EUROPEAN CENTRAL BANK

EU BANKING SECTOR STABILITY

February 2003

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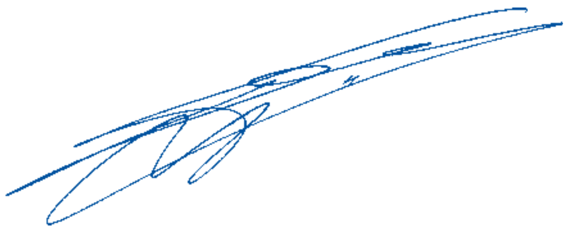
Foreword

Central banks traditionally analyse and monitor financial system stability as a key part of their core functions. This also applies to the Eurosystem and the European Central Bank (ECB). Financial stability, and in particular the stability of the banking sector, is of utmost importance to central banks as it is closely related to the successful conduct of monetary policy and the smooth operation of payment systems, as well as to the efficient performance of the economy. The focus of central banks' interest in this field is on macroeconomic and financial market developments and on financial conditions and risks in the banking sector. Banking stability is also one of the prime objectives of supervisory authorities, which traditionally focus on the financial conditions and risks of individual financial institutions.

I see therefore great value in central banks and supervisory authorities combining the two perspectives in a shared effort to analyse the stability of the banking sector. For central banks without supervisory functions, this co-operation significantly deepens their understanding of the resilience of the banking sector. For supervisory authorities, the analysis carried out by central banks helps assess risks which are correlated or affect a large number of institutions, or which could lead to system-wide vulnerabilities. Moreover, the combination of the two approaches allows one to consider how the behaviour of financial institutions may affect overall economic and financial market developments.

In the specific context of the EU, there is further added value to be gained from conducting analysis of banking sector stability from an EU-wide perspective. There are various sources of common shocks to banks that can cut across national borders, and the integration of the financial system – in particular since the introduction of the single currency – increases the likelihood of cross-border transmission of disturbances.

These two advantages – the marriage of central bank and supervisory expertise and an EU-wide perspective – are both provided by this report on EU banking sector stability. The report summarises, to a wider audience, the outcome of the recent assessment of banking sector stability carried out by the Banking Supervision Committee of the European System of Central Banks. The Committee is a forum of co-operation among the national central banks and supervisory authorities of the EU and the ECB.



Willem F. Duisenberg

President of the European Central Bank

Introduction

This publication of the ECB summarises the main findings of the regular macro-prudential analysis of EU banking sector stability conducted by the Banking Supervision Committee (BSC) of the European System of Central Banks (ESCB). The BSC consists of representatives from banking supervisory authorities and central banks of EU countries. Its regularly conducted stability analysis provides a review of the resilience of the EU banking sector and the potential threats to its stability. This analysis is based on a wide range of indicators drawn from national supervisory data sources and the ECB, as well as on an exchange of information between the member organisations of the BSC.

The document is organised as follows: Section 1 reviews recent developments in EU banking sector profitability. The solvency position of the sector and its ability to withstand any further shocks are discussed in Section 2, which also draws on market-based measures. Section 3 reviews the main forward-looking risks for the EU banking sector. Section 4 concludes with an overall assessment.

1 EU banks' profitability

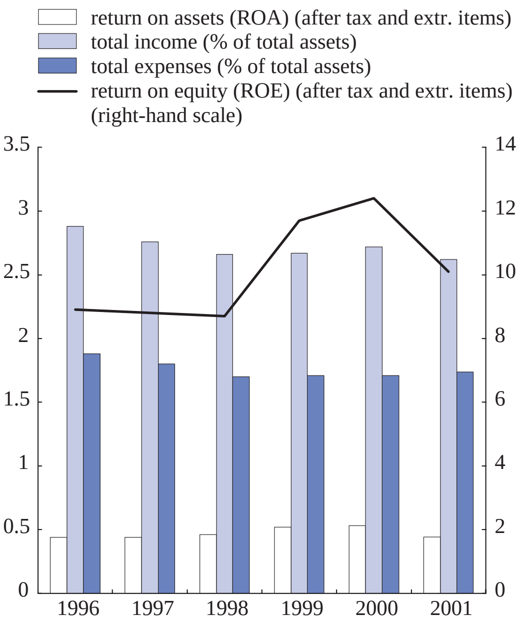
Decreasing profitability across the EU banking sector

Weak economic and financial market conditions have translated into a significant deterioration of EU banks' profitability. The decline in profits started in 2001. Having reached levels of around 12.4% in 2000, the aggregated return on equity (ROE) after tax and extraordinary items of EU banks declined to 10.1% in 2001 (Table 1 and Chart 1). The shift in distribution was even more pronounced: the number and asset share of banks with an ROE of below 5% increased significantly, while those banks with very high profitability (ROE above 20%) diminished markedly (Chart 2). It has to be stressed, though, that aggregate profitability remained at a satisfactory level – around the average value for the period between 1995 and 1999.

Chart 1

EU banks' performance 1996-2001

(percentages)



Source: BSC.

The drop in profitability continued during 2002. The ROE of the large EU banks[1] declined further by 1.5 percentage points, from end-2001 to mid-2002 (Table 2). Some caution is warranted when interpreting these figures, since the mid-2002 cumulated profits have been annualised to enable comparisons with the end-of-year figure. Negative signals also continued to emerge in the third quarter 2002 results of several large banks.

This declining profitability is driven by two adverse developments in the operating

1 See Annex for description of sample.

Table 1

Income, costs and profits of EU banks in different size groups

(change in percentage points)

	Change 2000-2001	2001			
	All	All	Large	Medium	Small
		% of total assets			
Income					
Net interest income	0.03	1.51	1.37	1.67	2.73
Dividends	0.00	0.02	0.02	0.02	0.05
Commissions (net)	-0.07	0.70	0.69	0.66	1.12
Trading and forex results	-0.03	0.21	0.26	0.10	0.06
Other operating income (net)	-0.02	0.18	0.18	0.18	0.23
Total income	-0.10	2.62	2.52	2.63	4.18
Expenses					
Staff costs	-0.04	0.88	0.89	0.85	1.40
Other	0.04	0.83	0.79	0.83	1.73
Total expenses	0.00	1.71	1.68	1.69	3.13
Profitability					
Profits I (before provisions)	-0.11	0.88	0.84	0.95	1.04
Specific provisions	0.07	0.29	0.26	0.33	0.61
Funds for general banking risks (net)	0.00	0.01	0.02	0.01	-0.01
Profits II (before tax and extraordinary items)	-0.18	0.57	0.56	0.61	0.43
Extraordinary items (net)	0.03	0.05	0.04	0.05	0.13
Tax charges	-0.05	0.18	0.17	0.20	0.25
Profits III (after tax and extraordinary items)	-0.10	0.44	0.43	0.46	0.32
		% of Tier 1 capital			
Return on equity					
Profits II	-4.27	13.20	15.32	11.76	4.75
Profits III	-2.33	10.11	11.84	8.86	3.52
		% of total income			
Income structure					
Net interest income	3.14	57.70	54.22	63.57	65.30
Dividends	-0.04	0.77	0.70	0.87	1.11
Commissions (net)	-1.65	26.77	27.57	25.06	26.83
Trading and forex results	-0.95	7.86	10.44	3.69	1.32
Other operating income (net)	-0.50	6.89	7.07	6.82	5.44
		% of total expenses			
Expenditure structure					
Staff costs	-2.36	51.62	52.78	50.70	44.84
Other	2.36	48.38	47.22	49.30	55.16
Cost-to-income ratio	2.81	66.40	66.72	63.99	75.04

Source: BSC.

environment of EU banks: (i) the deterioration in the economic cycle and in borrowers' credit quality, and (ii) the plunge in global and, in particular, European stock markets, coupled with increased risk aversion and uncertainty in other financial markets. These two developments have a negative impact on bank profitability, mainly via increased loan-loss provisions and reduced commissions and trading income from capital market-related business.

The 2001 data enable comparisons to be made between banks of different sizes[2] and some interesting differences to be highlighted. Profitability, as measured by the ROE, was substantially greater for the large institutions: the aggregate ROE of large EU banks was 11.8% in 2001 as compared with 8.9% for medium-sized banks and only 3.5% for small banks (Table 1). The lower ROE of small

2 *See Annex for definitions.*

Table 2

Key ratios for large EU banks [1)]

(percentages)

	end-2001	mid-2002
Cost-to-income ratio	66.13	63.23
Provisions to profits before provisions (Profit I)	37.64	46.88
ROE (after tax and extraordinary items) [2)]	13.80	12.30
Income structure (% of total income)		
Net interest income	55.90	55.77
Dividends	0.90	1.62
Commissions (net)	29.01	27.17
Trading and forex results	8.53	6.58
Other operating income (net)	5.66	8.85
Cost structure (% of total expenses)		
Staff costs	52.71	53.3
Other costs	47.29	46.7

Source: BSC.

1) Note that the sample of large banks is different in Table 2 from that in Table 1, since data for mid-2002 were not available for the same sample of banks.

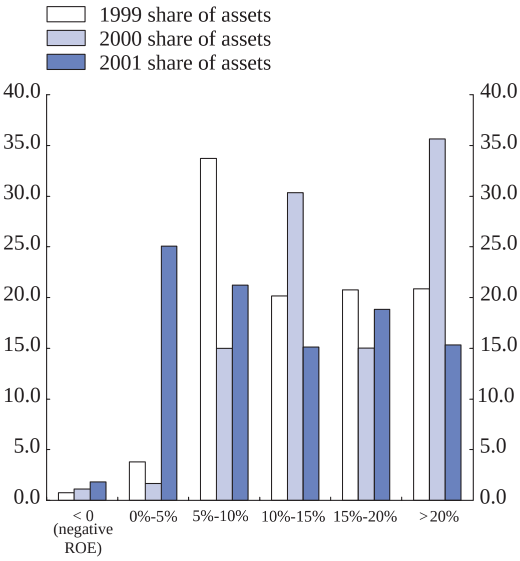
2) For annualisation, profits are doubled.

banks reflects their usually ample capital levels, as the differences across size groups are significantly reduced when the return on assets (ROA) is considered. Moreover, aggregate EU data conceal significant differences between countries, as business is still predominantly local, particularly in the case of small banks.

Chart 2

Distribution of EU banks' return on equity (ROE) 1999-2001

(percentages)



Source: BSC.

Economic woes...

The economic cycle began to deteriorate in 2001 and EU economic activity continued to grow only moderately in 2002. In particular, the combination of weaker growth in the global economy driven by the US slowdown, the negative developments in financial markets and the appreciation of the euro dampened growth in the second half of the year. The possibility of war in Iraq also contributed to the negative sentiment in the economy. Owing to the increase in household equity holdings in the late 1990s and in 2000, consumption might have become more responsive to stock market developments also in the EU. However, the adverse effect appears to be relatively modest in the EU compared with the United States. Moreover, as in the Unites States, increases in house prices may have compensated for the stock market losses in some EU countries.[3]

Ongoing corporate weaknesses and the succession of corporate scandals that followed the failure of Enron contributed to a change in the perception of the reliability of corporate accounting data. Uncertainties about firms' abilities to fulfil investors' profit

3 House price developments have continued to be fairly diverse in EU countries.

expectations led to a sudden reappraisal of corporate asset quality. The economic slowdown has also had a significant impact on the EU corporate sector. Bankruptcies of EU firms increased markedly in 2002. Sector-specific developments were partly responsible for the deterioration in corporate asset quality. The telecom-media-technology (TMT) sector was particularly hard hit by the bursting of the "new economy bubble".

...have translated into higher provisions...

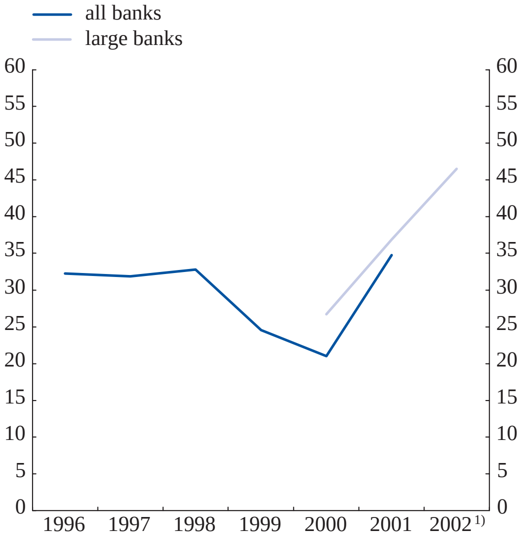
Banks felt the implications of these developments through the deterioration in the quality of international and domestic assets. The ratio of non-performing and doubtful assets to total loans and advances increased moderately for EU banks between 2000 and 2001, from 2.5% to 2.8% (Table 3).[4] EU banks' loan-loss provisioning rose markedly in 2001, as banks prepared for a decline in asset quality. The aggregated flow of provisions, including both specific provisions and funds for general banking risks[5], increased by 38% in 2001, reaching 35% of operating profits before provisions and 0.3% of total assets (Chart 3 and Table 1). The coverage of non-performing and doubtful assets by provisioning reserves also increased (Table 3). The provisions-to-profits ratio of the large EU banking groups continued to increase in the first half of 2002, reaching 47% (Chart 3 and Table 2). According to a limited sample of results and to qualitative evidence, the flows of provisions remained high and even increased in the third quarter of the year.

The deterioration in asset quality so far seems to be in line with that experienced in previous economic downturns. For instance, non-

Chart 3

Total annual provisions flow of EU banks

(percentage of operating profit before provisions (Profit I))



Source: BSC, large banks (30 largest EU banks): Bankscope.
1) Mid-year figure.

4 *Since banks' non-performing asset and provisioning figures are not entirely comparable across countries, the EU aggregation needs to be considered with caution.*
5 *Funds for general banking risk include, inter-alia, so-called dynamic provisions.*

Table 3

EU banks' non-performing assets and provisioning

(percentages)

	All		Large	Medium	Small
	2000	2001	2001	2001	2001
Total non-performing and doubtful assets (gross of provisions) (% of loans and advances to customers)	2.50	2.76	2.32	3.01	7.88
Total non-performing and doubtful assets (gross of provisions) (% of own funds) 1)	25.15	27.83	25.03	29.21	46.08
Total provisioning (stock of reserves) (% of total non-performing and doubtful assets (gross of provisions))	59.90	67.88	76.35	57.22	60.20

Source: BSC.
1) Own funds equal here the sum of Tier 1 and Tier 2 capital.

performing and doubtful assets, and annual provisioning levels in the EU as a whole, are approximately still similar to the levels reached during the slowdown of 1991-92.

On average, asset quality appears to be comparatively lower in small EU banks. In 2001, small banks made substantially higher provisions than medium-sized and large banks, but provisioning reserves still provided relatively low coverage of non-performing and doubtful assets due to the higher amount of the latter in terms of total loans (Table 3). This might reflect the greater exposure of small banks to small and medium-sized enterprises, which seem to have been more affected by the slowdown than large and diversified firms.

...and sluggish net interest income

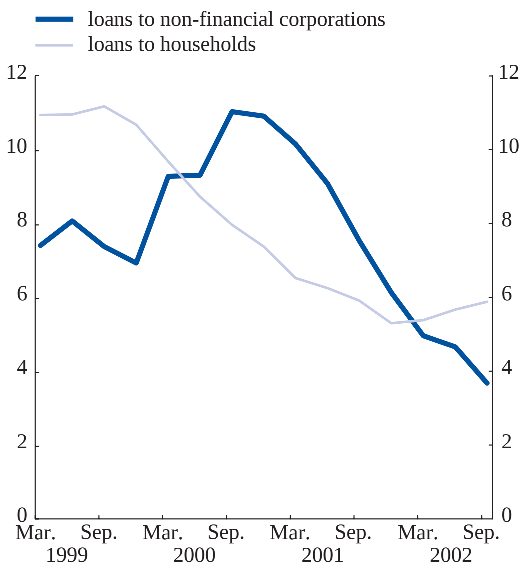
The adverse economic developments have also slowed down credit demand. According to the ECB residency-based Money and Banking Statistics, the overall annual rate of growth in bank loans granted to the private sector has declined considerably in the euro area from its peak of around 10% in 1999. There has recently been a clear divergence between borrower sectors. Household lending accelerated slightly to 5.9% year-on-year in the third quarter of 2002, driven by lending for house purchases, which increased by 7.5%. In contrast, the annual rate of growth of lending to non-financial corporations slowed to 3.7% (Chart 4). Loans to residents grew more slowly than loans to other European countries or to the rest of the world. The accumulation of fixed income securities by banks also decelerated to 5.7% in October 2002 from its peak of approximately 11% at the beginning of the year. On the liabilities side, deposit growth continued at a sustained pace, supported by the increased risk aversion of investors and consequent portfolio adjustments.

EU banks' overall retail interest margins have been generally rather stable since January 2000 (Chart 5). Because of stable margins and moderate asset growth figures, EU banks'

Chart 4

Euro area loan growth

(annual growth in percentage)

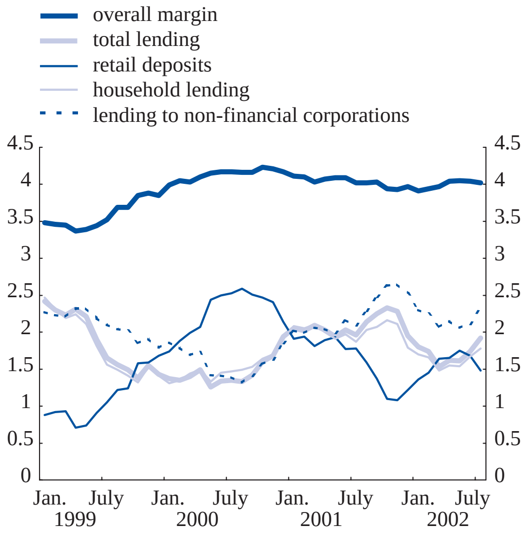


Source: ECB.

Chart 5

Euro area banks' retail interest margins

(percentage points)



Source: ECB.

Notes: Overall margin = EU aggregate loan rate – EU aggregate deposit rate.

Lending margin = EU aggregate respective lending rate – aggregate reference rate (i.e. weighted average of country-specific reference market interest rates).

Deposit margin = EU aggregate deposit rate – aggregate reference rate.

net interest income development has been sluggish. The ratio of net interest income to assets increased only marginally in 2001.

Adverse developments in capital markets...

As in other major stock markets, the broad euro area equity index (Dow Jones Euro Stoxx) fell sharply, shedding around 35% in 2002 and 55% since peaking in March 2000. The TMT and insurance sectors suffered the largest downward corrections. The stock market fall reflected corporate profit performance, which did not meet expectations, particularly in the TMT sector, as well as the corporate failures and scandals. The weakened economic performance and outlook and increased risk aversion also played a role.

Higher risk aversion also led to increased volatility in other financial markets. In the corporate bond market, higher spreads reflected the heightened stock market volatility but also increased corporate bond default rates and significantly increased rating downgrades. Defaults of EU debt-issuing corporations continued to grow, reaching historically high levels in the first half of 2002, while the default rates of US companies tended to stabilise in the same period. Particularly sharp increases were recorded for speculative grade issuers, notably for the TMT sector. On average, corporate bond spreads for EU issuers declined in the last quarter of 2002, but they still remained high by historical standards.

...affected EU banks mainly through reduced income

The direct exposures of EU banks to market risks are reported to be fairly limited. The total amount of shares and participating interests in the trading books of EU banks was only around 3.7% of the total consolidated balance sheet in 2001 (Table 4), without there being major differences between the three size groups. Some negative valuations might have an impact also on the shares in the investment portfolio, which are not marked to market, possibly reducing banks' unrealised capital gains resulting from the difference between the current market value and the historical book value of these investments. The holdings of debt securities are more relevant as they account for almost 20% of the balance sheet total of EU banks, but these are often government securities rather than default risk-prone instruments.

By contrast, the indirect effects of the stock market decline are clearly more significant. First, the financial market turmoil reduced investors' appetite for securities or mutual funds, thus reducing banks' income from asset management and trading activities. Second, many large banks have been particularly hurt by the reduction in income from investment banking, which suffered because of the reduction in primary capital market and

Table 4
EU banks' balance sheet structure

	All banks 2001	Change from 2000, in %
Assets	% of total assets	7.54
Cash and balances with central bank	1.24	22.84
Treasury bills	1.58	0.13
Loans to credit institutions	15.87	2.97
Loans and advances to customers	49.02	7.03
Debt securities	20.10	8.94
Shares and participating interests	3.68	2.29
Tangible assets and intangibles	1.55	6.75
Accruals and other assets	6.50	21.90
Liabilities	% of total liabilities	7.54
Due to credit institutions	22.76	4.87
Deposits and bonds	60.95	8.40
Accruals and other liabilities	8.09	27.91
Provisions	1.16	1.26
Fund for general banking risks	0.14	4.64
Subordinated liabilities	1.82	11.23
Own funds	4.38	10.62
Minority interests	0.41	4.54
Profit/Loss for current year	0.29	-16.83
Off balance-sheet items	% of total assets	
Total off-balance sheet items	1.54	17.51

Source: BSC.

corporate restructuring activities. Earnings from investment banking represented a large share of major banks' profits and income from the late 1990s until early 2001. Initial public offerings in equity markets and new bond issues by EU companies declined substantially from the heights reached in 2000, especially due to the drop in issuance by telecom firms. Finally, banks were indirectly affected by the impact of the stock market fall on general economic development. Since the use of equity as collateral is relatively limited in the EU, no major adverse effect has been reported through this channel.

The major consequence for banks has thus been a steep reduction in net commission income. The ratio of net commissions to total assets dropped from 0.77% in 2000 to 0.70% in 2001. According to annualised figures, large banks also experienced a contraction of a comparable magnitude in the first half of 2002. Trading and foreign exchange income fell relatively as much, although this is a generally less significant source of income.

Diversification benefits appear limited

Since 2001 the distribution of income sources at EU banks has shifted towards net interest income, thus bringing to an end the increasing trend in the share of non-interest income that began in the mid-1990s. This reversal was the combined result of the robust income from domestic household credit and other retail services, supported by a relatively steep yield curve (i.e. income from maturity transformation) and the plunge in income from capital market-related activities.

Banks with a strong focus on traditional retail operations and with a well-established retail franchise have consequently fared better than banks that have diversified into investment banking and asset management activities. In fact, large banks displayed a relatively low level of total income in 2001 (Table 1), which decreased further in the first half of 2002. Large banks also faced sharp contractions in income from their operations abroad. In particular, the economic slowdown in Latin America, the financial problems of Argentina and the difficulties in Brazil affected the profits generated from these markets. All in all, for large banking groups that have increased their range of financial services and presence in foreign markets, diversification has not recently generated the desired benefits, as several lines of business deteriorated at the same time.

Cost efficiency very important

EU banks' costs remained stable in 2001. Staff costs fell while other costs increased by approximately the same amount. The increases in non-staff costs in 2001 were partly driven by the euro cash changeover. There were also other non-recurring costs related to bank restructuring, further investment in asset management and other value-enhancing services, as well as electronic banking. Mainly as a consequence of lower income, cost-to-income ratios tended to deteriorate in 2001. However, large banks tended to improve their ratio in the first half of 2002 (Table 2).

In some cases, high cost-to-income ratios can signify important underlying efficiency issues. Stakeholders are increasingly paying more attention to bank efficiency, stressing the need for cost reductions. Pressure to improve efficiency has mounted as profitability has continued to decline. Many banks are currently stepping up efforts to reduce costs.

The medium-sized EU banks appear on aggregate to be the most efficient in terms of cost-to-income ratios in 2001, owing to relatively high income. This ratio is clearly the highest in the case of small banks. A more detailed inspection shows that other administrative expenses created the largest gap between small institutions and medium-sized and large institutions, most likely because of less extensive use of cost-saving information technology by small banks.

2 EU banks' financial conditions

Solvency levels intact so far

EU banks' solvency levels remained unaffected in all size groups of EU banks in 2001, allowing them to withstand the shocks in their operating environment. The aggregated total regulatory capital ratio for the EU banking system as a whole stood at 12.0% at end-2001 (11.9% at end-2000) (Table 5). The ratio remained broadly unchanged in June 2002 for major institutions.[6] The composition of own funds also remained sound, with extensive reliance on stable and higher quality capital components. The ratio of Tier 1 capital to risk-weighted assets remained stable and sizeable, at 8.3% on aggregate for EU banks in 2001. As regards the distribution of capital ratios, only a few banks, most of which were medium-sized or small, had a capital ratio below 9% at end-2001.

EU banks have made efforts to maintain and also build up capital levels in light of the increased risks. Their resilience in the face of the adverse developments owes much to the satisfactory capital buffers, as well as to improved risk management, active cost-cutting efforts and continuous access to wholesale market liquidity.

Table 5

EU banks' 2001 solvency ratios

All banks	
Tier 1 ratio	8.30
Total capital ratio	12.04
Number of banks, capital ratio below 9%	123
Large banks	
Tier 1 ratio	7.67
Total capital ratio	11.58
Number of banks, capital ratio below 9%	2
Medium-sized banks	
Tier 1 ratio	9.00
Total capital ratio	12.65
Number of banks, capital ratio below 9%	36
Small banks	
Tier 1 ratio	12.29
Total capital ratio	14.86
Number of banks, capital ratio below 9%	85

Source: BSC.

However, the decline in profitability reduces EU banks' ability to withstand further shocks without an impact on their solvency. Hence, greater attention should be paid to the preservation of adequate capital levels. Those segments of the EU banking sector where the worsening in cyclical and financial market conditions is further depressing already structurally low efficiency and profitability face particular challenges in addressing their structural problems.

Financial market assessment deteriorated, but not alarming

On the whole, the stock price development of EU banks has been largely in step with the general index. However, the bad news about banks' weakened profitability and asset quality caused banks' share prices to underperform in the third quarter of 2002. Some banks suffered substantial stock market falls during this period. More recently, market sentiment towards banks has turned more positive, reversing some of the earlier price falls. In comparison with banks, insurance companies' stock prices suffered much more in relative terms.

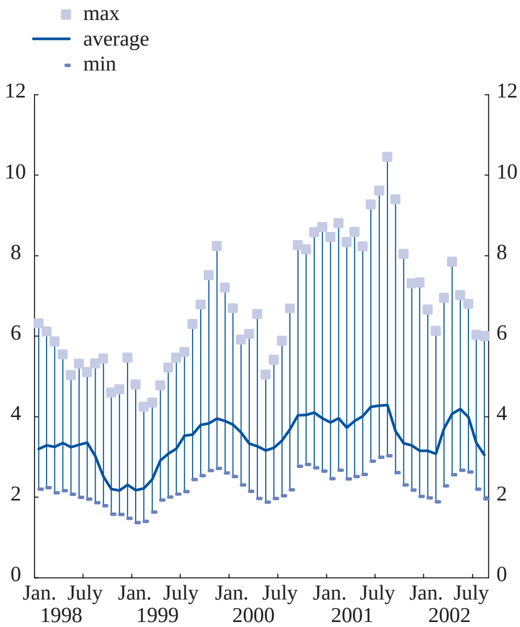
Stock market prices can also be used to build measures of bank fragility. In particular, the distance-to-default (DD) provides a useful summary measure of bank soundness, as it shows interesting properties in anticipating the emergence of stability problems.[7] Although it dropped significantly in the

6 *As confirmed by banks' reports.*

7 *The distance-to-default represents the number of asset value standard deviations away from the default point. It is calculated from bank's market value of assets and the volatility of that value and from the bank's liability figures. Option pricing theory is used to derive the first two components from the bank's equity market data. The default point is defined as the point at which the value of the bank is precisely equal to the value of its liabilities (i.e. equity value is zero). One should monitor, in particular, the changes in DDs over time, rather than the levels of DDs, as they are subject to several assumptions, e.g. the particular treatment of subordinated debt. Here it is considered as a component of banks' liabilities without any deductions. See Gropp, Vesala, Vulpes "Equity and bond market signals as leading indicators of bank fragility", ECB Working Paper 150.*

Chart 6

Large EU banks' distance-to-default



Source: ECB calculations.
Note: See footnote 7 for more information on how DDs are computed.

second half of 2001 and, after a temporary recovery, again in the second half of 2002, the average level of these indicators suggests that satisfactory solvency buffers are still in place – in market terms – to withstand further risks (Chart 6). For instance, at end-August 2002 both the average and the minimum values of this indicator were still above the levels observed in October 1998 after the Russian default and the crisis at the hedge fund Long Term Capital Management (LTCM), and roughly at the level of late-2001.

Banks' credit standards have tightened, but no evidence of a credit crunch

Given the present circumstances, a topical issue is whether the lending policies of EU banks are becoming tighter. While this has been the case, the presence of credit availability constraints cannot be rigorously tested given the data available. The quantitative and qualitative information collected at the country level does not provide strong evidence of supply-side constraints in any Member State. EU banks seem to have appropriately tightened credit standards in line with increased risks, rather than become restrictive in lending because of capital shortages. The tightening of loan contract terms – in particular pricing rather than collateral requirements – has resulted mainly from the introduction of more risk-driven approaches to lending. Lending policies have become more attentive to the risk profile of the counterparts. This is reflected in the clear tightening of credit to firms, especially in the TMT sector, where they are more exposed to deterioration.

3 Outlook for risks to EU banks' stability

At the current juncture, the risk outlook for the EU banking sector is crucially dependent on the timing and speed of the recovery in the EU economy. According to Eurosystem staff macroeconomic projections of December 2002, real GDP growth in the euro area is forecast to increase by between 1.1% and 2.1% in 2003. The recovery is expected to be mild in its early stages, gaining strength in the second half of the year. 2004 is expected to be more buoyant. Such developments would favour a gradual improvement in EU banks' financial conditions, even though lacklustre growth and the typical time lag with which asset quality and loan loss provisions react to cyclical developments might imply some further strains in the months to come.

However, an assessment of the outlook for banking stability indicates some potential threats to this baseline scenario, which could have adverse consequences for the EU banking sector. Risks could stem from specific weaknesses in the EU economy, from global economic and financial market developments, or from deteriorating conditions in emerging markets.

Some macro-risks for banks stem from EU-specific developments

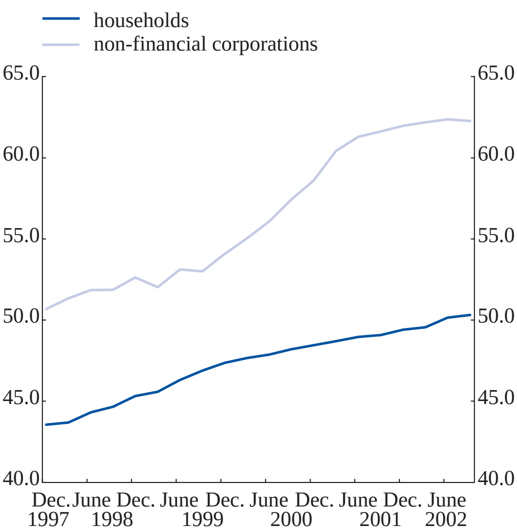
Real GDP growth in the EU could be adversely affected by a deterioration in consumer confidence and an increase in corporate sector fragility. Despite a slowdown in economic activity, employment in the EU has been surprisingly resilient. However, it cannot be ruled out that in order to restore profitability, firms might start to reduce their costs by shedding labour. This could weigh on consumer confidence and delay economic recovery. In the presence of negative developments in consumer confidence, an additional cause for concern for banks could result from downward corrections in residential and commercial property prices in a few EU countries, particularly if the growth in prices was sustained by increased borrowing by households. Nevertheless, a reassuring factor is that household debt levels are still relatively contained. In the euro area as a whole, the ratio of household debt to GDP was around 50% in the third quarter of 2002 (Chart 7), compared with 78% in the United States.

While the financial position of EU households seems relatively sound, the increasing indebtedness of firms, coupled with a recent decline in profitability, points to growing fragility. This pertains especially to specific industry sectors (such as the TMT sector). The reduced activity in the primary markets is a major obstacle to fast debt reduction, as it hinders equity issuance and reduces the realisable value from asset sales, effectively constraining firms' ability to repay debt by disposing of assets. It also constrains fund-raising via equity markets and limits the probability of conversion of convertible bonds into equity. Very recent observations point to some stabilisation in euro area companies' debt burden (Chart 7). In addition, the

Chart 7

Ratio of debt to GDP of the euro area non-financial private sectors

(amounts outstanding, ratios in percentages)



Source: ECB.

reduction in the interest rate level implies lower debt-servicing costs. Finally, the reduction in the corporate bond spreads in the fourth quarter of 2002 suggested an improvement in the EU corporate sector resilience.

Certain sectoral exposures of banks need monitoring

Moody's KMV expected default frequencies (EDFs)[8] showed that investors perceived corporate default risk to be rising in the EU until August 2002 (Chart 8). More notably, the dispersion of this indicator across listed companies, as measured by standard deviation, doubled in the last two years, indicating a substantially larger proportion of high-risk firms. The increase in the default risk was the most pronounced in the technology sector. Telecom and media firms also displayed significantly heightened risk.

The impact of an increased default risk by non-financial firms on banks can be assessed via banks' exposures to relevant industry and service sectors. EU banks' exposures to the TMT sector have been on a downward trend and are not particularly high, amounting on average to 17% of own funds in June 2002. However, the increased default risk of firms in this sector implies that the exposures at risk are not negligible. EU banks have tightened credit conditions and policies regarding the availability of credit lines to this sector. This was also facilitated by the expiration of guarantees undertaken for the UMTS auctions. However, banks may not have been able to reduce their exposures by as much as they wished, as the reduced availability of market finance has made firms more dependent on bank lines of credit. The exposures tend to be significantly concentrated in major banks, as the telecom counterparties are generally large. Some degree of concentration could also be present on the borrowers' side, where certain very large companies have substantially increased their indebtedness in recent years.

Banks' exposures to the construction and energy sectors are also considered relevant because of their cyclical nature and certain recent notable corporate failures. Exposures to the construction sector are fairly high (on average 34% of EU banks' own funds at mid-2002), but the exposures at risk are less worrying due to the lower perception of default risks than in the TMT sector. In some Member States both the level of exposures and the financial conditions of the sector may call for more careful monitoring. Exposures to the transport industry have recently been on the rise, reaching 20% of EU banks' own funds. The industry has experienced profitability strains and exposures exhibit a rather high degree of concentration. Finally, the automobile industry also raises some concerns, due to the high indebtedness of some major car manufacturers.

The overall profitability of European insurance companies, and thus their ability to buffer against risks, started to deteriorate quite markedly in 2001. The stock market fall seems to have affected insurance companies more than the increased damages due to the events of 11 September 2001, for instance. The negative impact of the stock market fall on insurers – in particular life insurers – is due to their significant equity portfolios, which generally have to be marked to market. Insurance companies that issued policies involving minimum guaranteed rates of return have been particularly hard hit.[9]

EU banks' direct credit exposures to life and non-life insurance companies and pension funds are rather limited, as these borrowers are typically not highly leveraged. Bancassurance conglomerates have continued to develop in the EU, together with minority shareholdings. Conglomerates carry some potential risk of internal contagion, as

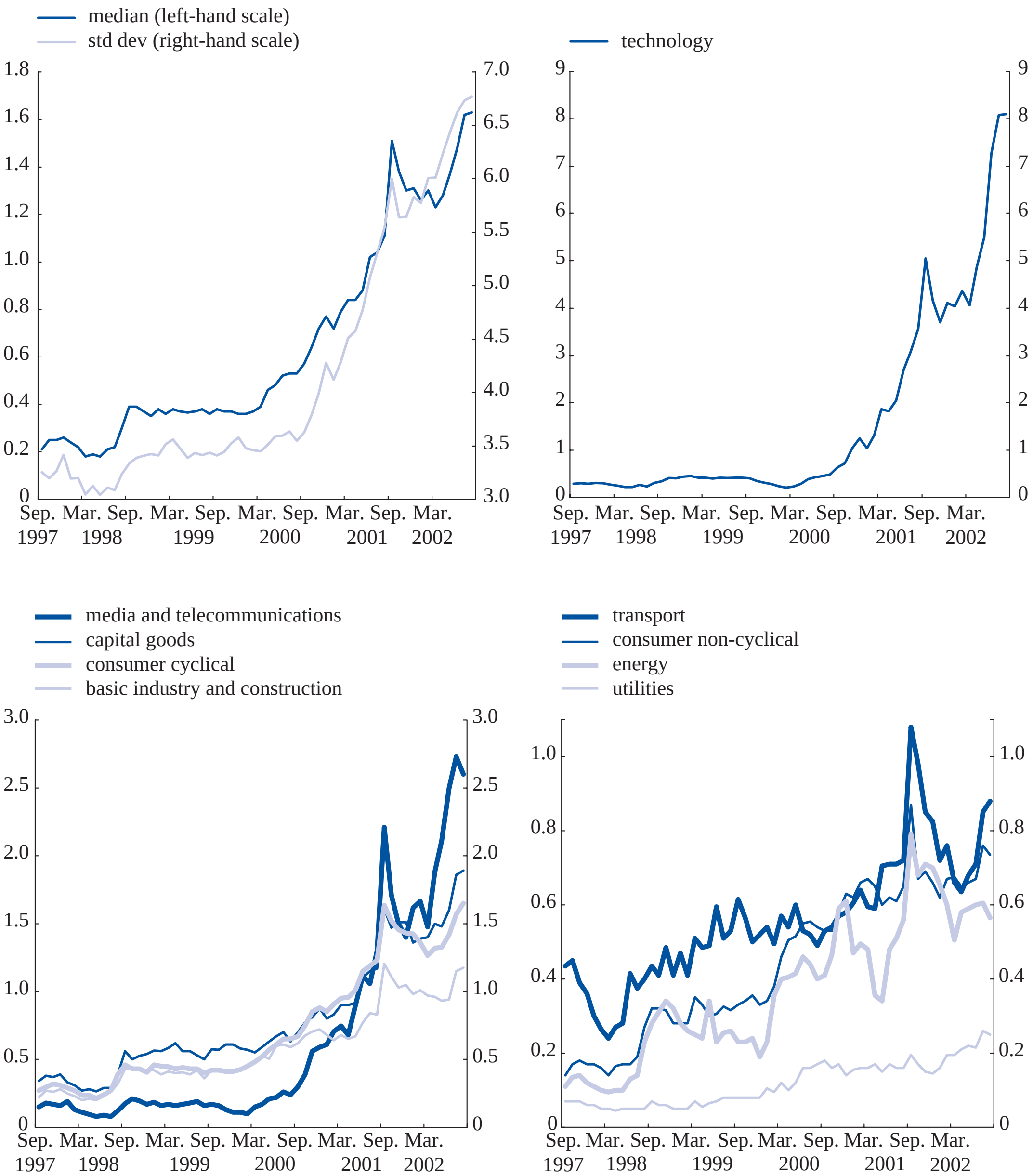
8 *The EDFs represent the probability of default in a year's time, estimated on the basis of stock market information.*

9 *At the end of 2000, euro area insurance companies and pension funds held around 43% of total financial assets in shares and other equity. However, there are significant differences across EU countries.*

problems in the insurance arm might impinge on the capital resources of the bank. Banks may also have capital from the insurance subsidiary as their own Tier I capital. The relevance of these "conglomerate links" may depend on the current organisational structure. In particular, the risks for banks are in most cases mitigated, as the bank and insurance wings of the group are often sister companies under the same holding company, or firewalls are in place preventing the insurance company from influencing banks' capital. However, reputational risks for banks cannot be ruled out if insurance companies belonging to the same conglomerate come under strain. The increased use of credit risk transfer instruments by EU banks to reallocate risks to other financial institutions, in particular insurance companies, could also provide a link between the two sectors. Legal

Chart 8

Expected default frequencies for EU non-financial corporations



Source: Moody's KMV.

and operational risks may result from the increased reliance on these instruments.

Developments in the US the key external factor

The outlook for growth in the EU also hinges on global economic recovery. The resilience of US household demand is crucial in this respect, as private consumption has so far been the engine for US growth. Lately, however, it has shown signs of cooling down. Together with income growth, asset price developments can impinge on US consumers' behaviour. The decline in stock markets has already affected US consumption through a negative wealth effect. Favourable mortgage rates have supported investments in real estate, and homeowners have taken advantage of the upturn in the housing market to borrow for consumption purposes, exploiting the appreciation on housing loan collateral. The levels of indebtedness could represent an element of fragility, which might lead to a contraction in consumption, especially in the case of further downturns in stock prices or falls in real estate prices.[10]

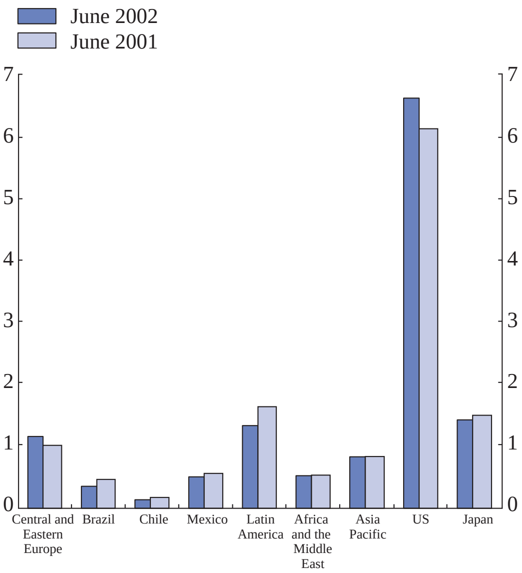
Military action against Iraq could also be a factor exerting downward pressure on consumer spending in the United States and worldwide. The adverse impact on global growth would mainly result from the likely increase in oil prices and, possibly, via indirect effects channelled through financial markets and exchange rates. Taking into consideration the experience of the previous Gulf war, it could be assumed that a swift and confined conflict, accompanied by a temporary spike in oil prices, would have a relatively mild impact on US and EU growth.

Further negative implications for the profitability of certain EU banks could result from lower income in US markets and from direct credit exposures to US counterparts. International claims of EU banks on the United States stood at about 3.5% of banks' total assets in June 2002. Furthermore, considering the claims in US dollars of local

Chart 9

EU banks' consolidated country credit exposures

(percentage of total assets in 2001)



Source: The BIS consolidated banking statistics and BSC.
Note: Total foreign claims, including local claims in local currency.

affiliates and branches, the exposure of European banks reached 6.5% of total assets in the same month (Chart 9).

Risks from emerging markets seem to be subsiding

In summer and early autumn 2002, some emerging market countries were considered a relatively important source of risk to EU banks. The negative outlook mostly followed from the slower pace of economic recovery and the difficult financial conditions that prevailed for the emerging markets at the time. In particular, Brazil was highly affected by negative investor sentiment, although since October 2002 the situation has improved. The spreads on Brazil's debt have decreased significantly in the past few months. There are also signs of a possible restructuring of Argentina's debt.

10 *In the second quarter of 2002, US household debt stood at 79% of GDP (103% of nominal disposable income), up from 68% in 1995.*

The exposures of EU banks to Latin America decreased between June 2001 and June 2002 (Chart 9). At the same time, exposures increased vis-à-vis central and eastern Europe and remained relatively stable vis-à-vis other emerging regions. However, monitoring these exposures continues to be warranted.

4 Overall assessment

The deterioration in the operating environment of EU banks resulted in a weakening of profitability in 2001 and 2002. So far, the European banking sector has been able to withstand the strain rather well. On average, profitability is still at satisfactory levels – viewed from a historical perspective – and capital buffers remain broadly intact. EU banks are also undertaking restructuring efforts to restore profitability and are increasingly adopting more sophisticated risk management tools, which allow for a more efficient risk-based pricing of credit.

Looking ahead, economic activity in the EU is expected to gradually recover, accelerating in the second half of 2003. This leads to a positive assessment of EU banking sector stability, even though profitability and asset quality are likely to deteriorate further in the near future.

However, some potential threats exist to this baseline scenario. First, there are risks stemming from domestic EU economic developments. A possible deterioration in the labour market or further turbulence in financial markets could affect economic growth in the EU over the short term. In certain countries, reversals in the growth of housing prices could also affect consumer spending. The increased vulnerability of the EU corporate sector due to rather high corporate indebtedness, in particular in the TMT sector, could further increase the strain on banks' balance sheets. Second, global economic recovery might be delayed. Military action against Iraq could be the triggering factor, especially if it is coupled with significant increases in the price of oil and negative reactions in financial markets. Third, although there are signs that risks from exposures to emerging markets are subsiding, new difficulties in these markets could also directly affect the financial conditions of banks that have diversified their activities in those areas.

Should such adverse macroeconomic developments materialise, the impact on EU banks' profits would be sizeable due to a significant increase in provisioning needs and a reduction in income from traditional retail banking, which is fundamental in sustaining profits, as other sources of income have recently suffered. However, the EU banking sector as a whole has the potential to withstand negative shocks. Exposures to sectors displaying a fairly high probability of default appear to be manageable. EU banks are also actively managing their exposures to emerging market countries and have significantly provisioned against risks stemming from areas that have shown increasing signs of fragility or outright crises. The ability of EU banks to restore profitability levels and to maintain adequate capital buffers has so far been, and will continue to be, a decisive factor in the resilience of the sector.

Annex

Data description

The macro-prudential analysis conducted by the BSC is based on the pooling of relevant aggregate information. The data consist of quantitative and qualitative information provided by member organisations of the BSC, harmonised ECB statistics and publicly available data. An important set of information for analysis is the consolidated bank profitability, solvency and balance sheet data provided by national supervisory authorities and central banks. These data are specifically collected for the macro-prudential analysis. They contain information on the three size groups of EU banks, covering approximately 99% of the EU credit institution sector in terms of total assets for the fiscal years 2000 and 2001 (Table A.1).

In the data, banks are divided into three size categories on the basis of consolidated assets. The threshold differentiating medium-sized banks from large banks is set at 0.5% of total consolidated assets of the European banking sector, corresponding to approximately €100 billion in assets. The threshold between small and medium-sized banks is set at 0.005% of total consolidated assets, which corresponds to €1 billion. Large banks represent 66% of EU banks' total assets and are particularly important from a systemic stability perspective, as they are typically subject to common shocks originating in the international environment and to EU-wide trends.

For the purposes of this report, mid-2002 data on large EU credit institutions were also collected. These data cover approximately 50% of the EU banking sector. The sample of large institutions for 2000 and 2001 (Table A.1) is somewhat larger than the sample for mid-2002, as mid-year results were available only for a limited number of banks. Comparisons between the data for 2001 and mid-2002 are based on this smaller sample of large banks.

Table A.1

Data for the fiscal year 2001: coverage

	EU
Number of credit institutions	
Stand-alone credit institutions	4,174
Banking groups	451
Total number of credit institutions	4,625
of which:	
large	*57*
medium	*968*
small	*3,600*
Total assets of EU credit institutions (EUR millions)	24,458,778
Assets of the credit institutions in the sample	
large	16,042,622
medium	7,217,943
small	913,078
% of total assets of all EU credit institutions	98.83
% of total assets of the credit institutions in the sample	
large	66.36
medium	29.86
small	3.78

Source: BSC.