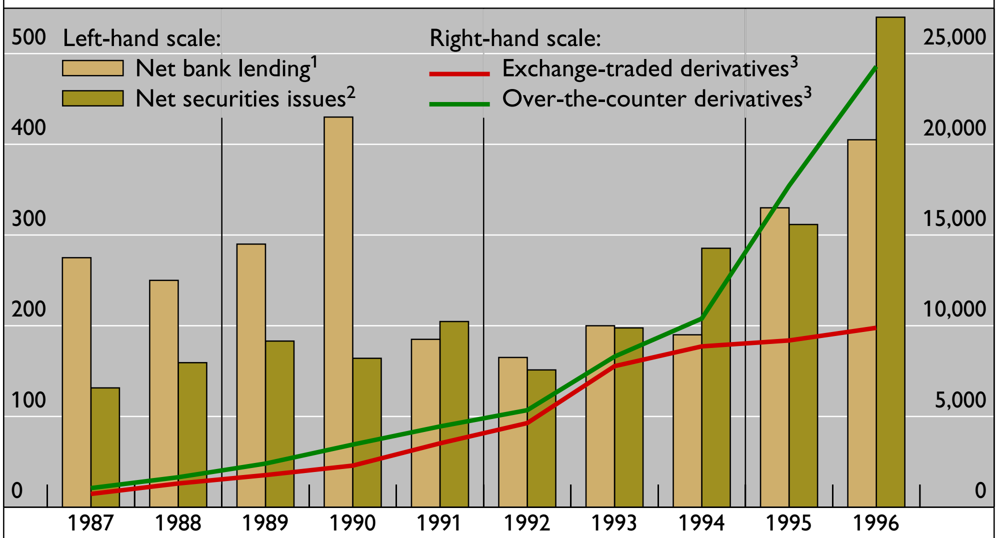
VII. International financial markets

Highlights

Ample liquidity, subdued inflation, widespread efforts at fiscal consolidation, further progress towards European economic and monetary union (EMU) and ongoing financial market liberalisation boosted activity in the international financial markets in 1996. Indeed, the international market-place was often at the centre of investors' relentless search for higher yields, with a growing acceptance of lower-rated issues and a proliferation of increasingly complex structures. Activity was characterised by a record volume of securities issues and a further expansion in banking intermediation. At the same time, the overlap between the two market segments was accentuated, with financial institutions accounting for the bulk of new securities issues and banks' acquisition of securities for all of the upswing in bank claims. In the derivatives markets, turnover in exchange-traded instruments stagnated, whereas business in over-the-counter (OTC) products continued to thrive and securities offering derivatives-related payouts returned to favour.

Activity in international financial markets

In billions of US dollars



[1] Changes in amounts outstanding, excluding exchange rate valuation effects and interbank redepositing. [2] Net issues (excluding exchange rate valuation effects) of international bonds and euronotes. [3] Notional amounts outstanding at end-year.

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.

Graph VII.1

Estimated net financing in international markets[1]							
Components of net international financing	1991	1992	1993	1994	1995	1996	Stocks at end-1996
	in billions of US dollars						
Total cross-border bank claims[2]	– 48.0	185.5	316.4	274.9	680.0	496.6	8,289.9
Local claims in foreign currency	– 61.4	–39.8	–0.9	0.2	–36.0	81.2	1,355.6
minus: Interbank redepositing	*–294.4*	*–19.4*	*115.5*	*85.1*	*314.0*	*172.9*	*4,630.5*
A = Net international bank lending[3]	185.0	165.0	200.0	190.0	330.0	405.0	5,015.0
B = Net euronote placements	34.9	40.4	72.1	140.2	192.4	265.0	834.1
Total completed international bond issues[4]	319.7	334.7	432.4	373.6	358.7	569.2	
minus: Redemptions and repurchases[4]	*150.0*	*223.8*	*307.0*	*228.4*	*239.6*	*294.1*	
C = Net international bond financing[4]	169.8	110.9	125.4	145.2	119.2	275.1	2,391.8
D = A + B + C = Total international financing	389.7	316.3	397.6	475.4	641.6	945.1	8,240.9
minus: Double-counting[5]	*34.7*	*71.3*	*122.6*	*60.4*	*111.6*	*200.1*	*1,310.9*
E = Total net international financing	355.0	245.0	275.0	415.0	530.0	745.0	6,930.0

[1] For banking data and euronote placements, changes in amounts outstanding, excluding exchange rate valuation effects; for bond financing, flow data. [2] Claims reported by banks in the Group of Ten countries plus Luxembourg, Austria, Denmark, Finland, Ireland, Norway, Spain, the Bahamas, Bahrain, the Cayman Islands, Hong Kong, the Netherlands Antilles and Singapore, and the branches of US banks in Panama. [3] Excluding, on an estimated basis, redepositing between reporting banks. [4] Excluding bonds issued under euro-medium-term note (EMTN) programmes, which are included in net euronote placements. [5] International securities purchased or issued by the reporting banks, to the extent that they are included in the banking statistics as claims on non-residents.

Sources: Bank of England, Euroclear, Euromoney, IFR, ISMA and BIS. Table VII.1

Behind these developments lie fundamental shifts in market practices and structures, which are related to the dismantling of regulatory barriers and technological innovation but also to deeper market forces. The issuance of international securities is increasingly becoming a substitute for more traditional funding channels. Meanwhile, repurchase agreements (repos) are gradually replacing outright interbank depositing, permitting participation by a broadening range of actors and further blurring the distinction between banking and securities transactions. Moreover, the rapid development of loan trading and the growing popularity of instruments such as asset-backed securities, structured notes and asset swaps are contributing to a greater interpenetration between market segments. Progress made last year in the area of credit risk management also helped to strengthen these links.

In spite of the growth of securitisation worldwide, commercial banks have generally been able to retain their dominant position at the core of the financial system by more active asset and liability management, by offering new off-balance-sheet services and by acquiring securities houses and investment funds. For their part, investment banks have been making inroads into areas hitherto dominated by commercial banks such as syndicated lending and credit risk assessment. These trends have heightened the convergence between commercial and investment banks, with both groups also facing competition on their own ground from other market participants. In this evolving and somewhat more opaque environment, the focus of official initiatives has been to facilitate the smooth play of market forces, while at the same time preserving the stability of the financial system.

The international banking market

An exceptionally large volume of international syndicated loan facilities (US$ 530 billion) was arranged last year. Non-financial entities from the industrial world, particularly in sectors facing economic restructuring or privatisation, accounted for the bulk of activity, but there was also an increase in facilities for emerging market borrowers. Ample liquidity and growing participation by investment banks and institutional investors meant that the pricing and non-price characteristics of loans continued to move in favour of borrowers. The low margins charged to highly rated names encouraged banks to link such business to other more lucrative services or complex arrangements, and to seek higher returns through loans to lower or non-rated borrowers and merger-related deals. They also led them to develop further secondary market trading, with, for instance, the establishment of a Loan Syndications and Trading Association in the United States and the announced launch of a Loan Market Association in Europe. The trend towards more active management of banks' loan portfolios was especially evident in the area of credit risk, with the further expansion of credit derivatives and the introduction by a major US bank at the beginning of this year of a model applying the value-at-risk concept to credit risk (see the section on derivatives

High volume of loanable funds available …

… more active management of credit risk …

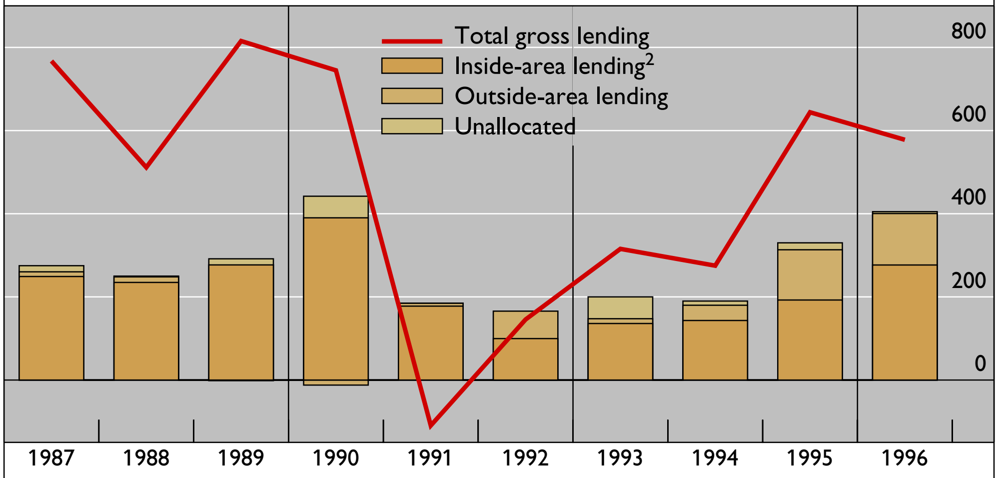
Main features of international banking activity[1]

Uses and sources of international bank credit	1991	1992	1993	1994	1995	1996	Stocks at end-1996
	in billions of US dollars						
A = Claims on outside-area countries	6.8	66.0	11.6	36.6	120.8	123.8	1,115.6
B = Claims on inside-area countries	–116.6	80.4	251.4	228.3	506.5	449.5	8,291.7
(1) Claims on non-banks	*100.9*	*90.0*	*122.7*	*–49.3*	*189.5*	*305.4*	*2,666.6*
(2) International financing of banks' domestic lending	*76.9*	*9.8*	*13.3*	*192.5*	*3.0*	*–28.7*	*994.6*
(3) Interbank redepositing	*–294.4*	*–19.4*	*115.5*	*85.1*	*314.0*	*172.9*	*4,630.5*
C = Unallocated	0.4	– 0.8	52.5	10.1	16.7	4.5	238.1
D = A + B + C = Gross international bank lending	–109.4	145.6	315.5	275.1	644.0	577.9	9,645.5
E = D – B*(3)* = Net international bank lending	185.0	165.0	200.0	190.0	330.0	405.0	5,015.0
A = Liabilities to outside-area countries	– 11.7	13.2	–14.8	74.6	96.4	93.7	983.3
B = Liabilities to inside-area countries	–208.8	91.2	112.5	539.2	338.5	316.3	7,595.7
(1) Liabilities to non-banks	*15.2*	*104.4*	*86.2*	*132.8*	*120.6*	*207.5*	*1,865.8*
(2) Domestic funding of banks' international lending	*117.7*	*40.7*	*85.6*	*–64.4*	*19.0*	*– 7.0*	*1,370.9*
(3) Interbank redepositing	*–341.7*	*–53.9*	*–59.3*	*470.9*	*198.9*	*115.8*	*4,358.9*
C = Unallocated	63.9	6.7	43.0	47.1	94.0	110.9	795.0
D = A + B + C = Gross international bank borrowing	–156.7	111.1	140.7	660.9	528.9	520.8	9,373.9
Memorandum item: Syndicated credits[2]	*136.7*	*221.4*	*220.9*	*252.0*	*310.8*	*530.0*	

[1] Changes in amounts outstanding, excluding exchange rate valuation effects. [2] Announced new facilities.
Sources: Bank of England, Euromoney and BIS. Table VII.2

Total international bank lending[1]

In billions of US dollars



[1] Changes in amounts outstanding of banks' cross-border claims and local claims in foreign currency, excluding exchange rate valuation effects. [2] Net of interbank redepositing.

Source: BIS. Graph VII.2

markets below). Nevertheless, banking authorities made renewed calls for caution, noting that the terms on transactions may not have given adequate consideration to risks over the full business cycle.

… and growing use of repos …

… which allows broader market participation

Actual on-balance-sheet transactions of international banks, as revealed by the comprehensive BIS data, showed a mixed picture last year, with a decrease in gross banking flows but a sharp acceleration in net bank lending. The contrast between the two primarily reflected the decline in interbank activity. Indeed, the slowdown in gross international banking flows would have been more severe had it not been for banks' on-balance-sheet transactions in securities, especially through repos. By improving funding and lending opportunities, the growing use of repos has enabled traditional players to maintain market presence and allowed participation by new actors. Banks' aggregate lending last year was also affected by the reduced activity of Japanese institutions and the difficulties experienced by the banking systems of some emerging market countries. Nevertheless, despite measures taken by the national authorities in several emerging market countries to moderate short-term capital imports, interest rate arbitrage continued to sustain banking flows to these countries.

Developments by sector, currency and nationality of reporting banks

Nevertheless, commercial banks retain their predominance …

The contraction in interbank activity was responsible for the overall dampening of international banking business. In contrast, lending to non-bank customers (including non-bank financial institutions) gathered pace, underlining the widening range of players in the international wholesale money market. At the same time, the strong upsurge recorded in reporting banks' holdings of securities suggests a closer link between interbank transactions and securities trading. The fact that cross-border lending to non-bank customers inside the reporting area was nearly twice as high as borrowing from them illustrates the key role played by banks in providing cash to other wholesale market participants. It also indirectly confirms anecdotal evidence of greater use of repos by institutional investors to raise funds for position-taking, albeit in a less leveraged and more diffused form than in the early 1990s.

One notable feature of last year was the further erosion in the market share of Japanese banks in international banking assets (from 24.8% to 21.6%), which partly reflected their funding difficulties in the international interbank market. Despite the variety of strategies adopted by financial institutions and the current restructuring in the industry, there was, however, little movement in the relative importance of other major banking groups. There are a number of reasons for this. First, banks from the English-speaking countries appear to have put greater emphasis on off-balance-sheet activities such as securities underwriting and risk management services. Secondly, the periodic emergence of strains in the foreign exchange and securities markets gave rise to large compensatory flows involving the banking systems of the issuing currency countries, irrespective of their international competitive position. For instance, a large volume of repo transactions involving the French banking system were undertaken in parallel with sales of French franc securities by foreigners. Thirdly, there were diverse offsetting influences related to the restructuring of the global financial industry, such as the rationalisation of operations through a reduction in inter-office positions and the greater concentration of business in London.

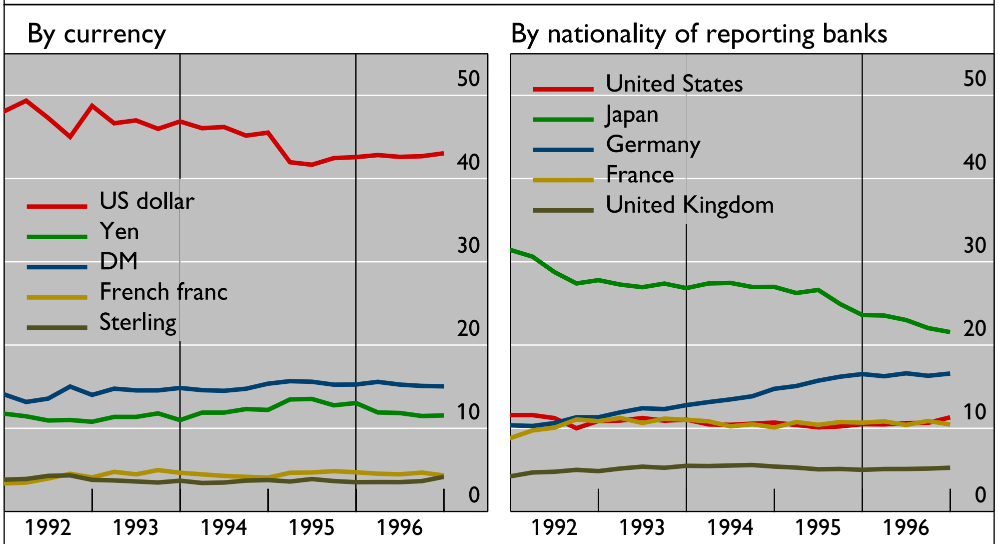
... although their strategies diverge ...

The pull-back by Japanese banks in turn strongly affected the currency composition of international banking flows last year and entailed, in particular, a shift away from the dollar and the yen. However, this was dwarfed in the case of the dollar by increased borrowing demand for other purposes, such as purchases of securities. At the same time, the expansion of banking activity in European currencies conceals important divergences between individual market

... with the retreat of Japanese banks causing currency shifts ...

Currency and nationality structure of international bank lending*

Percentage shares, at end of quarter



* Cross-border claims and local claims in foreign currency of banks located in industrial reporting countries.

Source: BIS. Graph VII.3

… as do changes in international portfolio preferences

segments, mirroring changes in international portfolio preferences. Whereas lending in Deutsche marks, Italian lire, sterling and Dutch guilders accelerated, a further scaling-back of banking positions in ECUs was reported.

Business with countries outside the reporting area

Sharp cutback in lending to Thailand …

New bank credit to countries outside the reporting area rose further in 1996. This occurred despite a sharp cutback in banking flows to Thailand (the largest Asian bank debtor after Korea), as restrictive policy measures and a record current account deficit dampened banks' enthusiasm for extending loans to Thai entities. In contrast, sizable transactions related to project financing and/or ongoing interest rate arbitrage led to an acceleration in bank lending to other large bank debtor countries in Asia, including Korea, China, Indonesia, Malaysia and the Philippines. In the case of Korea, the boost to inflows resulting from the more favourable capital ratio requirements associated with the country's entry into the OECD was tempered at the end of the year by news of the emergence of significant losses on loans to the local corporate sector. More generally, attempts to curb reliance on short-term banking flows and the growing receptiveness of international bond investors to new Asian signatures allowed borrowers in the region to diversify their sources of funds last year. This was a positive development given the high share of their short-term banking debt (up to 70% of the total banking debt in Korea and Thailand).

… but an acceleration elsewhere in Asia …

… and in Latin America …

There was a further expansion in lending to Latin American countries, where a loss of momentum in short-term credits to Brazil was more than offset by a resumption of banking flows to Mexico and an increase in bank lending to Argentina and a few other countries (Colombia, Ecuador and Peru). Large-scale refinancing of official loans in the international securities market by Argentina and

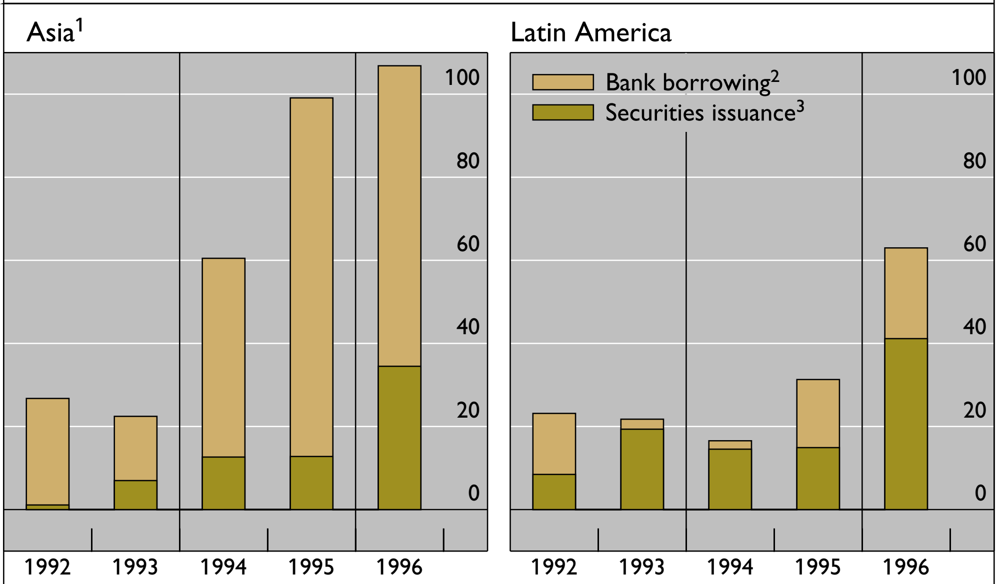
Banks' business with countries outside the reporting area*

Positions of banks vis-à-vis	Assets			Liabilities			Stocks at end-1996	
	1994	1995	1996	1994	1995	1996	Assets	Lia-bilities
	in billions of US dollars							
Total outside area	36.6	120.8	123.8	74.6	96.4	93.7	1,115.6	983.3
Developed countries	– 1.3	26.0	21.2	22.4	20.3	18.5	208.8	189.5
Eastern Europe	–13.0	3.3	10.9	2.0	9.2	2.7	94.7	48.7
Developing countries	51.0	91.5	91.8	50.1	66.9	72.5	812.2	745.1
Latin America	2.0	16.4	21.8	21.0	43.0	23.0	267.3	224.2
Brazil	*– 6.7*	*12.0*	*10.0*	*9.9*	*24.3*	*7.9*	*83.4*	*68.3*
Mexico	*6.6*	*–4.2*	*1.0*	*0.1*	*7.4*	*3.9*	*73.8*	*37.4*
Middle East	3.1	–7.5	0.0	2.9	8.1	16.6	72.4	219.0
Africa	– 2.0	–3.7	–2.4	3.3	–1.2	2.7	33.6	43.2
Asia	47.8	86.3	72.3	22.9	17.0	30.3	438.9	258.6
Korea	*15.1*	*22.5*	*25.9*	*4.9*	*4.5*	*5.3*	*108.5*	*29.9*
Thailand	*19.4*	*38.8*	*8.9*	*2.0*	*4.7*	*–2.5*	*98.7*	*9.2*

* Changes in amounts outstanding, excluding exchange rate valuation effects.
Source: BIS. Table VII.3

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. [3] Net issues of euronotes and international bonds.

Sources: Bank of England, Euroclear, Euromoney, IFR, ISMA, national data and BIS. Graph VII.4

Mexico may have indirectly facilitated access by the local private sector to the banking market, as evidenced by signs of greater recourse to international loans by corporate entities. In Brazil, heavy issuance of international securities by financial and non-financial entities was accompanied by massive inflows of short-term bank capital attracted by high interest rate differentials, despite various official measures to restrict such flows. Elsewhere in the region, external borrowing was conducted primarily through the international securities market and there were fewer instances of active interest rate arbitrage through local banking systems.

Banking business with other countries outside the reporting area was characterised by major transactions with Australia, Greece, Turkey and Russia. While the operations involved a high proportion of securities purchases in the case of Australia and Greece, the perceived risk in lending to Turkey and Russia meant that most of the new loans extended to these two countries had very short maturities. Overall, however, the behaviour of the different nationality groups of lenders towards outside-area countries varied considerably in 1996. Data available for the first half of the year show that European banks accounted for much of the new lending to the developing world, whereas the activity of US banks was more subdued and Japanese banks generally refrained from entering into new loan commitments with such countries. Although external factors such as temporary funding difficulties may have played a role for some institutions, this divergence should be seen in the broader context of banks' differing international lending strategies.

… accompanied by differences in the behaviour of major lending groups

The international securities markets

Ample liquidity fuels investors' search for yield …

Total net financing through euronotes and international bonds reached an all-time record of $540.1 billion in 1996. This represented a 19% increase in the stock outstanding, a rate of expansion significantly faster than that witnessed in domestic securities markets. Issuance of international debt was fuelled by investors searching for higher yields in a context of ample global liquidity, the further development of securitisation, the migration of fund-raising activity away from domestic markets and the appearance of new borrowers. In their attempts to enhance returns, international investors again showed a willingness to move down the credit spectrum and explore new niches. As a result, a large proportion of securities involved some form of asset repackaging and/or the use of derivative features. There was also an increase in the number of currencies used, with, for example, issues in Argentine pesos, Croatian kunas and Polish zlotys.

Although the climate in certain fixed income markets was not always conducive to issuance, renewed investor interest in assets denominated in US dollars and sterling proved to be more important than the evolution of interest

Main features of international securities issues[1]

Country of residence, currency and type of issuer	1991	1992	1993	1994	1995	1996	Stocks at end-1996
	in billions of US dollars						
Total net issues	204.7	151.3	197.6	285.4	311.6	540.1	3,225.9
International bonds[2]	169.8	110.9	125.4	145.2	119.2	275.1	2,391.8
Euronotes	34.9	40.4	72.1	140.2	192.4	265.0	834.1
Developed countries	159.0	115.3	129.7	208.4	230.5	361.5	2,421.3
Europe[3]	*88.3*	*93.7*	*142.7*	*166.2*	*169.9*	*210.0*	*1,457.0*
Japan	*39.6*	*–3.4*	*–44.7*	*–27.0*	*–27.4*	*–17.6*	*203.7*
United States	*13.8*	*16.8*	*11.1*	*41.1*	*64.3*	*145.7*	*449.7*
Canada	*15.9*	*10.5*	*19.1*	*18.2*	*10.6*	*9.1*	*186.6*
Offshore centres	3.9	0.0	5.8	38.6	38.4	73.7	255.4
Other countries	16.0	12.8	25.7	28.7	27.3	79.9	230.1
International institutions	25.7	23.2	36.5	9.8	15.4	24.9	319.1
US dollar	54.9	58.7	31.5	73.4	74.2	262.1	1,245.9
Japanese yen	21.1	9.2	33.7	106.8	108.3	81.2	517.6
Deutsche mark	12.6	24.6	31.2	27.5	55.1	54.8	347.1
Other currencies	116.1	58.7	101.2	77.6	74.0	141.9	1,115.4
Financial institutions[4]	43.5	43.5	53.5	156.1	179.9	342.7	1,344.0
Public sector[5]	79.6	83.1	132.7	107.9	98.7	123.6	1,075.1
Corporate issuers	81.6	24.7	11.5	21.4	33.1	73.9	806.8
Memorandum items:							
Announced international bonds[2]	*317.7*	*334.1*	*446.5*	*361.6*	*356.4*	*575.1*	
Announced euronote facilities	*95.9*	*113.2*	*109.8*	*194.0*	*271.6*	*269.3*	

[1] International bonds and euronotes. For international bonds, flow data; for euronotes, changes in amounts outstanding excluding exchange rate valuation effects. [2] Excluding bonds issued under euronote facilities. [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. Table VII.4

rates. In addition, the easy stance of monetary policy in core European economies and in Japan induced investors to seek higher-yielding alternatives, leading to a further convergence between "peripheral" and "core" long-term interest rates within the major currency blocs (see Chapter IV). The scale of the rally was particularly striking in Europe, as investors increasingly factored out currency risk in the light of evidence of a firmer commitment to implementing the fiscal corrections necessary to meet the Maastricht criteria and progress in other aspects of economic convergence. However, the search for yield created even more pronounced rallies in the area of emerging market debt. This proved highly beneficial to borrowers from those countries, with net new issuance more than tripling (to a record $90.6 billion). While sovereign borrowers such as Argentina, Mexico and the Philippines refinanced their Brady bonds or official loans internationally, the market opened up to several new countries (in Eastern Europe in particular). International demand for emerging market paper was fuelled by the adoption of sounder economic policies, the diversification of institutional portfolios, increased European retail interest, better data disclosure and the more widespread availability of hedging instruments. In such a favourable environment, sovereign borrowers often launched issues in anticipation of need in order to diversify their investor base, extend maturities or introduce benchmarks across the yield curve.

… leading to a narrowing of risk premia and, encouraging …

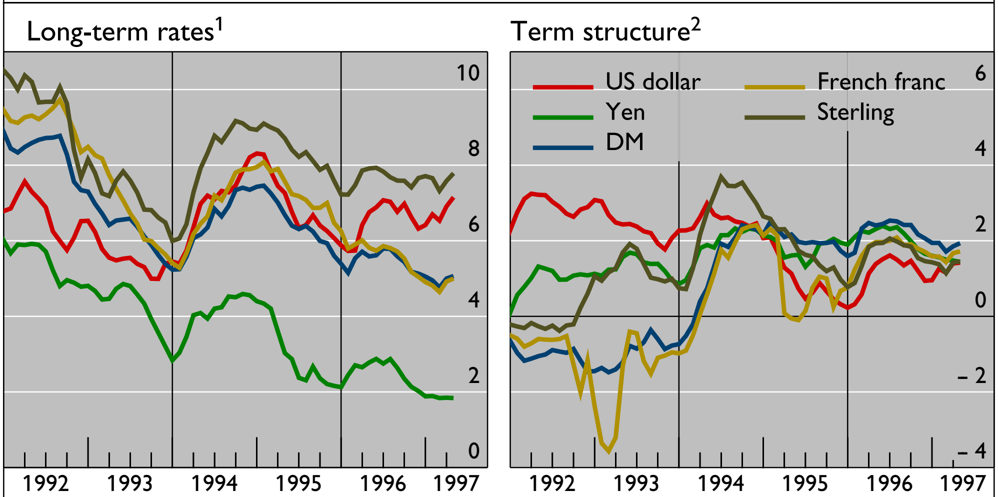
… issuance by emerging market borrowers …

The relentless search for higher returns was also illustrated by the pervasive use of derivative features. For example, a large number of subordinated bonds launched by financial institutions offered investors attractive margins, with various optional elements often resold in the secondary market by intermediaries to reduce borrowers' cost of funds. The originators of these structures made continued attempts to entice investors through the progressive incorporation of more complex features and finer distinctions between debt and equity characteristics. Such issues were particularly popular in the US dollar sector,

… a pervasive use of derivative features …

International interest rates

Monthly averages, in percentages and percentage points



[1] Yields in annual terms on five-year interest rate swaps. [2] Five-year rates minus three-month euro-market interest rates.

Source: BIS. Graph VII.5

... and the development of new techniques

where the low level of swap spreads had reduced the scope for sub-LIBOR funding. International investors also demonstrated a greater willingness to explore new techniques. Thus, asset-backed securities (ABSs) gained in popularity, accounting for 34% of total net issuance of stand-alone international bonds, compared with 13% in 1995. The market tended to diversify away from US-originated deals, with several large European issues related to privatisation or balance-sheet restructuring. There were, for instance, a $5.1 billion transaction securitising a pool of corporate loans originated by a UK bank, a $4 billion deal in the aircraft leasing sector and a series of repackagings involving the outstanding debt or foreign exchange receivables of Eastern European and Latin American borrowers. While offering investors higher returns than assets of comparable credit standing, ABSs allow issuing financial institutions to economise on capital and maximise income. The opportunities provided by such securities for maintaining relationships and obtaining ancillary business without tying up capital have been especially attractive to banks given the low level of margins on corporate loans to creditworthy borrowers.

US investment banks predominate ...

... whereas Japanese dealers face reduced yen business

The high volume of primary market activity continued to support the profitability of intermediaries. However, competition remained acute. While US-based investment banks established a dominant position in the underwriting league tables, European commercial banks were particularly aggressive in securing footholds in the business. There was some slippage in the ranking of Japanese dealers, which in part reflected the lower volume of yen business. In the secondary market, turnover in securities reported by the international clearing houses accelerated in 1996, with a 38% increase in value terms (to $44.6 trillion). As in recent years, the rise was more pronounced in domestic securities (70% of total turnover) than in eurocurrency paper. The Deutsche mark continued to gain market share, accounting for almost 50% of total transactions compared with 47% in 1995. Overall, activity was boosted by occasional turbulence in European securities markets, the continued growth of repo business and the integration of domestic links into clearing networks.

Type and residence of issuers

Financial institutions account for two-thirds of net new issuance

There was a record volume of net new issuance by financial institutions, which represented almost two-thirds of total market growth. The use of special-purpose vehicles to issue ABSs was reflected in a gain in the relative importance of non-banks within the group of financial institutions. But there was also a broadening of the range of borrowers, to include government-sponsored and local financing entities and lower-rated emerging market names. While European banks often used subordinated funds to capitalise their trading books or to finance acquisitions, many US-based institutions aimed at exploiting discrepancies in regulatory and tax treatments. Borrowing by public and corporate sector entities also increased significantly, with a large part of such net fund-raising stemming from emerging markets.

Types of instrument

Euronotes expand sharply ...

Euronote facilities continued to be a major vehicle for issuance, with the cumulative total of programmes launched since the establishment of the market exceeding

$1.5 trillion. Net issuance last year amounted to $265 billion, or almost 50% of total net issues of international securities. By year-end euronotes represented 26% of all international securities outstanding, compared with 7% at the end of 1990. Uncertainty concerning the evolution of interest rates in North America and Europe and growing demand from European mutual funds boosted net issuance of *short-term notes* (including *euro-commercial paper – ECP*), to a record volume of $41.1 billion. Although the short-term euronote segment now stands at more than $170 billion in terms of amounts outstanding, its size still pales in comparison with the US CP market ($779.4 billion). In addition to the longer history of the US market, this difference can be attributed to other factors such as the restrictions on issuance in several major European currencies and the relatively small size of the European money market fund industry. However, the introduction of a single European currency might contribute to the development of a pan-European CP market.

… although inhibiting factors in the ECP market …

At $223.9 billion, total net issuance under *euro-medium-term note (EMTN) facilities* accelerated further. Underwritten issues remained the chief source of market growth, making an increasing proportion of notes issued under such facilities little different from traditional eurobonds. For new borrowers, however, placement through dealers remains a more discreet way of testing market acceptance than issuing traditional eurobonds. For regular borrowers, EMTN facilities provide a quicker and cheaper way of accessing different pockets of investment demand since they allow the introduction of tailor-made instruments that can often better capture arbitrage opportunities or tax and regulatory loopholes than stand-alone international bonds. These factors may have accounted for the recent expansion of structured issues targeted at various categories of Japanese investors, particularly given the scope offered by recent liberalisation measures and the apparent preference of these investors for privately placed offshore paper.

… contrast with the greater success of EMTNs

International bond issues reach new heights

1996 represented a new landmark for the *international bond market*. Taken together, announcements of bonds issued on a stand-alone basis and under euronote facilities show an expansion of 85% in the gross volume of bond issues, to $792.4 billion. Issuance of global bonds more than tripled (to $118.3 billion), although, in contrast to the early days of the market, when supranational and sovereign borrowers were predominant, most global issues were launched by securitisation-related special-purpose vehicles.

In the fixed rate sector, heavy issuance of US dollar debt …

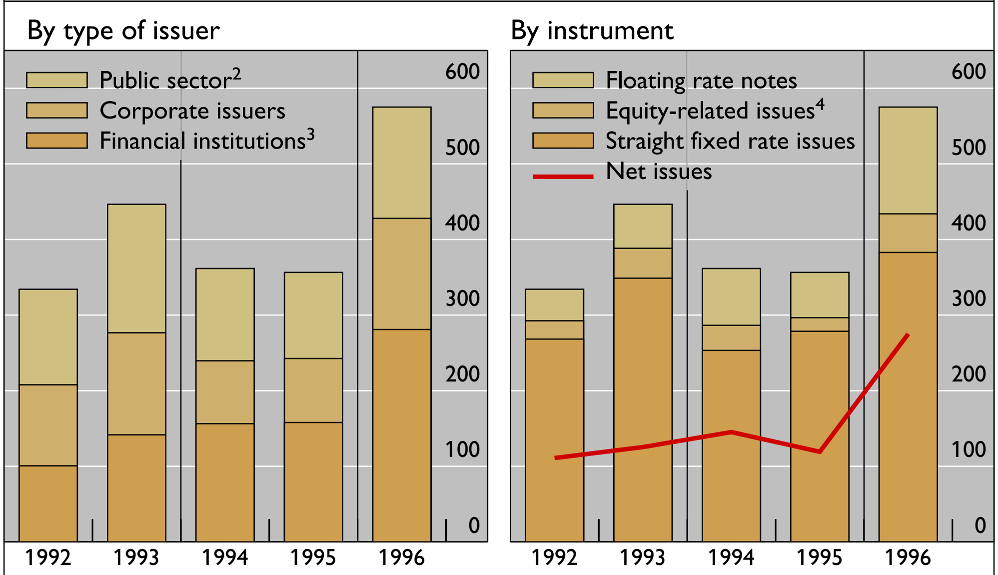
Announcements of *straight fixed rate paper* accounted for two-thirds of stand-alone bond issues, compared with 78% in 1995. Notwithstanding the historically low level of US dollar swap spreads, dollar issuance was spurred by the improvement in sentiment towards that currency and narrow margins over benchmark rates. In contrast, there was a pronounced decline in euroyen issuance owing to unfavourable interest rate expectations and swap rates, persistent currency weakness, the recent liberalisation of the domestic and Samurai bond markets and the greater freedom given to pension funds to invest in other types of foreign assets. Meanwhile, the search for higher yields by Japanese retail investors led to a record volume of dual-currency and emerging market Samurai issues. The movement by international investors away from Deutsche mark bonds translated into a reduction in the share of that currency.

… but reduced interest in euroyen paper …

… and DM-denominated bonds

Main features of the international bond market[1]

Announced issues, in billions of US dollars



[1] Excluding bonds issued under EMTN programmes. [2] Governments, state agencies and international institutions. [3] Commercial banks and other financial institutions. [4] Convertible bonds and bonds with equity warrants.

Sources: Bank of England, Euroclear, Euromoney, IFR, ISMA and BIS. Graph VII.6

Nevertheless, attractive interest rate swap opportunities in the five-year area supported a steady volume of issues by non-residents and German-based specialised financing entities. The offshore expansion of German financial institutions was reflected in a few large collateralised Deutsche mark issues (Pfandbriefe) by German mortgage and public sector banks. There were also pockets of demand for high-yielding Deutsche mark bonds, as illustrated by a number of large or long-dated emerging market issues. Most of the other important European currency sectors benefited from fixed income rallies or the more stable climate prevailing within the ERM. Issuance in Swiss francs, however, was adversely affected by some weakening of that currency's status as a haven during periods of turmoil. Finally, the economic and legal questions surrounding swap-driven issuance meant that activity in the ECU bond market remained subdued.

Continuing subdued market activity in ECUs

Uncertainty with respect to the evolution of interest rates in a few key countries, the strong liquidity position of financial intermediaries and buoyant demand for yield-enhancing structures provided fertile ground for the issuance of *floating rate notes (FRNs)*. The share of announcements in US dollars increased further, but issuance in sterling and Deutsche marks also rose appreciably. Financial institutions reinforced their dominant position with a large volume of asset-backed securities and subordinated issues. Gross issuance of sovereign FRNs was boosted by a $5.4 billion transaction for Mexico, the largest-ever single transaction in the euromarket. Nevertheless, the volume of new sovereign issues was matched by repayments, which enabled sovereign borrowers to take advantage of terms significantly better than those on maturing issues (and often highly competitive with those prevailing in the syndicated loan market). Sovereign

FRN issuance spurred by …

… ABSs and subordinated debt issues

issuers now account for a smaller share of business than in the early days of the FRN market.

Finally, the primary market for *equity-related bonds* recovered somewhat from the very low volume of 1995, and the outstanding stock of issues increased slightly following several years of contraction. Developments in the Asian equity markets, where the bulk of issuers have been located in recent years, were generally not very favourable. Japanese borrowers nearly doubled their announcements, but this was not sufficient to compensate for the volume of maturing issues. While the corporate sector accounted for most of the new issues by Japanese borrowers, a small number of banks attempted to strengthen their balance sheets by launching large yen-denominated convertible issues. Other notable developments included the higher profile of European-based names, with a few large privatisation-related transactions, and the emergence of Latin American issuers.

Limited recovery in the market for equity-related bonds

Global derivatives markets

Derivatives markets continued to exhibit divergent trends in 1996, with aggregate activity on exchanges stagnating and OTC business thriving. While some market sources attributed the subsiding demand for exchange-traded products to low volatility on a number of major debt and currency markets, this was not consistent with developments in all market-places. In fact, the continuing buoyancy of plain vanilla and exotic OTC business and the popularity of retail-oriented derivative instruments such as structured securities and warrants suggest that other, more fundamental forces were at work. These include the rapid growth of cash-based hedging strategies (most notably repos), the flexibility of OTC instruments in accommodating shifts in market preferences and the reduction in the cost of OTC transactions. Greater efficiency in risk management practices and growing industry concentration may also have lessened the need for the hedging of residual positions through exchanges, which again faced strong pressures to innovate and rationalise. These pressures were accentuated in Europe by the prospective introduction of the single currency, which acted as a catalyst for a broad-based restructuring of business.

Exchanges suffer from the growing use of cash-based and OTC trading strategies …

Exchange-traded instruments

The current dollar value of aggregate turnover in exchange-traded financial contracts monitored by the BIS declined further in 1996. While some of this reduction resulted from the valuation impact of the appreciation of the US dollar on transactions in other currencies, underlying turnover in interest rate products decreased and currency contracts continued to stagnate. A migration of activity to OTC markets has been observed for some time in currency contracts, but interest rate instruments were negatively affected by the growing preference of large participants for cash-based and OTC trading strategies. On the other hand, the use of stock index instruments for domestic and international portfolio allocation was reflected in a sustained expansion in that area.

… and offer a mixed picture …

Within the broad market risk categories, there were significant differences between contracts and exchanges. In North America, the overall value of trading

… with a lower volume of US interest rate business …

in financial products declined, but the inclusion of non-financial contracts (hitherto excluded from the BIS data) reveals diverging trends. For example, the lower volume of long-term interest rate business on the CBOT was offset by the buoyancy of commodity contracts, helping the exchange to maintain its leading position in North America, ahead of the CME and the CBOE. In contrast, higher commodity trading on the CME was not sufficient to offset the drop in short-term interest rate transactions. LIFFE maintained its lead in Europe and offered a strong challenge to the global supremacy of the Chicago exchanges, with a sharp expansion of business related to the convergence of European interest rates. Activity on the DTB was boosted by the growth in interest rate contracts and the rapid development of equity products, enabling the DTB to displace the MATIF as the second most active market-place in Europe. Lacklustre trading on the MATIF reflected a combination of factors, including a calmer financial climate, less active foreign participation in French debt markets and some displacement of activity in favour of Deutsche mark instruments. In Asia, there was a moderate expansion in Hong Kong, but a decrease in turnover in Singapore and Japan, with, in the case of the latter, the low level of yen interest rates limiting hedging needs. Elsewhere, turnover of small-sized currency and interest rate contracts on Brazilian exchanges contracted sharply, as a result of an easing of monetary policy (which reduced the demand for instruments circumventing compulsory deposit requirements) and a decline in currency uncertainty.

… but more commodity trading

LIFFE increases its market share

Exchanges under strong pressure to innovate

Competitive pressures on exchanges showed no signs of abating, maintaining the incentive to innovate. With interest rate products reaching a plateau on well-established markets and the bulk of currency-related business continuing to take place off-exchange, older exchanges placed greater emphasis on designing equity instruments, as illustrated by the large number of new contracts on indices, the extension of the flexible option concept and the introduction of contracts on

Markets for selected financial derivative instruments

Instruments	Notional amounts outstanding at end-year					
	1991	1992	1993	1994	1995	1996
	in billions of US dollars					
Exchange-traded instruments	3,519.3	4,634.4	7,771.1	8,862.5	9,188.2	9,884.6
Interest rate futures	2,156.7	2,913.0	4,958.7	5,777.6	5,863.4	5,931.1
Interest rate options[1]	1,072.6	1,385.4	2,362.4	2,623.6	2,741.8	3,277.8
Currency futures	18.3	26.5	34.7	40.1	38.3	50.3
Currency options[1]	62.9	71.1	75.6	55.6	43.2	46.5
Stock market index futures	76.0	79.8	110.0	127.3	172.2	198.6
Stock market index options[1]	132.8	158.6	229.7	238.3	329.3	380.2
Over-the-counter instruments[2]	4,449.4	5,345.7	8,474.6	11,303.2	17,712.6	24,292.0
Interest rate swaps	3,065.1	3,850.8	6,177.3	8,815.6	12,810.7	..
Currency swaps[3]	807.2	860.4	899.6	914.8	1,197.4	..
Other swap-related derivatives[4]	577.2	634.5	1,397.6	1,572.8	3,704.5	..

[1] Calls and puts. [2] Data collected by ISDA only; the two sides of contracts between ISDA members are reported once only. [3] Adjusted for reporting of both currencies; including cross-currency interest rate swaps. [4] Caps, collars, floors and swaptions.

Sources: Futures Industry Association, various futures and options exchanges, ISDA and BIS calculations. Table VII.5

individual stocks. Emerging market products were much in evidence, but, apart from those introduced by exchanges recently opened (e.g. in Korea and Malaysia), most were launched by US exchanges. However, save for the rapid acceptance of contracts on the Mexican peso, trading in such instruments failed to gain momentum. Established exchanges also sought to enhance trading in existing products through an extension of trading hours, new expiry cycles and reduced trading fees, and they continued to list new contracts replicating some of the characteristics of OTC instruments.

The challenge created by EMU …

In Europe, the perceived need to secure a strong competitive position ahead of the profound restructuring expected from the introduction of the single European currency was addressed through the creation of official and private task forces to analyse the implications of EMU and make recommendations aimed at strengthening the standing of local market-places. Among the actual EMU-related

Financial derivative instruments traded on organised exchanges

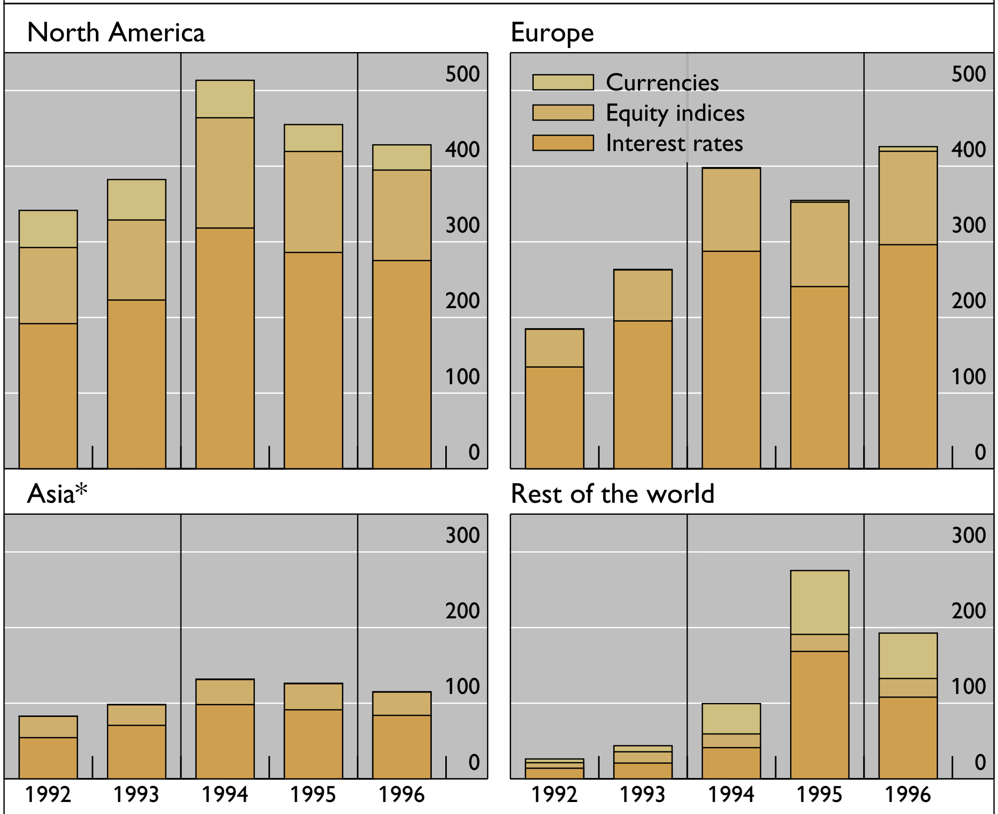
Instruments	Turnover in notional amounts						Notional amounts outstanding at end-1996
	1991	1992	1993	1994	1995	1996	
	in trillions of US dollars						
Interest rate futures	99.6	141.0	177.3	271.7	266.3	253.5	5.9
On short-term instruments	75.2	113.3	138.9	222.1	218.2	204.8	5.5
of which: Three-month eurodollar rates[1]	*41.7*	*66.9*	*70.2*	*113.6*	*104.1*	*97.1*	*2.1*
Three-month euroyen rates[2]	*12.9*	*14.0*	*24.6*	*44.2*	*46.8*	*34.2*	*1.4*
Three-month euro-DM rates[3]	*3.2*	*7.5*	*12.9*	*18.5*	*18.4*	*23.9*	*0.6*
Three-month PIBOR	*2.9*	*5.8*	*10.4*	*12.0*	*15.9*	*13.7*	*0.2*
On long-term instruments	24.3	27.7	38.5	49.6	48.2	48.7	0.4
of which: US Treasury bonds[4]	*6.9*	*7.1*	*8.0*	*10.1*	*8.7*	*8.5*	*0.0*
Japanese government bonds[5]	*2.0*	*2.8*	*3.2*	*4.6*	*3.4*	*3.4*	*0.1*
German government bonds[6]	*10.3*	*9.7*	*14.2*	*13.8*	*16.2*	*12.3*	*0.1*
French government bonds[7]	*2.0*	*2.9*	*4.2*	*8.1*	*8.0*	*9.3*	*0.0*
Interest rate options[8]	17.3	25.5	32.8	46.7	43.3	41.0	3.3
Currency futures	2.7	2.3	2.8	3.3	3.3	3.0	0.0
Currency options[8]	1.5	1.4	1.4	1.4	1.0	0.9	0.0
Stock market index futures	7.8	6.0	7.1	9.3	10.6	13.1	0.2
Stock market index options[8]	6.4	5.7	6.3	8.0	9.2	10.1	0.4
Total	135.2	181.9	227.8	340.4	333.8	321.7	9.9
In North America	*70.8*	*102.1*	*113.1*	*175.9*	*161.1*	*154.3*	*4.8*
In Europe	*26.7*	*42.8*	*61.4*	*83.9*	*87.5*	*100.3*	*2.8*
In Asia[9]	*37.7*	*36.9*	*53.0*	*77.8*	*81.1*	*63.8*	*2.2*
Other	*0.0*	*0.1*	*0.3*	*2.9*	*4.2*	*3.3*	*0.1*

[1] Traded on the Chicago Mercantile Exchange – International Monetary Market (CME-IMM), Singapore International Monetary Exchange (SIMEX), London International Financial Futures and Options Exchange (LIFFE), Tokyo International Financial Futures Exchange (TIFFE) and Mid-America Commodity Exchange (MIDAM). [2] Traded on the TIFFE, SIMEX and LIFFE. [3] Traded on the Marché à Terme International de France (MATIF), LIFFE, CME-IMM and SIMEX. [4] Traded on the Chicago Board of Trade (CBOT), MIDAM, LIFFE, New York Futures Exchange (NYFE) and Tokyo Stock Exchange (TSE). [5] Traded on the TSE, LIFFE, CBOT and SIMEX. [6] Traded on the LIFFE and Deutsche Terminbörse (DTB). [7] Traded on the MATIF. [8] Calls and puts. [9] Including Australia and New Zealand.

Sources: Futures Industry Association, various futures and options exchanges and BIS calculations. Table VII.6

Turnover in financial futures and options traded on organised exchanges

In millions of contracts



* Including Australia and New Zealand.

Sources: Futures Industry Association, national data and BIS. Graph VII.7

… prompts new initiatives …

measures taken were the redenomination of contracts in euros, the launching of new interest rate instruments to improve coverage of the various segments of domestic yield curves (including money market and bond contracts on German rates) and to allow spread trading, and adjustments to existing contracts (such as the reduction in the coupon on the French government bond contract). The size of the prospective euro-denominated bond market could offer new trading opportunities, but there is unlikely to be a demand for as wide a range of national bond futures as currently exists. Consolidation in short-term interest rate products will probably be even more pronounced, since these are based on generic interbank rates and are therefore less able to support more than a few pan-European contracts. From the very beginning, LIFFE has banked on the role of London as a global financial centre and its weight as the most active and diversified European exchange to ensure its continued dominance once the euro is introduced. The DTB is relying on the benchmark nature of German government debt, its status as the biggest electronic exchange in Europe and the high volume of its equity-related business, which will be somewhat less affected by intra-European competition. The MATIF is emphasising the sophistication and liquidity of French debt markets, benefiting from an official commitment to the early conversion of all underlying instruments into euros. Ultimately, however,

… and heightens competition in Europe …

success will depend on a complex set of interrelated factors such as the importance of the local financial system, the size and liquidity of the underlying instruments, the cost and efficiency of trading and clearing mechanisms and the overall regulatory and fiscal framework.

… but obscures the challenge posed by OTC markets

The importance of strategic moves in connection with EMU last year may have obscured an equally fundamental challenge facing exchanges, namely the loss of business to the OTC market. The perception of this threat was most evident in the United States, where exchanges stepped up the innovative drive to enhance their competitiveness vis-à-vis OTC instruments. Contracts providing for the trading of interest rate differentials were launched, as were, for the first time, flex options on single US equities. In addition, US exchanges announced new cross-market products and services, such as the listing of equity warrants issued by intermediaries and a facility for the simultaneous trading and clearing of cash and exchange-traded derivative instruments. At the same time, pressures to introduce facilities for the management of swap collateral intensified, with the opening of such a service by the banking subsidiary of a euromarket clearing house.

Links remain at the core of competitive strategies …

Efforts to consolidate market share or capture additional trading demand also involved regional or intercontinental links, through different combinations of trading systems and clearing arrangements. For example, the CME introduced euroyen futures as part of its long-standing mutual offset agreement with SIMEX, while LIFFE and TIFFE agreed on an open outcry/electronic link to trade similar contracts. The prospect of EMU also encouraged intercontinental alliances based primarily on revolving open outcry trading arrangements. Thus, the MATIF signed an agreement with the CME for the trading of its interest rate contracts on the CME's floor and LIFFE announced that it would allow CME members to trade its three-month euromark contracts on its own floor. In addition, several European exchanges entered into partnerships with local stock markets and/or promoted regional integration through the establishment of new links.

… but raise new issues for trading and clearing mechanisms

Certain other developments, however, pointed to the difficulty of structuring agreements that are satisfactory to all partners in a highly competitive environment, as illustrated by the abandonment last year of the project for a joint electronic platform to trade cash and derivative instruments between the DTB and the MATIF, and the announcement early this year by the MATIF and the CME that they were ending their participation in the current version of Globex, the multilateral electronic trading system. Exchanges are reluctant to develop alliances that could deprive them of the control or flexibility deemed necessary in designing new products and trading technologies. The various uses to which electronic systems can be put have led even the staunchest defenders of open outcry to re-examine their potential benefits. In the United States, in particular, such mechanisms no longer seem to be treated as mere after-hours supplements to open outcry, but as an integral part of new trading systems linking cash and derivatives markets. They also form the basis of some exchanges' global strategy, as in the DTB's expansion of remote access to its electronic system through the installation of terminals outside Germany and an extension of business hours.

Some evidence of market retrenchment

In contrast to the various initiatives aimed at expanding product lines and trading links, there was some movement in the direction of retrenchment. In particular, the low level of dealers' margins in relation to exchange fees maintained the pressure to reduce trading costs through a rationalisation of services. Important cost reduction measures included an agreement between the CBOT and the CME to establish a common banking facility and the merger between LIFFE and the London Commodity Exchange.

Over-the-counter instruments

Preliminary data released by the International Swaps and Derivatives Association (ISDA) indicate that the notional principal of swap and swap-related positions outstanding rose by 37% in 1996. Although this was less than the 57% rate of increase recorded in 1995, it remained well above that posted by exchanges. According to detailed data available for the first half of the year, interest rate swaps experienced the most rapid expansion, followed by interest rate options and currency swaps. Interest rate swaps in currencies other than the US dollar continued to grow at a faster pace than dollar transactions, with business in the yen and the Deutsche mark being particularly buoyant. Keen competition resulting from high global liquidity, the entry of new participants, improvements in market infrastructure (in areas such as documentation and collateralisation) and greater hedging efficiency all contributed to deepening the market. While intermediation margins generally continued to narrow, conditions varied between market segments. In the US dollar sector, evidence was mixed. Strong issuance of fixed rate securities, intense asset-swapping and an improvement in the credit quality of core participants were largely responsible for maintaining spreads over benchmarks at historically low levels; but activity was reportedly dampened by the flatness of the yield curve, the narrow range of interest rate movements and the proposed introduction of new US accounting standards for derivatives. In Europe, a significant volume of business was related to new issuance, the convergence of continental interest rates or the anticipated flattening of yield curves. In Japan, the process of financial market liberalisation, the search for higher yields and the funding difficulties faced by some financial institutions prompted renewed interest in risk management products. In particular, the sharp increase in dual-currency issues launched on the Samurai market and the persistence of the so-called Japan premium led to active trading in cross-currency and basis swaps involving the yen.

Further deepening of the interest rate swap market …

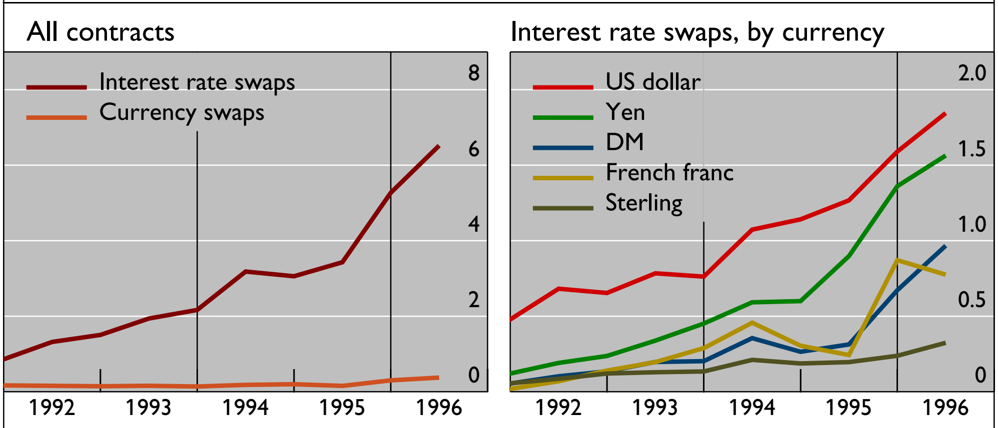
… with longer duration and more spread trading

Although complex yield-enhancing instruments returned to favour, greater interest rate risk appears to have been taken on more through an extension of duration or plays on interest rate differentials than through higher leverage. Higher yields were also sought through structures enabling investors to move down the credit spectrum, such as asset swaps. There were, nevertheless, reports that corporate end-users remained cautious in their approach to exotic products. This may have inhibited intermediaries' drive to create new instruments, as, save for the development of various types of volatility and overnight swaps, few products attracted the attention of market participants. Entities involved in these markets also seem to have devoted more resources to improving the quality of risk management systems.

The search for higher yields and the resulting broadening of the range of market participants generated greater interest in active credit risk management.

New interest rate and currency swaps

Notional amounts; half-yearly turnover, in trillions of US dollars



Sources: ISDA and BIS. Graph VII.8

Development of credit derivatives …

In this context, the concept of credit derivatives, which had been introduced by financial institutions in the early 1990s in an attempt to apply to credit risk the sophisticated techniques already used for the management of market risk, gained wider acceptance. Insofar as they provide a more systematic way of evaluating and transferring credit risk, such instruments offer financial institutions a useful tool for the management and optimisation of asset risk profiles. However, because of their novelty, credit derivatives are facing a number of constraints relating to market practices, accounting treatment and regulation. The customised nature of transactions and the lack of standardisation have also hampered liquidity, making it difficult to accurately price and hedge transactions. At the same time, there was continuing interest in structures providing access to the core segment of the swaps market, as reflected in the introduction of new triple-A derivatives subsidiaries. However, not all new credit enhancement facilities involved separately capitalised entities, which entail high capital and start-up costs and appear less suitable for infrequent users of swaps.

… and of new currency instruments

With regard to currency products, the low level of volatility prevailing on the foreign exchange market induced dealers to offer a variety of high-payout instruments based on barriers or trading ranges (see Chapter V). However, the fall of the dollar against the yen and the Deutsche mark in the summer again illustrated the potential pitfalls involved in using such instruments, with dealers suddenly having to cover their positions as parities moved outside their ranges. It was also reported that some intermediaries had suffered substantial losses on range trades because of a significant decline in volatility since 1995, when a large number of contracts had been struck. There was also growing investor interest in forwards and options on the currencies of Asian emerging market and Eastern European countries as well as in currency swaps. Non-deliverable forwards, which enable users to hedge currency exposure when regulatory restrictions preclude standard forward contracts, were particularly popular.

In the market for warrants, although the total dollar value of new offerings nearly halved compared with 1995 (from $161.2 billion to $87.1 billion), there was a greater number of separate issues. The low level of European interest

Lively interest in equity products

rates and the strong performance of European equity markets, combined with a string of privatisations, generated lively interest in equity products. As a result, instruments based on equities accounted for 75% of all new warrant issues, with a growing proportion of offerings made on narrowly focused indices or individual shares. Warrants are highly flexible securitised derivatives which allow intermediaries to rapidly tailor specific features in response to new developments. The climate in equity markets last year was conducive to the constant introduction of new issues. However, a flurry of offerings may have considerably outpaced demand, giving an exaggerated impression of actual transactions.

Developments in market infrastructure

Globalisation fostered by liberalisation measures …

Intense competitive pressures once again led regulatory authorities to further liberalise their financial systems last year, fostering the process of structural convergence taking place between financial systems in the main economic blocs. Thus, there was a major enlargement of repo markets, with, for example, an extension of the Bank of England's money market activities to include gilt repos and a greater number of market participants, the exemption of repos from minimum reserve requirements in Germany and, more recently, in France and the introduction of a more liberal system for such instruments in Japan. The progressive implementation in national legislation of European Union financial directives contributed to the harmonisation of market and regulatory structures. Following a series of measures further liberalising domestic and euroyen bond issuance, the Japanese Prime Minister announced in November a comprehensive five-year package aimed at bolstering the Japanese financial system and bringing its supervisory, accounting, legal and tax framework more into line with that in the rest of the industrial world. The "Big Bang" initiative proposed a concrete plan of action, which includes, inter alia, the removal of functional barriers between banks, securities houses and insurance companies. In the United States, the Federal Reserve considered a further relaxation of the conditions under which subsidiaries of US bank holding companies can underwrite securities. Emerging market countries also liberalised their financial systems, although heavy capital inflows led to the introduction of temporary restrictive measures in some of them (e.g. Brazil and Thailand).

… as well as new regulatory initiatives …

At the same time, various measures were adopted to strengthen the regulatory structure of financial markets. While several of these were aimed at reducing systemic risk through improvements to the payment and settlement infrastructure, one of the main thrusts of policy continued to be the development of a framework capable of dealing more flexibly with financial innovation (see Chapter VIII). Concrete initiatives included steps to encourage the flow of information at the micro and macro levels, to harmonise rules between markets, to develop more meaningful and transparent accounting standards and to establish adequate documentation for new instruments.

… for sharing information …

In the area of information, there was growing adherence to the Memorandum of Understanding concluded in March 1996 in the wake of the collapse of Barings in order to foster the sharing of information among exchanges and clearing houses. The original accord was supplemented by an agreement with regulators covering situations in which cooperation within the industry might be hampered for legal or other reasons. Similarly, in May 1996, the Basle Committee on Banking Supervision and the International Organization of Securities Commissions (IOSCO) announced a joint initiative for the exchange of information between banking and securities supervisors of diversified financial groups. The follow-up survey conducted by the Basle Committee and IOSCO on disclosure of trading and derivatives-related business by internationally active banks and securities firms, and the decision by the Group of Ten central banks to collect regular market statistics on OTC derivatives, provided other illustrations of the ongoing efforts at the official level to promote transparency. Harmonisation was fostered by the endorsement in June by a large number of banking supervisors of a report prepared by the Basle Committee and the Offshore Group of Banking Supervisors designed to strengthen implementation of the 1992 Minimum Standards for the Supervision of International Banking Groups and their Cross-Border Establishments. These, as well as other, initiatives are covered in greater detail in "Activities of the Bank" at the end of this Report. At the same time, private and semi-official initiatives were taken in Japan and the United States to promote mark-to-market accounting rules for derivatives, while industry groups such as ISDA developed standard documentation for repos, certain swap transactions and credit derivatives.

… for promoting disclosure …

Greater reliance on market forces than on rigid supervisory prescriptions has meant that a correspondingly larger share of responsibility has fallen on the financial industry. A primary goal of official initiatives last year was to enhance the role played by risk management systems in meeting regulatory risk control objectives. Along with calls for improved voluntary disclosure of information, one important step in this direction was the amendment extending the Capital Accord of July 1988 to market risk and allowing banks to calculate their capital charges for market risk according to internal models as an alternative to the standard method. The pre-commitment approach being considered in the United States would go one step further by leaving it to individual financial institutions to "pre-commit" an amount of capital deemed to be sufficient to cover any potential trading losses over a given time horizon, subject to a penalty if losses were to exceed the pre-committed amount. The emergence of a market for credit derivatives has added to the challenge of developing a consistent regulatory framework. Following the release by the US authorities in August 1996 of documents which for the first time addressed the regulatory issues raised by credit derivatives, the Bank of England published a discussion paper in November proposing a regulatory framework for this market which was in line with the approach adopted by the Basle Committee and the European Union for longer-established cash and derivative instruments. A more recent consultative paper published by the Bank of England aims at developing further the risk-based approach to banking supervision through a more flexible risk assessment process based on the overall business risk profile of an institution and on the evaluation of its internal control measures.

… and for enhancing firms' risk management systems

Towards a more flexible regulatory risk assessment process …

In this search for a viable market-oriented, risk-based official framework, the identification by market participants and regulators of underlying market trends and of the sources of potential systemic disturbances is assuming greater importance. The foregoing review of developments in the international financial markets last year has highlighted the continuing rapid growth of collateralised lending and OTC derivatives business. The resulting broadening spectrum of actors in the wholesale markets and the intermingling of exposures are raising a number of questions concerning the nature and role of core market participants, the increasing acceptance of lower-rated underlying instruments and counterparties, the potential impact on the financial system of the failure of one or more large participants, and the adequacy of firms' present management structure. These developments underline the need for adjustments to the existing regulatory framework. At the current stage of the financial cycle, characterised by ample liquidity and investors' pursuit of higher yields, the potential for more varied and subtle types of risk that are not adequately captured by models and risk assessment procedures cannot be ignored. This puts a premium on greater prudence and accountability on the part of individual market participants.

… which puts a premium on accountability of market participants