

## Box 4

## PROFIT DEVELOPMENTS AND THEIR BEHAVIOUR AFTER PERIODS OF RECESSION

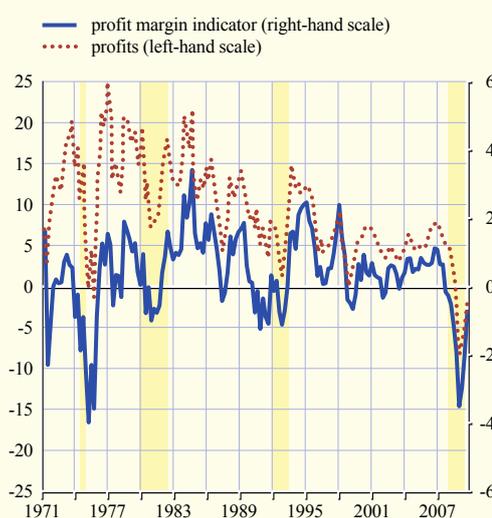
The sharp decline in firms' productivity coupled with resilient labour costs during the 2008-09 crisis have brought about a strong contraction in profits. In order to put the current dynamics into perspective, this box takes a closer look at how profits developed during previous periods of economic recovery. It shows that, historically, euro area firms' profit growth has picked up at a relatively rapid pace as the economy has emerged from recession. However, owing to the depth of the 2008-09 recession and the unprecedented contraction in aggregate demand during this period, the outlook for this variable in the short term is highly uncertain.

In the last quarter of 2009 profits (measured in terms of the gross operating surplus<sup>1</sup>) continued to contract (at a rate of 2.0% year on year), but at a considerably slower pace than in the previous quarter (when they fell by close to 6% year on year). Profits have been pushed down mainly on account of high unit labour cost growth stemming from both relatively high wages and the labour hoarding policies implemented by euro area companies during the recent downturn. Short-term dynamics (measured in terms of the quarter-on-quarter growth rate) continue to suggest, however, that profits are gradually recovering from their trough.

Chart A takes a long-term perspective and shows annual growth in profits since the early 1970s together with annual changes in the profit margin indicator (computed as the GDP deflator at factor costs minus unit labour costs). The profit margin indicator is generally used as a rough proxy of "mark-up", the gap between prices charged by business and the cost of production. Several features can be observed from Chart A, although considerable differences across business cycles and the unique character of each of the past recessions and recoveries should be considered when drawing conclusions. First, euro area firms' profits and the profit margin indicator witnessed sharp falls during previous recession periods (these periods are indicated by the shaded areas). Second, both variables bounced back to pre-recession rates relatively quickly after the recessions ended. In the two recessions in the early 1980s and 1990s, profits were already growing at double-digit rates by the end of the recession period. Third, looking at the ends of previous recession episodes and assuming that the current recession actually ended in

Chart A Profits and the profit margin indicator

(annual percentage changes)



Sources: ECB calculations based on Eurostat data and the ECB's area-wide model database from G. Fagan, J. Henry and R. Mestre, "An area-wide model for the euro area", *Economic Modelling*, vol. 22 (1), January 2005, pp. 39-59.

Notes: Shaded areas reflect periods of euro area recession as defined by the Euro Area Business Cycle Dating Committee of the Centre for Economic Policy Research (CEPR). The profit margin indicator is computed as the GDP deflator minus unit labour costs. Profits are measured in terms of the gross operating surplus.

1 Excluding the income of the self-employed.

mid-2009, it appears that both profits and the profit margin indicator have been contracting for an unprecedented length of time. In addition, profits fell at a record rate in 2009.

Corporate profits have a close and mutually dependent relationship with aggregate economic activity,<sup>2</sup> although profits are much more volatile than output and it is possible that globalisation may, over time, have somewhat weakened the link between profits and domestic output.<sup>3</sup> The unprecedented fall in profits recorded in 2009 should thus be considered against the available measures of the output gap, which indicate larger negative output gap changes in 2009 than in the 1992-93 recession (see Chart B). The output gap measures the degree of utilisation of production factors in the economy and gives an indication of the phase of the business cycle and possible inflationary pressures. Data limitations and the high uncertainty surrounding output gap estimates<sup>4</sup> should be borne in mind when drawing conclusions. This notwithstanding, large negative output gaps are likely to limit firms' ability to increase selling prices.

In order to allow a further examination of profit behaviour after periods of recession and to take into account differences in inflation rates across the periods analysed, Chart C compares the evolution of profits in real terms (deflated by the gross value added deflator) before and after the peak of activity reached prior to the respective recessions. Compared with previous recessions, the fall in real profits in the 2008-09 recession appears to have been initially less severe but subsequently more persistent. The contraction of profits in real terms in the last quarter of 2009, i.e. seven quarters after the peak in activity recorded in the first quarter of 2008, was larger than that recorded in any of the previous recession episodes. Among the

**Chart B Changes in output gap estimates in selected euro area recessions**

(annual percentage changes; annual data)

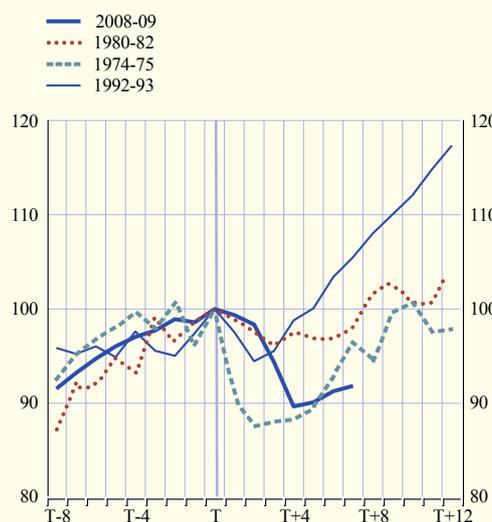


Source: The European Commission's AMECO database.

Notes: T represents the year of the peak of economic activity prior to the respective recessions as dated by the CEPR. The peaks in euro area activity occurred in the first quarter of 1992 and the first quarter of 2008.

**Chart C Real profit growth in euro area recessions**

(index: peak = 100)



Sources: See Chart A.

Notes: T represents the quarter of the peak of economic activity prior to the respective recessions as dated by the CEPR. The peaks in euro area activity occurred in the third quarter of 1974, the first quarter of 1980, the first quarter of 1992 and the first quarter of 2008. Nominal profits are deflated by the value added deflator.

2 For more details, see the box entitled "Developments in profit margins" in the November 2009 issue of the Monthly Bulletin.

3 See the box entitled "Volatility and cross-country dispersion of corporate earnings in the euro area" in the October 2007 issue of the Monthly Bulletin.

4 See the box entitled "Potential output estimates for the euro area" in the July 2009 issue of the Monthly Bulletin.

several reasons accounting for this pattern, it is worth mentioning the fact that the deceleration in compensation of employees has so far been more muted in the latest recession than in previous episodes.<sup>5</sup> The fall in profits is also related to a less pronounced adjustment in employment compared with past cyclical downturns.

Looking ahead, improving demand conditions and the expected cyclical increase in productivity in the context of weak labour market developments should help profits to continue to recover from their trough, in a broadly similar manner to that experienced in previous cyclical upswings. Profits are also likely to continue to benefit from restructuring and the cost-cutting measures implemented by euro area companies.<sup>6</sup> However, a still negative and large output gap is likely to limit firms' ability to increase selling prices and restore their profitability for some time to come.

<sup>5</sup> See the article entitled "The latest euro area recession in a historical context" in the November 2009 issue of the Monthly Bulletin.

<sup>6</sup> Results from the Eurosystem's Wage Dynamics Network indicate that firms react to unanticipated permanent demand shocks primarily by reducing (non-wage) costs (78% of respondents). See the article entitled "New survey evidence on wage setting in Europe" in the February 2009 issue of the Monthly Bulletin.