Box B

Have Business Profits Contributed to Inflation?

In a number of countries, high inflation after the COVID-19 pandemic has been accompanied by high corporate profits and falling real wages. This has prompted a debate in Australia and overseas about the role that changes in firms' profit margins have played in driving inflation.[1] Researchers at some international central banks have noted that changes in profit margins have contributed to higher inflation in those economies.[2] This debate has particular resonance at a time when household budgets are being stretched by rising prices and interest rates, because it bears on perceptions of how fairly the nation's income is being split between workers' income and corporate profits.

A rise in profit margins may be a causal factor in the increase in inflation if firms facing limited competition have taken advantage of higher inflation to raise their markup over input costs. Alternatively, rather than a driver of inflation, increased profit margins could simply be a by-product of strong demand in markets where firms are price-takers and prices have risen to match demand to limited supply, or margins could have increased temporarily in anticipation of future cost increases.

This Box sets out some of the available data for Australia at the aggregate, sectoral and firm level. There is little evidence that there has been a broad-based increase in domestic non-mining profit margins, suggesting that changes in domestic profit margins have not been a significant independent cause of the increase in aggregate CPI inflation. For example, outside of the mining sector – where output prices reflect the balance of demand and supply in global markets – aggregate profits have grown at a similar pace to labour income, with some variation between non-mining sectors.[3] At the firm level, there has been little change in the distribution of margins. These observations are consistent with firms having generally passed on higher costs to maintain their profit margins, and aggregate inflation having been driven by the balance of demand and supply factors – rather than changes in firms' pricing power.[4]

The profit share of income in Australia is little changed outside of the mining sector

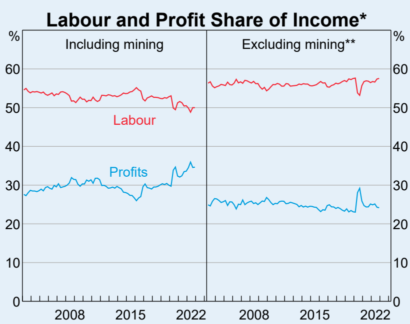
The Australian National Accounts data on private non-financial profits indicate that the aggregate profit share of income has grown strongly since the start of 2021.[5] This suggests that aggregate profits increased faster than labour income. However, this largely owed to strong growth in mining sector profits, which were driven by commodities prices set in global markets, based on the balance of global supply and demand (Graph B.1).

A large portion of the increase in mining sector profits has reflected higher iron ore and base metals prices over this period. This has little direct effect on the prices that domestic consumers face as these commodities are exported in much larger volumes than are used as inputs to domestic production.[6] That partly explains why the GDP deflator increased by 3¼ percentage points more than consumer prices over the two years to December 2022. In addition, mining profits earned on iron ore and base metals are not likely to have contributed significantly to inflationary pressures via domestic demand, as a large share have either been remitted to foreign shareholders or retained as windfall tax revenues by Australian governments.

Higher energy prices over the past year, driven by global factors, have also contributed to the elevated level of the mining sector profit share. This has benefited Australian energy producers while raising costs for other firms and households – for example, via increases in wholesale and retail gas prices in Australia (see Chapter 4: Inflation).[7] While higher energy prices have simultaneously boosted energy producers' profit margins and consumer price inflation, the primary underlying cause is global energy market conditions rather than higher markups in the energy sector independently driving prices.

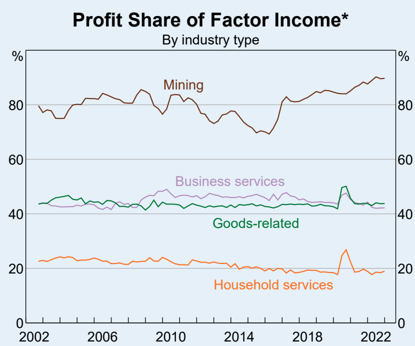
Excluding the mining industry, the aggregate profit share (i.e. non-mining profits divided by non-mining output) has been little changed over most of the past decade, looking through the volatility in the early stages of the COVID-19 pandemic. The profit share at the end of last year was slightly higher than in 2019, but it had fallen over 2022 and was below its average level over the previous 10 years. Excluding small business owners' income, the profit share was little changed compared with 2019.[8] If rising domestic profit margins were a significant independent driver of inflation, profits would instead have increased significantly relative to labour income over the past year. The profit share has, however, been broadly stable across most industries over the past year and the proportion of industries that saw a rise – or fall – in their profit share has been broadly in line with long-run averages. Similarly, profit shares in the household services and goods-related sectors, which tend to comprise of more consumer-facing firms, have been little changed recently (Graph B.2).

Graph B.1



* Shares do not sum to 100 per cent due to the exclusion of the gross operating surplus of public corporations, financial corporations, general government and dwellings.
** Profits excluding the mining sector and labour income excluding the mining sector, both expressed as a share of total non-mining income.
Sources: ABS; RBA

Graph B.2



* Profits include gross mixed income.
Sources: ABS; RBA

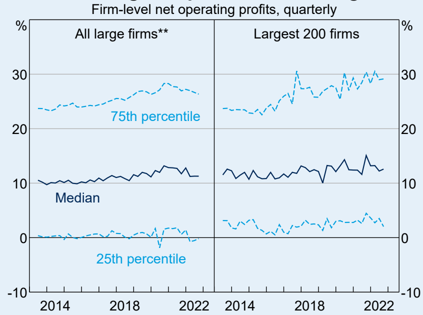
Firm-level net profit margins have not substantially widened outside of the mining sector

Consistent with the trends in profit shares, detailed firm-level data suggest that large non-mining firms' pricing behaviour has not changed materially as of the September quarter of 2022 (the latest available data). The distribution of net operating margins, which measure the extent to which firms' revenues exceed their wages and other operating costs, has remained largely unchanged relative to 2019 (Graph B.3).[9] This implies that these firms have increased their prices broadly in line with growth in their average costs. Among the 200 largest firms, some highly profitable firms have been able to gradually increase their margins over this period.[10] However, this is unlikely to have played a major role in driving the recent rise in aggregate inflation as the widening in margins has been ongoing since 2016 and the increase has been much less pronounced over the past year or so. The firm-level trends presented here are broadly consistent with information from ASX-listed companies' financial reports for the second half of 2022, which showed that aggregate profit margins remained within historical ranges in most sectors (Graph B.4). ✠

Graph B.3

Non-mining Companies' Profit Margins*

Firm-level net operating profits, quarterly



* Net operating profit margin calculated as total sales less operating expenses (including wages) over total sales; from business activity statements; non-financial companies only; seasonally adjusted.

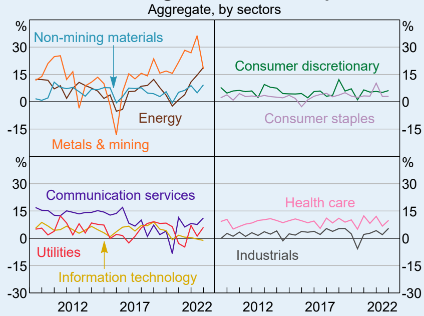
** Annual revenue ≥$50 million.

Sources: ABS; RBA

Graph B.4

Net Profit Margin of Listed Companies*

Aggregate, by sectors



* Net margin equals net income divided by sales.

Sources: Morningstar; RBA

Endnotes

[1] See, for example, Stanford J (2023), 'Profit-Price Spiral: The Truth Behind Australia's Inflation', The Australia Institute; Weber I and E Wasner (2023), 'Sellers' Inflation, Profits and Conflict: Why Can Large Firms Hike Prices in an Emergency?', Economics Department Working Paper Series No 2023–2; Glover A, J Mustre-del-Rio and A von Ende-Becker (2023), 'How Much Have Record Corporate Profits Contributed to Recent inflation?', Federal Reserve Bank of Kansas City Economic Review, January; Brainard L (2023), 'Stating the Course to Bring Inflation Down', Speech at the University of Chicago Booth School of Business, Chicago, 19 January.

[2] Researchers have noted that pass-through from costs to prices has been higher in the past couple of years than prior to the pandemic, that retail markups have increased or that profits have increased by more than labour income in recent years, resulting in a decline in the labour share of income. See Arce O, E Hahn and G Koester (2023),

'How Tit-for-tat Inflation Can Make Everyone Poorer', The ECB Blog, 30 March; Beaudry P (2023), 'No Two Ways About It: Why the Bank is Committed to Getting Back to 2%', Speech at the Alberta School of Business, Edmonton, 16 February; Glover *et al*, n 1.

[3] For an analysis of longer run trends in the profit share, see La Cava G (2019), 'The Labour and Capital Shares of Income in Australia', RBA *Bulletin*, March. Available at <https://www.rba.gov.au/publications/bulletin/2019/mar/the-labour-and-capital-shares-of-income-in-australia.html>

[4] See RBA (2023), 'Box C: Supply and Demand Drivers of Inflation in Australia', *Statement of Monetary Policy*, February. Available at <https://www.rba.gov.au/publications/smp/2023/feb/box-c-supply-and-demand-drivers-of-inflation-in-australia.html>

[5] The profit share of total factor income comprises of income accruing to capital owners as gross operating surplus (GOS) and to unincorporated business owners as gross mixed income (GMI). GMI, which accounts for a small share of private non-financial profits, includes both labour and capital income and it is not simple to separate out their respective contributions. For simplicity, GMI has been included in its entirety in profits in the below analysis. Private non-financial GOS, GMI and compensation of employees together comprised around 85 per cent of total factor income in the December quarter of 2022. The remaining 15 per cent is accounted for by public corporations GOS, financial corporations GOS, general government GOS and dwellings GOS.

[6] For further discussion and estimates of mining sector input to domestic final demand, see Rayner V and J Bishop (2013), 'Industry Dimensions of the Resource Boom: An Input-Output Analysis', RBA Research Discussion Paper No 2013-02. Available at <https://www.rba.gov.au/publications/rdp/2013/2013-02.html>

[7] See also RBA (2022), 'Box A: Recent Developments in Energy Prices', *Statement of Monetary Policy*, August. Available at <https://www.rba.gov.au/publications/smp/2022/aug/box-a-recent-developments-in-energy-prices.html>

[8] That is, the income share of gross operating surplus of private non-financial corporations, excluding the mining sector, is little changed compared with 2019. This measure excludes GMI.

[9] This analysis is limited to large firms (annual revenue above $50 million) as they account for the majority of economic activity. For a discussion including smaller firms' net operating margins, see RBA (2023), 'Household and Business Finances in Australia', *Financial Stability Review*, April. Available at <https://www.rba.gov.au/publications/fsr/2023/apr/household-business-finances.html>

[10] This result also holds when the 200 largest firms are weighted by size.

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