DEVELOPMENTS IN CORPORATE FINANCE IN THE EURO AREA

For central banks, the monitoring of corporate financing is an important factor in the assessment of economic developments and the transmission of monetary policy. Against this background, this article analyses the financing conditions, financing developments and balance sheet positions of non-financial corporations in the euro area over the past ten years up to the end of the second quarter of 2005.

Since the mid-1990s the financing conditions of non-financial corporations in the euro area have improved, mostly owing to an overall decline in the real cost of debt financing. Since 2003 banks have also eased their credit standards. By contrast, the real cost of equity, which stood around its long-term average in the second quarter of 2005, has been more volatile and persistently higher than the cost of debt.

The profit developments of non-financial corporations influence both the cost of external financing (through their impact on the credit risk premium) and the demand for external funds. The profitability of non-financial corporations, which started to decrease following a peak in 2000, has improved markedly since 2003. This has been supported by corporate restructuring efforts, for instance in the form of cuts in operating expenses relative to sales.

After rising steeply in the second half of the 1990s, the annual growth rate of external financing (loans, debt securities and equity financing) of non-financial corporations in the euro area declined from a peak at the end of 2000. As regards debt financing developments, after a weakening in the balance sheet situation, non-financial corporations have reduced their debt ratios in recent years and generally improved their balance sheet positions. Owing to the very low cost of debt financing and banks' more favourable credit standards, non-financial corporations have shown a preference for debt over equity financing in recent years. Finally, the financing and the balance sheet position of non-financial corporations in the euro area and in the United States have followed similar trends over recent years.

1 INTRODUCTION

In the context of its regular monitoring of economic and monetary developments, the ECB devotes particular attention to the evolution of the financing conditions of euro area non-financial corporations, as well as to corporate financing developments.[1]

In terms of the transmission mechanism, changes in monetary policy impact financing conditions mostly, although not exclusively, via two main channels: the interest rate channel and the credit channel.[2] Through the interest rate channel, monetary policy affects real interest rates which, in turn, affect the real cost of the different sources of financing across the maturity spectrum. The interest rate channel is therefore crucial to the cost of financing, which then affects the choice of the source of financing, as well as the balance sheet positions of non-financial corporations. The credit channel reflects the effect of imperfect and costly information on the functioning of credit markets. In particular, the credit channel focuses on how the availability of external financing from banks is affected by the state of the financial sector (i.e. the bank lending channel) and by corporations' financial situation (i.e. the balance sheet channel). In the balance sheet channel (also known as the broad credit channel), the amount and conditions of credit that a bank will grant a corporation largely depend on the financial situation of the corporation. In addition, the bank lending channel (also known as the narrow credit channel) emphasises the function of bank

1 For more detailed information, see L. Bê Duc, G. de Bondt, A. Calza, D. Marqués Ibáñez, A. van Rixtel and S. Scopel, "Financing conditions in the euro area", ECB Occasional Paper No 37, October 2005.

2 For more information on the transmission mechanism see, for example, F. S. Mishkin, "The channels of monetary policy: lessons for monetary policy", NBER Working Paper 5464, 1996.

credit supply in the transmission process. More specifically, owing to the role of banks and their position at the centre of the financial system, changes in the state of the banking sector can strongly influence financing conditions for borrowers and, in turn, the real economy.

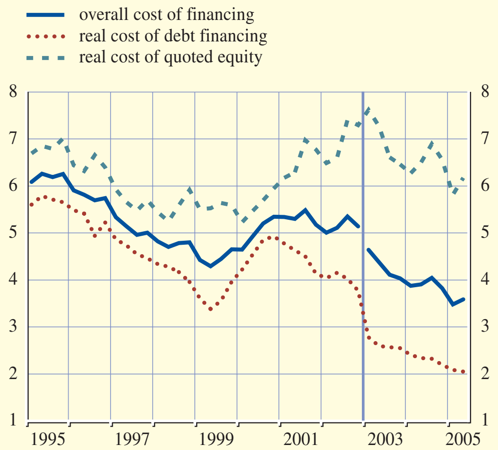
This article reviews developments in corporate finance in the euro area over the past ten years, with a focus on non-financial corporations. The analysis of corporate finance aims to assess developments in the cost of external financing as well as developments in internal and external sources of financing. Furthermore, as corporate balance sheet positions result from financing decisions and, in turn, partially determine the cost and accessibility of external financing, the analysis of corporate balance sheet positions plays an important role in the corporate finance analysis. Against this background, Section 2 of this article analyses the real cost of external financing of non-financial corporations in the euro area, as reflected in interest rates, risk premia and equity prices as well as in banks' credit standards. Section 3 analyses developments in internal funds. Section 4 examines external financing developments of euro area non-financial corporations and developments in their balance sheet positions. Section 5 provides some concluding remarks.

2 REAL COST OF EXTERNAL FINANCE

The cost of external financing (loans, debt securities and equity financing) is one of the main factors in non-financial corporations' financing decisions.[3] It is determined, to a large extent, by the borrower's credit risk, as well as by the "risk-free" market interest rate level (generally government bond yields), which, in the long term, mainly tends to reflect market participants' macroeconomic, and in particular, inflation and growth expectations. Corporate financing rates, however, are also affected by the risk preferences of asset holders and by other specific factors mainly linked to information asymmetries between borrowers and lenders. In this regard, changes in market participants' general risk perception can lead to movements in market interest rates, and in turn, corporate financing rates. Lastly, spillover effects from other markets can also influence the cost of financing. For instance, corporate bond rates could be affected by the prices and volatility of other financial assets, such as equities.

Chart 1 Real cost of external financing of non-financial corporations

(percentages per annum)



Sources: ECB, Thomson Financial Datastream, Merrill Lynch and Consensus Economics Forecast.
Notes: The real cost of the external financing of non-financial corporations is calculated as a weighted average of the cost of bank lending, the cost of debt securities and the cost of equity, based on their respective amounts outstanding and deflated by inflation expectations (see Box 4 in the March 2005 issue of the Monthly Bulletin).
The introduction of the harmonised MFI lending rates at the beginning of 2003 led to a break in the statistical series.

The overall real cost of external financing for non-financial corporations, as reflected by a

3 The euro area is historically a bank-based economic system. While there has been remarkable growth in various alternative sources of external financing in recent years, loans to non-financial corporations account for around 80% of the total amount of debt of non-financial corporations. The overall cost of external financing is a macroeconomic approximation. At the microeconomic level, other factors, such as differences in firm prospects, size and previous relationship with banks, would significantly affect the credit conditions of individual companies.

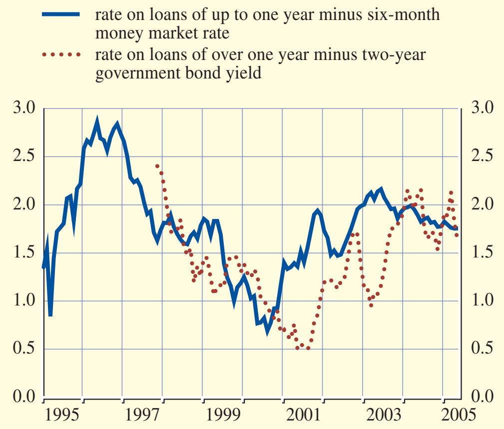
composite indicator of the real cost of debt and equity financing, has been on a general downward trend since the early 1990s, hitting its lowest level in the first quarter of 2005 (see Chart 1).[4] This is primarily attributable to the marked decline in the real cost of debt financing to historically low levels in the second quarter of 2005. More precisely, from 1995 to early 1999 the cost of debt financing for non-financial corporations in the euro area fell quite significantly, partly owing to the upcoming introduction of the euro. After increasing in 1999 and 2000, the cost of debt financing has been decreasing since late 2000. At the same time, the real cost of quoted equity rose significantly between 2000 and early 2003, mainly as a result of the fall in stock market prices. It subsequently dropped slightly, standing at around its long-term average in the second quarter of 2005.[5]

Analysing the spreads between bank or market-based debt and "risk-free" interest rates (i.e. credit spreads) generally provides insight into the credit risk premium incurred by corporations when raising external funding. In addition to casting light on the market's perception regarding the probability of losses should the corporate borrower default, credit spreads also reflect liquidity and tax considerations as well as, in the case of bank debt, the existence of a previous relationship between the bank and the borrower. In addition to these factors, the bank lending channel theory suggests that the state of the banking sector also has a bearing on banks' lending rates and on their ability to lend.

From 1997 to 2000 the spreads between bank interest rates on loans to non-financial corporations and comparable "risk-free" market rates (government bond yields or money market rates) declined for both short and long-term loans (see Chart 2). This was linked to the positive corporate earnings and credit risk outlook, as well as a delayed pass-through from "risk-free" rates to lending rates. Increased banking competition probably also exerted downward pressure on bank lending

Chart 2 Spreads between bank lending interest rates to non-financial corporations and comparable market rates

(in percentage points)



Source: ECB.
Notes: MFI interest rates have been aggregated using amounts outstanding whenever available. Otherwise, aggregated new business volumes have been used. In January 2003 there was a statistical break in the interest rate series. To take this into account, past levels of previous interest rate statistics data were adjusted on the basis of the difference between the old and the new interest rate statistics levels in January 2003.

spreads. From 2001 to 2003, however, spreads increased after market participants re-evaluated their profit expectations following the slump in stock market prices in 2001 and 2002, thereby probably increasing the perceived financial risk of borrowers linked to the build-up of corporate debt (see Section 4). The increase in lending spreads for non-financial corporations also seems to have coincided with a worsening in the state of the banking sector,[6] although euro area banks in general remained resilient, particularly in comparison with previous economic slowdowns.[7] By contrast, in late

4 Compared with a measure of the overall cost of financing based on transactions, the weighting based on the amounts outstanding currently gives greater weight to the cost of equity, which has been substantially higher than the cost of debt financing in recent years.

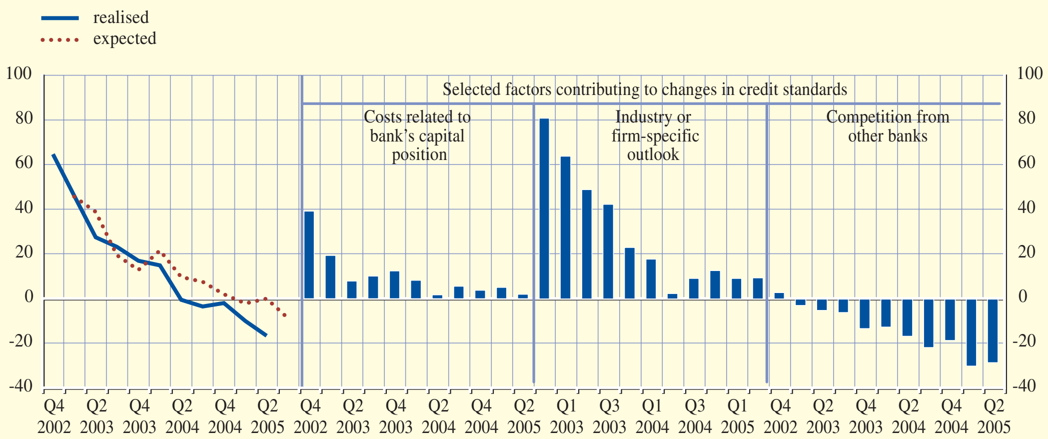
5 See also Box 4 entitled "The cost of equity in the euro area and in the United States" in the September 2005 issue of the Monthly Bulletin.

6 For more details on the situation of the banking sector, see "EU banking sector stability", European Central Bank, 2004, Frankfurt am Main.

7 For instance, loan-loss provisions remained contained. See Box 2 entitled "Developments in banks' loan-loss provisions over recent years" in the March 2004 issue of the Monthly Bulletin.

Chart 3 Changes in credit standards applied to the approval of loans or credit lines to enterprises

(net percentages)



Source: Eurosystem.
Notes: The net percentage refers to the difference between the sum of the percentages for "tightened considerably" and "tightened somewhat" and the sum of the percentages for "eased somewhat" and "eased considerably". "Realised" values refer to the period in which the survey was conducted. "Expected" values are the net percentages calculated from the responses given by the banks in the previous survey. For instance, "expected" values for Q3 2005 were reported in the July 2005 survey. The net percentages for the questions related to the factors are defined as the difference between the percentage of banks reporting that the given factor contributed to a tightening and the percentage reporting that it contributed to an easing.

2004 and early 2005 corporate lending spreads mostly declined, probably owing to improvements in corporate profits.

The Eurosystem's bank lending survey[8] provides additional information on other terms and conditions of bank lending, such as restrictions on the amount of credit granted or more stringent collateral requirements, which, in addition to the cost of financing, might affect the financing of firms. It also provides information on the main factors that, according to respondent banks, determine the demand for bank credit.

According to the bank lending survey results up to July 2005,[9] there has been a marked trend towards an easing in credit conditions since the survey was launched in the last quarter of 2002. Interestingly, respondent banks suggest that risk perceptions of the industry or firm-specific outlook have contributed to a decrease in the net tightening of credit standards since early 2003. At the same time, growing competition between banks has continued to encourage a loosening of credit standards (see Chart 3). According to respondent banks, this easing of credit standards has taken place primarily via a net decline in margins on average loans and, to a lesser extent, via a decrease in the margins on riskier loans. Furthermore, net collateral and loan covenant requirements moderated gradually during this period.

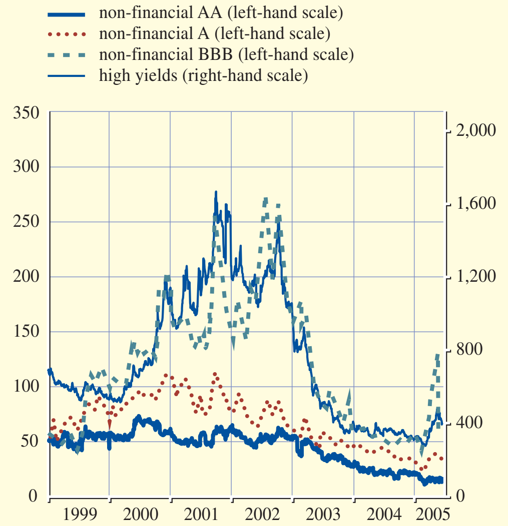
In addition to bank lending spreads, corporate credit spreads, defined as the difference between the yields on corporate bonds and "risk-free" interest rates (government bond yields), constitute a major source of information from the credit markets for those – normally very large – companies which issue corporate bonds regularly.

Developments in various corporate bond spreads in the euro area since 1998 show that the spreads on BBB-rated bonds and high-yield bonds rose sharply between 2000 and 2002

8 For more detailed information on the bank lending survey, see J. Berg, A. van Rixtel, A. Ferrando, G. de Bondt and S. Scopel, "The bank lending survey for the euro area", ECB Occasional Paper No 23, February 2005.
9 For the most recent bank lending survey results, see the box in this issue of the Monthly Bulletin.

Chart 4 Euro-denominated corporate bond spreads

(against euro-denominated government AAA bonds; basis points)



Sources: ECB, Thomson Financial Datastream and Merrill Lynch.

(see Chart 4). This was due to a large number of factors, including the September 2001 terrorist attacks in the United States and various accounting scandals in the course of 2002, predominantly in the United States but also in the euro area. In 2003, however, increasing market confidence and diminishing uncertainties brought about rapid corrections in the investment-grade credit spreads, and in the course of 2004 corporate bond spreads hit their lowest levels since the introduction of the euro. This may partly be attributable to the perception of relatively low credit risk in the euro area. It may also reflect the relatively strong investor demand for high-yield assets in an environment of relatively low returns on investment-grade instruments.

More recently, the widening spreads on BBB-rated corporate bonds until mid-May of this year were driven by a series of firm-specific events affecting, in particular, the automobile industry. Corporate bond spreads on high-yield bonds also widened during this period, although they remained at low levels. Overall, the current low level of corporate bond spreads continues to indicate a fairly benign assessment by financial markets of the credit risks of the non-financial corporate sector in the euro area.

3 INTERNAL FUNDS

Non-financial corporations generally prefer internal funds to external financing, as the latter is generally more costly due to the external financing premium that lenders demand to cover both the borrower's credit risk and information asymmetries.[10] Profit developments are therefore one determinant in the demand for external financing. They also influence the credit risk assessment of lenders and, hence, the credit risk premium as well as the general availability of credit. Consequently, the analysis of internal funds is an important component of the analysis of corporate finance.

At the macroeconomic level, profit developments are roughly indicated by the annual growth in the gross operating surplus.[11] More detailed information on profit developments of non-financial corporations can be obtained on the basis of microeconomic data. To this end, company financial statement data of listed non-financial corporations in the euro area have been aggregated.[12] Generally, such microeconomic information enables the additional monitoring of sectoral and other

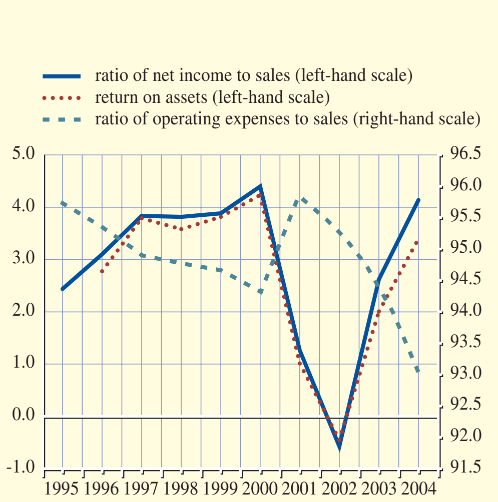
10 For the "pecking-order" theory of corporate financing, see for instance S. C. Myers, "The capital structure puzzle", *Journal of Finance*, Vol. 39, No 3, 1984, pp. 575-592, as well as S. C. Myers and N. S. Majluf, "Corporate financing and investment decisions – when firms have information that investors do not have", *Journal of Financial Economics*, Vol. 13, No 2, 1984, pp. 187-221.

11 For macroeconomic profit measures, see the article entitled "Measuring and analysing profit developments in the euro area" in the January 2004 issue of the Monthly Bulletin.

12 The microeconomic indicators used in this article have been constructed on the basis of company financial statement data of listed non-financial companies provided by the commercial database Thomson Financial Datastream. The aggregation is based on consolidated annual financial statements and covers the period 1995 to 2004. Generally, while listed firms are likely to dominate developments, the fact that non-listed companies are not included may lead to a bias towards larger companies.

Chart 5 Annual profit ratios of listed non-financial corporations

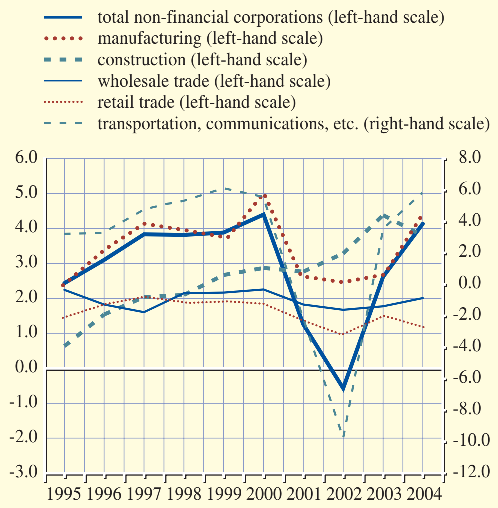
(in percentages)



Sources: Thomson Financial Datastream and ECB calculations.
Notes: The calculation is based on an unbalanced sample of listed non-financial corporations over time. The return on assets is defined as the ratio of net income to total assets in the previous period.

Chart 6 Net income to sales ratio across non-financial corporate sectors

(in percentages)



Sources: Thomson Financial Datastream and ECB calculations.
Note: The calculation is based on an unbalanced sample of listed non-financial corporations over time.

microeconomic trends. In addition, stock market-based data provide timely information on profit developments for listed companies.

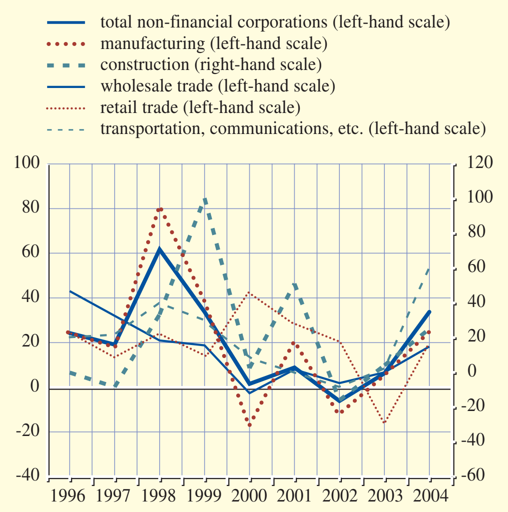
Having increased in the second half of the 1990s, microeconomic profit ratios of non-financial corporations in the euro area peaked in 2000, broadly in line with the euro area gross operating surplus, and fell steeply thereafter until 2002 (see Chart 5). This is illustrated by the development of the ratio of net income (defined as the operating and financial profit after interest expenses, taxation and extraordinary items[13]) to sales as well as by the development of the return on assets, which relates net income to total assets in the previous period. In 2003 and 2004 non-financial corporate profitability rose considerably. A key reason for the rise in profit ratios was the decrease in the operating expenses of non-financial corporations relative to sales between 2002 and 2004, indicating successful restructuring efforts.

As regards sectoral developments, profitability improved in most non-financial corporate sectors in 2003 and 2004 (see Chart 6). The manufacturing sector, which is rather export-oriented, benefited from the favourable global economic growth in 2004, which seems to have more than offset the negative impact of the appreciation of the euro. There has been a strong recovery in profitability in the communication sector from its low level in 2002. By contrast, the profit situation in the mainly domestic-oriented retail trade sector has, all in all, not improved over recent years, probably due to relatively weak private consumption. The general recovery in profits was linked to the decrease in the ratio of operating expenses to sales in most sectors between 2002 and 2004.

13 Consequently, by contrast with the macroeconomic measure gross operating surplus, net income refers not only to the operating income, but also to the non-operating income, as well as extraordinary items. A further difference is that net income is after taxation and depreciation.

Chart 7 Dividend growth across non-financial corporate sectors

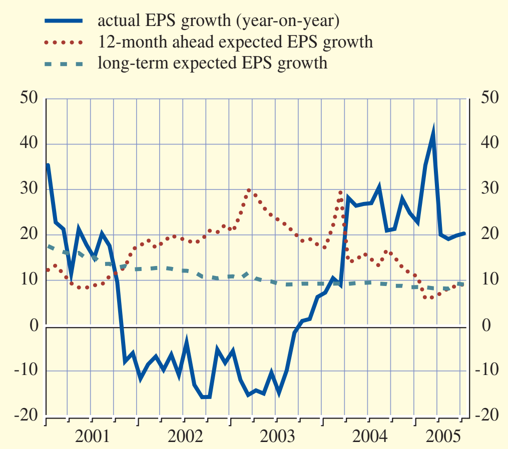
(annual percentage changes)



Sources: Thomson Financial Datastream and ECB calculations.
Note: The calculation is based on a balanced sample of listed non-financial corporations over time, i.e. the same companies over time.

Chart 8 Dow Jones EURO STOXX actual and expected earnings per share (EPS) growth

(annual percentage changes)



Source: Thomson Financial Datastream I/B/E/S.

The profit increase was partly used in 2003 and 2004 to pay out higher dividends than in 2002 (see Chart 7), the likely aim being to boost the appeal of shares following the substantial valuation losses between 2000 and 2002. Higher dividend payments also take into account investors' preference for a more secure return on their financial assets. The higher dividends paid by most non-financial corporate sectors seem to reflect a general change in the attitude towards dividend payments compared with the late-1990s, when stock prices increased considerably. They may, however, also reflect a perceived lack of attractive investment opportunities.

In addition to company financial statement data, stock market-based measures provide information about recent and expected profit developments. Broadly in line with the information on profit developments garnered from company financial statements, the annual earnings per share (EPS) growth of the companies included in the Dow Jones EURO STOXX index fell during 2001 and 2002 but has recovered since 2003.[14] In the second quarter of 2005 actual EPS growth was at a sound level (see Chart 8). As regards profit expectations, while a decline in growth has been observed since early 2004, the 12-month ahead EPS figure remained robust until the second quarter of 2005.

4 EXTERNAL FINANCING AND BALANCE SHEET DEVELOPMENTS

Contrary to the Modigliani-Miller (1958) "irrelevance hypothesis"[15], a borrower's financial structure is relevant to its investment decisions. In addition to the cost and accessibility of external financing, as well as the availability of internal funds, the financing decisions of corporations are

14 In addition to non-financial corporations, the Dow Jones EURO STOXX index also includes financial corporations. To some extent, the rise in EPS in 2004 was also driven by share buybacks.

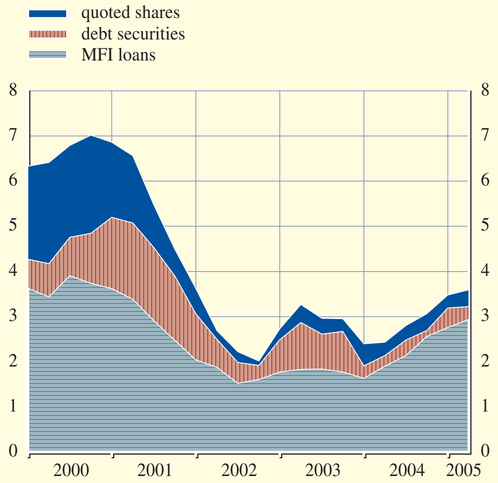
15 See F. Modigliani and M. H. Miller, "The cost of capital, corporation finance and the theory of investment", *American Economic Review*, Vol. 48, No 3, June 1958, pp. 261-297.

influenced by a number of other factors, such as taxation and asymmetric information.[16] In turn, these factors are partly influenced by the current and expected balance sheet situation of borrowers. Against this background, the analysis of financing flows, i.e. debt financing (loans and debt securities) and the issuance of quoted shares, as well as the analysis of the development of corporate balance sheet positions are important components of the corporate finance analysis.

Looking at overall external financing developments over the past ten years, the annual growth rate of financing of non-financial corporations rose significantly in the second half of the 1990s and peaked at 7% in the fourth quarter of 2000 (see Chart 9). Loans were the major factor behind this high growth, but equity issuance activity by non-financial corporations was also strong during this period. While the importance of debt securities issued in the overall external financing of non-financial corporations increased during this period, their contribution to the overall external financing growth of non-financial corporations was more limited. The high external financing growth was partly driven by non-financial investment growth and buoyant growth expectations during the period, but it also reflected increased financing needs of euro area non-financial corporations engaged in financial transactions linked to intense merger and acquisition (M&A) activity, both within the euro area and beyond. Subsequently, the annual growth rate of financing of non-financial corporations declined considerably, broadly in line with the economic slowdown in the euro area. Since the second half of 2004 it has recovered, mainly due to a pick-up in debt financing growth.

Chart 9 Breakdown of the annual rate of growth of financing of non-financial corporations

(percentage changes)



Source: ECB.

4.1 DEBT FINANCING AND BALANCE SHEET DEVELOPMENTS

Following the strong rise in debt financing throughout the second half of the 1990s, the balance sheet position of non-financial corporations in the euro area, as well as in other industrialised countries such as the United States, weakened.

Useful information on the balance sheet position of non-financial corporations can be derived first from the financing gap (i.e. the balance of gross saving and capital expenditure to GDP). When capital expenditure exceeds available internal funds, this signals a need for external financing, in the form of either debt or equity issuance. A widening (or narrowing) of the financing gap can be caused either by a decline (or increase) in saving or an increase (or decrease) in capital formation, or by a combination of the two, which leads to some ambiguity in the assessment of this indicator. Second, debt ratios and indicators of the debt service burden of non-financial corporations

16 Asymmetries of information between borrowers and lenders are the main cause of problems of moral hazard and adverse selection in corporate finance. For more information, see J. Amaro de Mato, "Theoretical Foundations of Corporate Finance", Princeton University Press, Princeton, 2001.

are key leverage indicators for non-financial corporations.[17] In addition to such macroeconomic indicators, microeconomic indicators based on company financial statements can provide more detailed information on firms' balance sheet position.

Against this background, the weakening balance sheet position of non-financial corporations throughout the second half of the 1990s is highlighted by the considerable widening of the financing gap between 1995 and 2000 – which resulted from the higher capital formation and lower saving by non-financial corporations in relation to GDP in the euro area and the United States – as well as by the steep rise in the debt ratios of non-financial corporations in both economic areas during that period (see Box 1).

In line with the slowdown in economic growth, debt financing growth of non-financial corporations fell considerably in the course of 2001 and 2002 and remained at fairly modest levels until mid-2004. Between 2001 and 2004 non-financial corporations scaled back their capital formation significantly and increased

17 See also the articles entitled "Developments in the debt financing of the euro area private sector" in the November 2003 issue of the Monthly Bulletin and "Developments in private sector balance sheets in the euro area and the United States" in the February 2004 issue of the Monthly Bulletin.

Box 1

CORPORATE FINANCING DEVELOPMENTS: A COMPARISON BETWEEN THE EURO AREA AND THE UNITED STATES

This box compares developments in the profits, financing and balance sheet positions of non-financial corporations in the euro area and in the United States. Overall, corporate profitability and the balance sheet positions of non-financial corporations have improved in both economic areas during recent years. Furthermore, while non-financial corporations in both economic areas have tended to prefer debt over equity financing, this preference has been much more pronounced in the United States.

Any comparison of corporate developments in the two economic areas has to take major differences in statistical accounting into account.[1] First, the US sector that broadly corresponds to the euro area non-financial corporate sector is the non-financial business sector, which includes all corporate and non-corporate non-financial businesses. However, by contrast with its euro area counterpart, the US non-financial business sector also includes sole proprietorships.[2] Second, in terms of financing instruments, accounting differences mean that only the sum of all loans to non-financial corporations (as reported in the quarterly euro area financial accounts and the US flow of funds accounts, respectively) can be compared. In addition, with regard to equity financing, the quarterly figures for the euro area only cover quoted shares issued by non-financial corporations, whereas the figures for the United States cover both quoted and non-quoted corporate equities issued by its non-financial business sector. Third, in order to bring the definition of the debt ratio more into line with its US counterpart, the figure for the debt ratio of euro area non-financial corporations used in this box includes an estimate (based on the balance of payments) of loans granted by non-euro area banks.

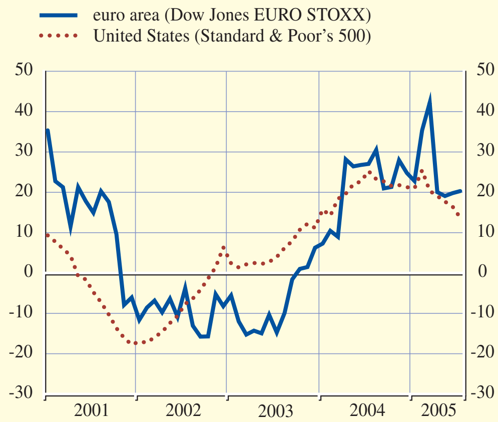
1 For the comparability of the national account data of the euro area and the United States, see the box in the article entitled "Developments in private sector balance sheets in the euro area and the United States" in the February 2004 issue of the Monthly Bulletin.
2 In the euro area, sole proprietorships fall within the household sector.

Favourable profit developments

In both economic areas, non-financial corporations have increased their profitability during recent years. This is reflected, for example, in earnings per share (EPS) developments. In the United States, the recovery of the EPS growth of companies included in the Standard & Poor's (S&P) 500 index started in 2002, whereas in the euro area, the EPS growth of companies included in the Dow Jones EURO STOXX index did not begin to recover until mid-2003 (see Chart A).[3] In both economic areas, EPS have continued to increase in 2005, although EPS growth has moderated somewhat in the course of the year. Cost-cutting, contained labour cost developments and low interest rates have all played an important role in the profit increases in both the euro area and the United States during recent years. While robust demand and productivity growth have contributed to favourable profit developments in the United States, these factors have been more modest in the euro area.

Chart A Earnings per share growth

(annual percentage changes)



Source: Thomson Financial Datastream I/B/E/S.

Rise in debt financing, but subdued net equity issuance

After a period of declining annual growth rates, non-financial corporations in both economic areas started to raise their debt financing during 2003 (see Chart B). In the euro area, however, the annual growth of debt financing dropped again in late 2003 and remained low in 2004 before starting to pick up again in the fourth quarter of that year. In the United States, the annual growth of debt financing by non-financial corporations stabilised only temporarily in the second half of 2003 and the first half of 2004, and has been on the increase since the second half of 2004. Overall, the recovery in the annual growth of debt financing has been more stable and, since the end of 2003, more pronounced in the United States. This is broadly in line with the earlier and stronger recovery of economic growth and fixed capital formation in the United States.

The rise in the annual growth of debt financing was driven in both economic areas largely by loans. In addition to the positive impact of the low cost of debt financing on the demand for loans, credit standards for loans to enterprises eased during 2004 in both economic areas according to the euro area bank lending survey and the Senior Loan Officer Opinion Survey on Bank Lending Practices published by the Federal Reserve System. Debt securities generally play a greater role in the debt financing of non-financial corporations in the United States than in the euro area (and accounted for around 40% of the amount outstanding of debt in the second quarter of 2005). However, the annual growth of debt securities issued by US non-financial corporations has been relatively modest since the end of 2002. In the euro area, the annual growth of debt securities issued by non-financial corporations has been more volatile over the same period and recovered somewhat, all in all, until the second quarter of 2005. However, even

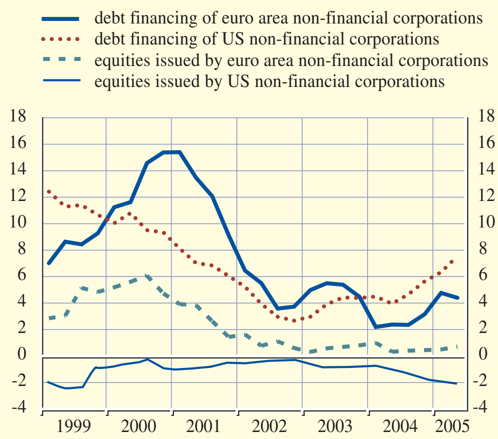
3 Both the S&P 500 index and the Dow Jones EURO STOXX index include non-financial and financial companies.

though it is increasing, the share of debt securities in the total amount outstanding of debt of euro area non-financial corporations is still relatively modest (around 15% in the second quarter of 2005, when pension fund reserves are excluded from the definition of debt).

In contrast to debt financing, the net issuance of equity by non-financial corporations in both economic areas has been subdued, or even negative, since 2003. The annual rate of change of quoted shares issued by non-financial corporations has been positive, although low, in the euro area. In the United States, net corporate equity issuance by the non-financial business sector has been negative since the second half of 1994 due to share buybacks and equity retirements following mergers. While share buybacks by non-financial corporations also increased in the euro area in 2004, they played a much more limited role than in the United States.

Chart B Financing of non-financial corporations

(annual percentage changes)



Sources: ECB and US flow of funds accounts.
Notes: Debt financing includes loans and debt securities. For the euro area, equity issuance only includes quoted shares.

Sounder corporate balance sheets

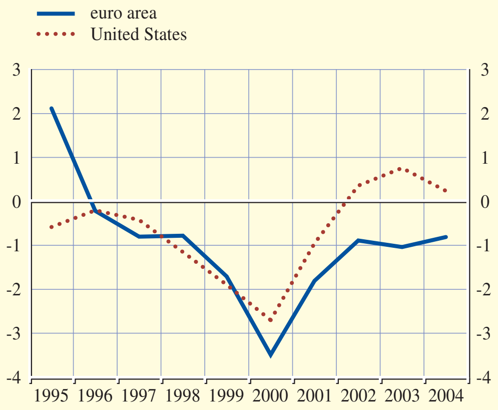
Non-financial corporate balance sheets in both the euro area and the United States have improved during recent years. This is illustrated by the financing gap (i.e. broadly the balance of gross saving and gross capital formation in relation to GDP) and debt ratios of the non-financial corporate sector.

From its low in 2000, the financing gap of non-financial corporations in both the euro area and the United States narrowed significantly until 2004 (see Chart C). This recovery was more pronounced in the United States than in the euro area due to the greater improvement in non-financial corporate gross saving in relation to GDP from its low in 2001 (2000 for the euro area), as well as to a larger cut in non-financial corporate gross capital formation in relation to GDP from its peak in 2000 (also 2000 for the euro area). The increase in non-financial corporate saving in both economic areas is in line with the above-mentioned evidence from stock market-based data that points to a rise in profits during recent years. Interestingly, from 2002 US non-financial corporations had a surplus of internal funds over capital expenditure, while the opposite was true for the euro area until 2004. The smaller surplus of US non-financial corporations in 2004 was the result of a pick-up in capital expenditure in relation to GDP, whereas gross saving in relation to GDP remained stable. By contrast, both ratios remained broadly stable in 2004 in the euro area.

After a large increase in the debt ratios of non-financial corporations in both the euro area and the United States in the late 1990s, debt-to-GDP ratios stood at the same level at the end of 2002 (at 67% – see Chart D). Thereafter, however, the debt-to-GDP ratio of non-financial corporations in the euro area (including loans from non-euro area banks) rose further, peaking at

Chart C Financing gap of non-financial corporations

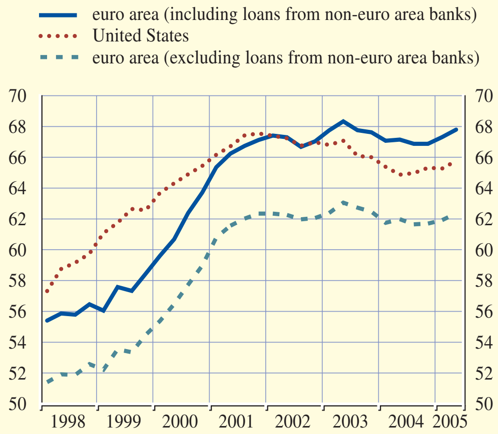
(as a percentage of GDP)



Sources: ECB, Eurostat and US national income and product accounts.
Notes: Estimated for 2004 for the euro area. The financing gap is defined as the net lending (+)/net borrowing (-) of the sector in relation to GDP.

Chart D Debt-to-GDP ratios of non-financial corporations

(in percentages)



Sources: ECB, Eurostat and US flow of funds accounts.
Notes: Estimated for Q2 2005 for the euro area. Debt includes loans, debt securities and, for the euro area, pension fund reserves. For the euro area, loans granted by non-euro area banks have been estimated on the basis of the euro area balance of payments.

68% in the second quarter of 2003. By contrast, the debt-to-GDP ratio of US non-financial corporations broadly stabilised. From the second half of 2003 the debt-to-GDP ratios of non-financial corporations declined in a more or less similar manner in both economic areas, but stood at a slightly higher level in the euro area. The fall in debt ratios during 2003 and 2004 reflects cost-cutting and debt consolidation efforts by non-financial corporations in both economic areas. Despite the greater debt financing growth of non-financial corporations in the United States since 2004, the gap between the debt-to-GDP ratios of non-financial corporations in the two economic areas has not closed due to the stronger GDP growth in the United States.

their saving in relation to GDP. Consequently, the financing gap narrowed substantially between 2001 and 2004 (see Chart C in Box 1). In addition to increasing their profitability (see Section 3), which is also reflected in the rise in saving, non-financial corporations reduced their debt ratios in 2003 and most of 2004 (see Chart D in Box 1).

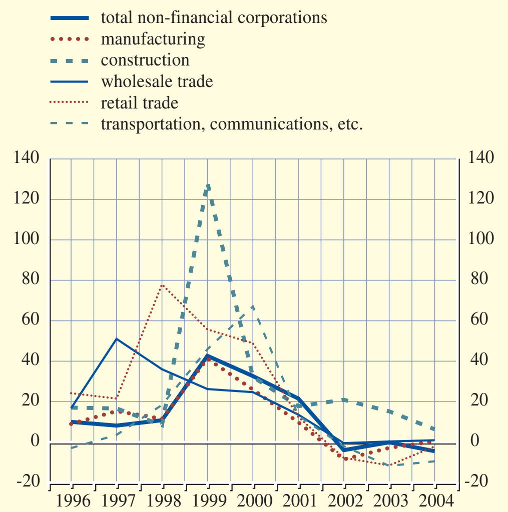
The consolidation of balance sheets was widespread across non-financial corporate sectors. Between 2001 and 2004 the annual rate of change in the amount of debt fell in most sectors and was mostly negative from 2002 to 2004 (see Chart 10).[18]

After the deleveraging that took place in 2003 and most of 2004, there has been a recovery in the debt financing growth of non-financial corporations since the second half of 2004. This recovery has been fuelled primarily by a marked increase in the annual rate of change in MFI loans granted to non-financial corporations and is also likely to be linked to the very low cost of bank lending and banks' more favourable credit standards. Furthermore, as the increase in the annual growth of loans has been mostly driven by developments in short-term loans, demand for

18 The microeconomic leverage indicators used in this section have been determined in the same way as the profit indicators.

Chart 10 Debt developments of listed non-financial corporations across sectors

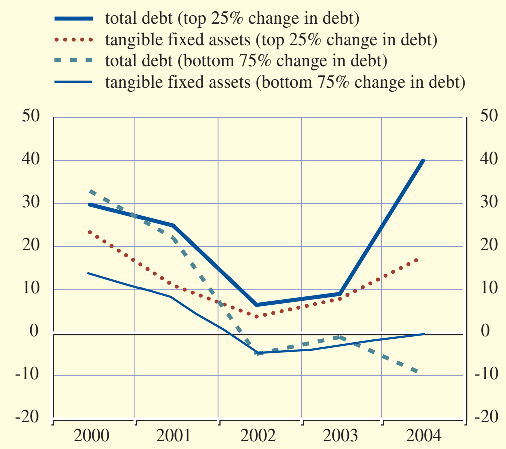
(annual percentage changes)



Sources: Thomson Financial Datastream and ECB calculations.
Note: The calculation is based on a balanced sample of listed non-financial corporations over time.

Chart 11 Debt and fixed asset developments of listed non-financial corporations according to their change in debt

(annual percentage changes)



Sources: Thomson Financial Datastream and ECB calculations.
Note: "Top 25% change in debt" ("bottom 75% change in debt") refers to the 25% (75%) listed non-financial corporations with the greatest (least) change in debt in 2004.

working capital, which is often financed by short-term loans, is likely to have played a role. The slight rebound in the annual growth of debt securities issued by non-financial corporations in the first half of 2005 is likely to be linked to the persistently low cost of financing through debt securities, as well as to a certain pick-up in M&A activity.

Notwithstanding the overall improvement in the balance sheet position of non-financial corporations since 2001, and as a result of the recovery in debt financing growth, the debt of non-financial corporations in relation to GDP has increased again slightly since the fourth quarter of 2004, reaching 62% in the second quarter of 2005.[19]

In addition to the greater demand for working capital, as reflected in the rise in short-term loans (accounting for around 20% of the amount outstanding of total debt of non-financial corporations) and the pick-up in M&A activity, direct investment abroad might have contributed, to some extent, to the rise in debt ratios of non-financial corporations.[20] The renewed increase in debt ratios is also likely to reflect, to some extent, the capital restructuring that has been carried out because of the very low cost of debt financing compared with the cost of equity. The decrease in the interest payment burden of non-financial corporations after 2001 in an environment of very low interest rates across the entire maturity spectrum probably also contributed to the preference for debt over equity. Moreover, the buyback of shares and higher dividend payments (see Chart 7) have also played a part in spurring capital restructuring towards debt.

Non-financial corporations might also have used debt financing in order to secure a low cost of financing for future investment. Notwithstanding the relatively weak gross fixed capital formation in the euro area up to the second quarter of 2005, microeconomic

19 This debt-to-GDP ratio, which is usually reported in the Monthly Bulletin, does not include loans granted by non-euro area banks to euro area non-financial corporations.
20 However, some uncertainty surrounds this theory as there is no separate information available for non-financial corporate direct investment abroad.

data suggest that, as early as 2004, some non-financial corporations had started to increase their debt in order to finance fixed investment. Chart 11 indicates that the 25% of non-financial corporations that increased their indebtedness to the largest extent in 2004 also acquired more fixed assets. By contrast, the other 75%, on average, further decreased their indebtedness in 2004 and continued to reduce their fixed assets. This might indicate that they had either recognised the need to further consolidate their balance sheets or that they did not have profitable investment opportunities for which to take on debt.

4.2 EQUITY FINANCING

Alongside debt financing, equities are the other major source of external financing for non-financial corporations (see Box 2).

Following a similar pattern to debt financing developments, the annual growth of quoted

Box 2

EQUITY ISSUANCE OF NON-FINANCIAL CORPORATIONS

This box provides a short overview of the various forms of equity issuance by non-financial corporations in the euro area.

Equities are claims to shares in the assets and profits of a corporation. Generally, equity can be issued privately in the form of unquoted shares and venture capital, and publicly via shares that are listed on a stock exchange (quoted shares).

Private equity consists of equity investments in the non-quoted securities of private and public firms.[1] Venture capital is often provided by investors, such as specialised venture capital firms, as start-up money to finance new high-risk companies, for example specialising in new technologies, in return for an equity position in the firm.

With respect to public issuance, companies can either issue shares for the first time (initial public offering or IPO) and obtain a listing on a stock exchange or, if they are already listed, they can issue additional public shares (secondary public offering or SPO). The listing of a firm's shares on a stock exchange improves its access to the capital markets, as potential investors receive better information due to the improved transparency and disclosure of information requirements that are part of the listing conditions. Furthermore, listed companies often have to meet certain financial performance criteria and accounting standards, which should boost investor confidence in the firm. Finally, when a firm is listed, investors can observe the movement of its share price and consequently form a better opinion of the firm's earnings potential.

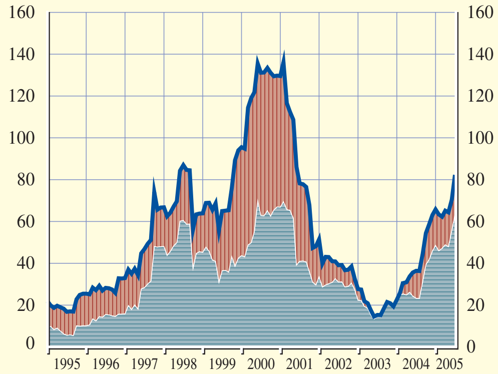
One of the main findings of empirical studies on public equity issuance is that there is substantial evidence of strong market cycles in IPOs, i.e. pronounced cycles in the number of IPOs per month and in the average initial return per month so that the volume of IPOs fluctuates considerably over time. These "hot" and "cold" markets seem to be mainly caused by fluctuations in the demand for capital by non-financial corporations and investor sentiment.[2]

1 For further information, see Box 2 entitled "The development of private equity and venture capital in Europe" in the October 2005 issue of the Monthly Bulletin.

2 See J. R. Ritter, "Investment banking and securities issuance", *Handbook of the Economics of Finance*, G. Constantinides, M. Harris and R. Stulz (eds.), 2003, North-Holland, Amsterdam, pp. 255-306.

Chart 12 Initial and secondary public offerings by non-financial corporations

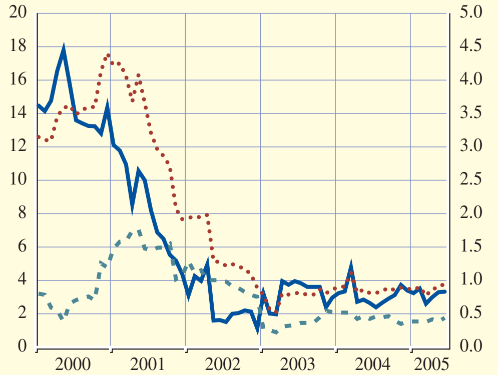
(EUR billions; 12-month cumulated figures)



Source: Thomson Financial Deals.

Chart 13 Net and gross issuance of quoted shares by non-financial corporations

(EUR billions; 12-month moving average; annual growth rates)



Source: ECB.

shares issued by non-financial corporations in the euro area rose strongly in the second half of the 1990s. From 1999 to 2001 there was a record volume of initial public offerings (IPOs) in the euro area, which was partly fuelled by hopes of making substantial corporate profit in the area of new technologies (see Chart 12). Such IPOs therefore became known as "New Economy" IPOs. In fact, during this period, in addition to the privatisation of a number of (partially) state-owned companies, there was a large number of new company listings, especially in the telecommunications, media and technology sectors. This development was also linked to the spectacular growth around that time of specialised stock markets for "growth companies", which became a particularly active segment for the issuance of quoted shares. More generally, equity financing is a particularly advantageous means of financing for innovative firms, as the risk profile of such firms can make banks reluctant to provide loans.

In the aftermath of the decline in stock market prices, the annual growth rate of the gross and net issuance of quoted shares by non-financial corporations in the euro area fell dramatically until mid-2002, stabilising at a relatively low level thereafter (see Chart 13).[21] This relatively subdued issuance of quoted shares by non-financial corporations in the euro area from 2002 to the second quarter of 2005 may partly reflect cyclical elements, but also indicates the relatively high cost of equity, particularly when compared with alternative financing sources. In order to take advantage of the low cost of debt financing, non-financial corporations have reduced the share of net equity issuance (from slightly above 30% in early 2000 to around 10% of their total annual financing transactions in the second quarter of 2005) and increased the share of debt financing (from slightly below 70% to around 90%) in their overall financing.

Other factors may also have played a role. The number of privatisations, for example, has declined considerably in recent years. In addition, private buyouts, mergers and takeovers have implied a reduction in the amount of outstanding quoted shares.

21 For an assessment of the development of equity financing, the net amount of equity issued is a more relevant indicator than gross issuance, as non-financial corporations may buy back or delist some or all of the shares they have issued.

Moreover, M&A activity, which was often financed by the issuance of new shares, slowed significantly, and anecdotal evidence suggests that a large number of companies initiated share buyback programmes, thus reducing their actual net issuance.

5 CONCLUSION

Over the past ten years, non-financial corporations in the euro area have experienced substantial changes in terms of their financing conditions, financing and balance sheet position. First, there was a general improvement in the financing conditions of non-financial corporations. This was partly attributable to the positive impact the introduction of the euro had on the level of interest rates. Second, following the peak in the external financing growth of non-financial corporations in 2000, which stemmed from heavy non-financial and financial investment, as well as a weakening in their balance sheet position, non-financial corporations underwent a period of restructuring. This led in part to improvements in corporate profitability, a substantial narrowing of financing gaps and a reduction in debt ratios. Only recently has there been a slight renewed increase in debt ratios due to a pick-up in non-financial corporate demand for debt financing in the first half of 2005, while equity issuance by non-financial corporations remained subdued up to the end of the second quarter of 2005.