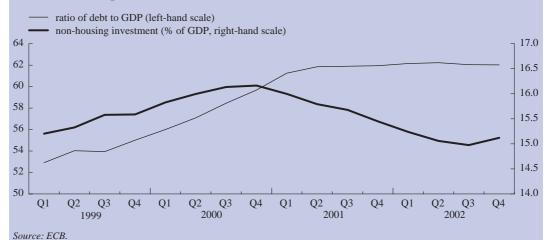
Box 2

The impact of financial factors on corporate investment in the euro area

Gross fixed capital formation in the euro area has been subdued over the past two years. The weakness in investment mainly seems to have been attributable to the economic slowdown (see the box entitled "Factors behind the weakness in investment by type of product" on page 43 of the March 2003 issue of the ECB's Monthly Bulletin for a discussion of the factors behind this weakness in investment). Despite a significant fall in interest rates, other financial developments may have played a role in holding back corporate investment. In fact, although the level of interest rates has been relatively low from an historical perspective, the fall in total investment in the euro area in recent years has followed a period of deteriorating financial positions of euro area non-financial corporations (see Chart A) and has, at the same time, coincided with worsening financing conditions. This box aims to assess whether certain financial factors, such as the cost of financing, corporate balance sheet positions and/or reduced access to financing sources have contributed to bringing down investment spending over the past few years.

Chart A: Non-housing investment as a percentage of GDP and the debt-to-GDP ratio of non-financial corporations in the euro area



Corporate finance theory suggests that the financial situation of borrowers may have an effect on corporate investment spending. A fall in the value of borrowers' financial assets – which can be used as collateral – generally increases the "external finance premium" demanded by lenders to compensate for informational asymmetries. Thus a decline in the net worth of borrowers leads to higher costs of external financing. If the net worth deteriorates during an economic downturn, this can lead to an amplification of the business cycle (i.e. the so-called financial accelerator mechanism) and to persistently weak economic growth. Empirical studies provide evidence of the fact that the impact of financial factors follows an asymmetrical and counter-cyclical pattern and is most prominent during economic downturns. In addition, these factors also influence the situation in the banking sector and, hence, could also affect banks' ability and willingness to lend.

The financial position of non-financial corporations

The financial position of non-financial corporations provides an indication of their creditworthiness and can, therefore, influence lenders' pricing and supply of funds. At the same time, firms themselves may aim for a particular level and composition of debt.

During the 1990s and up to the year 2000, the expansion both of investment in fixed capital and of mergers and acquisitions by euro area non-financial corporations led to a significant increase in their indebtedness,

a development which was particularly pronounced during the second half of the 1990s. This increase was particularly high in some economic sectors, e.g. in the telecommunications industry. Given the buoyant behaviour of stock prices until 2000, some leverage indicators (e.g. debt in relation to financial and total assets) did not deteriorate immediately, while other measures, such as the ratios of debt to operating surplus and GDP, began to reflect the increased reliance on external finance much earlier.

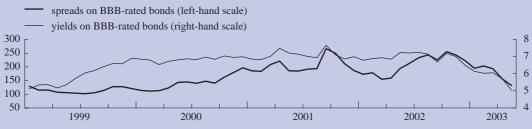
In parallel with the downward correction of stock prices, which got under way after March 2000, the high levels of indebtedness translated into a significant deterioration of all debt ratios, against a background of weakening corporate profits and lower economic activity. This was accompanied by an increase in the interest payment burden of non-financial corporations, which remained significantly below the levels seen in the early 1990s, however. In 2002 consolidation efforts by corporations and a significant decline in the annual growth of debt financing (see Chart D) contributed to broadly stabilising debt-to-GDP ratios, while further declines in asset prices caused the ratio of debt to financial assets to increase. In addition, the interest payment burden of non-financial corporations seems to have stabilised in 2002.

Debt financing conditions

The decline in interest rates to the current low levels has, all other things being equal, improved the debt financing conditions for non-financial corporations in the sense that debt finance has become cheaper. However, the rise in the debt-to-GDP ratios of euro area non-financial corporations up to early 2002 was

Chart B: Yields and spreads on BBB-rated corporate bonds in the euro area

 $(corporate\ bond\ yields\ as\ a\ percentage,\ corporate\ bond\ spreads\ in\ basis\ points;\ monthly\ data)$



Sources: Reuters, Bloomberg and Merrill Lynch.

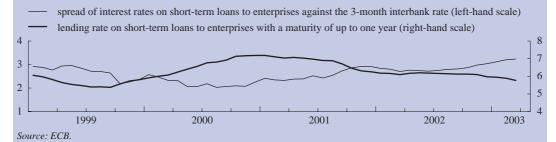
accompanied by a significant rise in spreads that corporate borrowers are obliged to pay for credit as opposed to government borrowers. This increase in spreads was most pronounced in the corporate bond market where spreads, while being volatile, reached very high levels in late 2001 and the summer of 2002 (see Chart B). At the same time, the spread of retail bank interest rates on short-term loans to enterprises against the three-month interbank rate also increased over this period (see Chart C).

Indicators of recent developments in bank financing conditions suggest that credit risk continues to be an important factor (see the box on page 15 of the May 2003 issue of the ECB's Monthly Bulletin on the results of the ECB's bank lending survey). Indeed, spreads of short-term loans to enterprises (with a maturity of up to one year) against the three-month interbank rate rose further in early 2003, indicating that lenders' perception of credit risk remains high.

By contrast, over recent months, financing conditions for corporate issuers in the bond market have improved considerably, as BBB-rated corporate bond spreads have fallen by some 130 basis points since October 2002. This decrease in spreads may, to some extent, reflect market perceptions of balance sheet restructuring in many euro area companies. However, it also reflects a correction of the extraordinarily high spread levels seen

Chart C: Retail bank interest rates on short-term loans to enterprises with a maturity of up to one year and the spread of retail bank interest rates on short-term loans to enterprises against the three-month interbank rate (EURIBOR)

(in percentage points; monthly data)

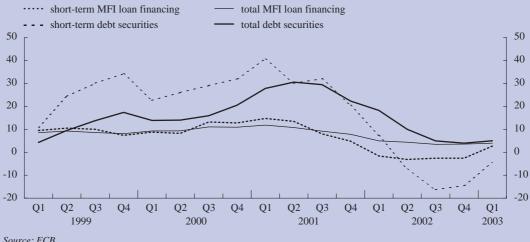


in 2002, as well as some portfolio shifts of institutional investors owing to risk retrenchment as a result of financial uncertainty and other more technical factors (see the box on page 17 of the April 2003 issue of the ECB's Monthly Bulletin).

Credit risk has been of some importance for corporate financing conditions, with short-term debt financing falling substantially in 2002, partly reflecting corporations' lengthening of the maturity of their debts. However, in part supported by the historically low level of interest rates, the growth rate of corporate borrowing is not exceptionally low compared with previous periods of subdued economic activity. In fact, corporate debt financing grew by 4-5% on an annual basis in most of 2002 and early 2003. Thus, although conditions may have differed across countries, there is little evidence of there having been widespread credit constraints in the euro area as a whole in 2002 and early 2003.

Chart D: Debt financing by non-financial corporations in the euro area





Source: ECB.

Financing conditions in the market for equity capital

In the stock markets, financing conditions have generally been unfavourable. The dividend yield, which is defined as the annual dividend as a percentage of the share price and which may be used as a proxy for the cost of equity capital, has increased. Data from Datastream, a private financial data provider, indicate that this increase was quite substantial in 2002 and the beginning of 2003 as stock prices tumbled. In fact, despite the rebound in stock prices in late March and early April 2003, measures of the dividend yield currently hover around the highest levels seen since the early 1990s, thereby indicating that equity financing has remained very costly. Moreover, the significant volatility observed in the stock markets until mid-March may have created considerable difficulties in timing public offerings, thereby further limiting firms' access to equity capital.

Consequently, equity financing almost dried up in the euro area in late 2002 and early 2003 (see Chart E and also the box on page 21 in the March 2003 issue of the ECB's Monthly Bulletin). Although there have been a few secondary public offerings (SPOs) lately, initial public offerings (IPOs) have been almost non-existent during this period, possibly reflecting the prevailing high cost of equity capital.

Overall assessment

In sum, there are some indicators which suggest that financial factors for non-financial corporations in the euro area may have contributed to the recent weakness in corporate investment spending. The general financial and economic uncertainty that prevailed in 2002 and early 2003 is likely to have enhanced the significance of financial factors in this respect and to have counterbalanced, to some extent, the effects of generally low interest rates. In a forward-looking perspective, the recent normalisation in financial markets after the end of the Iraq war has contributed to improving financing conditions in the bond markets and probably also in the equity markets. Furthermore, the historically low level of interest rates should contribute to an upswing in investment. At the same time, uncertainty remains as to the adjustment still needed in the euro area to enhance productivity and profitability.

