Box 6

DEVELOPMENTS IN PROFIT MARGINS

One important determinant of changes in inflation is the gap between the prices charged by businesses and the costs that they face, the so-called “mark-up”. A rough proxy at the macro-level of such a mark-up is the profit margin indicator, calculated as the difference between the GDP deflator at factor cost and the unit labour cost. This box discusses developments in the profit margin indicator.

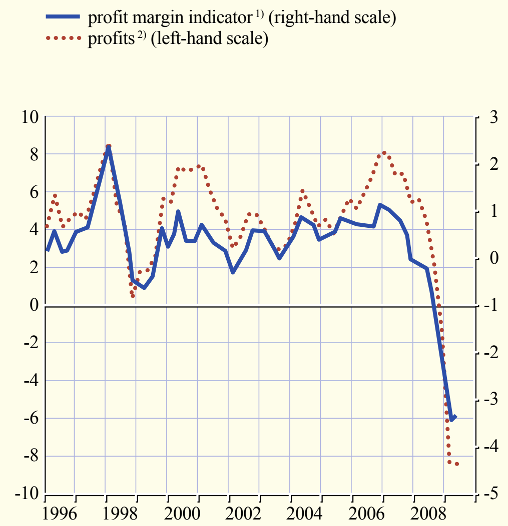
Chart A shows that the evolution of the profit margin indicator broadly matches profits measured in terms of gross operating surplus, a widely used indicator available from national accounts data.[1] The contraction in the profit margin indicator, which started in the first quarter of 2008, intensified progressively until the first quarter of 2009 before stabilising in the second quarter of 2009. Annual growth in the profit margin indicator for the euro area was about -3½% in the first half of 2009, its lowest level since the ESA 95-based data series started in 1996. The sharp contraction in profit margins took place despite the fact that raw materials prices (including energy prices), which are important non-labour input costs, sharply declined from their peak levels of mid-2008.

Changes in profit margins affect price developments. Indeed, the moderation in the euro area GDP deflator – a summary indicator of unit labour cost and profit developments – observed since the beginning of 2009 is characterised predominantly by a contraction in profits due to an easing of demand conditions.[2] The fall in profit margins has offset the effects of higher labour costs

1 For an overview and a discussion of the caveats associated with the measurement of profit in the euro area, see the article entitled “Measuring and analysing profit developments in the euro area” in the January 2004 issue of the Monthly Bulletin.
2 See also the box entitled “Recent trends in the HICP excluding food and energy” in the October 2009 issue of the Monthly Bulletin.

Chart A Profit margin indicator and profits

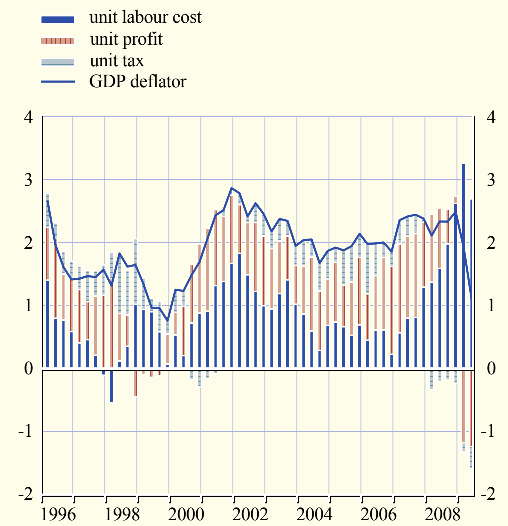
(annual percentage changes)



Sources: Eurostat and ECB calculations.
1) GDP deflator at factor cost minus the unit labour cost.
2) Gross operating surplus.

Chart B Decomposition of the GDP deflator

(annual percentage changes; percentage points)



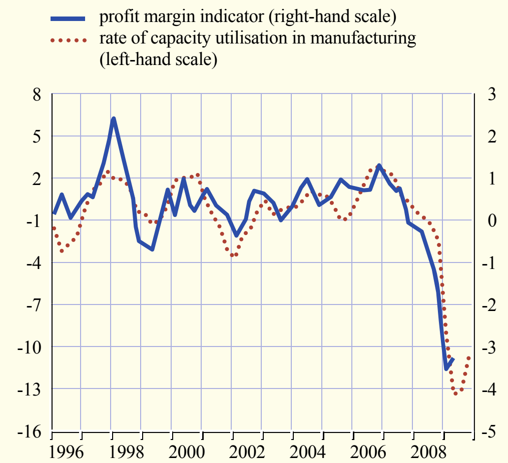
Source: Eurostat.

on the GDP deflator (see Chart B). Unit labour cost growth has risen sharply in recent quarters, reflecting labour hoarding policies adopted by many companies at a time of a severe economic downturn.

Profit mark-up developments depend, inter alia, on competition factors and on the relative speed of the adjustment of selling prices relative to labour and non-labour costs. The speed of the adjustment of prices is thought to be linked to demand conditions, particularly economic slack, which can be represented by measures of the output gap. However, as the output gap is not an observable variable and as its estimation is surrounded by a high degree of uncertainty, the capacity utilisation rate in the manufacturing industry is often used as a proxy for economic slack. In fact, past experience shows that a rise in the capacity utilisation rate is associated with an increase in the profit margin indicator and vice versa (see Chart C).[3] Available data for the capacity utilisation rate for the second half of 2009 point to a slight reduction in economic slack.

Chart C Profit margin indicator and capacity utilisation rate

(annual changes in percentage points; annual percentage changes)



Sources: European Commission, Eurostat and ECB calculations.

3 Economic theory cannot unambiguously determine how profit margins and mark-ups change with demand conditions. For a discussion, see C. Macallan and M. Parker, "How do mark-ups vary with demand", Bank of England, *Quarterly Bulletin,* second quarter 2008.

This is likely to be consistent with the decline in profit margins having bottomed out in the first half of this year.

Looking ahead, in the coming quarters the labour market is likely to continue to deteriorate, even though demand has already started to pick up. These developments should push productivity up, which, in turn, should benefit profit margins. In addition, profit margins should benefit from restructuring measures implemented during the recent downturn.