

Box 1

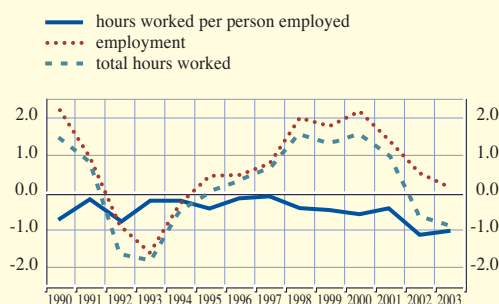
DEVELOPMENTS IN TOTAL HOURS WORKED IN THE EURO AREA

In order to minimise costs over the business cycle, companies attempt to adjust the amount of inputs used (including labour) to match developments in product demand. Due to fixed costs in adjusting employment in terms of the number of persons employed, the adjustment in labour input at the company level often takes place partly in terms of hours worked per person employed. The purpose of this box is to discuss available euro area evidence on the cyclical adjustment of total hours worked. Developments in an ECB estimate of total hours worked in the euro area indicate that firms may indeed have adjusted their labour input downwards in terms of hours worked per person employed to a larger extent during the recent period of slow growth than was the case during the slowdown in the early 1990s. However, due to the fact that it is difficult to distinguish clearly between a possible cyclical decline and other factors (including trend developments) that affect hours worked, these conclusions remain somewhat tentative.

The analysis of cyclical developments in hours worked in the euro area is limited by a lack of official data. An estimate of total hours worked has been constructed using annual data on hours worked per person employed from the European Labour Force Survey (LFS) multiplied by the total number of employed persons. Developments in total hours worked thus reflect changes in the number of persons employed and in the actual hours worked per person of both part-time and full-time employed persons. Actual hours worked do not take into account absences due to, for example, annual leave and sickness, while they include data on overtime hours.

Total hours worked, employment and hours worked per person employed

(annual percentage changes; annual data)



Sources: Eurostat and ECB calculations.

during this period than during the relatively more marked slowdown in economic activity in the early 1990s.¹ However, it is important to note that it is difficult to distinguish clearly between a possible cyclical decline and other short-term movements in hours worked, including working-day effects and reductions in average working hours in some euro area countries. Therefore, conclusions about the role of hours worked during the recent period of slow growth remain somewhat tentative.

Developments in the estimate of total hours worked suggest that firms may have gained more flexibility to reduce costs by adjusting hours worked in the course of the 1990s. Anecdotal evidence supports the view that firms have adjusted hours worked per person employed in a number of ways. The regulatory framework for annual hours worked in the euro area is governed by legislation and, within this framework, the details of a specific scheme are normally set at the company level – often through collective agreements. According to the European Industrial Relations Observatory (EIRO),² major general cuts in weekly hours worked have been rare in recent years, while smaller reductions have been negotiated at the firm level. These agreements relate mostly to cuts in weekly working hours, reductions of annual working hours and/or the introduction of additional leave. Furthermore, flexible arrangements such as the annualisation of hours worked, allowing working time to be calculated and scheduled flexibly over the year, are becoming more widely used. In general, these arrangements reduce the need for firms to adjust employment over the business cycle by shifting adjustment to hours worked per person employed, thus lowering costs associated with hiring and firing permanent full-time staff.

Looking forward, the possible downward adjustment of hours worked during the recent period of slow growth would imply that in the course of the recovery firms are likely to increase hours worked per person before increasing employment. Some recent evidence suggests that hours worked per person employed in the euro area have indeed been increasing since mid-2003. This rise in hours worked is expected to be followed by a gradual increase in employment.

1 The decline in hours worked per person employed since 2001 has been broadly based across most euro area countries, although it has been stronger in France due to the introduction of the 35-hour week. However, the main conclusions of the analysis remain even if France is excluded.

2 A tripartite monitoring agency, based on a network of research institutes, which monitors labour market developments in the European Union (for more information, see: www.eiro.eurofound.eu.int).

The estimate of hours worked shows a trend decline in hours worked per person employed over the 1990s, as well as evidence of cyclical changes in both total hours worked and employment (see chart). Based on correlations with activity over the past two decades, total hours worked are clearly procyclical. In addition, this evidence suggests that total hours worked appear to react somewhat faster to changes in economic activity than employment. With regard to the recent period of slow growth, there is some evidence that hours worked per person employed may have declined somewhat more