Box 7 New orders in euro area manufacturing industries

This box describes the concepts behind and compilation of the data on actual new orders in the euro area, and assesses their usefulness for economic analysis. New orders are covered by the EU regulation on short-term statistics. The transition period for its introduction in EU countries ended in June 2003. In November 2003 Eurostat officially released euro area-wide statistics on new orders in manufacturing industries for the first time. Prior to the introduction of these statistics, business surveys were the only source of information available on orders.

The concepts behind and compilation of data on new orders for the euro area

New orders are defined as the *intent to purchase for immediate or future delivery*. They measure the value of the incoming contracts in each reference month, including orders from sub-contractors. In the EU, the convention is for order cancellations not to be deducted from current or past order figures.

The EU regulation only covers industries that work on the basis of orders (i.e. textile, pulp and paper, chemicals, all capital goods, most consumer durable goods and selected non-durable consumer goods), which is not the case for all manufacturing industries. The aggregate comprising these industries is classified as *manufacturing industries working on orders* and accounts for around 63% of total manufacturing turnover. The euro area-wide index for this aggregate is available from January 1996. Spain, France and Portugal only recently introduced new order statistics into their systems. Consequently, the coverage of the euro area aggregate, in terms of underlying national data, has been gradually increasing, with coverage of over 90% only being achieved in 2002. Eurostat also provides a breakdown of total new orders into domestic and foreign new orders. As this breakdown is based on the respective national results, foreign new orders include those from outside the euro area as well as those originating from other euro area countries (a distinction between "true" intra and extra-euro area orders will only become available after 2005). It should be noted that euro area-wide new order data are only available in value terms. According to the transmission deadlines, euro area-wide indices should become available around 50 days after the end of the reference month, i.e. between one and two weeks after the release of the euro area industrial production indices for the same month.

The usefulness of data on new orders for economic analysis

In principle, new orders provide indications of current demand and future production. They tend to play an important role in the construction of composite leading indicators for real GDP growth. However, the lead time of orders can vary given that it is difficult to determine when exactly orders become production. More specifically, new orders result in turnover that can be serviced from production or inventories. In the latter case, the relationship between new orders and production depends on whether and how quickly inventories are replenished after sales have taken place. Moreover, new orders sometimes exhibit considerable month-to-month volatility, related in particular to high-value contracts, e.g. for transportation (aircraft and ships). Unfilled orders would provide a more direct link with future production given that they imply an order backlog and pent-up production; however, these data are not available for the euro area.

Correlation analysis suggests that over the period from 1996 to 2003, the three-month on three-month growth rate in new orders of *manufacturing industries working to order* has a lead time of one month over the corresponding growth rate for production (see Chart A). The same lead time is observed for the so-called order-to-sales ratio, which can be constructed from data on new orders and turnover (see Chart B). This ratio can be used as an indicator of turning points in output and may contribute to the analysis of production capacity developments. If capacity utilisation is already high and inventories are low, a strong rise in the ratio would suggest that new orders are gradually creating a backlog of unfilled orders. The order-to-sales ratio has been on a broad upward movement since 2001 and in the summer of 2003 it was back to levels comparable to those

observed at the business cycle peak in 2000. This development suggests that incoming business may have started to exceed outgoing sales, with the result of a backlog of orders. That would be in line with the available survey data for the manufacturing sector, which indicate that order books are increasingly regarded as sufficient and that the production months assured by current order books have remained well above their longer-term average. In this respect, data on actual new orders are also useful to cross-check – albeit with some time lag – the information available from survey data.

Chart A: Growth in new orders and production

Chart B: Order-to-sales ratio and production growth



(index; 2000 = 100; 3 month-on-3 month percentage changes)



Note: Data are seasonally adjusted and refer to manufacturing industries working on orders.

Source: Eurostat.

Note: Data are seasonally adjusted and refer to manufacturing industries working on orders. Order-to-sales ratio calculated as index of new orders divided by index of turnover.

Overall, data on actual new orders help to fill an important gap in the availability of hard data in the area of short-term statistics. Developments in new orders are ahead of those in production, but their usefulness as a leading indicator is somewhat restricted, since new order data only become available once the corresponding production data has already been released. However, the data now allow for a combined analysis of orders, turnover and production based exclusively on hard data and thus help to assess the information from survey data. Moreover, they provide valuable information at the disaggregated level of industries, e.g. capital goods industries. Desirable improvements include the timeliness of order data and the availability of data in volume terms.