## Box 5

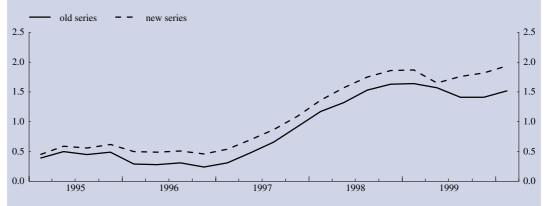
## **Revisions to employment figures**

Employment data for the euro area have been revised as a result of a significant revision of the employment data for Germany. Given the weight of German employment data for the euro area as a whole, the significant revisions to these employment figures have also translated into a substantial change in euro area figures.

The chart below presents a comparison of whole economy employment rates of growth for the euro area based on national sources, using the new and old German data from 1995 to the first quarter of 2000. Two main differences emerge. First, euro area employment growth has been revised upwards for the whole period, but more significantly since 1996. Indeed, annual growth was revised upwards by 0.1 percentage point for 1995 and by 0.2 percentage point for 1996-99. Moreover, in the last quarter of 1999 and the first quarter of 2000, the gap between old and new rates of growth increased to 0.4 percentage point. Second, the pattern of employment growth has also changed. The new data imply a rise in year-on-year employment growth since the second quarter of 1999, instead of from the first quarter of 2000.

## Impact of the revisions for whole economy euro area employment growth

(annual percentage changes; quarterly data)



Sources: National data and ECB calculations.

The revised employment figures also had a significant impact on the figures published for euro area productivity growth. In particular, the deceleration in 1998 and 1999 appears to be much more pronounced and the scale of the recovery currently observed appears to be reduced. A small effect has also been observed with regard to estimates of unit labour cost growth, as the downward revisions to the growth in compensation per employee are partly being offset by lower productivity growth.

As indicated above, underlying the changes to euro area figures is a significant revision of German employment data. The German Federal Statistical Office has released preliminary results of a revised estimate of the number of persons in employment since 1991. These figures incorporate new information on the number of part-time workers (as a result of new legal provisions, which have increased the number of employees subject to social security contributions). The change in the data source should, in principle, imply an improvement in the quality and reliability of the published data. However, the differences are considerable. In particular, the new numbers show not only a higher level of employment in Germany, but also significantly different growth rates. While the level of employment increased by 743,000 in the first quarter of 1991, the level was over 2 million higher by the first quarter of 2000. In sectoral terms, employment data have largely been revised upwards in the services sector.

The significant upward revisions to employment data highlight the problems with the main statistics on employment and compensation for the euro area. In particular, in periods in which part-time and temporary

## Revision of whole economy euro area employment, productivity and compensation per employee data

(annual percentage change)

	Employment		Productivity		Compensation per employee	
	old data	new data	old data	new data	old data	new data
1992			2.4	2.3	6.9	6.9
1993	-2.0	-1.9	1.0	0.9	3.9	3.8
1994	-0.5	-0.4	2.7	2.6	2.9	2.8
1995	0.5	0.6	1.9	1.8	3.4	3.3
1996	0.3	0.5	1.2	1.1	3.2	2.9
1997	0.6	0.8	1.8	1.6	2.5	2.3
1998	1.4	1.6	1.3	1.1	1.5	1.4
1999	1.5	1.7	0.9	0.7	2.0	1.8

Sources: National data and ECB calculations.

employment are rising rapidly (and part-time employment is estimated to have accounted for around 45% of total employment growth in the euro area between 1998 and 1999), the use of the number of employees alone has a significant distorting effect, not just for employment, but also for compensation per employee and productivity. The improvement in the measurement of part-time workers in Germany is just one example of this, albeit a particularly striking one. Thus, although the revision of euro area data may be an improvement in terms of recording the number of persons in employment, it cannot be considered to facilitate the assessment of real developments in labour markets, as employment growth increasingly differs from the rate of growth in the actual volume of work and derived measures – such as compensation per employee and productivity – are also affected. Therefore, an analysis of employment numbers for the euro area needs to be supplemented with information on the volume of work (hours worked). The lack of this information for the euro area emphasises again the need for improved labour market statistics in the euro area.