The surge in euro area inflation since mid-2021 was mainly the consequence of the rapid rise of energy and commodity prices, but the role of domestic factors has been growing. The deterioration in the terms of trade following the pandemic and the energy and food commodity price shocks triggered by Russia’s war of aggression against Ukraine implied that the initial surge in consumer inflation was largely imported. However, core inflation has been rising steeply since mid-2021, reaching an annual rate of 7.4% in the first quarter of 2023, a historic high.

This box offers insights into how profits have contributed to domestic price formation in the euro area during the past three years and what this could imply for inflation developments. When looking at domestic price pressures, attention commonly focuses on developments in unit labour costs, but unit profits also play a role. They can either constitute a direct driver of inflation or a cushion, depending on the extent to which firms pass on changes in costs to final consumer prices. This analysis on the factors behind the increase in domestic prices is based on national accounts data, and in particular the decomposition of the annual changes in the GDP deflator. The latter, calculated as the ratio of the nominal value of goods and services produced domestically to their volume, reflects the price of a unit of production and can be seen as a measure of domestic price pressures, thus primarily affecting core consumption items. The link between the GDP deflator and core inflation, i.e. headline inflation excluding energy and unprocessed food, is strong (Graph 1).

The income approach to calculate GDP allows to break the GDP deflator down into labour costs, profits and taxes, thus showing the role of each of these domestic factors in shaping domestic price pressures. Some important qualifiers are necessary, however. This analysis is purely an accounting exercise that does not reveal the uses that firms make of their higher operating surpluses. While they may indeed distribute some of it to their shareholders, firms may have other motives to raise their profit margins, including precautionary ones, for example in view of possible future investment, tax or wage increases. Moreover, causality may be difficult to ascertain at this stage as the economy is still adjusting to the pandemic and energy shocks, and fiscal support distorted the normal evolution of certain components due to subsidies and other policy interventions.

Unit profits have been resilient since the outbreak of the pandemic and have become a significant driver of the GDP deflator. Unit profits, which measure the average profit per unit of output, have fared relatively well since the outbreak of the pandemic (Graph 2). In the initial recession phase induced by the pandemic shock, both unit labour costs and, to a lesser extent, unit profits, increased, as compensation of employees and aggregate profits contracted less than real GDP due to...
unprecedented government support. Government support is reflected in the negative contribution of unit taxes, which dampened the impact of the increase in unit labour costs and profits on domestic prices. This pattern extended until early 2021, when job retention schemes for workers started to be phased out and (imported) energy prices began to soar. In 2022, unit profits increased steadily, growing at a record 9.3% (year-on-year) in the final quarter (Graph 3). This increase contributed 3.2 pps to the total GDP deflator growth of 5.8%, thus contributing more to domestic inflation than unit labour costs. A corollary of the strong increase in unit profits is the shift in the distribution of value added among firms and labour, whereby the profit share has risen above its pre-pandemic average, while the labour income share analogously fell (Graph 4).

Unit profits have increased across all euro area countries and sectors, albeit in a heterogeneous way. The surge in inflation differentials within the euro area is also visible when looking at the changes in the GDP deflator and unit profits (Graph 5). In 2022-Q4, unit profits grew in all countries, outpacing the GDP deflator in most of them. In terms of sectoral decomposition, profit increases during the early stages of the pandemic were led by industry, including manufacturing, energy and utilities, and mining, but the sector contribution broadened thereafter.

The strength of demand and the high inflation environment have been conducive to higher profit margins. In theory, a profit-maximising firm sets prices such that the percentage mark-up of price above marginal cost is inversely related to its price elasticity of demand, i.e. if demand is inelastic, a firm can afford to have a higher mark-up because demand will react less. The mark-up that a firm can charge will ultimately depend on the degree of competition and structure of the market it operates in, and on the market’s overall elasticity of demand. The rapid recovery of aggregate demand in the aftermath of the COVID-19 crisis, facilitated by high household savings and strong corporate balance sheets, provided scope for the build-up of unit profits, especially in sectors where pent-up demand exceeded supply such as in the electronics, health, transport and travel sectors. The initial rotation of
Box (continued)

demand towards goods, amid lockdowns and severe mobility restrictions, enabled firms in the manufacturing sector to raise their mark-ups (Graph 6). The services sector benefited most when restrictions were lifted in 2022. The energy sector benefited in aggregate from rising natural gas prices. Strategic complementarities in pricing, i.e. the response to competitors’ pricing, may be another explanation for simultaneous increases in profit margins in an environment of accelerating inflation. Meanwhile, the prevalence of cost shocks may have led to higher “acceptance” by customers of price increases, as they may be less inclined to view them as idiosyncratic increases and as a result are less likely to “punish” a firm by switching to a competitor. Also, supply shortages for many goods and commodities, caused by lockdowns and the war, may have raised the pricing power of their producers. 

**Profit developments matter for second round effects and have implications for risks to the inflation profile.** The purchasing power loss that workers have experienced as inflation started to rise has led to higher wage demands. Changes in the profit share in principle allows firms to compensate for higher wages and as such could limit the extent of second round effects, i.e. the prolongation of price shocks through higher wages and demand. This is what happened in the recession of 2008 when unit profits turned negative. In the wake of the terms-of-trade shock, the extent to which this pattern is repeated will depend on how value added is shared between firms and workers. If the profit share does not adjust, any wage increase going beyond productivity gains will ultimately lead to higher inflation. Protracted distributional conflicts could delay the process of disinflation, risk a loosening of inflation expectations, and ultimately force central banks to tighten monetary policy more than otherwise would be the case. 

In the Spring Forecast, the contribution of unit profits to domestic price pressures in the euro area (and other EU countries) is expected to remain high in 2023 but to decline notably in 2024. Unit profits in the euro area (EU) are projected to contribute 2.6 pps (2.5) to the GDP deflator in 2023, and to fall to 0.1 pps (0.4) in 2024. Likewise, in line with recent wage agreements, the projected wage growth is expected to keep unit labour costs high in 2023 with some moderation in 2024. The easing of supply-side bottlenecks, the phasing out of fiscal support, the exhaustion of the excess private savings accumulated during the pandemic, and weak global economic activity may imply a return to the patterns observed before the pandemic, when unit profits traditionally played a buffer role for unit labour cost increases, as firms attempt to maintain market shares. This would represent a safeguard against risks of prolonged second-round effects.

---

(2) Rising gas prices have implied rising profits for many so called “inframarginal” electricity producers. The marginal pricing model for electricity implies that the cheapest energy generators are deployed first, with more expensive sources added depending on demand.

