Box 6

RECENT DEVELOPMENTS IN NON-FINANCIAL CORPORATIONS' LEVERAGE RATIOS

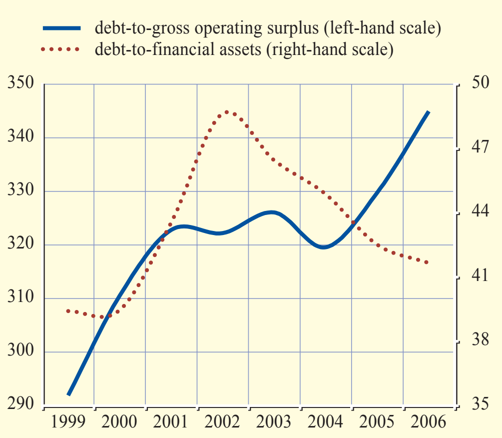
Over the past few years, measures of indebtedness, such as the debt-to-GDP or debt-to-gross operating surplus ratios (see Chart 33 in the main text) of euro area non-financial corporations (NFCs) have tended to rise, pointing to increasing indebtedness. This box provides an assessment of whether the increase in these ratios has been accompanied by a parallel increase in the assets of NFCs, which may indicate that the accumulation of debt has been accompanied by higher investments and/or by more favourable valuations of company balance sheets.

For the entire NFC sector, the only available information on assets refers to financial assets, as contained in the Euro Area Accounts (EAA).[1] While the debt-to-gross operating surplus ratio remained broadly stable in 2003 and 2004 and picked up strongly in the two subsequent years, the debt-to-financial assets ratio has recorded a downward trend since 2002 (see Chart A). This contrasts with the patterns observed in the early part of the decade, when both ratios evolved broadly in parallel.

1 With respect to the composition of the financial assets held by NFCs, loans accounted for 35%, shares and other equity for 24%, debt securities for 22%, currency and deposits for 12% and others (mainly other accounts receivable) for 7% of the stock of financial assets in the first quarter of 2007.

Chart A Indebtedness ratios of non-financial corporations

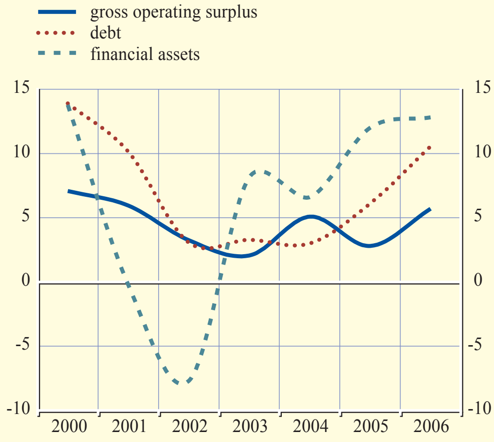
(percentages)



Sources: Euro Area Accounts and ECB calculations.

Chart B Growth of debt, financial assets and gross operating surplus

(annual growth rates)



Sources: Euro Area Accounts and ECB calculations.

The different behaviour observed in both ratios in the more recent period has clearly been a response to a different evolution in the growth of earnings on the one hand and financial assets on the other. Since 2003 financial assets have grown at a high rate, markedly above that observed for earnings (see Chart B), with the largest differences being registered in 2005 and 2006.

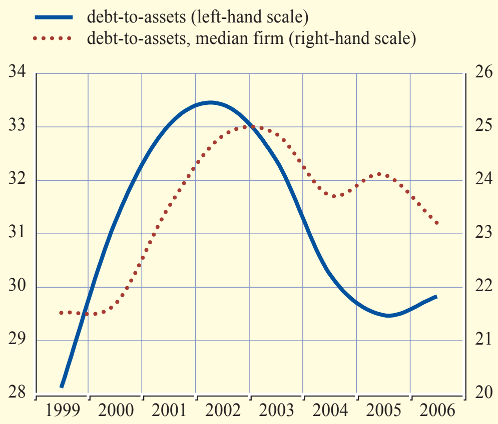
Looking at the entirety of NFC assets (i.e. including the capital stock and other assets, such as goodwill), the growth in the value of assets and of earnings can be expected to co-move in the long run, as the value of assets should be equal to the discounted value of future earnings. Hence, one would expect parallel developments in the debt-to-assets and debt-to-earnings ratios in the long run. In addition, assuming that, in the long run, the share of financial assets in the balance sheet of NFCs is constant, parallel developments can be expected in the ratio of debt to financial assets.

In the short run, several factors can result in the divergent trends between the ratios. First, as regards financial assets, their value may increase more rapidly than earnings on account of valuation effects, which were indeed pronounced in the period of stock market recovery which began in 2003. Second, the divergence may signal that firms have invested more in financial assets than in non-financial assets. In fact, there was a significant accumulation of financial assets in the period 2003-06. In particular, the high growth rate of financial assets in the last few years is partially attributable to merger and acquisitions (M&A) activity[2], which can impact on the value of NFC financial assets both through an actual increase in the stock of financial assets and through valuation effects, as stock prices may have responded positively to these operations. In addition, there has also been an increase in investments in other financial instruments less affected by valuation effects, such as currency and deposits or loans granted by NFCs.

2 For a deeper analysis of recent developments in M&A activity in the euro area see Box 4, entitled “Recent trends in merger and acquisition activity in the euro area”, in the July 2006 issue of the Monthly Bulletin.

Chart C Debt-to-assets ratio of listed non-financial companies

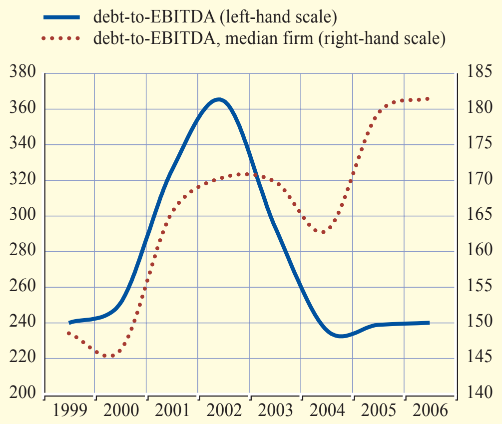
(percentages)



Sources: Thomson Financial Datastream and ECB calculations.

Chart D Debt-to-earnings ratio of listed non-financial companies

(percentages)



Sources: Thomson Financial Datastream and ECB calculations.

With regard to potential differences in the evolution of the debt-to-financial assets and debt-to-total assets ratio, in the absence of harmonised data for the euro area as a whole some insights can be derived from the annual financial statements of listed non-financial corporations in the euro area. This comprehensive dataset, in which large companies predominate, makes it possible to construct indebtedness ratios with respect to total assets. The data show that the debt-to-total assets ratio decreased in the period 2003-05 (see Chart C) and in 2006 stood at around the same level as in 2000. The accumulation of both financial and non-financial assets contributed to this development. However, while the growth rate of total assets was closely linked to tangible assets between 2001 and 2004, in 2005 and 2006 it was more closely associated with the development of financial assets. As a result, the ratio of debt to financial assets (not shown in the chart) showed stronger reductions than the debt-to-total assets ratio in the period 2003-06. This suggests that the divergent trends observed for the debt to gross-operating surplus and debt-to-financial assets ratios presented in Chart A are in part due to the strong accumulation of financial assets during this period. Furthermore, Chart C suggests that the main role in the reduction of the debt-to-financial assets ratio observed at the aggregate level has been played by large companies rather than the median firm.[3]

Movements in the debt-to-earnings ratio for listed companies, where earnings are approximated by EBITDA[4], were very similar to developments in the debt-to-assets ratio in the period under review (see Chart D). The increase in these companies' debt-to earnings ratio in 2005 and 2006 was fairly small by comparison with the increase in the debt-to-gross operating surplus ratio for the whole NFC sector. This is the result of a higher increase in earnings observed for large companies (which, as mentioned above, predominate in this database) in those years than for the NFC sector as a whole. Indeed, the increase in the ratio is more pronounced for the median firm than for the overall aggregate. This suggests that the increase observed in the EAA debt-

3 The median value is that which, when ordering indebtedness ratio observations from smaller to higher values, immediately follows the first 50% of the observations.

4 EBITDA (earnings before interest, taxes, depreciation and amortisation) is the closest correspondent measure from firms' balance sheets to gross operating surplus at the macroeconomic level.

to-earnings ratio in the last few years also reflects developments in small firms, which have recorded lower debt growth rates, but also lower earnings growth rates, than large firms.[5]

To sum up, there are indications that the increase, over the past couple of years, in the debt of NFCs with respect to earnings has been very modest for large listed companies, while for the entire NFC sector the ratio has risen to a larger extent. At the same time, the ratio of debt to financial assets has decreased in the case of euro area NFCs, which has probably facilitated NFCs' ability to receive credit in an environment of favourable asset price developments. Part of the reduction observed in this ratio is due to the accumulation of financial assets on the part of NFCs, but also to the increase in the value of assets on account of favourable financial market developments over the past couple of years.

5 For evidence of more favourable earnings developments on the part of large listed firms relative to all firms, see also Box 5, entitled "The relationships between listed companies' earnings growth and output growth in the economy as a whole", in this issue of the Monthly Bulletin.