

Box 8

The information content of data on total hours worked in industry

Eurostat has recently released data on total hours worked in industry (excluding construction) for the euro area. This represents further progress in the implementation of the Council Regulation concerning short-term statistics.¹ The euro area data are available on a monthly basis from 1995, estimated on the basis of both monthly and quarterly national data. The estimate covers almost 90% of the euro area, with data not yet being available for Greece, Spain and Ireland. These data can provide useful additional information for analysing economic activity, productivity and wage cost developments. However, it should be borne in mind that the data cover the industrial sector only and may therefore not be representative of the economy as a whole.

The concept of hours worked

Total hours worked denotes the aggregate number of hours that employees actually work. Developments in total hours worked thus reflect both changes in the number of employees and in actual hours worked per employee. Actual hours worked per employee exclude absences due to, for example, annual leave, sickness and bank holidays, as well as hours lost because of production stoppages related to, for instance, low demand or strikes. The data include overtime hours, whether they are paid or not. In practice, when data on actual hours worked are not available, they may be estimated on the basis of, for example, the contractually agreed number of working hours and the average rate of absences.

The data on hours worked per employee reflect the average number of hours that employees spend at their place of work. The increase in the share of part-time employment in industry in the second half of the 1990s thus implies fewer hours worked per employee. In this respect, the data on hours worked per employee provide a useful complement to the employment data.

Hours worked as an indicator of activity, productivity and costs

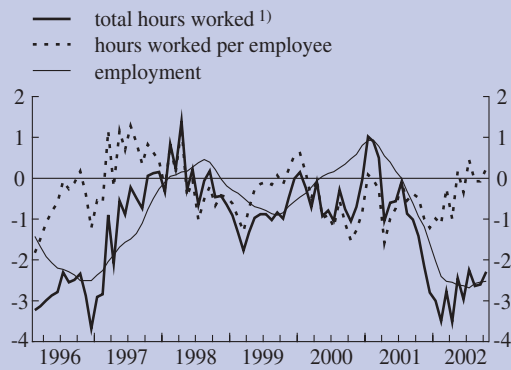
Developments in hours worked per employee in industry are considerably more volatile than those in employment (see chart below). Considering the relatively short period for which these data are available it is difficult to clearly distinguish between the more short-term movements (including seasonal and working day effects) and the underlying trends. In the period since data became available, hours worked per employee in industry have declined by somewhat more than ½% per annum. The pace of decline was highest in the course of 2000 and 2001. This reflected in particular the reduction in average working hours in certain euro area countries, but reductions in hours worked due to cyclical factors may also have played a role. In 2002, this decline in hours worked per employee appears to have come to a halt.

Data on hours worked per employee may provide useful information on economic activity, productivity and wage cost developments. For instance, hours worked per employee can be expected to react more quickly to the business cycle than employment, in particular when strict employment protection laws make layoffs difficult and may discourage new hiring. Moreover, the past few years have seen some progress on the contractually agreed flexibility with which firms can vary hours worked in response to changes in demand. This suggests that hours worked per employee may act as a leading indicator of employment, if firms adjust their employment only after they have resorted to the option of changing the hours worked per person. The chart below provides some support for the leading indicator property of total hours worked for employment in industry, but it should be borne in mind that the period for which the data are available is short.

¹ Council Regulation (EC) No 1165/98 of 19 May 1998 (Official Journal No L 162, 5.6.1998).

Hours worked and employment in industry

(annual percentage changes; three-month moving averages)



Sources: Eurostat and ECB.

1) Working day adjusted.

Information on hours worked also contributes to a better understanding of developments in labour productivity and wage costs in industry. For instance, the trend decline in hours worked per employee in the period since data became available resulted in a rate of growth in labour productivity that, on average, was slightly higher when measured per hour than when measured per employee. The importance of such differences, in particular with regard to international comparisons, was emphasised in Box 3 of the August 2002 Monthly Bulletin, which was entitled "Developments in euro area labour productivity". Similarly, to the extent that firms remunerate their employees in fixed monthly instalments, a cyclical decline in actual hours worked per employee implies upward pressure on hourly wage costs beyond what is suggested by wages paid per employee.