Box 3

M&A ACTIVITY AND STOCK PRICE DEVELOPMENTS IN THE EURO AREA

The marked stock price increases in the euro area of recent years have occurred alongside a highly dynamic market for mergers and acquisitions (M&As). This box takes a closer look at the nature of and possible reasons for this apparent relationship.

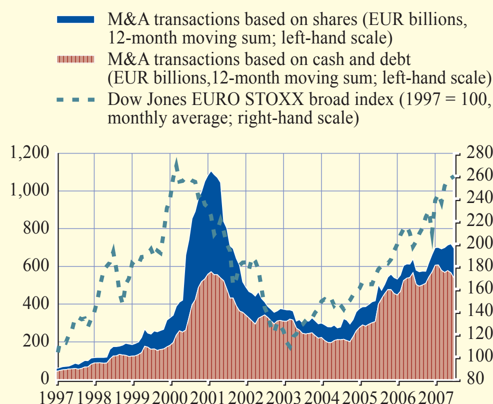
Chart A suggests that, in general, the cyclical developments in the value of M&A deals involving euro area companies (as acquirers and/or targets) and stock prices tend to be fairly strongly correlated. Specifically, the current wave of M&A activity in the euro area, which reached an annualised value of close to €700 billion in early 2007, occurred in parallel with a continued upward trend in euro area stock prices. This was the highest level of M&A activity since the boom in the late 1990s and early 2000s, which likewise occurred amid elevated stock prices.[1] One major difference between the nature of these two waves of M&A activity is that in 1999-2000 a large part of the transactions were carried out via the exchange of shares between the acquiring and target firm shareholders (see Chart A). In the more recent 2005-2007 merger wave, shares have played a much less important role as a method of payment probably owing to the very favourable debt financing conditions and ample corporate cash holdings.[2] These differences may suggest that the factors underlying the relationship between stock prices and M&A activity could differ over time and could indicate that stock prices played a more important role in M&A activity in the former period.

In the academic literature, several (potentially interrelated) factors have been proposed to explain the observed positive relationship between stock prices and M&A activity. First,

1 The fact that M&A activity seems to lag somewhat stock prices may reflect the time it takes to complete the deals following their announcement.
2 See also Box 4 entitled "Recent trends in merger and acquisition activity in the euro area" in the July 2006 issue of the Monthly Bulletin.

Chart A Value of M&A deals and stock prices in the euro area

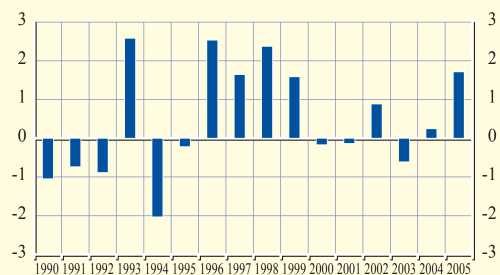
(monthly data)



Sources: Thomson Financial Datastream and Bureau van Dijk (Zephyr).
Note: M&A transactions involve completed deals where euro area companies act as acquirer and/or target.

Chart B Abnormal returns associated with M&A announcements in the euro area

(percentages)



Sources: Thomson Financial Datastream and ECB calculations.
Note: Abnormal returns are the percentage changes in the stock prices of acquiring euro area firms over a three-day window around the M&A announcement in excess of what could be normally expected given the parallel price changes in the broad market (see footnote 6 of this box), averaged over all relevant M&A announcements in each year. Only transactions where the deal value exceeded 10% of the market value of the acquiring firm were included.

mergers tend to cluster around fundamental economic and technological shocks fostering synergy effects for merging firms and hence producing immediate positive effects on stock prices from merger announcements.[3] A second, and somehow related, point is that the positive correlation between M&As and stock prices could reflect investor over-optimism being fuelled by a so-called merger momentum. This would tend to imply a positive short-run reaction of stock prices to merger announcements. However, a long-run reversal of the increase in the stock price of the acquiring firms may appear once it becomes clear to investors that they were too optimistic about the supposed synergies.[4] Third, the fact that strong M&A activity tends to occur when stock prices are high by historical standards could reflect that managers are more inclined to carry out acquisitions when they perceive their stocks to be overvalued.[5]

In order to better understand the factors underlying the recent relationship between stock prices and M&A activity in the euro area, an event study of the stock market reactions at the time of merger announcements was conducted. For this purpose, a three-day event window ranging from one day before to two days after the merger announcement is applied to calculate the abnormal returns of stock prices of acquiring firms in reaction to the announcement.[6] Chart B shows that the yearly average abnormal return of acquiring firms varies over time, but was particularly high in the period leading up to the stock market boom in the late 1990s and 2000, as well as in 2005.[7] Overall, these average reaction patterns do indeed suggest that firms that engage in acquisitions during merger waves tend to observe a positive initial stock market reaction to the news. This, in turn, lends some support to the aforementioned explanatory factors, namely the anticipation of future synergy effects and investor over-optimism.

Overall, these findings may suggest that M&A activity is at least partly driven by investor optimism during favourable stock market developments. Against this background, the observation that in the first seven months of 2007 announced M&A deals involving euro area companies as targets and/or acquirers amounted to around €180 billion (in addition to around €265 billion of completed deals from end-2006 to July 2007) suggests that the activity in the market for M&As in the euro area has continued at a fast pace and has exerted upward pressure on stock prices.

3 See e.g. B. Jovanovic and P. L. Rousseau (2001), “Mergers and technological change: 1885-1998”, Working Paper No. 0116, Vanderbilt University.
4 See R. J. Rosen (2006), “Merger momentum and investor sentiment: The stock market reaction to merger announcements”, *Journal of Business* 79 (No. 2), pp. 987-1017.
5 See e.g. M. Rhodes-Kropf, D. T. Robinson and S. Vishanathan (2005), “Valuation waves and merger activity: The empirical evidence”, *Journal of Financial Economics* 77, pp. 561-603; and A. Shleifer and R. W. Vishny (2003), “Stock market driven acquisitions”, *Journal of Financial Economics* 70, pp. 295-311.
6 To gauge how the firms’ stock prices are related to the market portfolio, the firms’ daily stock price returns are regressed on the basis of the returns of the corresponding Dow Jones EURO STOXX sector index over a one-year estimation window prior to the merger announcement event window. Abnormal returns in the event window are then calculated by subtracting the respective firms’ stock price returns from the normal return derived from the estimation window results.
7 Results for 2006 and 2007 are currently not available.