

Box 6

RECENT PRODUCTIVITY DEVELOPMENTS IN THE EURO AREA AND THE UNITED STATES

Over the course of the recent financial and economic crisis, the productivity growth gap observed between the euro area and the United States widened substantially. This was related to the much greater employment losses seen in the United States than in the euro area in the early part of the crisis, particularly in relation to the size of the GDP contraction. This box compares recent productivity developments in the euro area and the United States, paying particular attention to the adjustment over the course of the crisis and since the start of the recovery.

Overview of recent productivity developments

For the euro area, the onset of recession heralded a sharp decline in aggregate productivity, with productivity growth per person employed falling by a record 4.0%, year on year, in the first quarter of 2009, according to national accounts data. Hourly productivity fell less steeply, as flexible working-time arrangements and crisis measures in many euro area countries (such as short-time work in Germany) helped euro area firms adjust working hours rather than headcount employment over the course of the recession.¹ Since then, consecutive quarterly releases have shown ongoing improvements in productivity growth, with positive year-on-year growth observed since the fourth quarter of 2009. As of the first quarter of 2010, year-on-year productivity growth in the euro area has averaged 2.2% when measured in terms of persons employed and 1.4% when measured per hour worked (see Chart A).

In the United States, by contrast, the adjustment in labour input seen over the course of the recession relied more heavily on employment shedding (rather than on adjustments in hours worked of incumbent workers), which helped to support productivity – in both per person and per hour terms – to a greater degree than in the euro area. As output began to recover, continuing heavy job losses in the United States led to a particularly strong rebound in rates of productivity growth in the early part of the recovery. More recently, US productivity growth has moderated substantially, to the extent that – whether measured in terms of persons employed or hours worked – since the fourth quarter of 2010, rates of productivity growth have appeared similar in the two economies. However, this observed similarity masks important differences in the cyclical dynamics of productivity developments since the beginning of the recovery.

1 For more details on the crisis measures used over the course of the recession, see the article entitled “Labour market adjustments to the recession in the euro area” in the July 2010 issue of the *Monthly Bulletin*.

Chart A Labour productivity growth in the euro area and the United States

(annual percentage changes)



Sources: Eurostat, OECD, US Bureau of Labor Statistics and ECB calculations.

Note: In the case of the United States, resident civilian employment has been used to obtain productivity developments. Latest observations refer to the first quarter of 2011.

Two distinct paths of labour market adjustment

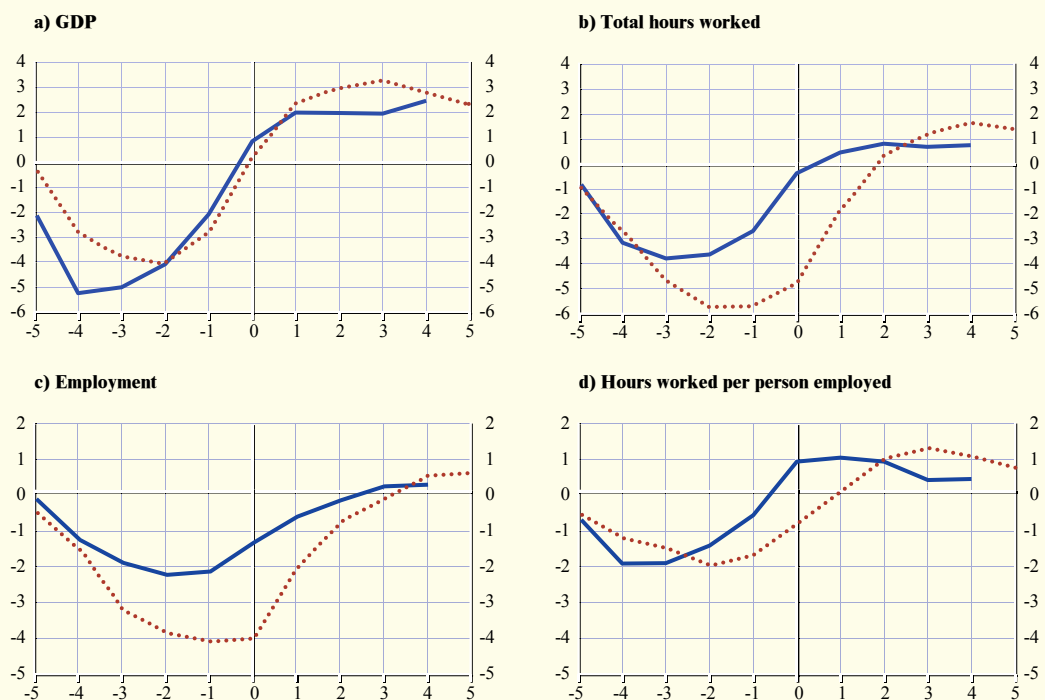
In order to be able to make a proper comparison of productivity developments at a similar stage in the recovery process, Chart B shows the rates of growth for each of the components of productivity growth around the start of the recovery (defined as the first quarter of positive year-on-year GDP growth). The relevant periods are thus the first quarter of 2010 for the euro area and the final quarter of 2009 for the United States.

Chart B shows that, despite a higher initial rebound in GDP growth at the onset of the recovery, job shedding continued for somewhat longer – and to a greater degree – in the United States than in the euro area. In the euro area, total hours worked adjusted virtually contemporaneously to the increase in activity – initially largely through an increase in hours worked per person, and more recently as a consequence of modest employment growth. By contrast, total hours worked continued to decline in the United States even at the start of the recovery (throughout the final quarter of 2009 and the first quarter of 2010), as increases in hours worked per person by the incumbent workforce were more than offset by continuing job losses. These developments help to explain the marked increases in US productivity growth seen at the beginning of the recovery, particularly in terms of hours worked. However, as the recovery has progressed, employment and total hours

Chart B Euro area and US growth in GDP, total hours worked, employment and hours worked per person employed

(annual percentage changes)

— euro area
 United States



Sources: Eurostat, OECD, US Bureau of Labor Statistics and ECB staff calculations.

Notes: 0 on the x-axis represents the first quarter of positive year-on-year GDP growth following recession (the first quarter of 2010 for the euro area; the fourth quarter of 2009 for the United States). Latest observations refer to the first quarter of 2011.

worked appear to have expanded at a faster pace in the United States than in the euro area, albeit with some levelling-off in recent quarters in both economies.

All in all, productivity growth in the United States considerably exceeded that of the euro area over the course of the crisis, to some extent owing to different adjustments in employment and hours worked across the two economies. In recent quarters productivity growth rates appear to have converged. However, with both economies still in the early stages of recovery, it is too soon to assess the implications of recent dynamics for longer-term trends.