

### Box 3

#### Recent developments in confidence indicators in the euro area

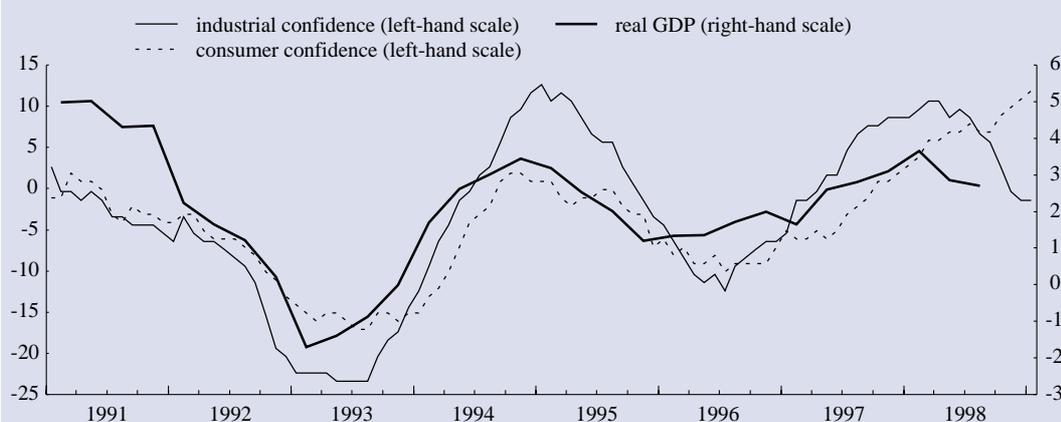
Developments in confidence indicators have attracted considerable attention in recent months. In view, in particular, of the limited availability of other reliable and timely statistics, analysis of these confidence variables may provide useful information on a number of key questions regarding the current conjunctural situation and the prospects for output growth in the euro area. At the area-wide level there has been a clear divergence in the paths of consumer and industrial confidence since the spring of 1998. Most notably, while consumer confidence has continued to improve, there has been a significant decline in industrial confidence. By the end of last year, consumer confidence had risen to the highest level attained by the indicator since 1985, whereas industrial confidence had fallen back from a peak in March 1998 to a level slightly below its long-term average. The extent and the duration of the recent divergence of consumer and industrial confidence indicators is highly unusual. The series have been highly correlated with one another in the past (with industrial confidence perhaps slightly leading the consumer confidence indicator, but only by one to two months).

Both consumer and industrial confidence indicators are produced by averaging the responses to a number of questions put to households and businesses respectively. Consumer confidence comprises the responses to a total of five questions: two questions on the financial situation over the past and the next 12 months, two further questions on the economic situation over the past and the next 12 months, and one question on attitudes concerning major purchases. The industrial confidence indicator averages the responses to questions on production expectations, order books and (with the sign reversed) stocks of finished products. An analysis of the responses to the individual questions that are used to compile the consumer and industrial confidence indicators does not suggest that there are any particular problems or peculiarities with either of the two overall series. In general, the trends towards improving or deteriorating confidence in each of the indicators are also broadly followed by the various underlying components. The national confidence indicators which are available also generally support, rather than conflict with, the European Commission survey data.

Movements in consumer and industrial confidence appear to follow developments in the real economy relatively closely (see the chart below). Industrial confidence is closely correlated with GDP (as well as industrial production; see Chart 9 in the main text), while consumer confidence is linked to GDP (and, although to a lesser extent, to private consumption). It is more difficult, however, to be precise about the extent

#### Confidence indicators and real GDP in the euro area

(percentage balances; annual percentage changes for GDP)



Sources: European Commission Business and Consumer Surveys and Eurostat.

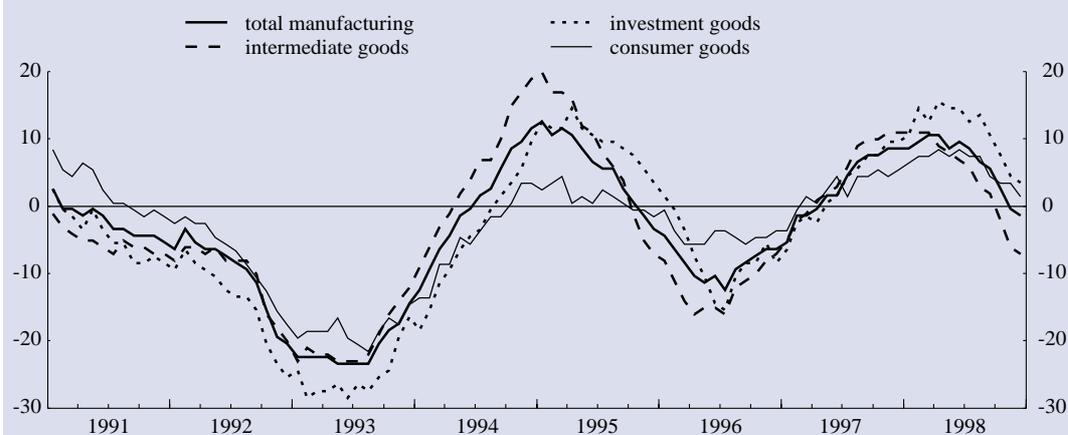
Note: For further information on the data used, see the respective tables and charts in the "Euro area statistics" section of this Bulletin. All data are seasonally adjusted. Survey data shown are calculated as deviations from the average over the period since January 1985.

to which the series provide reliable leading information on developments in real economic activity; in general the various indicators would appear to have a rather short lead over activity or even to be coincident. As data on confidence are available prior to actual data on sectoral activity or GDP, however, the survey evidence may be considered quite valuable, even if the series are to be seen primarily as coincident indicators. Moreover, an analysis of turning-points in output suggests that the timing of any relationship with activity is variable (although the identification of turning-points is itself open to some debate). Overall, this suggests that a mechanistic interpretation of these indicators should be avoided.

In addition to the aggregate industrial confidence figures, the European Commission also publishes a detailed breakdown of the results of the industrial survey by sector. The chart below shows the developments in total manufacturing and three broad categories – intermediate goods, investment goods and consumer goods. Considering the period from March 1998 onwards, it would appear that by far the sharpest decline in confidence has occurred in the intermediate goods sector. Although a decline is evident in all sectors, the fall in confidence in the intermediate goods sector has been much larger than that in the investment goods sector, while the decline in confidence in the consumer goods sector, which appears to be less volatile, has clearly been smaller. This corresponds in part to actual industrial production data, as data for the intermediate goods sector show that production in this sector weakened the most over the past year and that the level of production has remained broadly unchanged since the spring.

### Industrial confidence by sector for the euro area

(percentage balances; seasonally adjusted)



Sources: European Commission Business and Consumer Surveys and ECB calculations.

Note: Data shown are calculated as deviations from the average over the period since January 1985.

Furthermore, the development of the consumer and industrial confidence indicators appears to be broadly consistent with actual economic developments to date. Private consumption has been fairly robust over the past year, but industrial production has slowed in line with the deterioration in the external environment and increased uncertainty about the global situation. It is quite reasonable to assume that the current path of divergence between the consumer and industrial confidence indicators cannot continue. However, there are two possible ways in which the divergence could be reduced. One possibility is that low industrial confidence, especially in the intermediate goods sector, will spread to other industrial sectors, adversely affecting investment and employment, and thus also leading to a retrenchment in consumption. At present, however, there is little evidence that this has occurred. The other possibility is that continued robust consumption growth and consumer confidence, underpinned by further growth of employment – in the absence of a further deterioration in the external situation – may lead to a gradual recovery in industrial confidence and production. Such an outcome would be consistent with a more modest slowdown in output growth concentrated around the turn of the year.