

VII. The financial sector

Highlights

Against a favourable general economic background, financial companies across the industrialised world registered another year of stronger overall performance. Banking and insurance sector balance sheets strengthened on the back of continuing profitability, access to cheap funding and lower credit losses. A number of structural improvements also contributed to a better outlook in jurisdictions that had experienced strains.

While the financial sector generally proved resilient to the slowdown that followed the bursting of the technology bubble, the legacy of the late 1990s had a lingering influence on the condition and behaviour of financial firms. On the one hand, with the memory of outsize rates of return partly shaping expectations, investors' search for yield drove an aggressive pricing of risk. On the other hand, intensified official scrutiny of business practices confronted a number of firms with the consequences of their earlier actions, often dating back to the boom years.

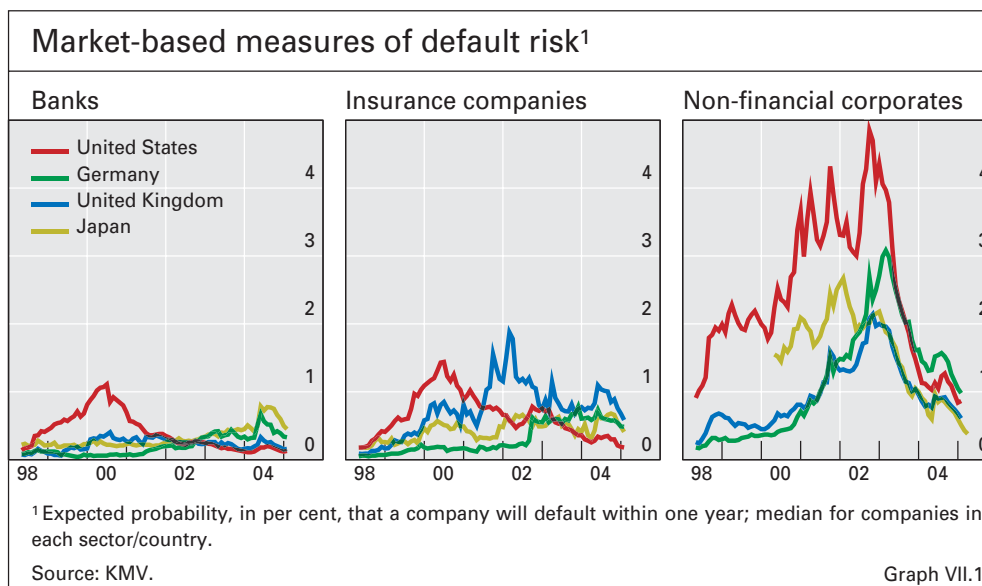
The main challenges ahead remain macroeconomic in nature. Healthy capital positions provide comfort that financial systems are well cushioned against immediate risks to their profits. However, longer-term challenges could come in the form of higher interest rates, posing risks to profitable strategies that exploit low funding costs and are premised on strong consumption growth. Increased exposure to real estate could also become a potential source of strains further down the road, especially if a price correction were to be associated with a general slowdown in household spending.

These general economic trends highlight the relevance of a macroprudential approach to financial stability. Arguably, as firms' ability to manage risk at the micro level improves and as low and stable inflation expectations become more firmly established, the main risks to the financial sector could stem from financial excesses linked to a generalised complacency towards risk reinforced by a benign short-term outlook. The identification of such risks and the calibration of prudential responses to them are central to current efforts by policymakers responsible for financial stability.

Performance of the financial sector

The performance of the financial sector has been a bright spot in the economic landscape over the past several years. In most countries, positive results posted by financial firms, especially banks, provided an unexpected counterpoint to the general economic slowdown, the surge in corporate

Continuing strength
in the financial
sector



defaults and the decline in equity prices early in the current decade (Graph VII.1). Current profitability levels are less surprising against the background of an improved macroeconomic outlook and abundant liquidity. A resilient financial sector remains a key source of strength at the current juncture.

Commercial banking

The period under review saw a continuation of recent positive trends in the performance of commercial banks in North America and Europe. Profitability

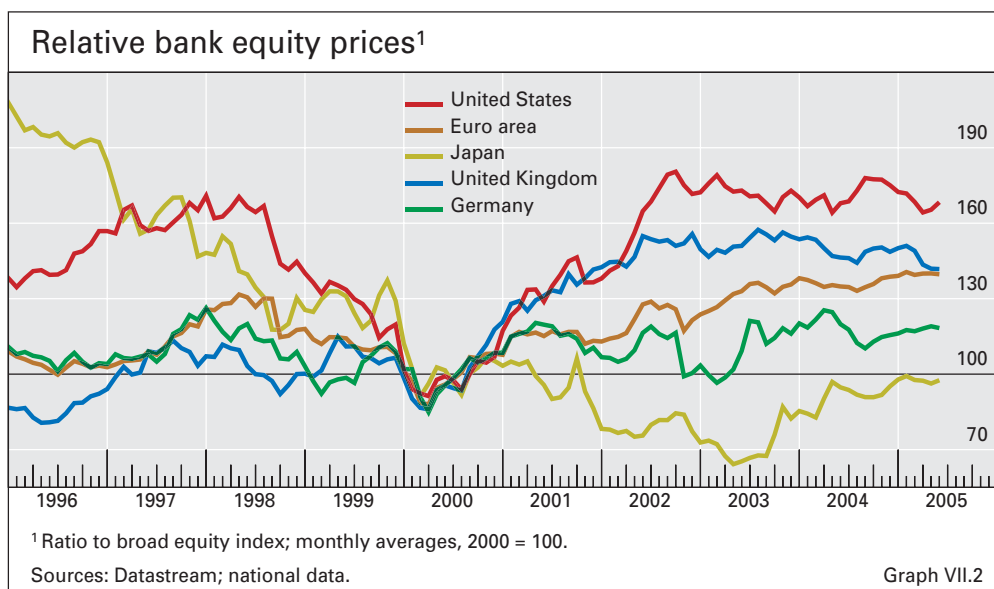
Profits improved for US and European banks due to ...

Profitability of major banks¹												
As a percentage of total average assets												
	Pre-tax profits			Provisioning expenses			Net interest margin			Operating costs		
	2002	2003	2004	2002	2003	2004	2002	2003	2004	2002	2003	2004
United States ² (12)	1.89	2.10	1.99	0.84	0.47	0.36	3.45	3.21	3.12	3.28	3.16	3.48
Canada (5)	0.61	1.00	1.19	0.58	0.23	0.06	2.07	1.99	1.92	2.75	2.78	2.77
Japan (11)	-0.55	-0.47	0.29	1.14	0.75	0.56	1.13	1.21	1.11	1.20	1.35	1.12
Australia (4)	1.49	1.49	1.46	0.26	0.21	0.17	2.16	2.13	2.05	2.04	2.30	2.55
United Kingdom ³ (9)	1.06	1.22	1.15	0.37	0.33	0.23	2.15	1.96	1.56	2.26	2.04	2.07
Switzerland ⁴ (5)	0.12	0.59	0.68	0.15	0.03	-0.01	1.02	0.97	0.82	2.55	1.96	1.65
Sweden (4)	0.69	0.77	0.98	0.09	0.10	0.03	1.48	1.44	1.35	1.44	1.37	1.24
Austria (2)	0.46	0.53	0.69	0.39	0.36	0.31	1.80	1.71	1.80	1.92	1.85	1.84
Germany ⁵ (9)	-0.01	-0.12	0.09	0.48	0.30	0.15	0.80	0.81	0.71	1.37	1.26	1.35
France ⁶ (7)	0.45	0.59	0.67	0.15	0.17	0.08	0.62	0.80	0.72	1.49	1.50	1.41
Italy (6)	0.67	1.03	1.03	0.91	0.68	0.49	3.07	2.82	2.24	3.33	3.22	2.73
Netherlands (3)	0.46	0.65	0.72	0.26	0.20	0.10	1.62	1.62	1.53	1.98	1.85	1.82
Spain (5)	1.01	1.29	1.17	0.50	0.44	0.35	2.73	2.45	2.17	2.36	2.13	1.79

¹ The figures in parentheses indicate the number of banks included. ² 2004 figures relate to 11 banks only. ³ 2004 figures relate to seven banks only. ⁴ 2004 figures relate to three banks only. ⁵ 2004 figures relate to six banks only. ⁶ 2004 figures relate to three banks only.

Source: Fitch Ratings.

Table VII.1



improved, albeit at a somewhat more moderate pace (Table VII.1). Bank share prices, which had outperformed broad equity market indices in previous years, preserved their gains even as the market recovered (Graph VII.2).

The buoyancy of revenues varied across business lines. Household financing continued to represent a stable source of interest and fee income for banks. By contrast, business lending remained subdued, as companies made further efforts to rebuild their balance sheets and to absorb the capital stock overhang dating back to the period of the technology bubble.

... buoyant household financing ...

Lower costs remained an important driver of profitability. A more favourable credit environment translated into a decline in provisions, while write-offs in many countries fell to the lowest levels in recent memory. Rationalisation of cost structures, more flexible strategies and the use of technology continued to produce efficiencies. Many banks announced plans for further reductions in their workforces through outsourcing and the merging of business lines.

... lower costs ...

Consolidation activity picked up, motivated by the strategic objectives of improving cost efficiencies and strengthening retail franchises. The majority of transactions involved small and medium-sized institutions seeking an increase in scale that would allow a more efficient deployment of technology and cut costs by eliminating overlaps. Scepticism has grown among industry observers about the functionality of the conglomerate model, which had sought to create cross-sectoral synergies and opportunities for cross-selling products. The managements of such firms formed in the late 1990s often found the task of blending diverse corporate cultures and overseeing a sprawling institution more challenging than they had anticipated. European banks' interest in cross-border transactions intensified. Cross-border deals took place primarily on the periphery of the euro area, involving banks in the Nordic countries, the United Kingdom and Ireland. More recently, a number of announced transactions have involved banks within the single currency area and are expected to trigger a new wave of consolidation in the area.

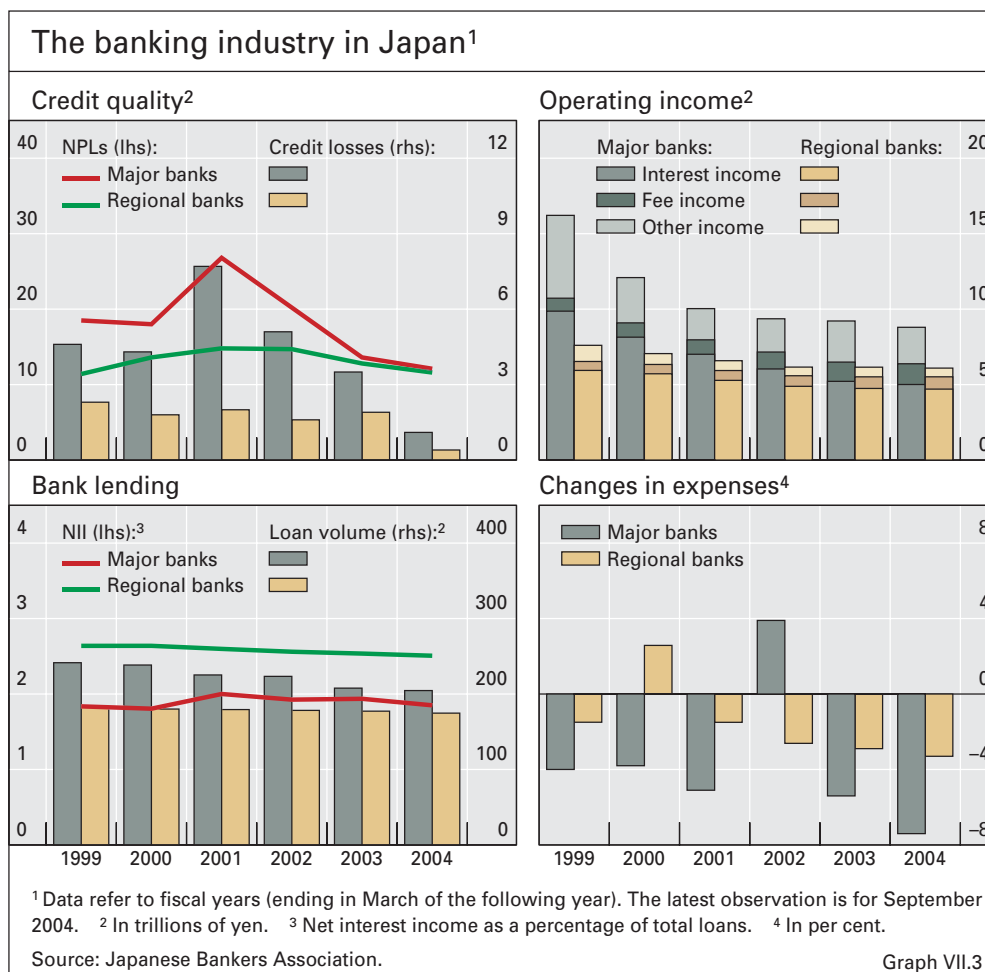
... and consolidation

In Japan, systemic risks receded ...

The Japanese banking sector made encouraging progress last year. For the first time since 1993, Japanese banks were able to post positive net income. Their efforts to remove non-performing loans (NPLs) from their balance sheets through write-offs and sales were also helped by the improved condition of corporates and the resulting upward migrations of doubtful loans. By March 2005, the ratio of NPLs to total assets for major banks had fallen to 2.9%, bettering the regulator's target of 4.2%. This, allied with stronger operating results, allowed major banks to strengthen their capital base by paying back public funds and writing back deferred tax assets, which have fallen to below 30% of Tier 1 capital compared with 55% in 2003.

... but profits have remained low ...

Despite these encouraging developments, the Japanese banking sector still faces a number of important challenges. The restructuring progress has so far been uneven, with regional banks lagging behind major banks in reducing their NPL burden and strengthening their capital ratios (Graph VII.3). While this might reflect in part weaker incentives, given their relatively more stable revenues and higher margins, it has prompted the attention of regulators. More generally, the biggest challenge for the banking sector as a whole remains long-term profitability, which is low by international standards. Even major banks, so far the most aggressive in cost cutting, have made little progress in shoring up income. Since the main wave of consolidation in 2000, Japanese



banks have managed to cut the number of branches by about 10% and the headcount by over 20%. Yet bank lending has continued to decline in the face of weak demand from the corporate sector. In addition, intensified competition among financial institutions has caused net interest margins to narrow further.

To offset the continuing weakness in traditional lines of business, major Japanese banks have started to seek new opportunities by increasing fee-based activity, retail business and lending to small firms. Recent acquisitions of leading consumer credit and securities firms by major banks are likely harbingers of a trend towards financial superconglomerates. Similarly, the desire of two of the largest banks to merge with a third was primarily motivated by its large retail customer base. However, it remains to be seen whether this trend will achieve synergies and improve operating results.

... leading to changes in business strategies

Reduced public sector support

A number of recent developments confirmed the general trend of reduced public sector influence on the corporate governance of financial institutions. Legislative and regulatory developments in Japan, Germany and the United States pointed to receding levels of government support, which had hitherto helped boost balance sheet growth of sponsored institutions and frustrated competition.

In September 2004, the Japanese government decided on a plan to phase in the privatisation of Japan Post, the banking and insurance business of the postal system, over a 10-year period starting in 2007. Japan Post is the largest financial institution in the world, with ¥400 trillion in assets, and has a dominant share of retail deposits, owing in part to its public sector status. Generous concessions, in the form of corporate tax and deposit insurance premium waivers, have allowed it to compete favourably in the credit markets, contributing to the compressed lending margins in the country. The institution plays an important role in state financing, with more than ¥160 trillion of deposits with the fiscal loan fund and holdings of about one quarter of total outstanding Japanese government bonds (more than twice the combined JGB holdings of the private banking sector). While privatisation will be an important step towards improving competitiveness in the Japanese financial system, some uncertainty remains as to how the structure of the balance sheet might be affected by the transition to private ownership.

Privatisation of Japan Post

Liabilities of German Landesbanken issued after July 2005 will no longer carry the credit guarantee of the government. As a result, these institutions will play their role as wholesale lenders and central clearing institutions for the country's savings banks on the basis of funding costs that better reflect their intrinsic financial strength. In anticipation of the preannounced measure, some smaller institutions have merged, and others have moved to strengthen their balance sheets. Admittedly, the withdrawal of the guarantees does not by itself alter the ownership structure of these institutions. In fact, in many cases the strengthening of their balance sheets will take the form of a capital injection by their public sector owners, and markets are likely to continue to price in implicit state support. It does, however, call into question the viability

Removal of state guarantees for German Landesbanken

of their business model predicated on low financing costs, as the ratings for the non-guaranteed obligations are lower than those that are still covered by the public guarantee.

Increased scrutiny
of US GSEs

Government-sponsored enterprises (GSEs) in the United States attracted increased regulatory scrutiny last year. Fannie Mae had to restate profits and scale down the growth of its balance sheet as a result of an investigation into its accounting practices. In addition, there was renewed discussion regarding changes in the overall framework for GSEs aimed at increasing the level of public oversight. The proposals contemplate a new regulatory agency with the authority to liquidate a GSE, raise capital standards and approve new products. Moreover, under the new framework, GSEs would be required to adhere more closely to their statutory role in providing liquidity to the market for securitised mortgages and avoid creating distortions in the primary mortgage market through their activities. A limit on the mortgage holdings of GSEs could, if implemented, encourage the entry of other market participants.

Insurance companies

Developments in the insurance sector during the period under review were more mixed. In general, the non-life sector had a less easy year than the life sector, but both sectors demonstrated an enhanced capacity to deal with risks.

Life insurance in a
healthier position

The financial strength of life insurers improved. On the premiums side, underwriting income picked up substantially. Profitability was also boosted by better investment results as equity markets recovered, by successful efforts to reduce costs and by lower guaranteed returns on new policies. Even so, a low interest rate environment implied that solvency pressures did not disappear. A longer-term challenge for life insurers is rising life expectancy. Firms increasingly sought to effectively hedge this risk by purchasing securities such as long-term bonds and longevity bonds.

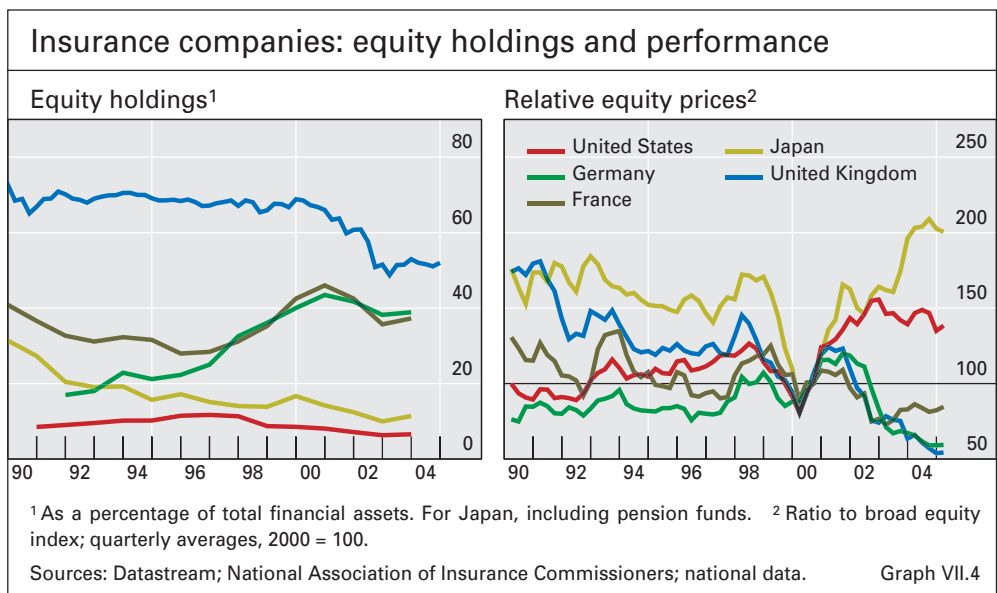
Higher competitiveness in the sector has spurred consolidation. In particular, acquisitions were widespread in the US life insurance and health care sectors in 2004. In Canada, ongoing consolidation among life insurers in the last decade has resulted in the three largest companies' market share rising to more than 70%.

Non-life companies
showed resilience

The non-life insurance sector had to deal with record claims related to a number of natural catastrophes in 2004. In particular, four Caribbean hurricanes accounted for the majority of claims to US property and casualty insurers. Yet the sector still managed to post modestly improved underwriting performance in 2004 relative to 2003, in part because cost sharing with two government funds in Florida reduced the claims burden. Moreover, the firming of premiums over the past few years provided a partial offset in the form of higher income. Similarly, the reinsurance industry in general experienced a slight deterioration in the underwriting profitability of the property and casualty reinsurance business in 2004. However, higher investment income and stronger performance in life reinsurance resulted in slightly improved profits overall.

Challenges from
regulatory
scrutiny ...

Recent investigations into insurance broking have called into question many established practices. As a result, a number of brokers posted losses and



others embarked on a revision of their business model. Likewise, investigations into insurance accounting practices have spurred a review of whether reinsurance contracts of limited risk transfer value have been inappropriately used to smooth insurers' earnings. The potential damage to the insurers' franchise value arising from these investigations is, however, likely to be limited, as evidenced by their stock prices (Graph VII.4).

The potential impact of changes in the accounting and regulatory framework presents some challenges to the insurance sector. Phase I of the implementation of the International Accounting Standards Board's (IASB) standards will apply fair value to insurance assets, while liabilities will continue to be recorded at historical cost. The mismatch may in certain cases increase the volatility of financial statements. Phase II will extend the use of fair value accounting to insurance liabilities. For life insurers, this implies that the recognition of embedded options and guarantees attached to long-term policies might also significantly affect the value of liabilities. The Solvency II framework to be adopted for EU insurers emphasises risk-based capital requirements. The new framework is likely to induce European insurers to hold more capital, focus more on capital-efficient business lines and purchase more reinsurance. In terms of implementation, a clear link needs to be established between financial accounting, based on the IASB standards, and regulatory accounting under the Solvency II framework, as is also the case for banking regulation.

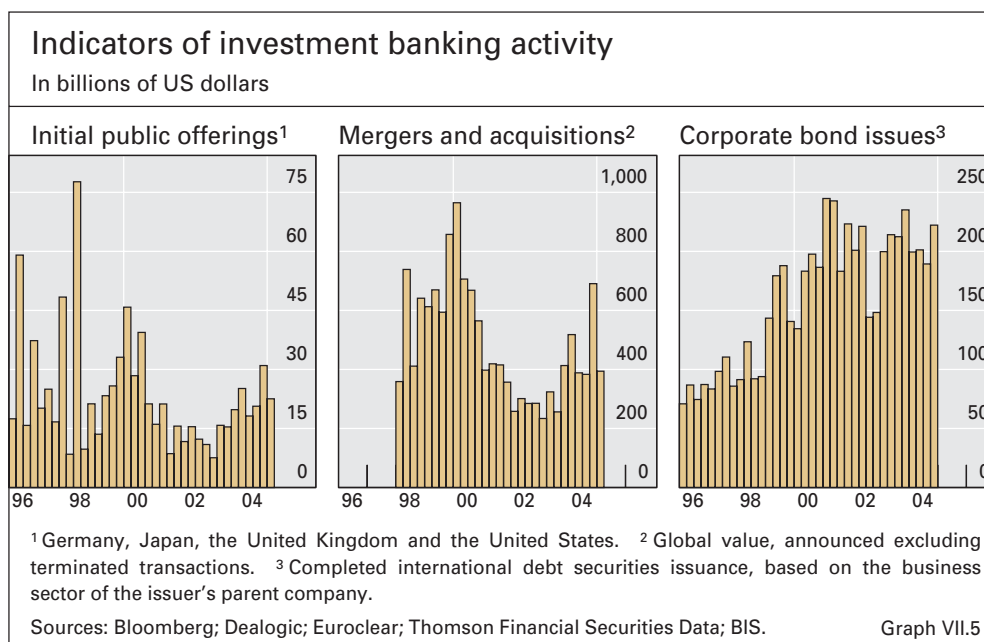
... new accounting rules ...

... and a new capital framework

Investment banking

Top-tier investment banks continued to turn in record profits during the period under review. Trading revenue was a strong contributor to earnings growth in the earlier part of the period. However, reduced market activity and lower price volatility in subsequent months translated into lower earnings from trading, in particular from fixed income markets. In recent quarters, a pickup in other types of capital market activity, such as securities underwriting and merger and

Record profits



acquisition advisory business, provided an offsetting boost to income. The rise in M&A activity, which was especially pronounced in the United States, is expected to continue as corporations seek to put their increased cash holdings to work (Graph VII.5).

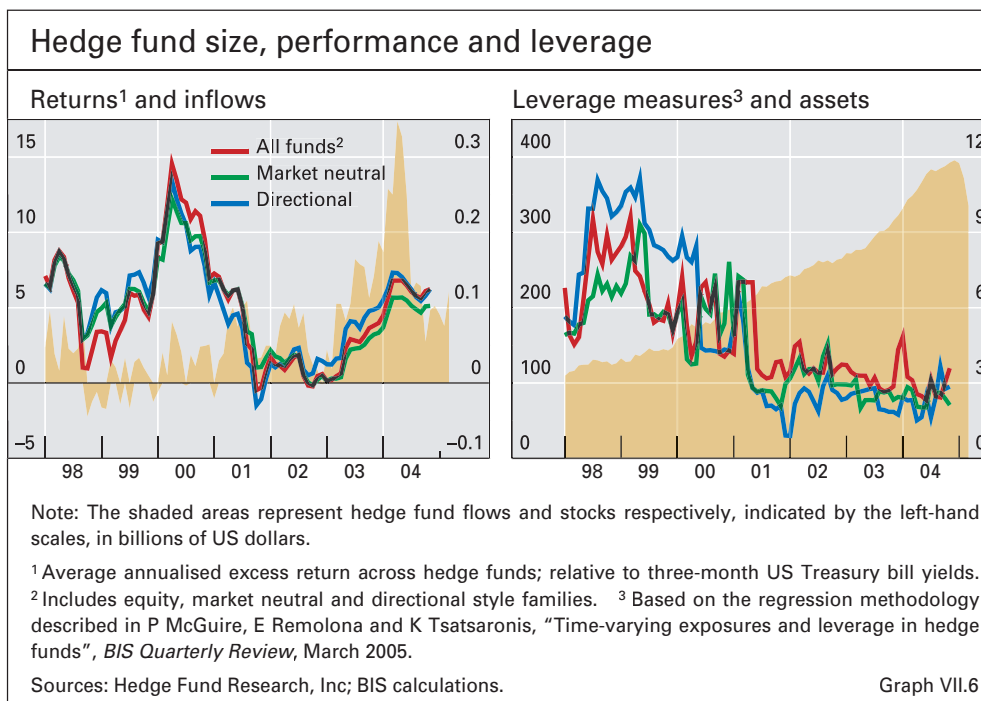
Competition

An increasingly international marketplace favours players with a strong international presence offering a broad portfolio of wholesale services, ranging from funding to the provision of advice on capital structure to larger corporate customers. In response, smaller houses have renewed their efforts to solidify their presence in specific areas such as capital markets and broking services. Primary broking services to a booming hedge fund sector have been one such area of growth (see below). Market observers estimate that, given their active investment style, hedge funds have accounted for more than one eighth of capital market earnings for the major institutions that provide primary broking services.

Hedge funds

Large inflows into hedge funds ...

Hedge funds were well placed to benefit from the environment of high market liquidity and low yields in a number of traditional asset classes that emerged following the equity market declines of 2000. Marketing nimble investment tactics that can potentially generate positive returns even in bear market conditions, the sector attracted record inflows. High net worth individuals, pension funds and endowments increased allocations to so-called "alternative investment vehicles" in an effort to stem the decline in the value of their portfolios and enhance diversification. The resulting proliferation of hedge funds continued during much of the period under review. This growth attracted significant talent away from more established financial companies and traditional asset managers, drawn by the promise of greater independence and rich rewards for market acumen. Some traditional investment houses also saw hedge funds as an opportunity to maintain an arm's length relationship



with talented traders while simultaneously benefiting from higher returns and expanding their palette of wealth management products.

While hedge funds performed better than the market in the years that immediately followed the equity market bust, they have failed to do so consistently more recently (Graph VII.6). In addition, the remarkable similarity in the performance of funds with purportedly distinct investment strategies implies that, in practice, the diversification benefits to the investor might be considerably smaller than fund managers claim. Weaker performance is in part responsible for the marked slowdown in inflows to the sector during more recent months. A side effect of the growth in assets under management has been the disappearance of exploitable investment opportunities in more traditional areas of hedge fund activity, such as equity and government bond markets. This has motivated managers to venture into new, less crowded asset classes, such as corporate bonds, credit derivatives and structured finance, contributing to their enhanced overall liquidity. Improved counterparty risk management practices have resulted in a more closely controlled exposure of prime brokers and lower leverage ratios for funds compared to the situation around the near collapse of LTCM in 1998. However, given the rapid growth in assets under management and the intensifying competition for prime broking business, the overall exposure of banks to the sector is arguably higher and the information flow less transparent.

... but lower returns

Potential sources of vulnerability

The current robust condition of financial institutions augurs well for their being able to continue to support the macroeconomy going forward. The immediate risks for the global financial sector appear low, since financial institutions have

The financial sector is resilient to short-term risks ...

sufficient buffers to weather most risks that are likely to materialise in the near term. Moreover, restructuring efforts in many countries are likely to further strengthen domestic systems in the medium term.

... but is it also robust to longer-term challenges?

Longer-term vulnerabilities are harder to assess. The cyclical challenges are linked to the risk that the rebalancing of the world economy might entail protracted adjustments in interest rates and asset prices. Associated with weaker economic growth, increased market and credit risks could alter the currently favourable situation of financial institutions. Other challenges derive from structural pressures on bank profits. In addition, the longer-term implications of the transfer of risk to households might become more apparent in the event of a slowdown in economic expansion.

Pressure on bank profits

Greater reliance on fees ...

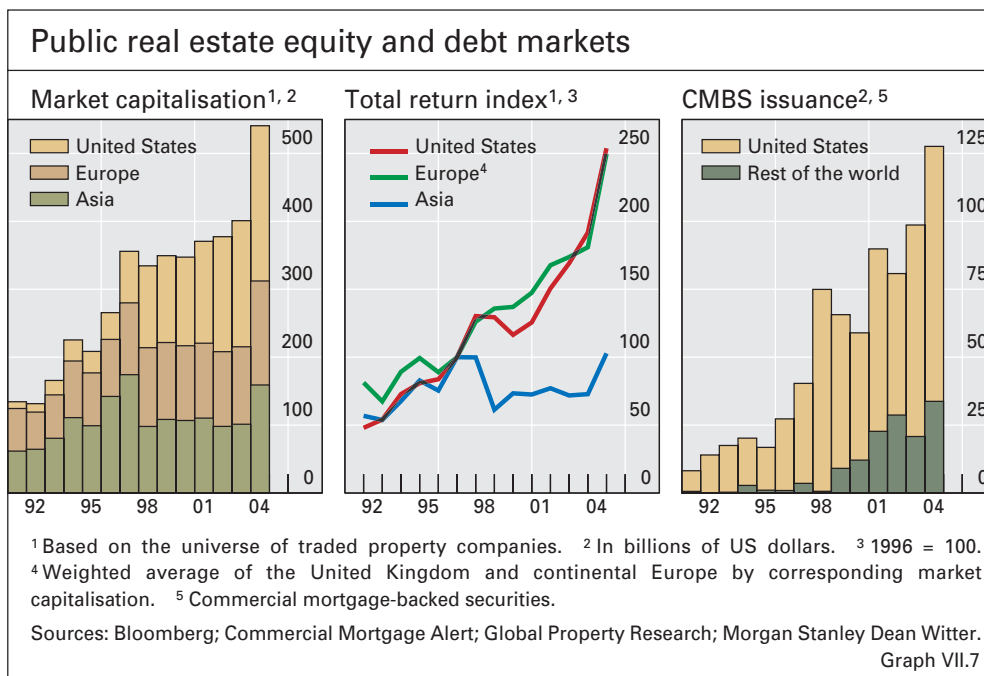
The banking sector has benefited from restructuring efforts and an expansion into new business lines; nevertheless, the pressure on bank profits from a more competitive environment remains. The substitution of fee income for more traditional interest margin revenue has been a general international trend (see also Chapter III). This earnings diversification has taken the form of increased net fees and dealing profits, as in the United Kingdom, greater reliance on consumer loans with higher margins, as in France and Japan, and a boom in mortgage lending in many countries. However, interest margin income has been declining in a number of countries and is likely to weaken further in an environment of higher short-term interest rates and flatter yield curves. Margins are particularly low in Germany and Japan, owing in part to sluggish demand for loans, but also because of competition from publicly owned intermediaries (see above).

... at the cost of higher volatility?

The sustainability and properties of this emerging blend of income sources are important factors that will determine the longer-term stability of banking systems. A key aspect of this revenue mix is the greater exposure of banks to broader market risk, taking them beyond interest rate risk, with which they are more familiar. Broking fees and dealing profits have been notoriously volatile sources of income for investment banks, but these institutions have more flexible cost structures compared to commercial banks. Similarly, while the growth in consumer finance in many jurisdictions has a large structural component related to a more liberalised environment and lower inflation, it has also been partly linked to the exceptionally low levels of short-term interest rates. Moreover, a booming housing market has already shown signs of reversal in some countries (see below). It appears that success in maintaining the current level of bank profitability will be determined just as much by developments in risk management and mitigation as by the outcome of efforts to further diversify income sources.

Property markets

The resilience of the banking sector has owed much to the solid performance of real estate markets. Nevertheless, increased direct and indirect exposure of banks to property raises some longer-term concerns, especially in the light of historical experience.



Investors' interest in commercial property has intensified in the past several years. Low interest rates, disappointing stock market returns and the greater accessibility of commercial real estate markets due to the further deepening of publicly tradable instruments (Graph VII.7) have all played a role. Interest has been further stimulated by the lower amplitude of recent commercial property cycles (Table VII.2) and very low delinquency rates on commercial property loans. As a result, banks' exposure to the commercial real estate sector has grown substantially. For instance, in the United States commercial real estate lending has increased by about 70% over the past five years and now accounts for about one eighth of commercial banks' total assets; for medium-sized banks, the share is 30%. Similarly, in the United Kingdom one third of banks' lending to non-financial firms goes to real estate companies, up from about 20% four years ago.

Increased commercial real estate lending ...

The greater exposure to the commercial real estate sector does not appear to pose an immediate risk to the banking industry, but it could represent a potential vulnerability in the longer term. Historically, commercial real estate loans have been one of the most volatile components of bank portfolios. Although a sharp deterioration in loan quality, as witnessed in the early 1990s in many industrialised countries, is unlikely to occur in the near future, even a return of delinquency rates to levels more comparable to their historical average could generate strains. In addition, given that recent activity has been largely driven by investment interest, rather than business demand, there are some concerns about the sustainability of the high investment returns. Persistently high vacancy rates suggest that market fundamentals may be vulnerable (Table VII.2), and prime office yields have already shown signs of weakness.

... may pose micro risks

On the residential side, the rapid growth of bank exposure to housing markets has been one of the main drivers of bank profits in recent years.

Residential property exposure ...

Commercial property prices and office vacancy rates							
	Commercial property prices ¹				Office vacancy rates ⁴		
	Nominal change ²			Level ³	2002	2003	2004
	1995–2003	2003	2004	2004			
United States	2.5	-2.5	4.0	35.7	15.6	16.7	16.0
Japan	-8.9	-10.2	-9.6	31.2	8.0	8.5	7.2
Germany	1.0	-18.4	-13.2	43.2	7.1	9.8	11.4
United Kingdom	1.9	-4.0	7.6	34.0	8.0	11.3	9.8
France	1.0	0.0	1.5	60.3	5.9	6.0	6.6
Italy	9.4	-5.1	-3.2	73.8	4.7	5.4	7.5
Canada	3.0	-2.7	2.2	46.8	13.7	15.6	14.4
Spain	9.2	-10.9	13.5	46.5	4.8	7.7	8.4
Netherlands	6.1	-3.0	6.2	85.9	7.4	9.7	12.0
Australia	4.2	4.0	1.0	50.5	8.3	10.3	11.5
Switzerland	-0.1	-2.2	-2.3	56.9	8.0	10.8	9.0
Belgium	4.8	10.9	15.0	94.9	8.8	9.5	10.7
Sweden	3.2	-8.0	5.6	49.7	12.5	18.3	17.6
Norway	5.6	-2.1	1.5	56.3	8.3	11.0	11.0
Denmark	6.1	-1.2	4.9	85.4	2.5 ⁵	9.0	10.3
Finland	2.9	0.0	-2.3	57.2	1.7 ⁵	7.0	9.5
Ireland	13.4	0.2	1.3	82.5	18.4	17.5	16.7

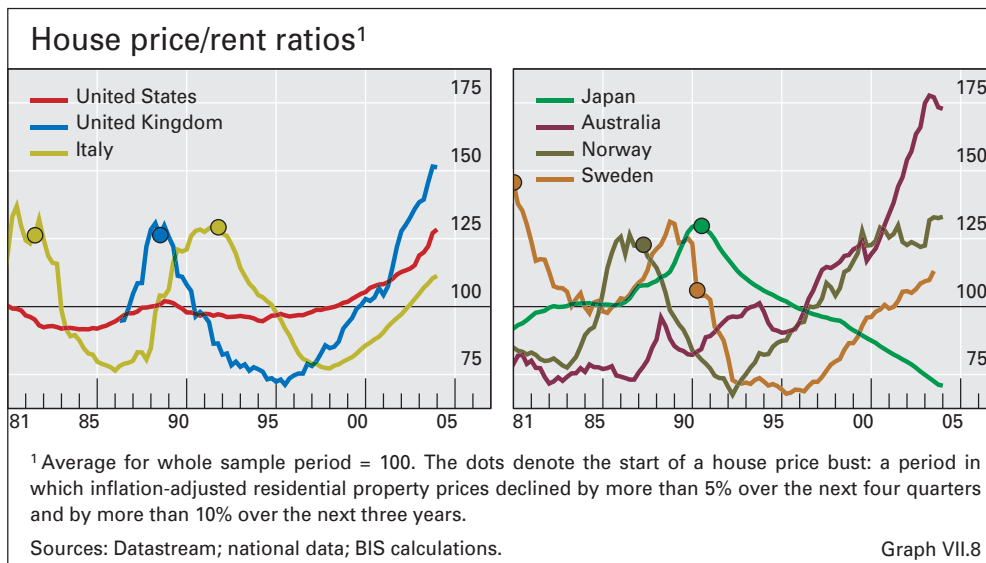
¹ For Australia, Belgium, Italy and Spain, prime property in major cities; for Japan, land prices.
² Annual changes, in per cent. ³ Peak period of real commercial property prices = 100. ⁴ Immediately vacant office floor space (including sublettings) in all completed buildings within a market, as a percentage of the total stock. For Switzerland and the United States, nationwide; for Australia, France, Germany, Italy, the Netherlands and Spain, average of major cities; for other countries, capital city.
⁵ 2001.

Sources: Catella Property Consultants; CB Richard Ellis; Investment Property Databank Ltd; Japan Real Estate Institute; Jones Lang LaSalle; National Council of Real Estate Investment Fiduciaries; Sadolin & Albæk; Wüest & Partner; national data. Table VII.2

Mortgage lending has surged in the last five years in most economies, including the United Kingdom (a cumulative increase of 160%), Australia (100%), the United States (75%), the euro area (50%) and Japan (30%).

... implies a macro vulnerability

However, uncertainties concerning the housing market could also imply some direct and indirect risks to the financial system. In many countries, including the United Kingdom, the United States, Australia, Norway and Spain, house prices have risen much faster than rents, and rental yields are historically low (Graph VII.8). This might signal either a downward correction in house prices or an upward movement of rents, which tend to be rather sticky. Should the house price growth flatten or reverse direction, mortgage activity could shrink substantially (as observed in Australia and the United Kingdom recently), with concomitant declines in fee income for banks. In addition, losses on property-related loans could increase, especially in those markets with high household indebtedness and high loan-to-value ratios. More broadly, a fall in household wealth could presage a more general economic downturn reflecting consumer retrenchment. Were these risks to materialise, the challenges to the banking sector from this indirect, but broader and more persistent, macro effect could be significant.

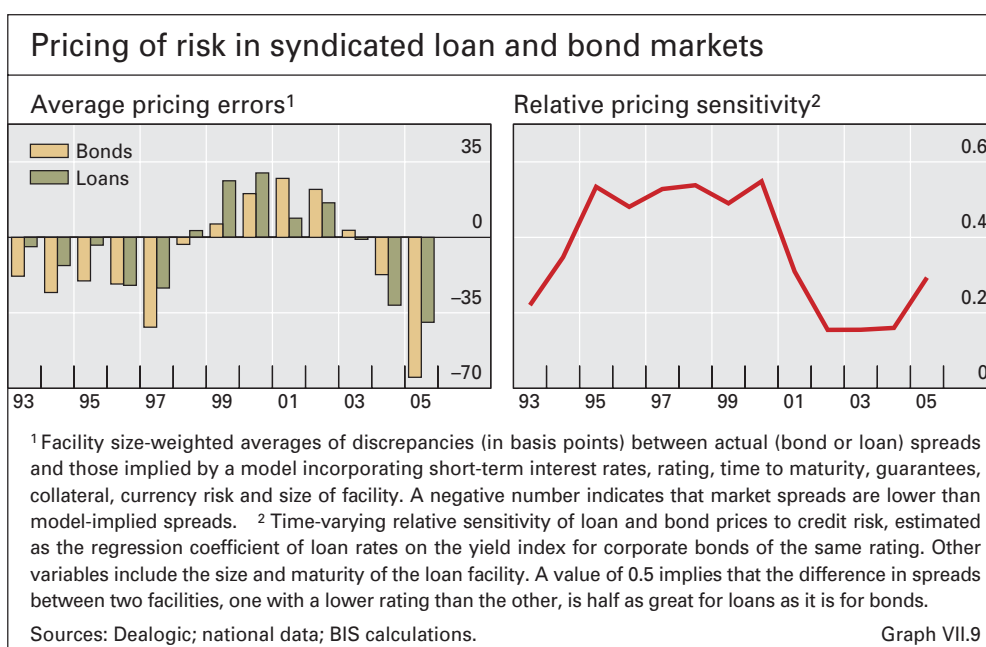


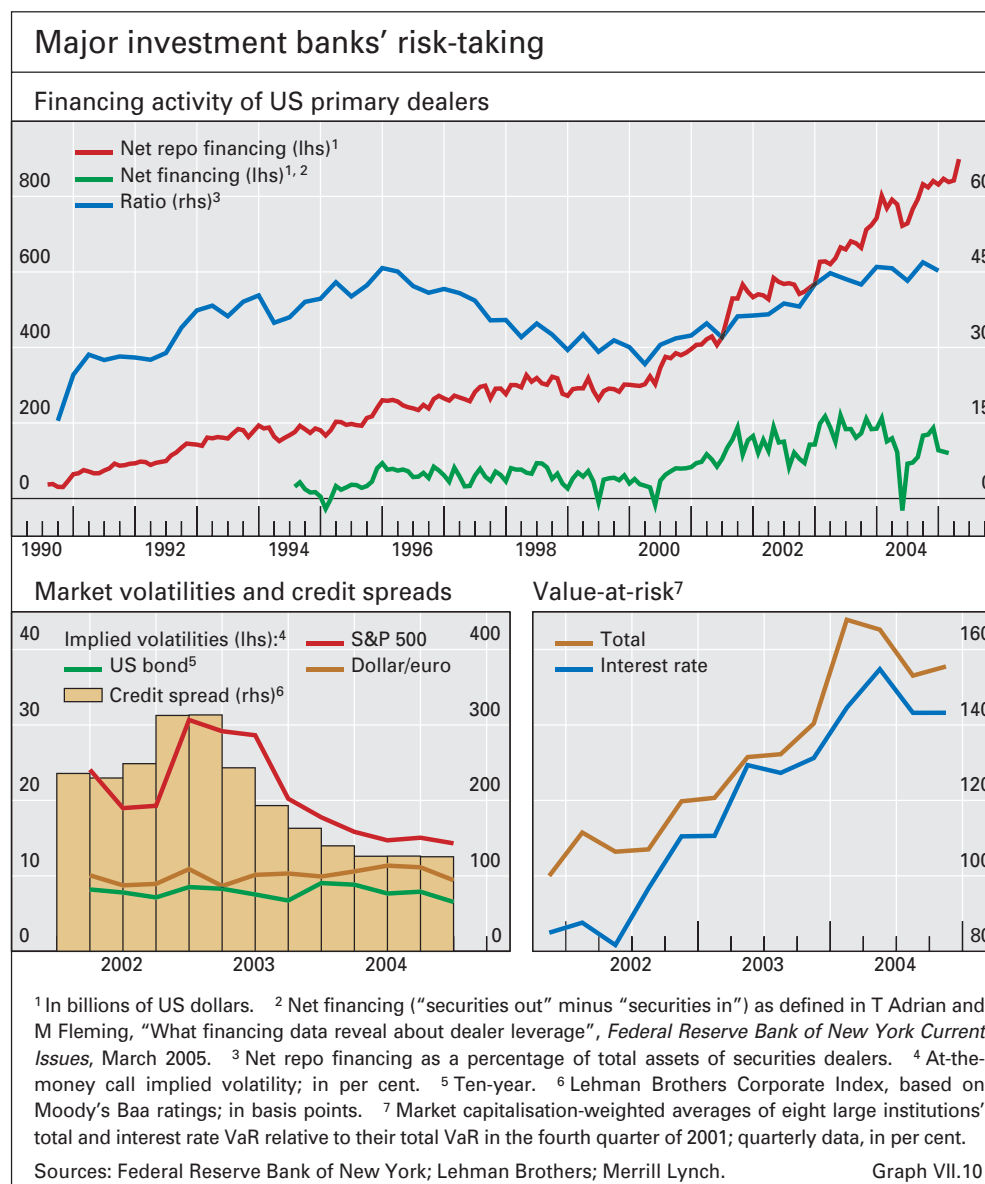
Further development of the “search for yield” phenomenon

Persistently low interest rates and abundant liquidity have encouraged investors to seek higher yields in riskier investments. This “search for yield” gained momentum during much of the period under review (see Chapter VI).

There is evidence of continued aggressive pricing of risk in both syndicated loan and bond markets. In 2004, signings in the US syndicated loan market surged to a historical high of \$1.3 trillion, of which 46% went to non-investment grade companies. In the same year, spreads in bond and syndicated loan markets appeared to reflect a lower compensation for credit risk than implied by historical relationships (Graph VII.9, left-hand panel). More recently, this underpricing of credit risk seems to have become

Potential underpricing of credit risk





more pronounced in the bond market, as the sensitivity of syndicated loan spreads to default risk has increased slightly (Graph VII.9, right-hand panel).

The trend towards greater risk-taking is also visible in the investment banking sector. The total value-at-risk (VaR) rose by over 50% in the three years to end-December 2004. Given the declines in the volatility of equity and credit markets over the same period, this suggests a notable increase in position-taking (Graph VII.10, bottom panels). The slight decline in overall risk exposures in 2004 could be related to a delayed adjustment of risk-taking by these firms, or to a tightening in market liquidity (Graph VII.10, top panel).

Shift of risk to the household sector

Recent structural trends point to a shift of risk-bearing away from financial institutions and markets and towards the household sector. Some of this shift is voluntary. Greater access to diverse financing tools has increased household debt relative to income (see Chapter II). In particular, the growth rates of

High market risk exposure

Higher risk linked to mortgages ...

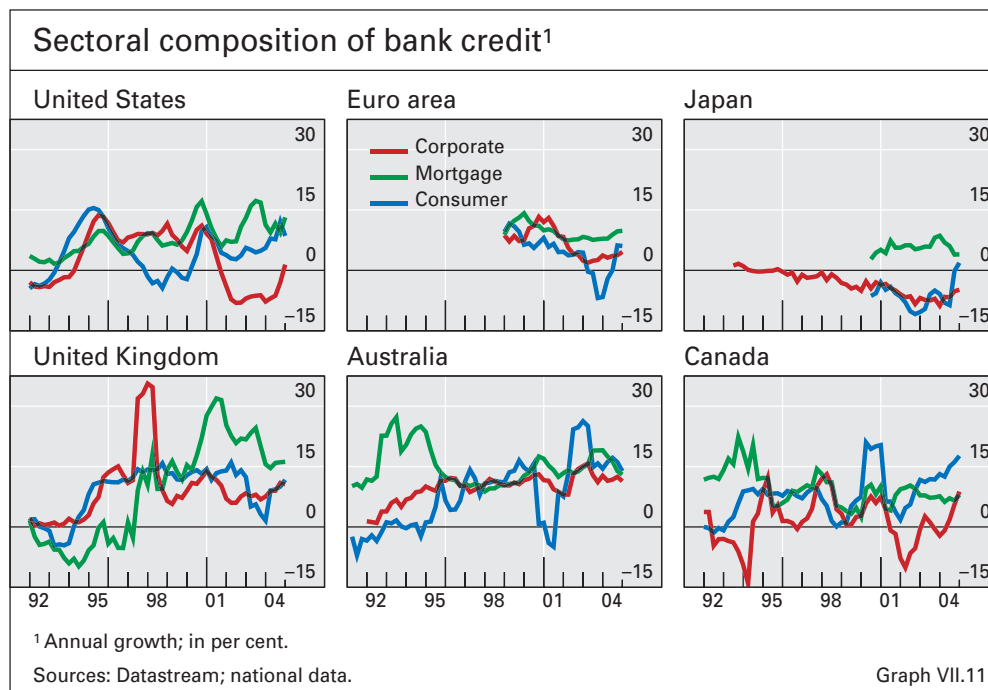
mortgage and consumer loans provided by banks surpassed that of corporate loans in the United States, Europe and Japan in 2004 (Graph VII.11). Households have also shifted their financial investments to more market-sensitive instruments. Variable rate mortgages, traditionally prevalent in Australia, Ireland, Spain, the United Kingdom and most Nordic countries, have recently gained more popularity in the United States. The expansion of unit-linked products in the life insurance sector also reflects a greater willingness on the part of households to take on risk.

Institutional changes are also exposing households to greater financial risk. First, pension reform proposals in the United States and the United Kingdom are underpinning a shift from defined benefit to defined contribution schemes, which increases households' exposure to market risk. The trend towards defined contribution occupational plans has gathered pace under the funding pressures on firms from increased longevity, weak equity markets and low interest rates. Second, the introduction of fair value accounting is likely to make the presence of minimum return guarantees in insurance contracts more visible. Thus, insurers will be under pressure to make partial cuts in the guarantees. Finally, reduced job security in many developed countries has increased the uncertainty in individual household income flow, adding to the risks faced by households.

These trends raise the question of whether this shift might affect the risk-bearing capacity of the economy. Households are the ultimate bearers of all risks by virtue of being the ultimate stakeholders in all economic enterprises. Nonetheless, the overall level of financial risk is not independent of the financial structure, institutional features or the distribution of risk-bearing. Typically, households are liquid, given their regular employment income and relatively large holdings of liquid assets. Moreover, idiosyncratic losses on

... and old-age pension income ...

... can affect the risk-bearing capacity of the economy



household balance sheets have limited negative externalities. However, the household sector is characterised by a more restricted capacity to understand, manage and diversify risks, greater dependence on collateralised credit, and higher transaction costs than financial institutions. These limitations suggest that greater direct exposure of the household sector to risk might not necessarily be efficient.

Improved access to financial products has made it easier for households to own houses and offered greater flexibility in managing consumption over their lifetime. However, as discussed earlier, a fall in house prices can pose risks to the financial sector and the macroeconomy. Moreover, when interest rates rise, households with variable rate liabilities will face higher borrowing costs. If consumption and default rates on home loans are affected, the resilience of the macroeconomy and the financial system could be reduced.

Towards a more operational macroprudential framework

Macro risks call
for ...

The preceding discussion of the outlook for financial stability has highlighted the key role of vulnerabilities arising from the interactions between the financial and real sectors of the economy. The principal challenges derive from the process of redressing imbalances gradually built up during the equity price boom of the late 1990s and the macroeconomic environment that has emerged during the first half of this decade. An effective response to these challenges places a premium on a prudential framework that focuses on those interactions and takes a systemic approach to financial stability. The general trend towards a strengthening of the macro orientation of prudential frameworks is a recognition of this need.

... macroprudential
approaches

The macroprudential approach emphasises the importance of interactions between individual financial institutions, as well as between the financial system as a whole and the macroeconomy. Complementing the more traditional micro approach, which focuses on the individual institution as the unit of analysis, it pays particular attention to concentrations of exposures and the common drivers of risk across the different components of the financial system. The analysis of potentially destabilising feedback from the behaviour of these components is central to this approach.

Operationally, a number of different facets of the prudential framework reflect this greater systemic orientation. Arguably, the most visible aspect relates to the institutional architecture and mandates of official bodies in charge of financial stability. A more macro perspective is also concretely manifested in the way these bodies discharge their responsibilities. Examples include improvements to risk measurement technology so as to better identify systemic vulnerabilities, and a calibration of preventive and remedial prudential tools that is more sensitive to systemic concerns.

Institutional architecture

The institutional architecture of policy bodies in charge of financial stability is increasingly influenced by a macroprudential perspective. At both the national and international levels, this architecture increasingly reflects the importance

of monitoring interactions among individual institutions and of developing coherent frameworks that take into account the similarities in the treatment of risk across different sectors of the financial industry.

At the national level, the trend towards a single authority with responsibility for the prudential supervision of banks, insurance companies and other types of financial intermediaries has gathered pace since Norway's decision to adopt such a scheme in the late 1980s. Synergies arising from the emergence of financial conglomerates, and the convergence of the business practices of financial firms driven by the development of new markets and technology, have both contributed to this trend.

Unified supervisory authorities

This institutional development has often gone hand in hand with the establishment of more explicit financial stability objectives for central banks. Operationally, this has often been reflected in the creation of a dedicated financial stability function in the central bank and the publication of regular reports that communicate its assessment of the financial system's performance and potential vulnerabilities. Frequently, central banks have taken on similar tasks even in the absence of an explicit mandate, building on their expertise in producing more traditional macroeconomic assessments.

Financial stability mandates for central banks

At the international level, a number of forums have been set up to promote communication and cooperation between prudential authorities from different jurisdictions. Monitoring developments in international financial markets and assessing possible weaknesses in the international financial system are among the objectives of the committees working under the aegis of the G10 central banks and various regional groupings. The Financial Stability Forum brings together all relevant national authorities, international financial institutions and other international groupings, fostering dialogue and the coordination of efforts to address systemic vulnerabilities. Indicative of the Forum's efforts has been the set of recommendations it issued on policy responses to the potential threats to systemic stability from the activities of highly leveraged institutions. More recently, it has spearheaded global supervisory efforts to strengthen the oversight of reinsurance companies (see pages 170–171 of this Report).

International forums

Identification of vulnerabilities

An accurate diagnosis is a precondition for successful treatment. The deployment of risk measurement technology at the level of system-wide stability is therefore the basis for establishing an operational macroprudential framework.

Financial risk measurement technology is in general at a relatively early stage of development. Even at the level of individual institutions, the focus was originally on measuring specific aspects of financial risk, and only lately have efforts been made to develop coherent frameworks for enterprise-wide risk measurement. The extension of VaR-type indicators beyond portfolio market risk assessment to include other types of exposures is an example of this. At the macro level, the modelling of interactions between financial sector behaviour and the real economy has a short track record compared to the longer tradition of building macroeconomic models that describe the relationships between aggregate production, expenditure and prices.

Systemic risk modelling

Macroprudential indicators

Considerable progress has been made recently in developing systemic risk measurement tools and applying them in a variety of contexts. The efforts of the IMF and the World Bank in drawing up a list of financial stability indicator variables, and encouraging national authorities to systematically collect and publish them, are geared towards providing the raw material for further analysis. The Financial Sector Assessment Program jointly implemented by these two institutions carries out regular analysis on potential systemic vulnerabilities of both a structural and a conjunctural nature.

Macro stress testing

Mirroring the development of stress testing methodology at the level of individual firms, many central banks are now developing the infrastructure to perform robustness tests of the financial sector as a whole, relying on both micro and macro indicators. Such exercises often combine three elements: macroeconomic models, built to guide monetary policy decisions; models of the financial condition of households and the business sector; and surveys of the potential impact of different scenarios on the performance of financial institutions and markets. In some jurisdictions, this infrastructure is used not only to carry out routine assessments of financial sector vulnerabilities for prudential purposes but also to provide input into the monetary policy decision-making process. Once in place, the technology also lends itself to ad hoc exercises that are more focused on the analysis of specific risks, such as those arising from an abrupt decline in asset prices.

Calibration of prudential tools

The policy response to identified risks to financial stability is also increasingly factoring in systemic considerations. This is true both of the design of prudential standards and of the rationale behind actions to address any strains that materialise.

Adoption of a systemic approach ...

The explicit incorporation of systemic objectives into the design of prudential standards is a relatively recent phenomenon, although it has always been recognised that standards that limit the scope for excessive risk-taking at the level of individual institutions will also mitigate systemic risks. The newer elements of macroprudential thinking reflect mostly the notion that behaviour and rules that are individually rational may lead to undesirable aggregate outcomes. For example, retrenchment from risky positions in response to elevated measures of market risk may be a prudent approach from the perspective of an individual institution interested in preserving its capital. A generalised sell-off, however, could trigger a self-reinforcing chain of actions that results in higher market volatility and overshooting of asset prices.

... influences standard setting ...

The new bank capital framework published last year by the Basel Committee on Banking Supervision represents a major step forward. It sets a standard that is particularly supportive of the private sector's desire to develop and use risk management tools. By accepting the output of internal models for the setting of minimum regulatory capital, it recognises the importance of providing incentives for the use of best practice technology by all market participants. Excessive risk sensitivity of capital requirements, however, might raise the possibility of inadvertently amplifying the inherent procyclicality in credit availability. Partly to mitigate this risk, and based on other empirical

studies, the final version of the framework has reduced the rate of increase of required capital in response to a deteriorating credit outlook. In addition, it recognises that stress-testing the portfolio of bank exposures should also condition the required level of capital in order to avoid the latter being unduly influenced by current economic conditions. More importantly, the new framework is helping to embed historical improvements in risk management in the corporate culture of institutions, thus promoting earlier detection and correction of problems and reducing procyclical tendencies.

A similar rationale motivates the system of statistical provisioning implemented in Spain. Under this standard, bank provisioning is anchored to an average estimated over the business cycle. Bank loan reserves are thus built up during the upswing of the business cycle into a statistical provisions buffer that is run down during the downturn when credit conditions worsen. The smoother time pattern in credit costs dampens the tendency to reduce credit excessively in the face of a deteriorating economic outlook, hence mitigating the risk of regulation-induced bank behaviour contributing to macroeconomic volatility.

As well as having a growing influence on the design of standards, systemic considerations are also increasingly shaping discretionary policy actions by prudential authorities. These have sometimes been taken in response to the manifestation of strains or the build-up of vulnerabilities. A recent example was the reaction of the UK authorities to the strains faced by insurance companies when the drop in the equity market induced severe losses in their asset portfolios. A temporary relaxation of minimum reserve requirements was introduced to help stem stop-loss sales of stocks, thereby preventing a downward spiral in equity prices that would have resulted in further weakness in the balance sheets of regulated firms. Similar rationales have been behind the adjustments made in some jurisdictions to the regulatory parameters that govern mortgage lending (such as maximum loan-to-value ratios) in response to concerns that rapid growth of credit would be a risk to the macroeconomic outlook. While these interventions are only imperfect substitutes for a systematic *ex ante* accumulation of reserves to deal with strains, such *ex post* supervisory actions can facilitate the system's response to specific circumstances with little adverse effect on incentives if calibrated judiciously and used sparingly.

Finally, systemic stability concerns are very much in evidence in the attitude of prudential authorities towards large and complex financial institutions. In many jurisdictions there are explicit provisions governing the regulatory treatment of these institutions, stipulating a course of action in the event of strains coupled with closer supervisory monitoring and review. In particular, systemic concerns feature high on the list of factors that are examined in the approval of mergers. Beyond the preservation of an appropriate degree of contestability in the market, authorities are also increasingly concerned about the potential risks from a higher concentration of the financial system's exposure to a small number of interconnected institutions. Moreover, contingency plans are in place for responding to the failure of such a firm. These plans focus on the orderly transfer of control from

... discretionary
policy decisions ...

... and the
treatment of large
institutions

the shareholders and management of the failed firm while maintaining its functionality and value as a going concern and minimising systemic disruption.

Challenges ahead

Challenges include: The preceding analysis suggests that considerable progress has been made in strengthening the systemic orientation of prudential frameworks, in terms of both awareness and implementation. At the same time, a number of major challenges remain.

more accurate measurement ... A first challenge relates to the improvement of risk measurement technology. Despite the recent advances, current methodologies are still more successful at measuring relative risks at a given point in time, such as across borrowers or asset classes, than at assessing the evolution of risk over time, especially system-wide risk. In particular, rather than providing truly forward-looking risk indicators over longer horizons relevant for policy, many such measures tend to function more like coincidental indicators of materialised risk. Moreover, when drawing on market prices, they may fail to distinguish changing appetite for risk from changing risk assessments (see Chapter VI). Through both of these channels, they may inadvertently introduce excessive procyclicality in risk assessments and actions.

... supervisory incentives ... A second challenge relates to ensuring that the prudential authorities have the wherewithal and incentives to use the instruments at their disposal from a macroprudential perspective. Understandably, despite the exceptions noted above, there is still considerable reluctance to do so when the problems are perceived to have a macroeconomic origin. In part, this may reflect a lack of relevant expertise, which may be more likely when supervision is not entrusted to the central bank. In addition, it may stem from a conception of the supervisory mandate dominated by objectives of consumer protection, rather than systemic crisis prevention.

... and coordinated policies A third challenge relates to strengthening the coordination of the official sector's approach to macrofinancial stability. A more coordinated approach would recognise the strong interdependencies between the roles of a broader set of authorities, also including monetary policymakers, ministries of finance and even accounting standard setters. Obvious complementarities exist between the expertise of these different bodies and the instruments at their disposal. For example, accounting standards can have a first-order effect on the ability to assess financial strength, on the incentives to take on risk and on the stabilising or destabilising properties of individual behaviour. Likewise, sometimes financial strains with first-order macroeconomic costs may not have their roots in failed financial firms. They may originate in market dynamics or in disruptions to the balance sheets of households and corporations, even if regulated financial institutions remain sufficiently insulated; the current risks associated with mortgage finance are a case in point. This puts a premium on close cooperation among the various authorities, based on an agreed diagnosis of the problem.