Box 5

FACTORS BEHIND THE RECENT DECOUPLING OF EURO AREA STOCK PRICES FROM THOSE IN THE UNITED STATES

Over the past year, stock prices have posted large gains in the euro area, while they have stagnated in the United States. Between end-December 2004 and end-December 2005, the Dow Jones EURO STOXX broad index surged by nearly 23%, compared with an increase of just under 4% in the Standard & Poor's 500 index. That euro area stock prices have performed so much better than US stock prices may appear hard to reconcile with the relatively weaker economic growth, both actual and expected, in the euro area. If at all, this should have favoured US equities. This box suggests that a number of other fundamental factors, including a more favourable development of corporate earnings, a weaker euro vis-à-vis the US dollar and more subdued interest rate increases in the euro area, may explain why the euro area stock market has outperformed that in the United States.

In order to assess factors which may have widened the gap between stock prices in the two economic areas, it may be useful to recall that, in theory, the price of a share is equal to the sum of expected future dividends discounted by a measure of the risk-free interest rate plus the risk premium that investors demand for holding stocks. In carrying out this valuation, expected future dividends can be replaced by earnings expectations, assuming that a given fraction of the earnings will be paid out as dividends. Differences in the trends of stock prices from one economy to another must therefore originate from differences in profitability, interest rates and the equity premium.

Starting with developments in relative profitability, according to earnings data on the Dow Jones EURO STOXX index and the Standard & Poor's 500 index provided by Thomson Financial Datastream, earnings per share grew more strongly in the euro area than in the United States in both 2004 and 2005. Earnings growth in 2005 was not only stronger in the euro area than in the Unites States, it was also far stronger than anticipated a year earlier. In December 2004, analysts had expected earnings per share to grow by 11.6% in the euro area in 2005, but the actual outcome was 18.3%, almost 7 percentage points higher than anticipated. In the United States, earnings per share grew by 14.1% in 2005, only around 3 percentage points more than expected in December 2004 (see Chart A).

One of the factors that may play a role in explaining differences between stock market developments in the euro area and those in the United States is the exchange rate. Marked exchange rate changes can affect both reported earnings and market perceptions of earnings prospects. The impact of exchange rate changes on the earnings of a specific corporation and, ultimately, on a broad equity index will of course differ, depending on whether firms are more import-oriented or more export-oriented, so that – at an aggregated level – its sign is hardly identifiable and thus becomes a matter of empirics. The chart below shows the exchange rate of the euro vis-à-vis the US dollar, together with the relative stock market performance of the two economies. Since the better performance of euro area equities appears to be closely related to the depreciation of the euro against the US dollar throughout 2005, it seems reasonable to assume that the latter contributed to the more favourable development of the earnings of euro area firms in comparison with those of US firms in 2005, possibly through corresponding general gains in export competitiveness.

Monetary and financial developments

Chart A Earnings surprises in the euro area and in the United States

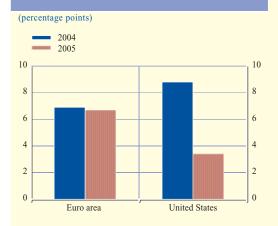
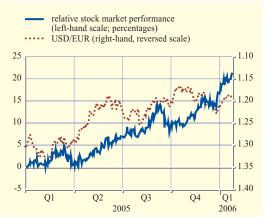


Chart B The relative performance of stock prices in the euro area and the United States, and the EUR/USD exchange rate



Sources: Thomson Financial Datastream and ECB calculations. Note: Earnings surprises are measured as the difference between the actual annual growth of earnings and the growth of earnings expected in December the year before.

Sources: Reuters and ECB calculations.

As mentioned above, interest rate developments are of relevance for stock prices because they affect the discount factor that investors employ to evaluate stocks. For purposes of gauging the impact of interest rates on stock prices, it is useful to look at long-term real yields in empirical terms. When these yields rise, stock prices – all other things being equal – typically tend to fall. The effects of discount factors on stock prices in the United States in 2005 must have been less favourable than those in the euro area. For instance, the long-term real yield on euro area inflation-linked bonds (with maturity in 2012) changed little between December 2004 and December 2005, while the real yield on comparable 2011-maturity index-linked bonds in the United States increased by about 80 basis points. Hence, it is likely that the strong increase in real bond yields roughly offset the impact of the generally positive development of earnings in the US stock market.

Moreover, euro area stock prices in 2005 may have benefited from the perception among investors that US equities entailed higher risks than euro area stocks. Throughout 2005, for example, in answer to the question as to the region in which they deemed equity markets to be most overvalued and most undervalued respectively (asked in the monthly Merrill Lynch Global Fund Manager Survey), an average net percentage (i.e. the percentage of "most overvalued" less the percentage of "most undervalued") of around 50% of the fund managers surveyed perceived the US stock markets to be most overvalued. For the euro area, this net percentage averaged about -16%, indicating that fund managers tended to perceive the euro area stock market as undervalued. Such perceptions may have induced institutional investors, in particular, to overweight euro area equities and underweight US equities in their portfolios, thereby affecting relative stock price developments.

As the increases in stock prices on both sides of the Atlantic were generally broadly based, the differences between the overall stock market performance in the euro area and that in the United States are generally properly reflected in corresponding performance differentials across sectors. However, stock prices of corporations in the euro area financial sector – a sector that has a greater weight in the Dow Jones EURO STOXX index than the corresponding US sector

has in the Standard & Poor's 500 index – gained 29% between end-2004 and end-2005. In the United States, stock prices in the financial sector rose far less, namely by around 3.5%, over the same period. This difference in the performance of the financial sectors thus amplified the decoupling of broad-based stock price performance in the two economies. One potential factor behind the stronger increases in European financial stock prices observed in recent years may be found in market speculation about further progress in the consolidation of the European banking sector. Market expectations of further cross-border consolidation may thus have driven the stock prices of European banks upwards (in particular those of potential targets).

Overall, the better performance of euro area stock prices in comparison with those in the United States in 2005 has contributed to a levelling-off of some of the prevailing differences in stock market valuation metrics, such as the price-earnings ratios in the two economies, and could therefore be regarded as part of an equilibration process. At the end of 2004, the ratio of equity prices to corporate earnings in the preceding 12 months was 20.5 for companies in the Standard & Poor's 500 index, while – as measured for companies in the Dow Jones EURO STOXX index – it stood at 14.3 in the euro area. The relative movements of both the equity indices and the corporate earnings in 2005 brought the two price-earnings ratios still closer, to 18.5 and 15.9 respectively, at the end of the year.