# VII. The financial sector

## Highlights

There was little change in the general picture of the financial sector in industrial economies during the period under review. Positive performance in most lines of business continued. Profitability was helped by growth in the demand for credit and for other services related to capital market activities, by the abundant supply of liquidity and by the very favourable credit environment. In those cases where risks materialised, institutions were able to withstand them. Capital cushions appear sufficient to absorb the impact of possible adverse developments in the immediate future.

The potential sources of vulnerability remain inextricably linked to future macroeconomic developments and the pace of adjustment of financial imbalances. Signs suggesting a slowdown in certain types of activity and increasing risks in others did emerge. Institutions remain exposed to common risks associated with a likely return of interest rates to more normal levels and a potential turn in the credit cycle. Bank exposures to real estate risk have intensified and the possibility of a decline in credit growth could put pressure on bank profits.

Overall, the coming years are likely to be more challenging for the financial sector than the recent past. This puts a premium on proper risk management and on preparations to deal with expected and unexpected sources of strain. Risk management from the perspective of the financial system as a whole depends critically on the quality of information available to market participants regarding the financial condition of peers and counterparties. A smooth interface between financial reporting standards, financial risk management practices in individual firms and the prudential framework can be a source of strength for the financial system. The last section of this chapter explores these issues in some detail.

# The performance of the financial sector

The generally positive performance of financial firms continued during the year under review. With few exceptions, profitability remained high and sectors facing adverse circumstances were able to confront them without undue strain. The continuing intensification of competitive pressures, however, led to a further compression of margins, compensated for by rapid growth in business volumes. This growth could be vulnerable to shifts in the macroeconomic environment.

#### Commercial banks

Strong profits despite narrowing interest margins Banks in most regions posted strong performance, extending the trend of the past several years. Net interest margins narrowed further, reflecting competitive pressures and flattening yield curves, notably in the United States. The growth of interest revenue was thus driven by rapid loan extension compensating for narrower margins. The return on assets changed little, largely as a result of falling operating costs and minimal provisioning expenses, while the contribution of non-interest income remained stable (Table VII.1).

US banks reported record earnings in 2005, with return on assets and return on equity only slightly below their historical peak in 2003. Major European banks also witnessed strong returns, although intertemporal comparisons are complicated by the fact that most accounts were reported for the first time under International Financial Reporting Standards (IFRS). While there was an impact on reported figures, including net interest margins, impaired loans and capital, the transition does not appear to have imparted undue volatility to financial statements.

Growth in retail business ...

The retail business remained central to banks' good financial performance. In many countries, mortgages dominated loan growth. In France and Spain, the rapid pace of mortgage lending boosted revenue against the backdrop of buoyant housing markets. In addition, asset management and the sale of pension and insurance products contributed to non-interest income. The continued expansion of the retail business showed few signs of abating, and may well advance further in countries where personal indebtedness remains relatively low, such as Italy.

... and credit demand

Credit growth proceeded at various speeds in different countries, conveying a mixed overall picture (Graph VII.1). Countries with weak credit

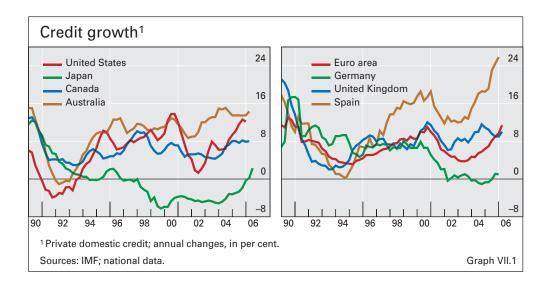
# Profitability of major banks<sup>1</sup>

As a percentage of total average assets

	Pre-tax profits		Provisioning expenses			Net interest margin			Operating costs			
	2003	2004	2005	2003	2004	2005	2003	2004	2005	2003	2004	2005
United States (12)	2.20	1.81	2.06	0.37	0.24	0.23	2.99	2.86	2.65	3.77	3.75	3.32
Canada (5)	1.08	1.23	1.01	0.25	0.06	0.10	2.16	1.99	1.79	3.26	2.93	3.00
Japan² (15)	0.11	0.26	0.84	0.81	0.47	0.22	1.08	0.98	1.07	2.14	1.59	1.42
Australia (4)	1.63	1.48	1.76	0.23	0.18	0.16	2.33	2.09	2.06	2.39	2.18	2.08
United Kingdom <sup>3</sup> (9)	1.24	1.16	0.99	0.43	0.30	0.29	2.12	1.78	1.44	2.62	2.25	1.80
Switzerland <sup>3, 4</sup> (5)	0.42	0.67	0.67	0.03	-0.01	-0.01	0.99	0.87	0.65	2.78	2.46	2.39
Sweden <sup>3</sup> (4)	0.87	1.04	0.91	0.11	0.03	0.00	1.61	1.43	1.02	1.63	1.40	1.05
Austria <sup>3</sup> (3)	0.61	0.78	0.85	0.37	0.34	0.31	1.86	1.83	1.64	2.58	2.41	2.09
Germany <sup>3, 4</sup> (9)	0.04	0.17	0.41	0.28	0.23	0.08	0.81	0.73	0.66	1.58	1.48	1.25
France <sup>3, 4</sup> (7)	0.68	0.80	0.70	0.19	0.11	0.07	1.17	1.03	0.85	2.07	1.80	1.36
Italy³ (6)	0.80	0.87	1.07	0.51	0.42	0.21	2.12	1.92	1.63	2.99	2.65	1.99
Netherlands <sup>3, 4</sup> (4)	0.69	0.51	0.60	0.21	0.08	0.06	1.69	1.30	1.11	2.12	1.56	1.35
Spain <sup>3, 4</sup> (5)	1.61	1.37	1.46	0.49	0.35	0.30	3.02	2.29	2.07	3.17	2.49	2.17

<sup>&</sup>lt;sup>1</sup> The figures in parentheses indicate the number of banks included. <sup>2</sup> For 2005, annualised ratios based on bank reports for the first half-year. <sup>3</sup> 2005 figures are based on IFRS. <sup>4</sup> Preliminary data for 2005.

Source: Fitch Ratings. Table VII.1



growth saw some improvement, while others, including Australia, Canada and the United Kingdom, experienced a modest slowing. The euro area's robust credit growth rate of 11% conceals substantial differences among countries. Whereas lending in Germany remained almost flat, the acceleration of lending was great enough to strain deposit funding in Spain, where banks benefited from solid growth both at home and in Latin America. Lending to businesses gained momentum on both sides of the Atlantic. Lending standards vis-à-vis firms eased, while those vis-à-vis households were reported to be broadly unchanged. In the United States, the rate of growth of corporate lending reached the pace of mortgage lending, while consumer lending slowed.

On the cost side, banks continued to reap the benefits from past restructuring and rationalisation, while the favourable credit environment helped further reduce the ratio of non-performing loans, especially on commercial loans and mortgages. Correspondingly, loan loss provisions drifted towards historically low levels in a number of countries as banks were not affected by any major credit events. Indeed, no US bank failures have been recorded since 2004, the longest period without a failure in more than 70 years. Diversification across locations and business lines helped banks overcome various challenges, including natural disasters, litigation and the flattening yield curve. US credit losses were largely confined to consumer loans, especially credit cards. Changes in bankruptcy laws can only partly account for the surge in personal bankruptcy filings in late 2005, given that consumer finances appear generally stretched. The credit cycle appears to have turned already in the United Kingdom. Higher interest rates and utility bills, coupled with the cooling housing market, strained highly indebted UK consumers. The number of personal bankruptcies rose, and with it the arrears and provisions banks recorded for personal loans, including credit cards. But UK banks' profitability, cost efficiency and diversification are expected to allow them to cope with any likely deterioration.

The easing of credit-related costs was a source of strength in Japan. Having posted the best performance in recent memory, Japanese banks left more than a decade of weakness behind them. Falling loan loss charges helped place net income firmly in positive territory. The improved condition of

Low credit costs

Stronger balance sheets in Japan

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corporates further eased the problem of non-performing loans (NPLs). The ratio of NPLs to total assets for major banks continued to decline. Retained earnings also improved the quality of their capital base, with the share of public funds in Tier 1 capital receding to below 20%. The return to profitability was enhanced by unrealised gains on equity holdings, which are expected to outweigh potential losses in bond portfolios in the event of rising interest rates (see Chapter IV). Most importantly, the broad economic recovery carries the prospect of a resumption of profitable lending, as loan growth turned positive for the first time since 1994.

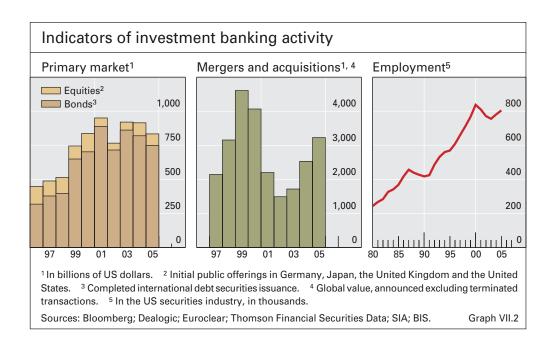
Consolidation in Europe

The pursuit of growth through retail banking activities and the promise of cost efficiencies associated with greater size have maintained interest in consolidation within the banking sector. The previous wave of domestic consolidation among larger banks in the United States left room for small and medium-sized deals focused on achieving better geographical diversification. The changes in the European competitive landscape were more diverse. The integration of smaller domestic retail banks into cooperative networks proceeded further in France and Germany. The number of larger cross-border transactions, however, was a novelty. Italian banks were key participants in many cases, either as targets or acquirers, but a number of deals involved banks on the periphery of the euro area.

### Investment banking

M&A activity boosted profits

Investment banks enjoyed a year of exceptional performance. Return on equity was in the range of 15–30%, reflecting unusually high profits across a range of business lines. In addition to traditional investment banking revenues, many houses succeeded in generating sizeable trading profits. An important driver of the former was the boom in mergers and acquisitions (Graph VII.2; see Chapter VI). M&A activity contributed to both the advisory business and the bond underwriting business needed to finance the deals. Analysts expect



activity to remain strong in view of the level of corporate profits and the pipeline of potential deals, where size and tolerance for leverage appear to be rising.

The fees earned in underwriting and M&A advisory services were concentrated among the top-tier investment banks. The same houses also financed larger positions through repo borrowing than had been the case in previous years. Buoyant trading in commodities and energy-related securities, as well as business linked to the activities of private equity funds, provided important new sources of revenue. Investment banks also benefited from other business lines, including underwriting credit products and offering broking services to hedge funds. The industry is in the process of expansion and is actively recruiting staff, reversing much of the downsizing that took place early in the decade.

Expansion

#### Hedae funds

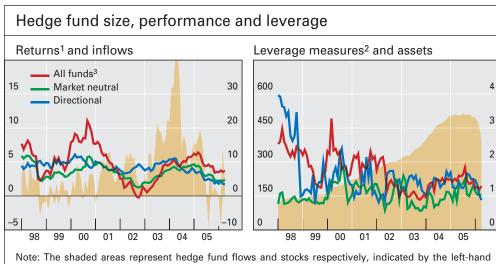
Following a period of rapid growth during the first half of this decade, the hedge fund sector during the past year experienced the downside of success. There was a decline in financial performance and a slowdown in new investments, while the interest of institutional investors elicited further changes in operating frameworks.

Performance slipped across the range of hedge fund investment styles during 2005. This arguably reflected an increasingly crowded field, with many managers seeking to exploit a limited set of profitable investment opportunities (Graph VII.3). A further sign of this crowding was the narrowing of the performance range across a variety of investment strategies.

Hedge fund performance slipped ...

Mirroring this lacklustre performance, investor interest, as measured by the rate of inflows into the sector, also cooled. For the first time since the LTCM episode, the sector witnessed net outflows for several months during

... inflows slowed ...



scales, in billions of US dollars.

Sources: Hedge Fund Research, Inc; BIS calculations.

Graph VII.3

<sup>&</sup>lt;sup>1</sup> Average annualised excess return, in per cent, across hedge funds; relative to three-month US Treasury bill yields. <sup>2</sup> Based on the regression methodology described in P McGuire, E Remolona and K Tsatsaronis, "Time-varying exposures and leverage in hedge funds", BIS Quarterly Review, March 2005. 3 Includes equity, fixed income, market neutral and directional style families.

2005. In addition, fewer new funds were created to replace normal rates of attrition.

... and funds' profile became more conventional Despite the slowdown in performance, signs that hedge funds have become an acceptable investment option for mainstream institutional investors multiplied. Ties between the sector and more established firms engaged in asset management or private banking services continued to deepen, with many such firms including hedge fund investments in the portfolio of products offered to clients. In many cases this involved the outright purchase of existing funds-of-funds operations by those players. The secular narrowing of the range of volatility recorded in individual fund returns over recent years is another consequence of the influx of institutional money in the sector, as it has implied more exacting requirements for risk management, reporting and consistency in investment strategy.

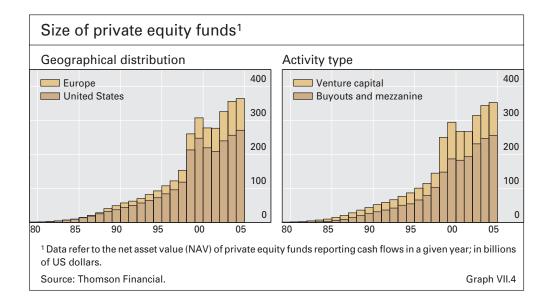
### Private equity

The past few years have witnessed major growth in the activity of private equity funds. This increase has manifested itself both in their fund-raising activities and in their involvement in corporate control transactions. A number of factors can account for this intensified interest in private equity investments, including investor disappointment with public equity markets after the collapse of the technology bubble, the low-yield environment and extremely favourable liquidity conditions. At the same time, this boom in activity has raised some concerns about its potential financial stability implications, given the important role of leverage in private equity investment strategies.

Private equity fund structures ...

Private equity funds are investor pools that specialise in providing equity financing to high-risk and information-intensive companies. There are two main types of funds. The first provides financing to companies that have no access to publicly traded equity markets, such as new entrepreneurial ventures with high growth potential but no established track record, or medium-sized firms requiring financing to overcome financial distress, alter their capital structure or acquire another company. The second type specialises in buyouts of public companies which are subsequently delisted. Typically, buyouts are partly financed with debt, substantially raising balance sheet leverage at the acquired company. Financial benefits come in the form of dividends over the medium term and from the receipts of the eventual sale of the company, either in the private market or through an initial public offering.

... reward risktaking Private equity funds are organised in the form of limited partnerships, and partners' incentive structures resemble those of other aggressive investment vehicles such as hedge funds. The transactions in which the funds participate put a premium on financial acumen, managerial skills and entrepreneurship, since the partners are actively involved in the management of the companies in which the fund invests. Partners are rewarded by generous fee structures and performance-related pay, as well as by the expectation of sharing with outside investors a high targeted internal rate of return on invested assets. The funds raise financing from high net worth individuals and a variety of institutional investors, such as pension funds and endowments, as well as from other financial or non-financial firms.

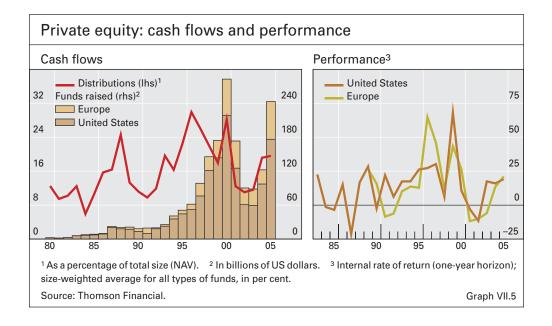


There has been a very significant increase in the size of the private equity sector since the late 1990s. A period of rapid growth in the assets under management for all categories of funds during the technology investment boom was followed by a mild and temporary slowdown before growth resumed in the last two years (Graph VII.4). Even though the majority of funds operate in the United States, European funds have grown more strongly recently. Buyout funds have historically represented the majority of private equity sector assets. A slight decline in their overall share around the peak of the internet investment bubble has reversed itself on the heels of the recent resurgence of corporate M&A transactions (see Chapter VI).

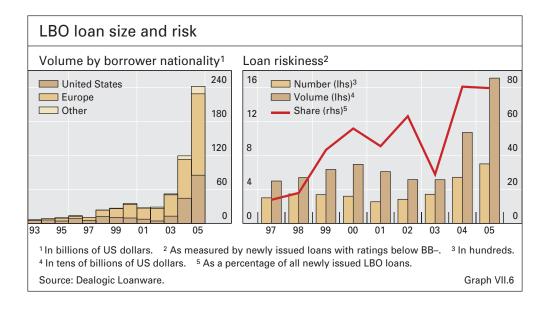
Recent boom in activity ...

Over the past two years funds raised globally have surged, reaching \$240 billion in 2005, a figure surpassed only in 2000, the peak year of the technology sector boom (Graph VII.5). Cash payouts to investors have also followed a similar pattern, albeit displaying more pronounced volatility. There

... fund-raising ...



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is anecdotal evidence, however, that individual funds may currently favour a more accelerated schedule of distributions to investors and partners over a backloading of payouts in line with the revenues from the eventual disposal of their investments. The high average rates of return on private equity funds explain the interest of outside investors, despite the associated volatility and relative illiquidity (Graph VII.5, right-hand panel).

... and LBO-related financing

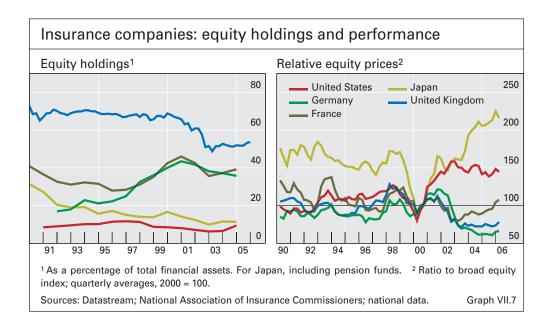
Cycles in the activity of private equity funds are related to the availability and cost of financing as well as the general trends in corporate balance sheets. Leveraged buyouts (LBOs) are encouraged by low interest rates, and usually target companies with underperforming shares due to a conservative capital structure. The previous periods of heightened LBO activity coincided with market innovations, such as the boom of junk bonds in the late 1980s and the internet venture capital boom of the late 1990s. Low financing costs and more relaxed attitudes towards risk and leverage also seem to be important drivers in the current cycle. The recent surge in the volume of LBO-related international syndicated loans has been impressive, with facilities exceeding \$240 billion in 2005, in their majority arranged on behalf of European borrowers (Graph VII.6). Just as significant has been the decline in the credit quality of these facilities. About 80% of all loans associated with LBOs are characterised as high-yield facilities, more than six times the corresponding share in the overall syndicated loan market.

#### Insurance companies

Favourable financial market conditions boosted the performance of life insurance companies in 2005. By contrast, the year 2005 was the costliest ever for the non-life and reinsurance sectors, mainly owing to large claims related to natural catastrophes.

Life insurers built on strength

The financial strength of life insurers continued to improve. Positive stock market performance led to better investment results and improved capital buffers (Graph VII.7). Japanese life insurers increased their solvency margins, as premium income rose, the number of policy cancellations declined and the



rising stock market generated unrealised capital gains. With-profits unit-linked insurance products gained popularity in the United Kingdom and France on the back of improved expectations of stock market returns. However, low long-term interest rates still burdened some European life insurers with the legacy of high guaranteed rates, so that solvency pressures did not disappear entirely.

Strong competition, improved capitalisation and the pursuit of operating efficiency encouraged consolidation in the life sector. In Europe, over the past two years, this trend mainly took the form of small-scale mergers and acquisitions. By contrast, major US financial and non-financial groups spun off their life insurance arms or sold them to other insurers.

A potential risk faced by life insurers stems from the slow pace at which projected increases in longevity risk are being incorporated into balance sheet valuations. In addition, risk transfer mechanisms for this type of risk have yet to mature. Demand for longevity bonds remains limited, as does the capacity of the reinsurance sector to underwrite this risk.

The non-life insurance sector faced record claims in 2005, expected to be about double the amount in 2004. Three Caribbean hurricanes accounted for the majority of global insured losses. As a result, US property and casualty insurers suffered their largest catastrophe losses, relative to the size of the industry, since the 1906 San Francisco earthquake. Despite the ensuing decline in underwriting profits, the US non-life sector proved resilient, helped by growth in investment income and risk transfer to the reinsurance sector.

Strong investment income and sufficient diversification helped most reinsurers to cope with the elevated catastrophe claims of last year. However, a number of Bermuda-based specialist reinsurers suffered a deterioration of their capital and rating downgrades. An upward trend in insured losses, owing to the increased severity of storms, higher population density and a boom in coastal area property values, presents a continuing challenge to the sector.

The European insurance sector faces a number of challenges associated with changes in the institutional framework. Progress in the Solvency II project

Non-life sector confronted record claims ...

... successfully

Regulatory challenges in Europe continued with active discussion between officials and the sector in the period under review. The project is likely to increase the industry's focus on risk management. In terms of implementation, the new regulatory framework regarding solvency requirements for European insurance companies will interact with the proposed changes in financial reporting standards. The adoption of IASB standards in Europe started in 2005, and its impact remains unclear. The current stage of implementation can lead to earnings volatility, as the extension of the fair value attribution principle to further categories of insurance company assets might not be matched by existing valuation principles applied to liabilities. In anticipation of the possible full implementation of fair value accounting for liabilities as well, insurance companies have focused on matching assets and liabilities by investing more in long-term bonds and reducing their exposure to equities (see Chapter VI).

### Pension funds

Underfunding of pension funds

A series of developments affecting corporate pension funds have attracted the attention of analysts and regulators in recent years. Funding levels have deteriorated as a result of the low-yield investment environment that prevailed in the early years of this decade. Low returns on asset portfolios were reinforced by the inflating effect of low discount rates on the value of liabilities. The impact of this constellation of factors was compounded by the fact that many sponsors had taken advantage of the very favourable investment environment during the second half of the 1990s to reduce contribution levels on the basis of optimistic extrapolations of exceedingly high levels of return.

Changes in the regulatory framework ...

A number of important changes in the institutional framework that governs occupational pension schemes are expected to have a lasting influence on their profile and investment behaviour. In a number of jurisdictions, new regulations are being implemented that reduce the permissible level of pension plan underfunding before the sponsor is required to increase contributions. In addition, new accounting standards move towards greater use of current market valuations for assets and liabilities related to post-employment benefits. This restricts sponsors' discretion to use projected returns for assets and to smooth over time the discount rates for liabilities.

... may affect asset allocation ...

The immediate effect of these changes has been an increased awareness among companies and their external stakeholders of the magnitude of the issues related to unfunded pension liabilities. The new standards emphasise the importance of sound risk management as regards these liabilities, and should improve the transparency of links between pension plan performance and company earnings. They appear to have also affected investment decisions by the plans. Increased portfolio allocations to longer-term fixed income securities are seen as an attempt to immunise the volatility of pension liabilities resulting from changes in the level of interest rates (see Chapter VI).

... and fund structure

These structural changes are likely to accelerate the shift away from defined benefit towards defined contribution plans, which has been under way in many countries for some time. Questions posed relate to the implications of these changes for the demand for various asset classes and for market dynamics. A more general issue is whether these changes will have a broader

effect on financing patterns in the economy and the types of investment favoured by the markets.

#### **Vulnerabilities**

Looking forward, the main sources of vulnerability relate to the speed with which the current environment of abundant liquidity may change. This could have implications for the sustainability of the balance sheet positions of households and firms, were a reversal in liquidity conditions to bring about abrupt changes in asset prices, with attendant effects on the soundness of financial institutions.

### Potential sources of pressure on bank profitability

Persistent high levels of overall bank profitability in recent years against a backdrop of a favourable economic environment raise the question of their long-term sustainability. The issue is particularly important in the light of possible increases in interest rates or less favourable capital market conditions. Developments affecting interest margins and credit risk are likely to generate more uncertainty about future bank performance in the years ahead. Net interest margins in many countries have trended downwards since the 1990s, reflecting in part the intensification of competitive pressures. Meanwhile, fee revenue associated with increased retail banking activity has contributed to an upward trend in non-interest income. Together with these secular movements, the components of banks' profits have fluctuated depending on cyclical changes in income, credit and the interest rate environment.

Trend decline in interest margins

The historical relationships between components of bank profitability and overall macroeconomic indicators can provide some guidance as to the potential risks to bank profits associated with future economic developments (Table VII.2). Typically, interest margin income responds positively to higher

Higher interest rates help margins ...

Sensitivity of income t	o cyclical	conditions <sup>1, 2</sup>
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_	-							
	Net	interest ma	argin	Non-interest income <sup>3</sup>	Loan loss provisioning <sup>3</sup>			
	Yield spread <sup>4</sup>	One- month rate	GDP growth	Stock market turnover to GDP	One- month rate <sup>5</sup>	GDP growth⁵	Equity return	
United States (12)	19.4**	11.7*	-5.4	0.3**	3.9**	-2.6	-0.9**	
Canada (5)	15.8**	7.0**	-5.7**	1.1**	5.3**	-3.5**	-0.6**	
United Kingdom (9)	8.6**	10.0**	4.3	-0.1**	6.0**	-7.1**	-0.3**	
Germany (9)	22.2**	23.3**	-4.0*	0.1	0.8	-1.7*	-0.2**	
France (8)	26.7**	27.6**	-4.5	0.8**	4.3**	-0.5	0.2**	

Note: The coefficients denote the change in basis points for a 1 percentage point change in the corresponding variable; \* and \*\* indicate statistical significance at the 10% and 5% level respectively.

Sources: Fitch Ratings; national data; BIS calculations.

Table VII.2

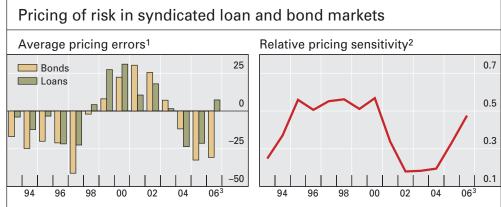
<sup>&</sup>lt;sup>1</sup> The figures in parentheses indicate the number of major banks included. <sup>2</sup> Fixed-effects panel regression on a constant, bank-specific loan-to-asset ratio and the macroeconomic variables. Sample period: 1990/91 to 2004/05, annual. Macroeconomic variables are annual averages. <sup>3</sup> Normalised by total assets. <sup>4</sup> Benchmark 10-year yield minus one-month yield. <sup>5</sup> Lagged by one year.

interest rates and a steeper yield curve, as bank lending rates adjust faster than those applied on their liabilities (Table VII.2, left-hand panel). North American and UK banks' margins seem to be less sensitive to yield curve gyrations than those of their continental European counterparts. A likely explanation could be the stronger competition for traditional bank products in North America and the prevalence of floating rate lending in the United Kingdom. Higher interest rates and a slowdown in economic activity are associated with higher credit costs, typically with some lag (Table VII.2, right-hand panel).

... but also increase provisions

These past patterns could serve as the basis for outlining the potential impact on bank profits from likely macroeconomic developments in the coming years. Higher interest rates will probably bolster net interest margins, especially in continental European countries, while a flattening of the yield curve will have an offsetting influence. At the same time, though, rising interest rates may also lead to higher loan loss provisioning expenses, offsetting some of the possible gains on interest revenue. Provisioning expenses typically rise in an economic slowdown, a prospect that could entail difficulties across business lines.

Moreover, following a period of generous loan pricing, the spreads built into banks' loan books may not fully compensate for higher provisioning expenses once credit quality deteriorates. Recent developments in the syndicated loan market suggest that the pricing of loans is now becoming more risk-sensitive, reverting towards values closer to the average over the credit cycle (Graph VII.8). However, as the stock of loans arranged over the 2002–04 period enter the phase in their life cycle when higher default incidence is typically observed, their particularly low spreads may weigh on bank earnings. These considerations suggest caution in projecting current performance to the near future.



<sup>1</sup> Facility size-weighted averages of discrepancies (in basis points) between actual (bond or loan) spreads and those implied by a model incorporating short-term interest rates, rating, time to maturity, guarantees, collateral, currency risk and size of facility. A negative number indicates that market spreads are lower than model-implied spreads. <sup>2</sup> Time-varying relative sensitivity of loan and bond prices to credit risk, estimated as the regression coefficient of loan rates on the yield index for corporate bonds of the same rating. Other variables include the size and maturity of the loan facility. A value of 0.5 implies that the difference in spreads between two facilities, one with a lower rating than the other, is half as great for loans as it is for bonds. <sup>3</sup> First quarter.

Sources: Dealogic; national data; BIS calculations.

Graph VII.8

#### Exposure to property markets

Property-related activity represents a rapidly growing component of banks' business and profits at the current juncture. The rate of growth of property-related lending has outpaced that of corporate or consumer lending in many countries. This raises the risk of potential problems arising either from an overextension in the commercial property market or from a cooling in the residential property segment. Indeed, the latter has been showing signs of slowdown after many years of exceptional growth.

In most countries, the commercial real estate sector has recovered from weak fundamentals. In particular, vacancy rates have declined and property prices have bounced back compared to 2004 (Table VII.3). At the same time, commercial real estate exposures have grown rapidly relative to capital and assets in many countries. In the United States, for instance, commercial real estate lending has increased by 80% during the past five years, and now represents 13.5% of commercial banks' total assets, matching the level at the peak of the previous cycle in 1988. Similarly, in the United Kingdom, nearly 40% of banks' lending to non-financial firms goes to real estate companies, up from about 20% five years ago. Even Japanese banks witnessed an extraordinary 44% jump in new loans to real estate companies in the third quarter of 2005 to ¥2.7 trillion, a growth rate reminiscent of the boom in the latter half of the 1980s.

Commercial real estate exposures are higher ...

Commercial property prices <sup>1</sup>								
	Nor	ninal char	nge²	Level <sup>6</sup>	Memo: Office vacancy rates <sup>7</sup>			
	1996– 2004	2004	2005	2005	2003	2004	2005	
United States	2.5	4.0	12.0	38.6	16.7	16.0	14.5	
Japan	-9.0	-9.6	-7.0	29.0	8.5	7.2	3.9	
Germany	-1.2	-4.1	-5.0	38.6	9.8	11.4	11.6	
United Kingdom	3.0	7.6	13.4	37.8	11.3	9.8	7.3	
France	2.6	1.5	5.8	63.0	6.0	6.6	6.5	
Canada	3.8	2.3	9.3	78.5	15.6	14.4	12.1	
Spain	1.83	5.1	8.0	98.6	7.7	8.4	6.1	
Netherlands	2.9	-1.7	0.1	78.4	9.7	12.0	13.6	
Australia	3.7	1.0	10.9	54.4	10.3	11.5	7.2	
Switzerland	0.7	0.4	2.1	61.5	10.8	9.0	11.5	
Sweden	2.6	-1.7	5.6	45.0	18.3	17.6	16.8	
Norway	0.84	1.7	6.3	96.8	11.0	11.0	9.0	
Denmark	1.34	-1.5	5.8	97.5	9.0	10.3	7.9	
Finland	1.15	-2.2	0.1	90.4	7.0	9.5	9.0	
Ireland	12.1	1.3	16.7	93.9	17.5	16.7	15.2	

<sup>&</sup>lt;sup>1</sup> For Australia, prime property in major cities; for Japan, land prices. <sup>2</sup> Annual changes, in per cent.

Sources: CB Richard Ellis; Investment Property Databank Ltd; Japan Real Estate Institute; Jones Lang LaSalle *Asia Pacific Property Digest*; National Council of Real Estate Investment Fiduciaries; Wüest & Partner; national data.

Table VII.3

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<sup>&</sup>lt;sup>3</sup> 2000-04. <sup>4</sup> 1999-2004. <sup>5</sup> 1997-2004. <sup>6</sup> Peak period of real commercial property prices = 100.

<sup>&</sup>lt;sup>7</sup> 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, the Netherlands and Spain, average of major cities; for other countries, capital city.

... and more concentrated

In the United States, commercial real estate lending is highly concentrated in certain groups of banks. Increases have been most remarkable among small and medium-sized banks, for which commercial real estate lending now accounts for approximately 30% of total assets. By contrast, the exposure of large banks is rather modest, with an average ratio of 8.6%.

The high exposure to the commercial real estate market could represent a potential threat to financial stability, in particular given the high degree of concentration of exposures. The low interest rate environment over recent years has reduced borrowers' loan payments and boosted cash flows, contributing to record low default rates on commercial real estate loans. Were interest rates to rise, loan quality might well deteriorate. Indeed, regulators in the United States and Japan have already expressed concerns about some banks' lending standards for commercial property loans.

Despite some similarities with the early 1990s, however, the current situation is unlikely to lead to similar strains. First, the commercial property cycle was at a peak in the previous episode but is currently rising from a cyclical bottom, suggesting a low risk of widespread defaults among borrowers in the event of a price decline. Second, the continuing growth of publicly traded real estate securities markets allows part of the associated credit risk to be spread more widely across investors, and has arguably had a tempering influence on commercial real estate cycles.

A possible softening in housing markets ...

On the residential side, the demand for housing finance has been cooling in some countries but remains robust in others, mirroring mixed developments

Residential property prices and mortgage debt								
		Change in						
	Annual		Change from peak	Date of peak	residential mortgage debt 2005 <sup>2</sup>			
	1996–2004	2005	2005	poun				
United States	7.1	13.0	0.0	2005 Q4	4.6			
Japan	-3.9	-4.7	-40.0	1991 H1	-0.0			
Germany	-0.9	-2.1	-9.7	1995	0.4			
United Kingdom	12.3	2.2	-0.5	2005 Q3	4.7			
France	9.2	9.0	0.0	2005 H2	3.1			
Italy	6.4	7.2	0.0	2005 H2	2.0			
Canada	5.5	10.5	0.0	2005 Q4	1.7			
Spain	11.1	12.9	0.0	2005 Q4	9.4			
Netherlands	9.0	6.4	-0.6	2005 Q3	6.0			
Australia	10.1	2.3	0.0	2005 Q4	3.9			
Switzerland	1.6	1.5	-10.0	1989 Q4	2.8			
Sweden	8.6	10.5	0.0	2005 Q4	4.0			
Norway	7.9	7.5	-0.7	2005 Q2	1.6			
Denmark	6.7	21.3	0.0	2005 Q4	7.2			
Finland	7.2	9.0	0.0	2005 Q4	3.4			
Ireland	14.0	9.4	0.0	2005 Q4	9.6			

<sup>&</sup>lt;sup>1</sup> End of period; nominal changes, in per cent; for Japan, land prices. <sup>2</sup> In percentage points of GDP. Sources: OECD; various real estate associations; national data; BIS estimates. Table VII.4

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in house prices (Table VII.4). In the United Kingdom and Australia, house prices increased slightly during 2005, while Germany and Japan, which have not recovered from the previous cycle, experienced further price declines (see Chapter II). By contrast, in most other European countries, housing markets remained buoyant. The same was also true for the US market for most of the year, even though since the end of 2005 there have been indications of an impending weakening, as signalled by a slowdown in mortgage applications and in sales of existing homes.

The characteristics of housing finance have recently changed in a number of countries. Relaxation of lending standards due to competition and greater reliance on securitisation has contributed to a significant increase in lending to more risky households. US subprime mortgage originations in 2005 rose to seven times their 2000 volume. Mortgages to borrowers with a poor credit history have also expanded significantly in the United Kingdom. Moreover, mortgage products with flexible repayment options have increased several times over. About one third of total US mortgage originations in 2005 had interest-only options, compared to 1.5% in 2001.

The pace of developments in house prices and interest rates is likely to determine the impact of the expected adjustment in those countries where residential real estate valuations appear more stretched. Lenders seem sufficiently buffered against the direct impact of increased delinquency rates, which could result were the expiration of grace periods in earlier mortgages with flexible repayment contracts to coincide with higher interest rates. However, the indirect effect on banks from a potential economic slowdown, as a result of a contraction in consumer spending and construction activity, is likely to be more sizeable even if it remains more difficult to gauge (see Chapter II). This risk is more pronounced for economies where mortgage debt is at higher levels.

... will have an indirect impact on

### Financial reporting and financial risk management

A number of developments in the period under review focused attention on the influence that financial reporting standards exert on decision-making by firms and investors. Market observers debated the likely impact on earnings volatility and equity valuations of EU listed companies in the first year of implementation of international accounting standards. Similar debates surrounded the introduction of a number of new standards in the United States. Finally, as noted earlier, the implementation of new rules for pension plan accounting in a number of jurisdictions was thought likely to have a significant impact on the asset allocation decisions and risk-taking choices of employer-sponsored pension schemes.

Broadly speaking, these developments implied a shift towards greater reliance on market-based and away from historical cost valuations for balance sheet and income accounting. Discussions between accounting standard setters and users focused on the possible impact on how businesses manage their risks. From the perspective of financial stability, the debate related to the economy-wide implications for the availability and use of risk capital as well as for the dynamics of asset prices.

New accounting rules ...

... triggered debate

Financial reporting ...

These issues revolve around the two main economic functions of financial reporting, namely to provide information about the performance of employed resources and to facilitate their governance. Management of resources depends on proper and reliable measurement of inputs and ultimate results. Outside stakeholders, such as investors and regulators, rely on accurate and representative financial reports by the firm in forming an independent assessment of its current condition and future prospects as well as of how its performance compares to that of its peers and competitors. Moreover, formal intervention rules for the transfer of control over resources are typically based on accounting information. A case in point relates to the respective control rights of equity and debt holders in the event of default. Similarly, regulatory intervention rules are also conditioned on accounting valuations of assets and liabilities of the firm and on associated measures of risk.

... interacts with behaviour ...

There is a two-way relationship between accounting rules and behaviour. Accounting returns act as a focal point for outside stakeholders, including regulators, wishing to gauge the performance of a firm. As such, they inevitably condition the decisions of management. Conversely, the nexus of incentives that influences management behaviour also affects their attitude towards risk. The collective impact of changes and behaviour can in turn influence market prices and valuations. This is particularly true for those items in financial reports that include more forward-looking elements and assessments of risk.

... and risk measurement ...

The measurement of value is not an unambiguous scientific exercise, as it often entails judgment regarding future developments and the assessment of risk/reward trade-offs associated with a specific item. However, the capacity of financial reports' measures of value to reflect the available information has been enhanced as a result of complementary developments over the past three decades: the expansion of markets for risk transfer instruments and advances in risk measurement technology.

... through market prices ...

Markets for risk transfer have developed in both depth and breadth, expanding enormously the range of instruments available to facilitate the tailoring of financial risk to the specific needs and circumstances of individual market participants. Derivatives markets have blossomed, with the latest additions being those for the transfer of credit risk. Securitisation structures have increasingly been used to repackage and reallocate financial risk (see Chapter VI). Importantly, from the perspective of financial reporting, these innovations have generated readily observable market prices for an ever finer grid of risk classes. This has markedly improved the pricing of items that had hitherto been difficult to value.

Helpful as they might be in providing forward-looking valuations, market prices have a major shortcoming, namely their relative opacity as to the drivers of value. Observed prices contain risk premia that are directly related to market participants' views about the risk to future cash flows and their attitude towards risk-taking. Disentangling the relative influence of these two drivers of premia at a given point in time is a highly judgmental exercise, not least because they both vary over time (see Chapter VI). Risk assessments are subject to revisions in the light of new information. Investors' effective risk attitudes can be affected by market conditions, the availability and cost of external funding and recent

performance. Hence, market price variability can reflect, at least in part, temporary shifts in risk appetite as opposed to fundamental shifts in expected cash flows. More importantly, changes in market prices may feed back to the effective risk attitude of investors and lead to a more persistent impact on valuations.

... and risk models

Complementing the deepening of markets for risk transfer, advances in risk measurement technology have also contributed to the accuracy of valuations for complex and illiquid balance sheet items ("marking to model"). Innovations in the pricing of derivative securities have transferred successfully to other contexts, such as the valuation of credit risk and of embedded options in financial contracts. New modelling techniques provide valuable tools for firm-wide risk measurement and management. Increasingly, investment and hedging decisions are supported by asset and liability analysis based on forward-looking models of value and risk, calibrated on observed prices but often extrapolated to cover a broader range of instruments. Regardless of their sophistication, the validity of models depends critically on the validity of the assumptions on which they rest. Moreover, model-implied valuations are not immune to the influence of the same time-varying factors as market prices, since they are based on historical relationships between observed prices and are typically calibrated to reflect recent movements in those prices. Despite these shortcomings, however, risk models offer the promise of achieving a better understanding of the drivers of risk, as they lend themselves more readily to the identification and analysis of risk premia.

Different valuation principles rely variously on historical cost, market prices, models and internal assessments of value. By adopting different perspectives, they strike a different balance between desirable aspects of financial reports, namely accuracy, verifiability, reliability and comparability. For example, historical cost accounting produces highly predictable assessments of value over time that are tightly linked to easily identifiable past events. By contrast, valuation principles that depend on forward-looking assessments of value may be more responsive to current developments at the expense of potentially greater variation in values over time. The contrast is clearest in the case of financial securities for which daily fluctuations in market prices can at times lead to significant unrealised gains or losses if the portfolio is reported on the basis of historical acquisition costs. Moreover, while some principles allow the valuation of specific asset or liability items to depend on firm-specific inputs (eg own assessment of future benefits, discount rates based on portfolio characteristics, synergies with other assets), others such as fair value and historical cost seek to generate values that would be identical, regardless of the specific context. The greater relevance of values generated under the former principle from the viewpoint of internal decision-making comes at the cost of relatively greater dependence on internal models built around potentially opaque assumptions. The debate regarding the accounting for demand deposit liabilities of banks is a case in point.

Accounting standards strive to provide a reporting framework which is neutral with respect to economic decisions. However, as noted above, the choice of valuation principle has important implications for behaviour at the Valuation principles have implications for ...

micro as well as at the macro level, especially as it relates to the treatment of risk information.

... governance of resources ...

The treatment of risk information in reporting standards has a significant influence on the governance of economic resources. The degree to which forward-looking assessments of value and risk are embedded in valuations influences the effectiveness of transfer of control rules included in the law or bilateral contracts. An obvious example is the paradoxical situation that can arise if the market value of an entity's liabilities is used to determine bankruptcy. In this case the deterioration in creditworthiness will generally increase the value of the firm since it will lead to a reduction in the value of its liabilities. Another example is given by the different implications of loan provisioning based on demonstrated signs of distress in individual loans, or on assessments of expected loss for a loan portfolio. While the former approach depends on backward-looking manifestations of risk, the latter involves forwardlooking assessments of risk informed by the analysis of past experience. The nature of the adopted approach will influence reported income and capital for the bank over the business cycle and also condition the assessment of prudential authorities as to its soundness.

... and financial stability

The importance of these influences is further magnified when examined from a systemic perspective, where the endogenous character of risk is more evident. Behaviour that is rational from the point of view of an individual firm, which perceives market prices as invariant to its actions, can lead to inefficient aggregate outcomes when the compounded effect of individual actions feeds back to market conditions. One such example is the recent compression of rates at the longer end of the UK gilt yield curve as a result of the increased demand from pension funds attempting to hedge the risk of low discount rates on the mark to market values of their liabilities (see above and Chapter VI). Likewise, the procyclical variation of loan provisions based on point-in-time credit risk assessments can result in lending behaviour that amplifies business cycle volatility and increases financial system vulnerability.

Valuations are not unique ...

In sum, an analysis of the interaction between financial reporting, on the one hand, and risk measurement and management, on the other, highlights three main messages. The first is that valuations are not unique. Value is often dependent on the perspective from which it is measured. The value contribution of the same item may differ depending on the context. Moreover, even when performed from the same perspective, valuations are subject to variations due to time-varying risk premia driven by shifting investor risk attitudes that may be only indirectly related to changes in expectations about cash flows. These issues are magnified in the case of complex instruments for which there are no deep and liquid markets. This is precisely when accounting is most relevant.

... and are influenced by risk management ...

The second message is the key role played by assessments of risk. The link between risk measurement and valuations is explicit when models are used in deriving values; it is implicit when relying directly on market prices. Moreover, risk measurement and management practices have an indirect influence on reported values as they influence behaviour and asset prices. To the extent that accounting standards affect behaviour towards risk, they also influence valuations.

The final message is that a valuation approach that is best suited for one purpose might present complications for another. Given the multiplicity of external uses of financial reports, this issue can lead to tensions, including among policymakers with different objectives. These are discussed below.

... and different perspectives

#### Financial reporting and prudential policy

The discussion above suggests a number of issues pertaining to financial reporting standards which are relevant from a prudential policy perspective. These relate both to the information content of reports and to the prudential governance of financial firms.

A first point to make is that the information content of reported accounts could be enhanced by the inclusion of more systematic information about risk and uncertainty. Existing standards, regardless of the degree to which they incorporate forward-looking information, are predominantly focused on giving point estimates of current value and income. This could be supplemented by two additional types of information. The first could refer to estimates of the range of potential future variation of value and income ("risk information"). Examples of such statistical summary measures include value-at-risk as well as the outcomes of stress tests and other sensitivity analyses. The second type could refer to measures of the uncertainty embedded in the assumptions of the valuation methodology ("measurement error information"). Clearly the importance of this latter type of information is directly related to the extent to which assumptions and models are used in the assessment of the point estimates. Thus enhanced, financial reports would give users the opportunity to form a more rounded view of the condition and prospects of the firm and avoid a false sense of precision. They would also facilitate comparisons across firms, for example by investors seeking to optimise their portfolios or by regulators in the context of financial stability.

Enriched risk information in reports ...

A second implication for policy is the importance of seeking consistency between the treatment of accounting valuations and sound risk management principles. An example of the tensions that can arise in this context is the different treatment of demand deposits for financial reporting and for the cash and risk management of banks. Accounting standards treat deposit liabilities on the basis of their contractual maturity. By contrast, from a bank treasury perspective, in terms of liquidity management and the associated hedging strategy, they are treated as having a longer effective maturity, which is more in line with the historical behavioural patterns of depositors.

... greater consistency with business decisionmaking ...

A third and more general implication is that there is room for reconciling the policy objectives of prudential authorities and financial reporting standard setters based on a clearer understanding of their different perspectives. Under this approach, reporting standards would focus on providing an unbiased picture of the current financial condition of the firm and the associated risk profile, while regulatory and supervisory instruments would focus on encouraging prudent behaviour based on that picture. In practice, such a decoupling would include redesigning capital and liquidity cushion requirements on the basis of accounting returns free of intentional conservatism, applying "prudential filters" to accounting figures that incorporate risk information,

... and decoupling of accounting and prudential objectives ... and defining new triggers for regulatory intervention in the case of manifest strain.

... are areas where despite progress ...

Progress has been made in all three directions in recent years. Quantitative financial risk disclosures, such as value-at-risk measures for securities portfolios, have already been included in regulatory reporting requirements of financial firms for which this type of risk has been more important. Accounting standard setters, too, have been paying more attention to risk disclosures that are consistent with, but arguably less ambitious than, those of prudential authorities. The prescriptions of IFRS 7 are a case in point. In addition, the classification of items being valued on a fair value basis into categories indicating different degrees of estimate reliability, coupled with rough estimates of the measurement sensitivity to underlying assumptions, is an example of progress in providing measurement error information. And the close cooperation between accounting standard setters and prudential authorities in the development of standards on provisioning, the fair value option and the measurement of insurance liabilities are but the latest examples of the value added by a greater focus on risk management.

... challenges remain

Regardless of the substantial progress made to date, the way forward needs to be based on a longer-term strategy which recognises the need to cooperate at all intermediate stages. Given the complexity of the issues and the multiplicity of stakeholders in this process, a decoupling of objectives and recalibration of policy instruments can only be a long-term goal. Over the medium term, progress can only be deliberately incremental, and appropriate safeguards should always be in place to avoid inadvertently compromising the fundamental objective of financial stability. The continuing dialogue between accounting standard setters and prudential authorities augurs well for further progress in this direction.