

Box 6

Developments in compensation per employee and unit labour costs in the main euro area sectors

In its latest release of ESA 95 national accounts data in February 2003 Eurostat published for the first time total compensation of employees for the euro area broken down by main sectors of economic activity, which in statistical terminology are also called branches. These data, which are presented in Table 5.4 in the statistical section of this Monthly Bulletin, enable the ECB to calculate quarterly frequency compensation per employee at a sectoral level and, when combined with estimates for labour productivity, nominal unit labour costs broken down by sector. This box shows that developments in compensation per employee have been broadly similar across sectors over the last ten years. In addition, it provides evidence that unit labour costs (ULC) growth in industry displayed a pronounced cyclical pattern and was on average lower than that in services over the period under review.

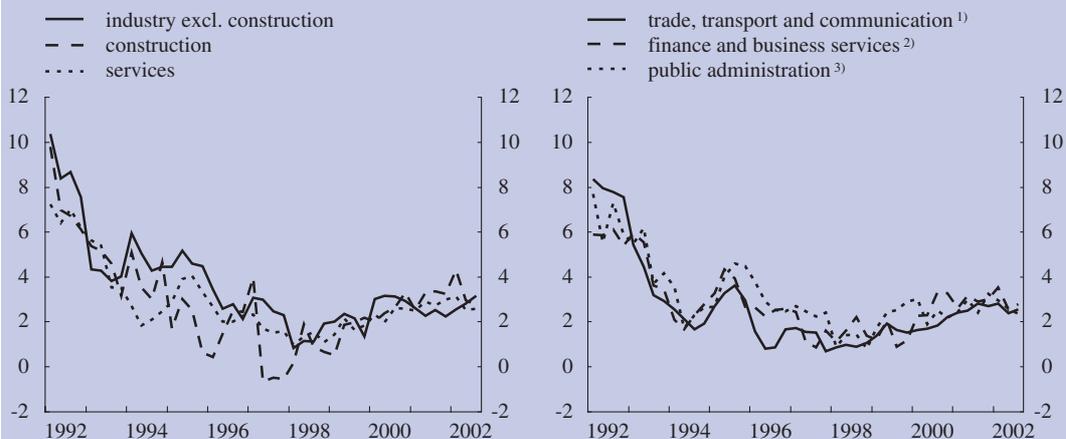
The new data on compensation of employees for the euro area allows for the calculation of a sectoral average compensation per employee. Compensation includes the total remuneration of employees, including employers' and employees' social contributions. In parallel it is possible to calculate an estimate of labour productivity by dividing value added (at constant prices) by total employment for each sector and thus compute unit labour costs as a ratio of compensation per employee to labour productivity.

Compensation per employee exhibited broadly similar developments across sectors of the euro area economy. In particular, growth of compensation per employee in services and industry is characterised by a substantial slowdown from the beginning of the 1990s and a slight upward movement from 1999 onwards (see Chart A). All sectoral series display a high degree of positive and contemporaneous correlation with one another, which suggests that no main sector leads in terms of compensation per employee developments.

Average growth in compensation per employee in services remained below that of industry during most of the 1990s. This can partly be explained by developments in part-time jobs, which rose from less than 15% to more than 20% of employment in services between 1992 and 2001 (compared with an increase from 5% to 7% in total industry over the same period). Part-time employees work fewer hours and then receive less compensation than their full-time counterparts. Since 1998, the gap between compensation per employee growth in services

Chart A: Compensation per employee in the euro area

(annual percentage changes; quarterly data)



Sources: Eurostat and ECB calculations.

1) Also includes repairs, hotels and restaurants.

2) Also includes real estate and renting services.

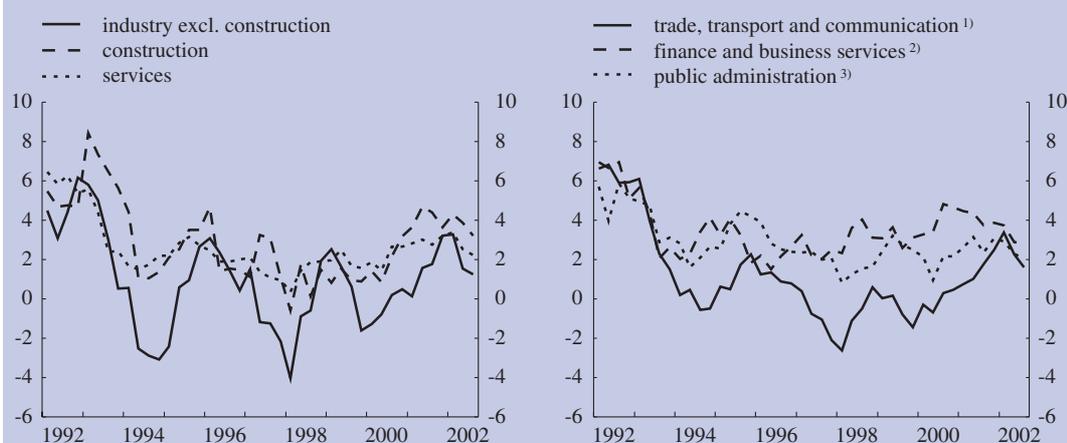
3) Also includes education, health and other services.

and industry has disappeared, coinciding with a lower rate of increase in part-time jobs. Moreover, dynamic employment growth in services might have triggered recruitment difficulties and some degree of wage pressure. Overall, a gradual convergence of sectoral growth rates of compensation per employee was observed during the 1990s.

Unlike compensation per employee, developments in growth rates in ULC differ more across sectors (see Chart B). Between 1992 and 1994, ULC growth declined significantly in all parts of the economy, in line with the fall in the growth rates of compensation per employee. From 1994 onwards, ULC growth rates displayed cyclical movements around a horizontal path. Moreover, they were on average higher in services (2.6%) than in industry excluding construction (1%). The magnitude of cyclical movements of ULC growth rates in industry is about twice as high as in services. These differences are mainly due to contrasting developments in productivity growth across sectors. In industry, both employment and output are sensitive to changes in the economic environment. As employment growth lags output growth, the resulting productivity growth also reflects a strong cyclicality. By contrast, in services, output is less sensitive to changes in the economic environment. This applies particularly to non-market services as the economic cycle has limited bearing, for example, on education or health services. Moreover, the estimation of output in services, and therefore of productivity, may rely on proxies (such as employment) in some sub-sectors, thereby further reducing cyclicality.

Chart B: Unit labour costs per sector in the euro area

(annual percentage changes; quarterly data)



Sources: Eurostat and ECB calculations.

1) Also includes repairs, hotels and restaurants.

2) Also includes real estate and renting services.

3) Also includes education, health and other services.

In 2001 and 2002, the increase in ULC growth rates for the whole euro area economy was mostly driven by developments in industry (including construction) as well as in the trade, transport and communications sectors. While part of that increase can be explained by an increase in the rate of growth of compensation per employee, the cyclical slowdown in productivity growth accounted for most of the rise.

A further analysis of compensation and ULC developments in the euro area would require statistical information on the number of hours worked per sector in order to correct for effects due to changes in the average hours worked and part-time employment. These estimates are currently only published in a few euro area countries, but are expected to become available for the euro area as a whole by 2004 as a result of an amendment of the ESA 95 regulation currently being finalised.