Inflation factors: how returns to capital and labour have contributed to domestic inflation pressures

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With the upsurge in inflation in 2021-22 in many countries creating a cost-of-living crisis, there has been much interest in whether this is mainly attributable to firms securing higher profits, to higher wages (pushing up unit labour costs), or to some combination of the two (OECD, 2023).

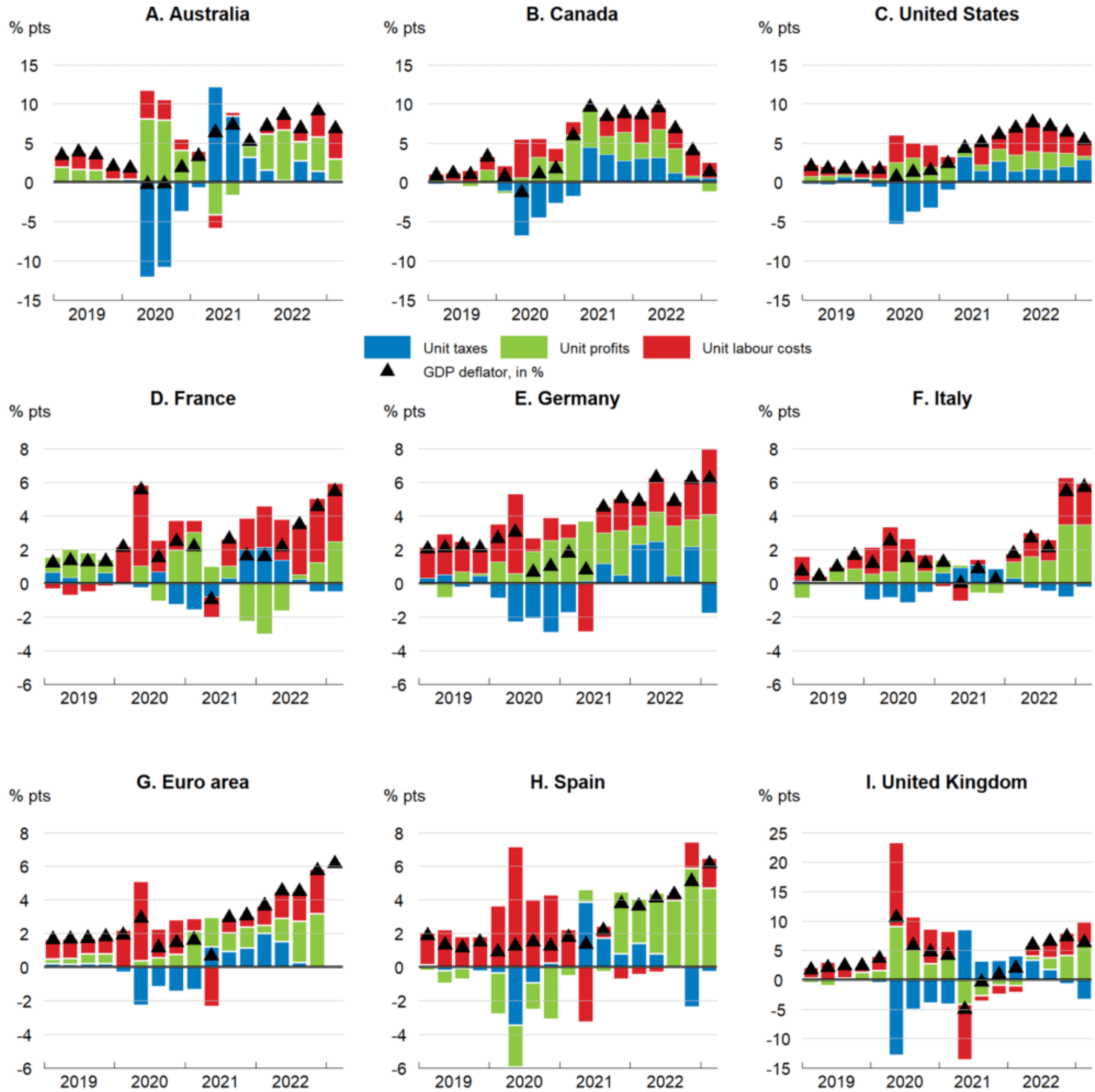
The data needed to estimate the impact of changes in unit profits, unit labour costs and unit taxes on consumer price indices are not generally available directly, although attempts to get around this constraint have been made for some countries (e.g. Diev *et al.* (2019), for core CPI inflation, Haskel (2023) for headline CPI inflation and Hansen *et al.* (2023) for the consumption deflator). The breakdown can, however, be directly calculated for GDP inflation (i.e. changes in the GDP deflator). This is not the same as consumer price inflation, as the composition of household consumption differs from that of domestic output. Many OECD economies are net importers of fossil fuels and food, and energy and food prices increased dramatically in 2021-22. In these countries, consumer prices increased by much more than the GDP deflator over that period. Conversely, for oil and gas exporters, the prices of goods produced domestically and then exported rose rapidly, pushing GDP inflation above headline consumer price inflation. A decomposition of GDP inflation thus gives only a partial picture of the contribution of profits and labour costs to headline consumer price inflation. Nevertheless, GDP inflation is an indicator of domestically generated inflation, and can shed light on the extent to which headline inflation is domestically generated or imported.

The decomposition of GDP inflation since 2019 for three commodity-exporting OECD economies (Australia, Canada and the United States) and six commodity importers is shown in Figure 1. As expected, the commodity exporters experienced higher GDP inflation over 2021-22 than the commodity importers. A number of facts emerge from the decomposition exercise:

- In the United States and Canada, the contribution from unit profits widened during most of 2021-22 as GDP inflation was rising but has fallen back as GDP inflation waned in late 2022 and the beginning of 2023. In Canada the contribution of unit profits turned negative in Q1 2023.
- For most of the large European economies, by contrast, GDP inflation was still rising into 2023, and the contribution of unit profits also increased in Q1 2023.
- The contribution from unit labour costs has recently risen in Australia, the euro area (including France, Germany and Italy) and the United Kingdom, whereas it was moderating in the United States and Canada in the first part of 2023.
- While it is usually stable and small, the contribution from unit taxes was particularly volatile following the COVID-19 shock, reflecting pandemic-related subsidies that have subsequently been phased out and changes in the composition of expenditure, particularly household consumption.

Figure 1. The contribution to inflation from both unit profits and unit labour costs has increased recently in many countries

Contribution to year-on-year GDP inflation



Note: A small statistical discrepancy between the sum of the components and the GDP deflator is not shown. Unit taxes correspond to taxes on production net of subsidies per unit of real GDP; unit profits to gross operating surplus per unit of real GDP; and unit labour costs to compensation of employees per unit of real GDP. The published gross operating surplus data include mixed income, which incorporates the income of the self-employed. The calculations in this figure adjust the published gross operating surplus data by allocating part of self-employment incomes to unit labour costs, based on the assumption that the self-employed receive on average the same compensation per head as employees. For the euro area, the data necessary for calculating the contribution of unit profits, unit labour costs and unit net taxes to GDP inflation were not yet in the OECD Quarterly National Accounts database when this post was written.

Source: OECD Economic Outlook 113 database; OECD Quarterly National Accounts database; and OECD calculations.

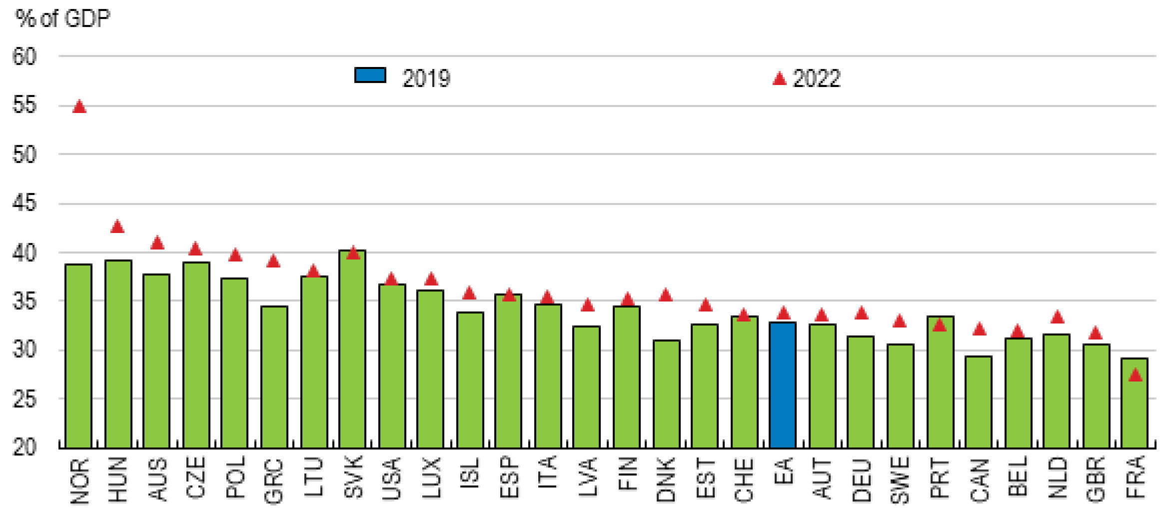
The combination of rising unit labour costs and rising unit profits seen in 2021-22 for many economies is relatively unusual. Over the two decades prior to the pandemic, there was typically a negative relationship between unit profits and unit labour costs, with increases in one being partially absorbed by falls in the other. This relationship has weakened of late, with the median correlation amongst 17 OECD countries shrinking from -0.6 over the period 2000-19 (using quarterly data) to -0.2 during 2021-22, similar to the value for the decade 1971-81, another period characterised by large energy and food price shocks. This suggests that a period of rising input cost inflation may be conducive to unit profits and unit labour costs rising together, at least in nominal terms.

The decomposition of GDP inflation does not allow definitive conclusions to be drawn about firms’ profit margins or changes in market power, which have been the focus of much of the debate about what has driven the rise in inflation. An increase in unit profits (profits per unit of value added) does not necessarily entail higher profit margins (profits as a proportion of sales) as the increase of input costs (including intermediate consumption) can result in profits per unit of value-added moving differently to profits on gross sales (Colonna et al., 2023). And an economy-wide increase in unit profits does not provide any information about how that increase is distributed across sectors or firms.[1]

The evolution of the share of profits in GDP does, however, offer some indirect evidence that aggregate profitability has risen over the past few years. In most advanced economies, the ratio of the gross operating surplus to GDP in 2022 was higher than in 2019 (Figure 2), implying that unit profits rose faster than GDP inflation over this period.

Figure 2. The share of profits in GDP increased in most countries between 2019 and 2022

Gross operating surplus



Note: The calculations in this figure adjust the published gross operating surplus data by removing the part of self-employment incomes that is estimated to reflect labour compensation rather than profits. This is done using the assumption that the self-employed receive on average the same labour compensation per head as employees.

Source: OECD Economic Outlook 113 database; OECD Quarterly National Accounts database; and OECD calculations.

For most OECD economies, projections in the June 2023 Economic Outlook imply that the qualitative pattern that characterised the upsurge in inflation in 2021-22 will be reversed over the next 18 months: real wages will begin to recover – they are projected to be higher in the final quarter of 2024 than in the corresponding quarter of 2022 in all the G7 economies – and labour’s share of national income will rise even as inflation falls back: both headline and core inflation are expected to ease in 2024 in all G7 economies. Implicitly, part of the increase in labour income is being met from profits, with the non-labour share of national income declining.

References

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[1] A subsequent ECOSCOPE post will discuss evidence on the sectoral breakdown of unit profit contributions to GDP inflation.