# Recent developments in the euro area banking sector

This article provides an overview of euro area banks' performance in 2002 and early 2003. Profit and loss and balance-sheet information for the 50 largest euro area banks shows that their performance deteriorated significantly compared with 2001 owing primarily to a persistently weak macroeconomic situation and subdued financial market activity. Nonetheless, solvency levels have so far provided ample cushioning against weaker income developments and continuing problems with asset quality. Furthermore, the outlook for the banking sector appears more favourable, underpinned by the return to profitability in early 2003 of some of the weaker banks and by the prospect of a general economic recovery late in 2003.

Section I of this article reviews the financial condition of euro area banks in 2002 and early 2003, focusing predominantly on income and profitability results. The main forces behind these developments, in particular, changes in the underlying income and asset quality, are covered in Section 2. Section 3 evaluates, on the basis of market-based indicators, the financial standing of the banking sector up to the first quarter of 2003. The final section elaborates on the outlook for the remainder of 2003 and early 2004.

### I Euro area banks' financial condition

In 2002 the average income performance and profitability of euro area banks deteriorated further from the already weak results seen in 2001 mainly as a result of a further weakening in the macroeconomy and continued turbulence in financial markets. This was also reflected in the general slowdown in banking activity, visible in the fall in the aggregated consolidated total assets of 50 large euro area banks in 2002 for the first time in many years. The return on equity in the 50 largest euro area banks declined for the second consecutive year to 6%, i.e. less than half of its value in 2000 (see Table 1). However, at the same time these banks maintained a high dividend pay-out ratio, which may signal that banks expect profitability to recover in the near future in line with expectations of a gradual economic recovery and financial market stabilisation. Furthermore, positive developments were observed in banks' first quarter results for 2003.

The analysis of the performance indicators across individual banks shows that the banks in the lowest decile fell very close to the break-even point in terms of return on equity (or assets) (see Table I), which can be attributed to a larger-than-average increase in provisioning needs and large differences in operating efficiency. Operating efficiency, measured by the cost-income ratio, varied between 40% and 85% for the lowest and

highest deciles. The fall in many of the banks' operating efficiency was mainly due to reductions in income. Whereas banks' income from retail operations remained robust and became the backbone of their profitability in 2002, banks' commission income related to investment banking operations and asset management declined significantly as capital market activity continued to remain depressed and retail clients' investment in securities slowed down. These developments resulted in a further significant decline in the share of non-interest income in banks' total income (see Table I).

As a consequence of income and cost pressures, many banks have undertaken or announced substantial cost restructuring programmes, involving a reduction in the number of staff and branches. The reduction in the number of branches and employees began in 2001 and is most evident in those banking systems identified as being in need of substantial restructuring. The cost restructuring is likely to be spread over 2003, but provisional figures reveal some impact already. This year's first quarter average return on equity after tax (ROE) for a sample of 30 major euro area banks recovered from 9.1% to 11.5%, and the average cost-toincome ratio decreased from 63.3% to 59.8% compared with end-2002.

Table I
Indicators of the asset quality, profitability, solvency and liquidity of the largest 50 euro area banks

(percentage)

	We	ighted ave	erage	Lowest and highest decile		
	2000	2001	2002	2000	2001	2002
Growth in total assets	16.2	9.2	-2.5	[3.6,37.1]	[-1.4,30.8]	[-12.0,14.0]
Asset quality						
Loan-loss provisions/total operating income	6.7	9.4	12.3	[1.4,22.1]	[3.1,22.4]	[4.9,35.7]
Loan-loss provisions/total loans	0.4	0.5	0.7	[0.1, 0.8]	[0.2, 1.0]	[0.2,1.3]
Non-performing loans/total loans	3.1	2.6	3.1	[0.8, 7.6]	[0.8,6.4]	[0.8,6.4]
Profitability						
Non-interest income/total operating income	55.8	51.4	49.2	[19.3,73.0]	[17.1,66.0]	[16.3,65.0]
Total operating cost/total operating income 1)	67.7	71.0	72.0	[40.3,78.1]	[42.6,82.2]	[40.4,84.6]
Return on equity (after tax)	14.0	8.7	6.0	[6.4,23.0]	[2.6,18.6]	[0.0, 15.2]
Return on assets (after tax)	0.7	0.4	0.3	[0.1, 1.5]	[0.1, 1.1]	[0.0,0.9]
Dividend pay-out ratio (dividend/profit after tax)	23.2	32.8	33.2	[5.9,51.4]	[8.7,81.6]	[0.0,88.8]
Solvency 2)						
Total capital ratio	11.0	11.2	11.4	[8.5,13.2]	[8.9,13.7]	[9.2,15.0]
Tier 1 ratio	7.7	7.7	8.1	[5.3,10.4]	[5.5,10.8]	[5.6,10.8]
Liquidity						
Customer deposits and short-term liabilities/						
total liabilities	65.4	64.2	64.5	[44.6,84.0]	[45.7,84.0]	[44.6,77.0]
Liquid assets/total assets	17.9	17.4	18.0	[7.4,34.9]	[8.7,31.3]	[5.1,29.1]
Loans/customer deposits and short-term liabilities	77.0	89.3	90.0	[46.2,122]	[46.0,152]	[41.0,138]

Source: ECB calculations based on Fitch Ibca Bankscope (May 2003) consolidated data for the 50 largest banks (accounting for over 40% of euro area banks' total assets). Lower and upper deciles refer to the 10% tail of the distribution of each indicator.

Overall profitability in 2002 was also dented by a further deterioration in banks' asset quality following an increase in corporate sector bankruptcies. Loan-loss provisions of the 50 largest banks increased to 0.7% of total loans and to 12.3% of total operating income in 2002 (i.e. by around 40% compared with the previous year). For the institutions in the highest decile, loan-loss provisions, as a fraction of total loans, increased from 0.98% in 2001 to 1.32% in 2002, whereas non-performing loans remained at 6.4% of total loans. The main motive for this increase in provisioning was the deterioration in asset quality. Non-performing loans increased to an average of 3.1% of total loans in 2002, which is, however, not alarming compared past business cycle downturns. Provisioning increased substantially in the fourth quarter of 2002, reflecting some of the usual quarterly variations, but also the typically delayed impact of business cycle weakening on banks' provisions. Provisioning declined in most of the group of 30 banks reporting 2003 first quarter results, and variations across these banks also fell. The simple average provisioning decreased as a percentage of total loans from 0.59% to 0.45%.

In spite of the reduced profitability, the solvency ratios of the 50 major euro area banks remained quite stable and even increased somewhat in 2002, both on average and in the lowest decile. The average total capital ratios remained significantly above the regulatory minimum (i.e. 8%). Also, the core capital ratios (Tier I) generally remained sound. Hence, euro area banks still appear to have sufficient capital buffers to absorb any further potential losses. Many banks seem to have continued to actively manage their capital so as to maintain a constant buffer above the regulatory requirements, regardless of the change in business conditions. This is supported by the announcements made by

<sup>1)</sup> Total operating cost includes personnel expenses, and other administrative and operating expenses.

Solvency ratios are calculated as unweighted averages. Figures are not comparable with those reported in the August 2002 Monthly Bulletin owing to differences in sample selection and weighting schemes.

individual banks of active capital management and asset-reduction strategies aimed at maintaining solvency ratios. In the case of some banks, these strategies involved significant sales of "non-core" assets, including participations and minority stakes in other financial firms. These sales significantly boosted these banks' profitability. Without the income from these transactions, the average return on equity in the 50 leading banks would have been close to 5% (instead of 6%) in 2002. These sales also led to a reduction in risk-weighted assets, which supported banks' solvency ratio, but possibly at the expense of reduced hidden reserves.

Euro area banks' balance-sheet liquidity positions remained largely unchanged in 2002. The share of deposits and short-term liabilities remained at around 65% of total liabilities. At the same time, liquid assets were

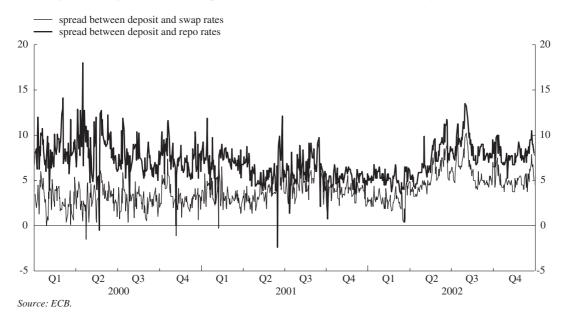
maintained at around 18% of total assets, but fell from 8.7% to 5% in the lowest decile.

The availability and cost of money market liquidity can be decisive for banks' ongoing liquidity management. In this respect, credit conditions have remained broadly unchanged since the decline seen in 2002. This can be seen from the spreads between the unsecured interbank deposit rates and the EONIA swap and, in particular, secured repo rates (see Chart I). Both spreads indicate the pricing of banks' credit risk in the interbank money market. In early 2003 the average spread against the swap rates stood at around 5 basis points, while the average spread between the deposit and repo rates stood at around 8 basis points. Both figures were down from the higher levels observed in late 2002, but still remained somewhat high.

### Chart I

### Euro area interbank money market spreads

(average spread in basis points calculated from quotations in the two-week, one-month and one-year segment)



### 2 Main factors affecting banks' performance

The financial condition of banks reflects a number of factors which materialised in the period under review, notably affecting banks' income composition and asset quality. In addition, some other factors related to equity market developments are also worth noting.

### 2.1 Income composition and evolution

Banks' net interest income was affected by turbulence in credit markets owing to the economic situation and the conflict in Iraq. During the course of 2002 growth in loans to non-financial corporations failed to recover from the downward trend observed over the last three years. Growth in lending to the corporate sector continued to fall until December 2002, settling just above 3% (see Chart 2a). More recently it has started to pick up, reaching almost 4%. By contrast, lending to households grew at close to 6% throughout 2002, driven primarily by property-related lending, but it was still well below the peak of close to 12% observed in 1999. Much of the increase was sustained by lending for house purchases, which nonetheless started to grow at slightly lower rates in the first quarter of 2003. Hence banks' net interest income has been increasingly reliant on household lending.

ECB retail interest rate figures suggest that euro area banks continued to widen interest margins on lending to households and nonfinancial corporations in 2002 (see Chart 2b), reportedly owing to a low demand for loans. The widening of margins has evolved over the last two years, and is particularly evident in lending to the non-financial corporate sector. Wider margins on lending to firms and also households have not supported a higher overall intermediation margin, however. The latter narrowed as a consequence of lower margins on deposits, as banks have been unable or unwilling to provide lower interest rates to depositors. Figures for the first quarter of 2003 indicate a stabilisation of margins on corporate and household sector lending and some reversal in the deposit margin, thereby stabilising the overall margin.

Important changes in banks' lending behaviour are also evident from the results of the second ECB Bank Lending Survey in April 2003, in which a net tightening of banks' credit standards was

Table 2
Income structure of the 50 largest euro area banks
(percentage of total assets)

	Weighted average			Lowest and highest decile			
	2000	2001	2002	2000	2001	2002	
Total operating income	2.74	2.58	2.58	[1.11,4.36]	[0.88,4.42]	[0.87,4.39]	
Net interest income	1.21	1.25	1.31	[0.63,2.43]	[0.59,2.68]	[0.52, 2.80]	
Net non-interest income	1.53	1.32	1.27	[0.17,2.06]	[0.15,1.83]	[0.14, 1.80]	
Of which: net commission income net fee income net trading income	0.60 0.21 0.52	0.56 0.17 0.41	0.56 0.17 0.32	[0.00,1.27] [0.00,0.34] [0.00,0.80]	[0.00,1.30] [0.00,1.40] [-0.01,0.76]	[0.00,1.34] [0.00,0.38] [-0.04,0.67]	
Total operating cost	1.88	1.78	1.78	[0.59,2.52]	[0.56,2.55]	[0.62,2.65]	
Loan-loss provisions	0.18	0.24	0.32	[0.05,0.43]	[0.07, 0.51]	[0.09, 0.63]	
Net operating result	0.69	0.49	0.42	[0.17, 1.46]	[0.10,1.39]	[-0.05,1.28]	
Net non-operating income	0.09	0.06	0.08	[-0.10,0.23]	[-0.04,0.32]	[-0.04,0.34]	
Net extraordinary income	0.07	0.03	-0.02	[-0.08,0.31]	[-0.10,0.14]	[-0.13,0.06]	
Pre-tax profit	0.86	0.59	0.48	[0.22,1.65]	[0.18,1.37]	[0.04,1.16]	

Source: ECB calculations based on Fitch Ibca Bankscope (May 2003) consolidated data for the 50 largest banks. Lower and upper deciles refer to the 10% tail of the distribution of each indicator.

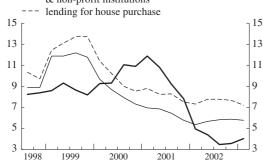
### Chart 2

### Credit market conditions in the euro area

### a) Euro area loan growth

(annual percentage change)

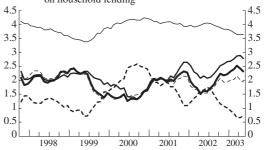
- loans to non-financial corporations
- loans to households& non-profit institutions



### b) Margins on euro area banks' retail interest rates

(in percentage points)

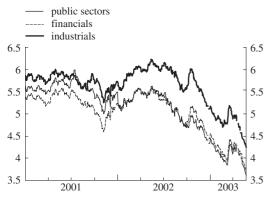
- overall
- on total lending
- on lending to non-financial corporations
- --- on retail deposits
- --- on household lending



Note: See report entitled "EU Banking Sector Stability", ECB, February 2003, for definitions.

### c) Yields on euro-denominated bond indices

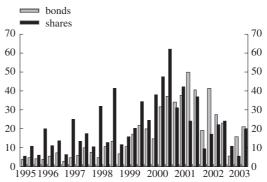
(all ratings and maturities, in percentage points)



Sources: ECB, Dealogic and JP Morgan.

## d) Bond and equity issuance activity in the European Union

(EUR billions)



identified as an ongoing development in the first few months of 2003. The survey identified the general economic situation and the industrial or firm-specific outlook as the main motives behind a tightening in corporate lending conditions — primarily wider interest rate margins, loan covenants, collateral requirements and the size of the credit lines. With regard to lending to households, the main factors underlying a milder tightening of credit standards were again the general economic situation as well as expectations of deteriorating housing market conditions and lower consumer creditworthiness. In this case also, riskier loans were subject to wider margins.

Driven by lower financing needs for fixed investments, M&A activity and restructuring, the demand for corporate loans was reported in the survey to have fallen, particularly from large enterprises. Lower expectations were also partially discernible for household lending not related to house purchase. Continued weaker growth in lending would naturally limit banks' possibilities for generating net interest income this year, unless improving economic conditions were to reverse this trend.

The reduced economic growth in the euro area was also reflected in banks' geographical

portfolio composition. Cross-border lending out of the euro area rose much faster than domestic lending (growth rates above 15% compared with rates below 4%), continuing the upward trend seen over the past two years. The growing importance of non-domestic assets in banks' balance sheets also reflects a longer-term internationalisation tendency owing to maturing euro area financial markets and banks' desire to exploit expertise and portfolio diversification benefits abroad.

Euro area banks' holdings of fixed income securities increased more strongly than loans. Fixed income security holdings by euro area banks rose by around 6% in the second half of 2002 and the first quarter of 2003 (following a peak of 11% in January 2002). The lower yields in the government and corporate bond markets (see Chart 2c), however, reduced the amount of income obtainable from these securities. Also, in the case of fixed income securities, holdings of non-domestic assets by euro area banks have grown faster than the holdings of domestic assets, which have remained relatively unchanged since 2000.

The decline in investment banking and asset management activities which began in mid-2000 tended to reduce euro area banks' noninterest income from fees and commissions. In 2002 consolidated non-interest income accounted for 49% of the 50 largest euro area banks' total operating income, down from 56% in 2000 (see Table I). In relation to total assets, total net income fell from 1.53% to 1.27% over the same period (see Table 2). For the five largest banks active in the securities field, the share of non-interest income amounted to 65% of total net income in 2002, down from 73% in 2000, or 1.80% of total assets, down from 2.06%. For the five most retail-oriented banks, non-interest income accounted for slightly more than 15% of net income in 2002, or 0.14% of total assets. These developments and the negative impact on profitability have been small, and consequently these banks have been able to maintain relatively stable profitability.

Investors' increased appetite for fixed income securities has created some renewed activity in the primary corporate bond markets in the first quarter of 2003, up from the depressed levels seen in the last quarter of 2002 (see Chart 2d). Similarly, the more favourable equity market developments since early-2003 have supported an increase in equity market issuance. While the issuance levels are still modest compared with the peak times, these changes have interrupted the downward trend since mid-2000, which has depressed banks' investment banking income.

The withdrawal of funds from equity markets contributed to reducing the role of this segment as the main financial assets of the euro area non-financial sector. In 2000 the value of direct and indirect fund holdings of shares surpassed the value of deposits with euro area banks. However, in 2001 deposits re-emerged as the dominant form of saving, representing 44% of households' net acquisition of financial assets. Fixed income securities continued to increase their share, exceeding 12% of net acquisition of financial assets in 2001. These developments reduced banks' income from retail asset management services, while increasing their net interest income through deposit margins.

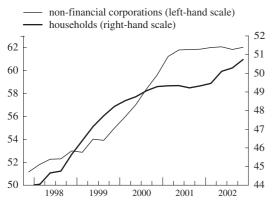
### 2.2 Asset quality developments

The increase in euro area banks' nonperforming loans in 2002 mainly reflected the deterioration in corporate sector financial conditions and the increased number of bankruptcies. However, the outlook may be improving thanks to the stabilisation of corporate sector indebtedness observed since late-2001 (see Chart 3a). The euro area corporate sector debt-to-GDP ratio has settled at around 62%. This owes much to debt reduction programmes and the slowed pace of bank borrowing and issuance of debt instruments. While clear signs of major corporate sector de-leveraging in the euro area have not yet emerged, the decline in interest rate level has significantly reduced the debt-servicing burden of euro area firms.

### Chart 3

#### Credit risk indicators for the euro area

### a) Debt as a percentage of GDP

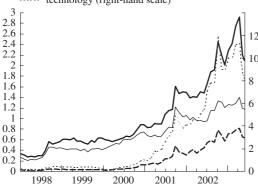


### c) Expected default frequencies for selected euro area corporate sectors 1)

(in percentage points)

- capital goods (left-hand scale)
- basic industry (left-hand scale)
- --- media & telecommunications (right-hand scale)

··· technology (right-hand scale)



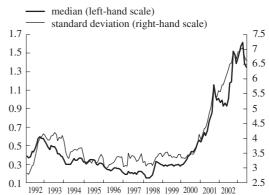
### Sources: ECB, Moody's KMV, JP Morgan and BIS.

### $1) \quad \textit{The EDFs represent the probability of a default in a year's time estimated on the basis of stock market information.}$

In accordance with the expected default frequency (EDF) for next year provided by Moody's KMV, the risk profile of euro area firms has deteriorated since late 2000. This is in line with banks' increased asset quality problems. Whereas the risk profile continued to deteriorate in all industries in the second half of 2002 and first quarter of 2003 (see Chart 3b), some sectors faced a notable increase in the EDF median (see Chart 3c), in particular the capital goods sector and above all the technology sector, which has remained the highest-risk industry in accordance with this measure. The most recent figures, however, indicate an improvement.

# b) Expected default frequencies for euro area corporations <sup>1)</sup>

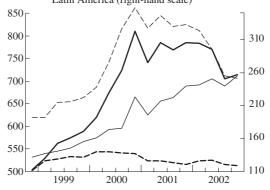
(in percentage points)



### d) Gross exposures of euro area banks

(EUR billions, includes local claims in local currencies)

- emerging and developing countries (left-hand scale)
- -- Asia-Pacific (right-hand scale)
- Central and eastern Europe (right-hand scale)
- --- Latin America (right-hand scale)



The media and telecommunications sector experienced positive developments into May 2003, but its EDF median was still significantly higher than the euro area average.

The deterioration in corporate sector credit quality was also evident in the rather high corporate bond default rates in late 2002 and early 2003. According to Standard & Poor's, the EU 12-month average speculative grade default rate remained very high in the first quarter of 2003 at 12.3%, after reaching 13.5% in December 2002. More recently, this default rate decreased substantially to 8.1% in May 2003. Also firms' ratings tended to worsen

with a total of over €80.5 billion of European corporate debt (41 names) being downgraded by Standard & Poor's in the first quarter of 2003, compared with less than €1.3 billion (two names) which was upgraded. In late-2002 and early-2003, European insurance companies suffered most of all. However, strong corporate earnings in some sectors for the first quarter of 2003 could potentially be marking a turning point in credit quality, as also suggested by significantly narrowed corporate bond spreads.

The fact that euro area banks' loan losses have remained relatively contained may reflect improved risk management by banks, to some extent in anticipation of the new risk-sensitive Basel capital requirements, but perhaps also due to the wider use of credit risk transfer instruments. Banks typically run well-diversified portfolios, and the exposure to individual higher risk industries is relatively limited. On the basis of recent analyses, on average no more than 15% of the own funds of European banks are invested in industries such as technology and transport (including airlines), and insurance. The deterioration in the quality of corporate lending due to increased insolvency rates in 2002 and early 2003 also seems to have triggered a shift of new lending to lower risk sectors.

Household sector indebtedness, having shown some stability at around 50% of GDP until 2001, experienced a slight increase in 2002 (see Chart 3a). The higher growth rates in household sector loans, particularly for housing purposes, and the relatively high level of lending by banks to finance construction and real estate could indicate some shifting of banks' risk exposure to these areas. The reduced level of interest rates has tended to keep mortgage servicing costs stable in relation to disposable income.

Euro area banks' exposure to emerging market economies has tended to fall since mid-2002. This owes much to greater

stability in Latin America following the resolution of political uncertainty in Brazil and Argentina, as well as to positive developments in Argentina's IMF negotiations. Notwithstanding the brighter outlook in this region, a shift in lending volumes has occurred away from Latin America and Asia towards central and eastern European countries, also reflecting progress in the accession process (see Chart 3d).

#### 2.3 Market-related risks

Euro area banks' equity holdings are on average small, around 5% of their total assets, which has mitigated the impact of the stock market fall since mid-2000 on their financial condition. However, the indirect macroeconomic effects of the stock market fall - through higher costs of capital and falls in financial wealth - have been significant. Indirect exposures have also materialised through affiliated insurance companies with significant stock market exposures and through the poor general economic performance. Some euro area banks with sizeable insurance affiliates had to write down some of the value of their insurance participations in 2002 and some were forced to inject more capital into the insurance business. The wealth effect of the stock market fall on households was somewhat mitigated by the positive real estate market price developments in many of the affected countries.

Euro area banks' direct market risk exposures can be observed, for example, in their disclosed value-at-risk measures, or market risk-related capital requirements, which are small. Similarly, interest rate risks are typically well covered. However, banks are naturally exposed to exchange rate and interest rate movements, like stock price movements, through the impact of these changes on their borrowers' and affiliated companies' financial condition.

See report entitled "EU banking sector stability", ECB, February 2003.

### 3 Market indicators of banks' condition

Financial market indicators are a complementary source of information on banks' financial health, risks and earnings outlook. As a whole, market-based measures of banks' fragility indicate good resilience in the sector following the marked deterioration in credit risk at the end of 2002 and early 2003.

Simple stock market measures suggest that conditions for euro area banks are stabilising and possibly even improving. Whereas the index of euro area banking stocks declined over 2002 by 27%, market and insurance sector stock indices declined by 35% and 52%, respectively. In addition, clearer signs of a recovery than in the market as a whole can be observed in the decrease in the volatility

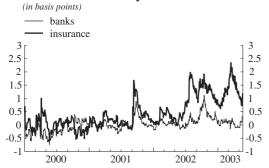
of banks' stocks since March 2003 (see Chart 4a).

Euro area banks' stock volatility, measured in excess of market volatility, was high in the autumn of 2002 after some of the major rating agencies revised the ratings of a number of large banks. Since then, volatility has come down to normal market-wide levels. Banking sector volatility has been much lower than that of the insurance sector, suggesting more contained risks. The reasons for the dismal performance of insurance sector stocks are the large portfolio losses incurred by many major insurance companies in 2002 and the weakened short-term prospects.

### Chart 4

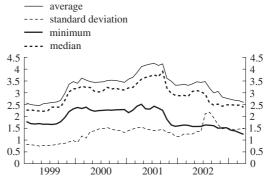
#### Market indicators of euro area banks' health

### a) Excess volatility of EURO STOXX components 1)



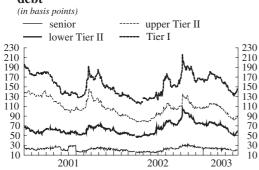
 Difference between selected sectors and average market volatilities in basis points.

### b) Selected large EU banks' distance-to-default

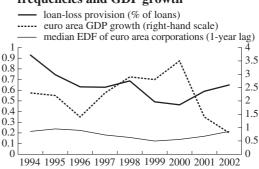


Note: See report entitled "EU Banking Sector Stability", ECB, February 2003, for more information on how distances-to-default are calculated.

### c) Asset swap spread on banks' subordinated debt



### d) Loan-loss provisions, expected default frequencies and GDP growth



Sources: Moody's KMV Datastream, JP Morgan, and ECB calculations.

A more direct indication of the default risk in the banking sector can be obtained from distances-to-default (DD), which provide a measure of the financial stress level on the basis of the bank's leverage, risk profile and earnings expectations. The DD median across banks reveals some deterioration in 2002, but looks as though it is stabilising in 2003 (see Chart 4b). The minimum DD has also stabilised, and variability across banks, while still high, decreased following the peak in late 2002. In addition, DDs for most banks also point to their ability to withstand any further deterioration, as the increases seen suggest that there are ample buffers in place to protect them from any default risk.

Banks' subordinated debt spreads also reflect banks' default risk, and more so than the spreads on senior debt instruments, as subordinated debt represents a junior claim on banks' assets. Asset swap spreads on euro area banks' euro-denominated subordinated debt declined quite substantially in late 2002 and early 2003, while tending to rise slightly in May 2003 (see Chart 4c). While this development can be partly attributed to the resolution of the Iraq conflict and the narrowing of the spreads in corporate bond markets, it also partly reflects a more positive assessment by markets of banks' credit risk.

### 4 Outlook

The past analysis suggests that the difficult conditions towards the end of 2002 and very early in 2003 considerably affected euro area banks. The quick resolution of the war in Iraq, the parallel decrease in oil prices, and the subsequent stock market rebound significantly reduced economic uncertainty in the second quarter of 2003. It is nevertheless important to remain vigilant as banks are only just recovering from a rather difficult period of over two years, and activity in euro area financial markets depends, to no small degree, on the performance of the real sector. In this respect, the financial health of the European corporate sector still remains the most relevant cause for concern. In particular, lower corporate sector leverage ratios are important for the improvement of banks' condition. Furthermore, a strengthening of economic growth is essential to restore sound conditions among euro area corporates so as to relieve pressure on the quality of banks' assets.

Experience suggests that deteriorating corporate and household financial conditions have a delayed impact on the banking sector. In particular, this has been evident for non-performing assets and loan-loss provisions, where an approximate one-year lag of the overall sectoral risk indicator (the median of all sectors' EDF) correlates with non-

performing loans and loan-loss provisions (see Chart 4d). While the increase in banks' loan-loss provisioning was significant in 2002, it is still possible that the lagged effect could cause some further short-term pressure on banks' provisioning needs even below the baseline economic projections. Consumer cyclical goods, the technology, energy and utilities industries could remain fragile. Hence, banks with substantial exposures to those industries may continue to see adverse conditions.

The ECB's baseline macroeconomic scenario of a very gradual recovery in the latter half of 2003 and in 2004 would likely imply a bottoming-out of adverse conditions for the banking sector in the remainder of 2003. This could also mean a corresponding gradual increase in banks' income towards the end of the year. The expected recovery in 2003 could be assisted by more buoyant activity in financial markets, the beginning of which may have been observed in the second quarter of 2003. In particular, firms in need of liquidity could profit from more favourable conditions in bond and equity markets. Increased activity in primary markets would also positively affect the fee income performance of banks active in these markets, as well as facilitate the re-financing of exposure to the corporate sector.

The residential and commercial property markets may embody downside risks for banks in some euro area countries. However, a relatively stable euro area household debt level which is significantly lower than in the United States, for instance, provides some reassurance. Also positive in this respect are the results from the bank lending survey. On the other hand, lower lending levels could reduce income for banks with important retail operations. The recent positive contribution of the household sector to euro banks' profitability relies to some extent on households' ability to acquire or refinance residential property. Their willingness and capacity to sustain current levels of debt will also depend on the economy's capacity to return to reasonable growth levels and to sustain higher levels of employment.

Insurance sector developments still deserve careful attention. Anecdotal information suggests that large reinsurance and life insurance players, by increasing their participation in the market for credit protection, also play an important role in absorbing risks from the banking sector. The deterioration in these sectors, which began in 2001 and which continued to intensify in 2002, weakened their ability to raise capital on favourable terms, thus also limiting their ability to sell credit protection. Furthermore, the apparent restructuring of their portfolios and the corresponding reduction in stock market exposure following the sharp correction in equity markets only compounded the fall in equity prices. Some of the slack appears to have been taken up by mutual and pension funds, but the sharp downgrading of a number of insurers in the first quarter of 2003 and the prospect of their further withdrawing from the credit protection market could

impinge on banks' willingness and ability to assume further credit risk.

Finally, investors' preference for fixed income securities may have depressed the yields on government and corporate securities (see Chart 2c). Spreads on corporate bonds, in particular, continued to decrease markedly, while bond default rates remained rather high. The historically high prices and sharply narrowed spreads have raised some concerns about a rapid unwinding of positions by investors and reductions in market prices of these securities (i.e. a corresponding increase in long-term interest rates). These risks for banks should remain contained, however, since their interest rate risk positions are typically small and to a large extent hedged. However, as noted before, more important could be the indirect implications of such events for banks through their effects on economic and financial market developments. The same also applies to any sudden exchange rate movements.

In sum, the higher risks in the operating environment of euro area banks over the past two years or so have tested both their ability to manage in adverse conditions and the resilience of their intermediation function. Overall, the sector has accommodated this deterioration without any major disruptions, and has managed any significant exposures to fragile counterparties very well. Most importantly, solvency levels have been maintained well above regulatory requirements. The outlook for the banking sector has also tended to stabilise and more recently even to improve, but the extent of this improvement depends, to no small degree, on the extent and timing of the expected economic recovery.