

Box 3

Euro area sectoral employment growth and employment business survey results

The year-on-year rate of growth in total employment increased in the course of 1999, and it stood at a high level of around 2% between the second quarter of 2000 and the first quarter of 2001. Favourable developments in economic activity stimulated a steady increase in services sector employment growth and positive employment growth in the manufacturing sector. In the second and third quarters of 2001, employment growth is expected to have shown signs of weakening, resulting from the lagged impact of the recent slowdown in economic activity. This expectation is mainly based on employers' replies to business surveys, which have proved to be a useful tool for anticipating employment developments at the sectoral level.

Two euro area business surveys on employment growth are currently available. The first is the European Commission (EC) Business Survey, which covers employment prospects in the months to come for a number of firms in the manufacturing, construction and retail trade sectors and, since very recently, the services sector as a whole. Survey results for the manufacturing and services sectors are released early in the second month of every quarter and refer to the same quarter, while expectations for retail trade and construction are issued monthly shortly after the end of the reference month. Data are provided from 1980 for the construction sector, from 1982 for the manufacturing sector and from 1986 for the retail trade sector. First results from the services survey only go back to the first quarter of 1999, and data are therefore too limited to show their predicting properties on actual employment growth in the services sector. The second available survey is from the Purchasing Managers Index (PMI) survey, collected by NTC Research on behalf of Reuters. It refers to samples of firms in manufacturing and in services. It is a monthly series and employers are asked to compare the level of employment in their firm with that of the previous month. Data are available relating to the period since July 1997 for the manufacturing sector and since July 1998 for services.

The charts show a fair degree of similarity between the employment survey results and the corresponding year-on-year employment growth rates provided by Eurostat. This similarity is also confirmed by standard correlation analysis. Given the available sectoral breakdown in ESA 95 national accounts, employment expectations for manufacturing can only be compared with employment growth in industry excluding construction, 95% of which is accounted for by manufacturing and the remaining 5% by utilities (such as water or electricity supply). The series on employment growth exhibits a high degree of positive contemporaneous correlation with the EC Business

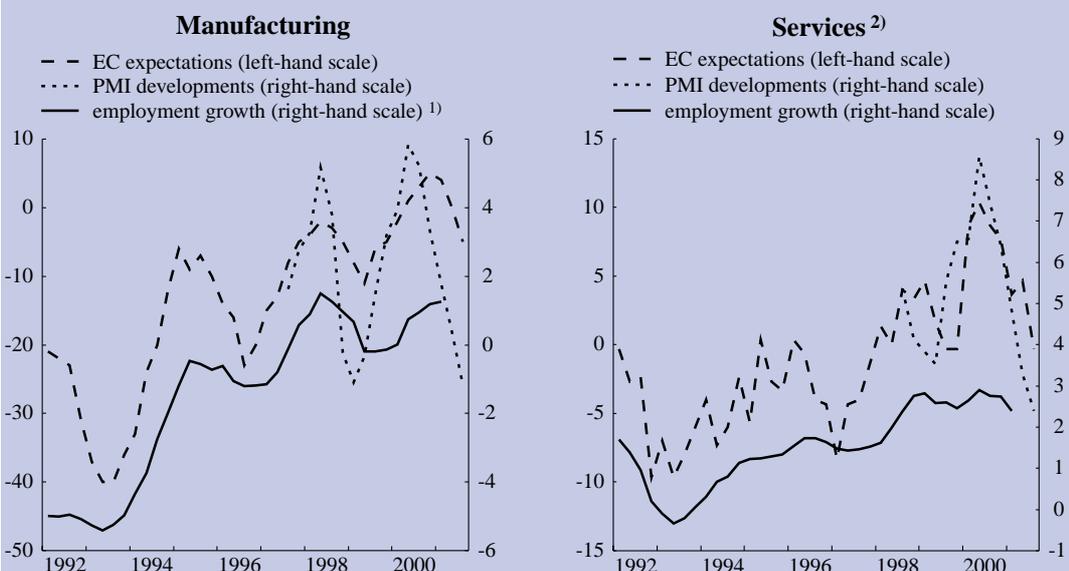
Survey results, while the degree of correlation is slightly lower with PMI survey results, with employment lagging somewhat. In the construction sector, a positive correlation can also be seen between actual employment growth and EC survey results. It is nevertheless somewhat lower than in manufacturing. This may reflect the fact that employment growth in construction tends to be more volatile and probably more difficult to predict. The correlation between the two series appears to be contemporaneous.

Finally, in the services sector, there is a rather large discrepancy as regards the coverage between the series for employment growth and employment expectations. While the longest series of EC survey results cover only retail trade, the most comparable national accounts' sub-sector given by the available breakdown of employment growth also includes wholesale trade, hotels and restaurants, transport and communications. In fact, retail trade accounts for less than half of the jobs registered in the ESA 95 sub-sector. Nevertheless, there appears to be a high degree of positive correlation between the two series, and, once again, survey results are contemporaneous to actual employment movements. As pointed out above, there has been a series of EC survey expectations for total services since January 1999, but there are still too few observations to carry out a similar analysis. Interestingly, the correlation between EC survey results for retail trade only and the series for employment growth in total services is also high, despite the discrepancy in coverage. The PMI survey results display a much lower positive correlation, but there again, the series is still far too short to draw any conclusions on the reliability of its relationship with actual employment growth in total services.

All in all, employment expectations are generally positively correlated with developments in year-on-year employment growth and follow contemporaneous movements. Given that employment survey results are published in a very timely manner compared with employment growth data (up to two quarters in advance), they provide a useful indication for sectoral and possibly total employment developments in the short run. However, some caveats should be mentioned. Surveys do not exhibit a real ability to predict turning points in employment developments. Expectation data from EC business surveys only cover business sector employment in part, and their correlation with employment, very high for the manufacturing sector, is lower for construction and retail trade, whereas PMI surveys are available for too short a period of time to properly assess their leading properties. At present, all surveys have in common that they point to a moderation in employment growth in the second and third quarters of 2001.

Employment business survey results and employment growth in the euro area

(annual percentage changes; percentage balances unless otherwise specified)



Sources: Eurostat, European Commission Business and Consumer Surveys, NTC Research and ECB calculations.

Note: A reading of PMI survey results above 0 indicates an increase in employment since the previous quarter and a value below 0, a decrease.

¹⁾ Refers to total industry excluding construction.

²⁾ EC surveys refer only to retail trade; PMI results refer to most market related services (i.e hotels and restaurants, communication, financial intermediation, real estate and business services).