Box I.2.2: Decomposition of inflation

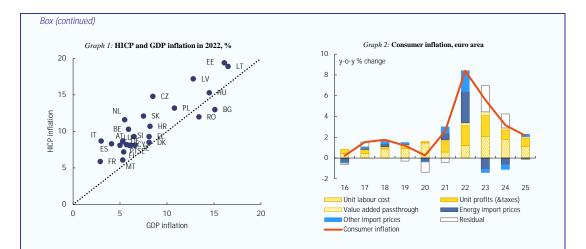
Understanding the driving forces of inflation is important to gauge its likely persistence. Energy prices and supply bottlenecks were at the root of the recent inflation surge. However, with accelerating consumer inflation, the importance of home-made inflationary factors increased considerably across the EU (Graph 1). The analysis in this box uses input-output tables to break down inflation into unit labour cost, unit profits, energy and non-energy import prices. In addition, as inflation has substantially increased across the EU, cross-border inflation spillovers are set to increase, owing to the strong economic interlinkages between EU economies. Hence, the analysis also factors in cross-border value-added inflation pass-through.⁽¹⁾

Energy prices drove the inflation surge in the euro area in 2022, but wages and profits are set to keep inflation elevated this year and next. In 2021, disruptions caused by the pandemic amid reviving demand increased the contribution of external factors to consumer inflation. HICP inflation increased to 2.6% in the euro area and 2.9 % in the EU (Graph 2). For the euro area, energy and non-energy import prices contributed around 1.2 pps. Domestic drivers, however, dominated, with the combined effect of unit profits and wages adding 1.6 pps. In 2022, the impact of the external shocks prevailed, contributing nearly two thirds of the 8.4% inflation rate. At the same time, unit profits increased strongly, capturing almost 2 pps. of the inflation rate, while the contribution from wages remained relatively subdued.

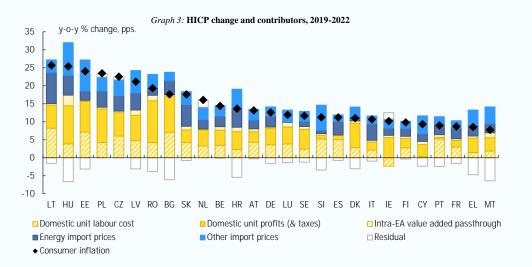
In 2023, inflation is moderating, owing to a fading effect of the external shocks, while the gradual moderation in domestic inflationary factors is expected to bring inflation close to 2% in 2025. The ongoing adjustment of wages, combined with still robust unit profits, explains a large part of the 5.6% euro area inflation rate forecast for 2023. Next year, wages are forecast to continue increasing at a swift pace to partly undo the losses in households' real disposable income, but other drivers are expected to moderate. Unit profit growth, which increased strongly in 2022 and 2023 likely reflected the rapid pass-through of higher input cost into selling prices and the comparatively slower adjustment in wages, is expected to markedly ease. In addition, energy prices are estimated to have a mild deflationary effect, as the lagged effect from falling prices outweighs the inflationary effect stemming from the assumed increase in energy prices. ⁽²⁾ As a result, inflation should fall to just over 3%. In 2025, inflation in the euro area is projected to ease to just over 2%, as both domestic drivers normalise and external drivers remain insignificant. Over the forecast horizon, the impact of cross-border value-added inflation spillovers on consumer inflation is expected to remain modest, capturing only around 0.7 pps of the 11% increase in HICP forecast for the period between 2023 and 2025.

⁽¹⁾ Figaro input-output tables provide the productive structure of each EU economy through which costs are propagated. The price of imported energy bundle is calculated from the Comext database and the external assumptions for energy prices underlying the forecast are used to extrapolate the historical series. Domestic unit labour cost, profits and consumer inflation are taken from Ameco. More details on an earlier version of the model can be found in European Commission (2023). "Inflation Differentials in Europe and Implications for Competitiveness." Institutional paper No. 198, April 2023

⁽²⁾ The unexplained part – the residual – may partly reflect the impact of the withdrawal of energy policy measures.



The increase in inflation has been uneven across Member States. Almost all Member States saw their inflation rates accelerate in 2021 and soared in 2022. Reflecting the differences in economic structures and policy response, inflation ranged from 5.9% in France to 19.4% in Estonia in 2022. The energy price shock contributed markedly to the acceleration (Graph 3). Among all EU countries, Lithuania experienced the largest energy contribution, nearly 9 pps. in the period between 2019 and 2022. The contribution exceeded 5 pps. in Croatia, Slovakia and Hungary. By contrast, the impact of energy prices is estimated at below 1 pp. in Luxembourg and Slovenia. Non-energy imports were also an important factor in some Member States, particularly in Hungary, Estonia, Latvia, Slovenia and Malta. On average, nonenergy imports contributed around one quarter to consumer inflation in the three years up to 2022. However, domestic drivers dominated in most countries, with unit profits being the more important factor in most Member States. The contribution of unit profits was particularly large in Hungary, Romania, Bulgaria, Poland and Estonia. Value-added inflation spillovers were relatively limited. Only a handful of smaller economies are estimated to have experienced inflation spillovers exceeding 1 pp. over the three-year period, namely Hungary, Romania, Slovakia, Croatia, Luxembourg and Malta.

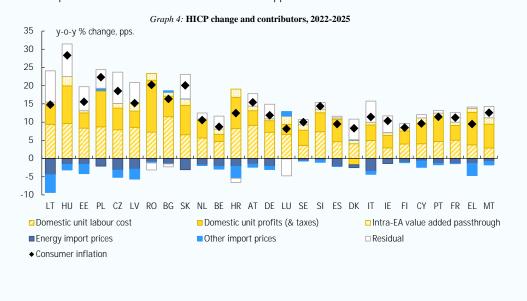


Domestic factors are expected to drive inflation over the forecast horizon. Inflation is projected to gradually decelerate across the EU. However, the cumulative increase in the price level will still be substantial in most Member States (Graph 4). Unlike in the 2019-2022 period, external drivers are projected to have only a benign impact on inflation over the forecast horizon, as energy

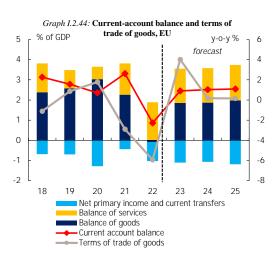
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Box (continued)

prices are assumed to stay elevated. Still, their impact will likely be substantial in Lithuania, Latvia, Estonia, Czechia, Croatia, Italy, and Greece, reflecting the strong pass-through of external shocks. Domestic factors are expected to remain strong and even increase in most Member States compared to the 2019-2022 period. Unit profits are set to continue fuelling inflation, though their role is projected to diminish in most countries after 2023. The highest contributions are expected for Hungary, Poland, Romania, Slovakia, Greece and Slovenia. By contrast, the contribution of unit labour costs is forecast to increase in 2023 and to remain high in 2024 in most countries. In 2025, both domestic factors are set to normalise, though they may continue to drag the disinflationary process in some countries. Compared to the 2019-2022 period, value-added inflation spillovers are set to increase, though their contribution to total inflation remains comparatively low. On average, they increase total inflation by about 1.3 pps. cumulatively over the forecast period. In Hungary, Latvia, Croatia and Luxembourg, inflation spillovers are estimated to add more than 2 pps. to total inflation.



since the end of 2022 (Graph I.2.43). In the second guarter of 2023, the EU trade balance of goods registered a markedly reduced deficit of EUR 3.9 billion, as the decline in the value of imports outpaced that of exports (-3.5% and -1.9% respectively, seasonally adjusted). Particularly, the energy trade deficit shrank considerably on the back of lower energy prices over the last three quarters. The improved goods balance was reflected in the uptick in the current account balance, which reached a surplus of EUR 73 billion (1.7% of GDP) in the second quarter of 2023. For 2023 as a whole, the trade balance is expected to reach 1.8% of GDP and to increase to 2% of GDP until 2025.



The EU current account surplus is set to improve in 2023 and stabilise over the forecast horizon. The rebound of the goods trade balance is projected to push up the current account balance to 2.5% of GDP in 2023. In 2024 and 2025, the current account balance is expected to remain broadly unchanged (see Graph I.2.44), as the import volumes recover while the terms of trade are set to remain rather constant. However, as global energy prices are assumed to persist at elevated levels, the balance of goods in the EU is expected to remain well below its pre-pandemic %-of-GDP ratio (2015-19) over the forecast horizon, as also the total current account balance. In