



Greedflation in New Zealand?

An imported narrative

Report to Business New Zealand
23 May 2023



SENSE PARTNERS
DATA LOGIC ACTION

Key points

Greedflation is when increasing profit margins drive price inflation. It has led to significant discussion internationally.

In the US, this has gone from a dismissed fringe theory to an issue even Federal Reserve governors speak about.¹

In Europe, the European Central Bank is looking closely at the role of firm mark-ups (or increasing profit margins) in inflation.²

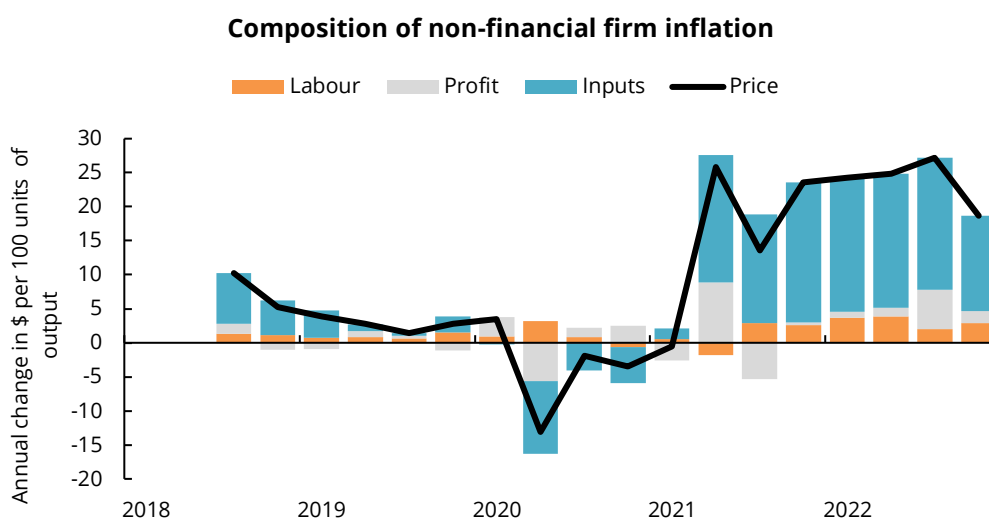
In Australia, a think tank found profits a big driver of recent inflation.³

But these findings are contested. The Reserve Bank of Australia, for example, did not find abnormal profit margins outside of the mining sector.⁴

Is greedflation an issue in New Zealand? Using Statistics New Zealand data, we show that profit margins are lower than pre-Covid levels. By decomposing price increases for the non-financial sector of the economy, we find that 75% of the inflation in the three years to 2022 has come from the increase in the cost of inputs (of goods and services) and the remainder is evenly split between wages and profits.

We found no evidence of widespread increases in profit margins driving up inflation in New Zealand. It is an imported narrative not supported by the evidence.

FIGURE 1: INFLATION HAS BEEN DRIVEN LARGELY BY INPUT COSTS



Source: Statistics New Zealand, Sense Partners

¹ [Speech by Vice Chair Brainard on the economic outlook | Federal Reserve Board](#)

² [How tit-for-tat inflation can make everyone poorer | Europeaeuropa.eu](#)

³ [Profit-Price Spiral: The Truth Behind Australia's Inflation | The Australia Institute's Centre for Future Work](#)

⁴ [Box B: Have Business Profits Contributed to Inflation? | Statement on Monetary Policy – May 2023 | RBA](#)



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1. Profit-driven inflation approach

Record profit margins in the US have been linked to increased inflation. That is, firms are taking advantage of the inflationary period to boost their profit margins.

In Australia, the Reserve Bank of Australia has found that profit margins outside of the mining sector have remained within historical norms.

There are two main thrusts to this international analysis:

- Comparing profit margins to the pre-Covid period. Unusually high profit margins would show that firms have marked up prices more than can be justified by cost increases.
- Decomposing price increases into wages, inputs (purchases of goods and services) and gross profits (which flow through to taxes, dividends and reinvestments in business). This helps us understand how much of the increase in price is coming from these three components.

The analysis is done for non-financial firms, as the national accounts data does not lend itself to this kind of analysis. Financial firms require more complex analysis, as the volume of services consumed is not conceptually the same, which is outside the scope of this paper.

2. Inflation decomposition by sector

We can get a better understanding profit margins and components of price increases from detailed quarterly financial data published by Statistics New Zealand.⁵ This data is available for non-financial private sector firms.

We can use this data to analyse profit margins from 2017 to 2022, allowing us to compare pre- and post-Covid periods.

We can also use this data combined with real production GDP data⁶ (a good proxy for quantity unit of output) to calculate sale price per unit, which adds up to the increase in cost of inputs, spend on labour and gross profits.

While gross profits will generate taxes and there will be other expenses such as interest payments or money to cover maintenance for example, this gives us a comparable approach to understanding the drivers of inflation.

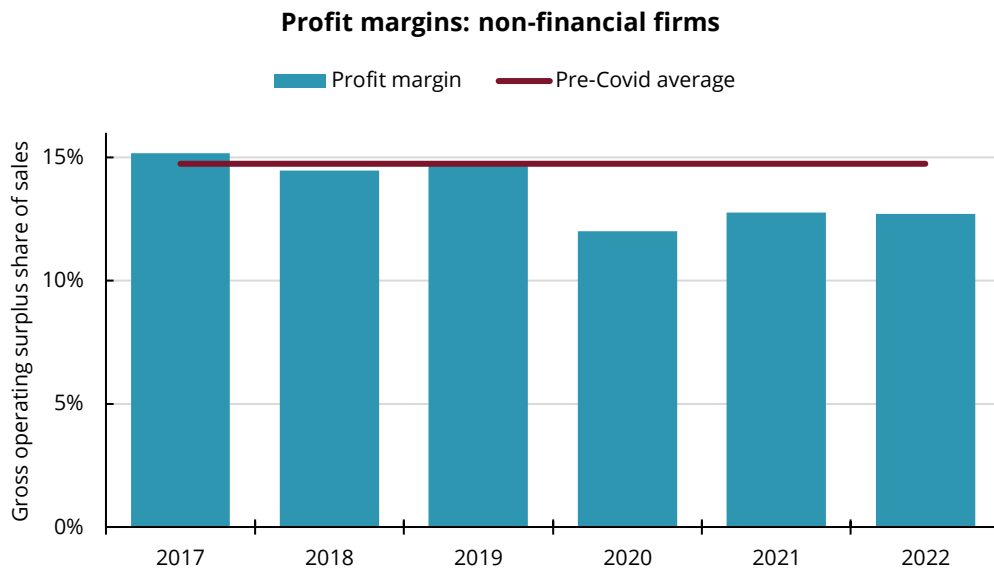
⁵ Available from Statistics New Zealand's Infoshare tool: Industry sectors; Business Data Collection; Table: Industry by financial variable.

⁶ Available from Statistics New Zealand's Infoshare tool: Economic indicators; National Accounts – SNA 2008 – SNE; Series, GDP(P), Chain Volume, Actual, ANZSIC06 industry groups.

2.1. Profit margins lower than pre-Covid

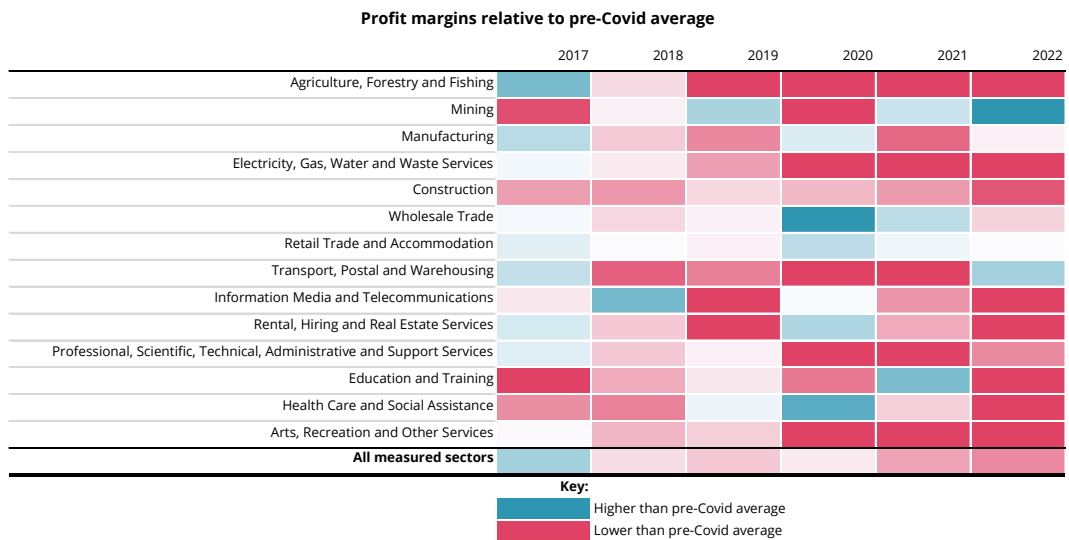
Our analysis of the financial data shows that profit margins for the measured non-financial sector averaged 14.7% before Covid and were 12.7% in 2022 (calendar year), shown in Figure 2. Figure 3 summarises profit margin variation from pre-Covid average by industry. These industry statistics are shown in more detail in section 4. There is no pattern of increased profit margins across the non-financial sector in New Zealand.

FIGURE 2: PROFIT MARGINS HAVE BEEN LOWER THAN USUAL SINCE COVID



Source: Statistics New Zealand, Sense Partners

FIGURE 3: NO EVIDENCE OF WIDESPREAD SYNCHRONISED INCREASE IN PROFIT MARGINS



Source: Statistics New Zealand, Sense Partners

2.2. Decomposing price changes by source

We also decompose the price increase over the three years to 2022 (December 2019 quarter to December 2022 quarter) into the component shares of inputs, labour and profit. We do this by all available industries and their total.

We found that, over the three years to December 2022, prices rose by 14% (or an average of 4.6% per year) – 71% of that price increase can be attributed to the increase in input costs, 15% to an increase in labour costs and 14% to an increase in gross profits.

The industry breakdowns show that price increases have varied considerably across sectors. In the sectors with the highest inflation, input costs was the biggest contributor, not wages or profits.

FIGURE 4: PRICE HAS INCREASED SHARPLY IN SOME PARTS OF THE ECONOMY, DRIVEN MAINLY BY INCREASED COST OF INPUTS

Industry	2019-2022		Share of price increase from:		
	Price change		Inputs	Labour	Profit
Agriculture, Forestry and Fishing	17%		72%	14%	14%
Arts, Recreation and Other Services	15%		64%	25%	11%
Construction	22%		70%	16%	13%
Education and Training	4%		38%	45%	16%
Electricity, Gas, Water and Waste Services	0%		67%	11%	22%
Financial and Insurance Services					
Health Care and Social Assistance	4%		46%	37%	18%
Information Media and Telecommunications	-6%		64%	15%	20%
Manufacturing	24%		75%	13%	12%
Mining	28%		54%	14%	32%
Professional, Scientific, Technical, Administrative and Support Services	2%		48%	31%	21%
Public Administration and Safety					
Rental, Hiring and Real Estate Services	-2%		61%	7%	32%
Retail Trade and Accommodation	14%		79%	13%	8%
Transport, Postal and Warehousing	25%		59%	17%	23%
Wholesale Trade	20%		87%	6%	7%
All measured sectors	14%		71%	15%	14%

Source: Statistics New Zealand, Sense Partners

3. Conclusion

The data available to us shows that recent inflation in New Zealand has been largely driven by input costs, not wages or increasing profit margins. International experiences of increasing profit margins through increased mark-ups are not well supported in the New Zealand experience.

This indicates caution in importing international narratives without local context.



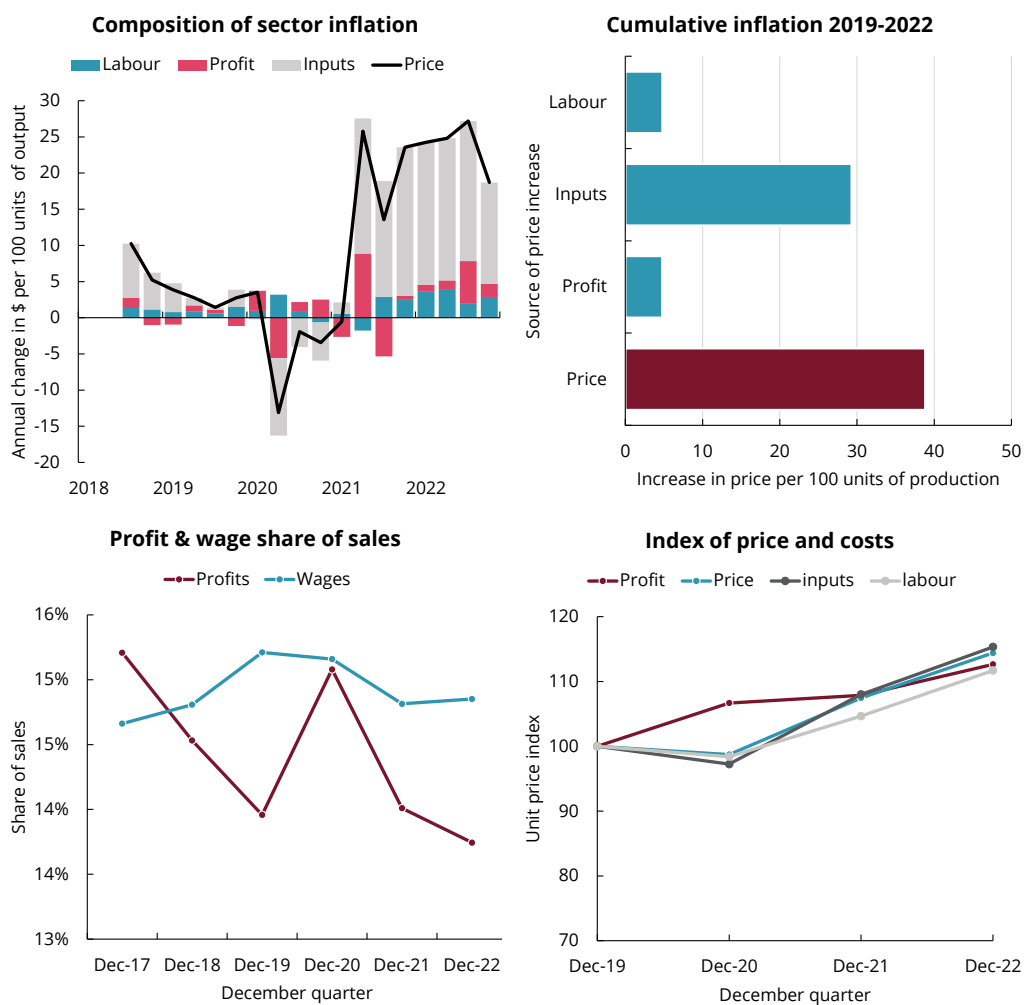
4. Industry summary statistics

This section summarises the key inflation and margin measures by sector. Section 4.1 shows the non-financial sector total.

- The top-left chart shows the composition of inflation by input costs, wages and profits.
- The top-right chart shows the cumulative source of inflation between 2019 and 2022. Inputs drove much of the increase.
- The bottom-left chart shows the share of sales going to wages and gross profits. It shows that wage share has increased a touch and profit share has fallen.
- The bottom-right chart shows that the price index for each component of inflation, where input cost inflation is the highest.

4.1. Non-financial sector total

Non-financial sector total

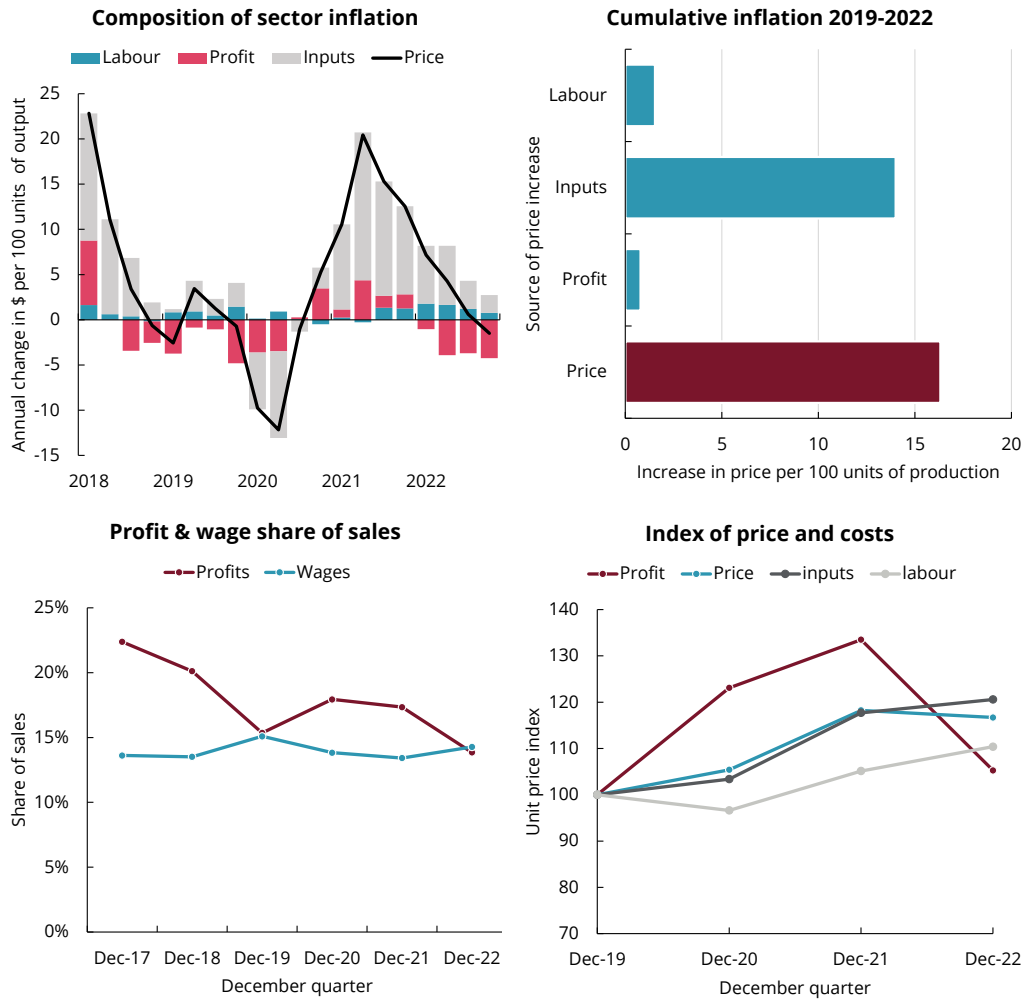


Source: Statistics NZ, Sense Partners



4.2. Agriculture, Forestry and Fishing

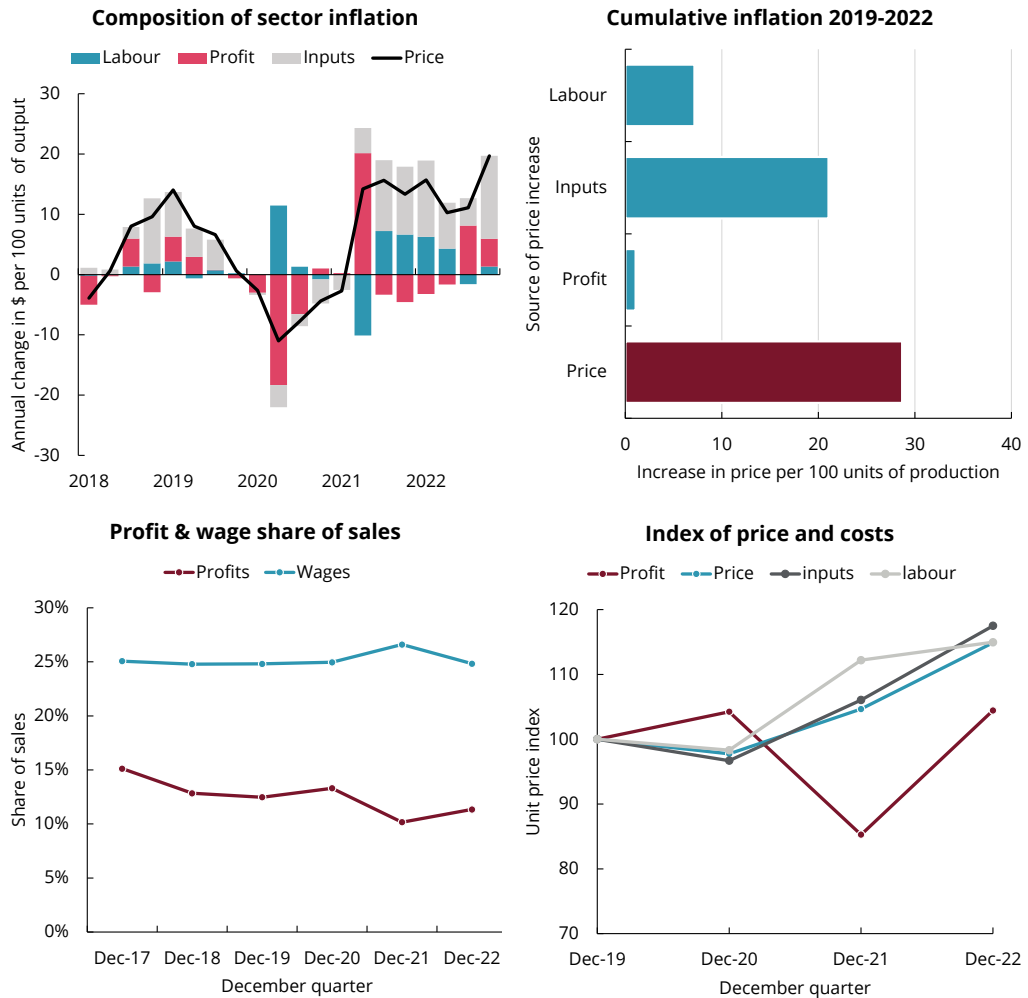
Agriculture, Forestry and Fishing



Source: Statistics NZ, Sense Partners

4.3. Arts, Recreation and Other Services

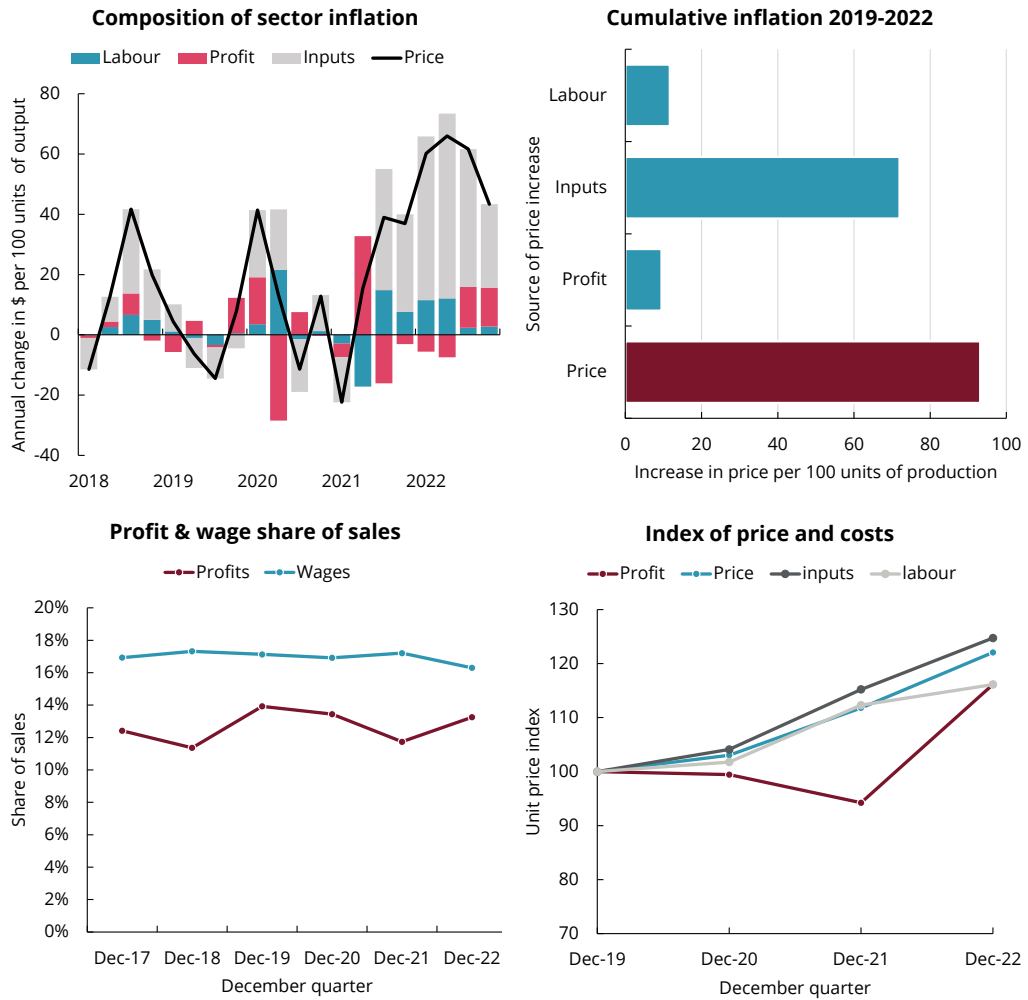
Arts, Recreation and Other Services



Source: Statistics NZ, Sense Partners

4.4. Construction

Construction



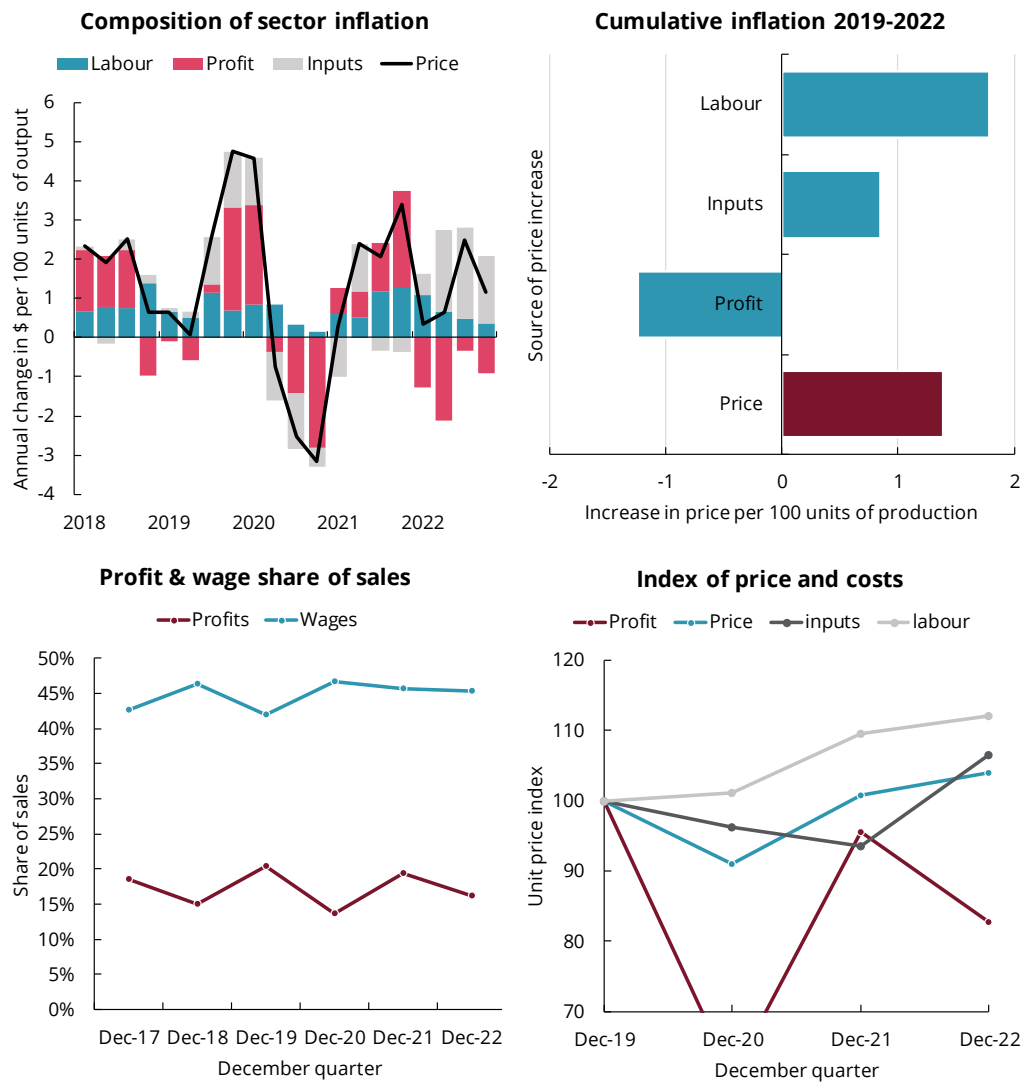
Source: Statistics NZ, Sense Partners



4.5. Education and Training

Note: The private education sector is small and not well measured. Exercise caution in using these statistics.

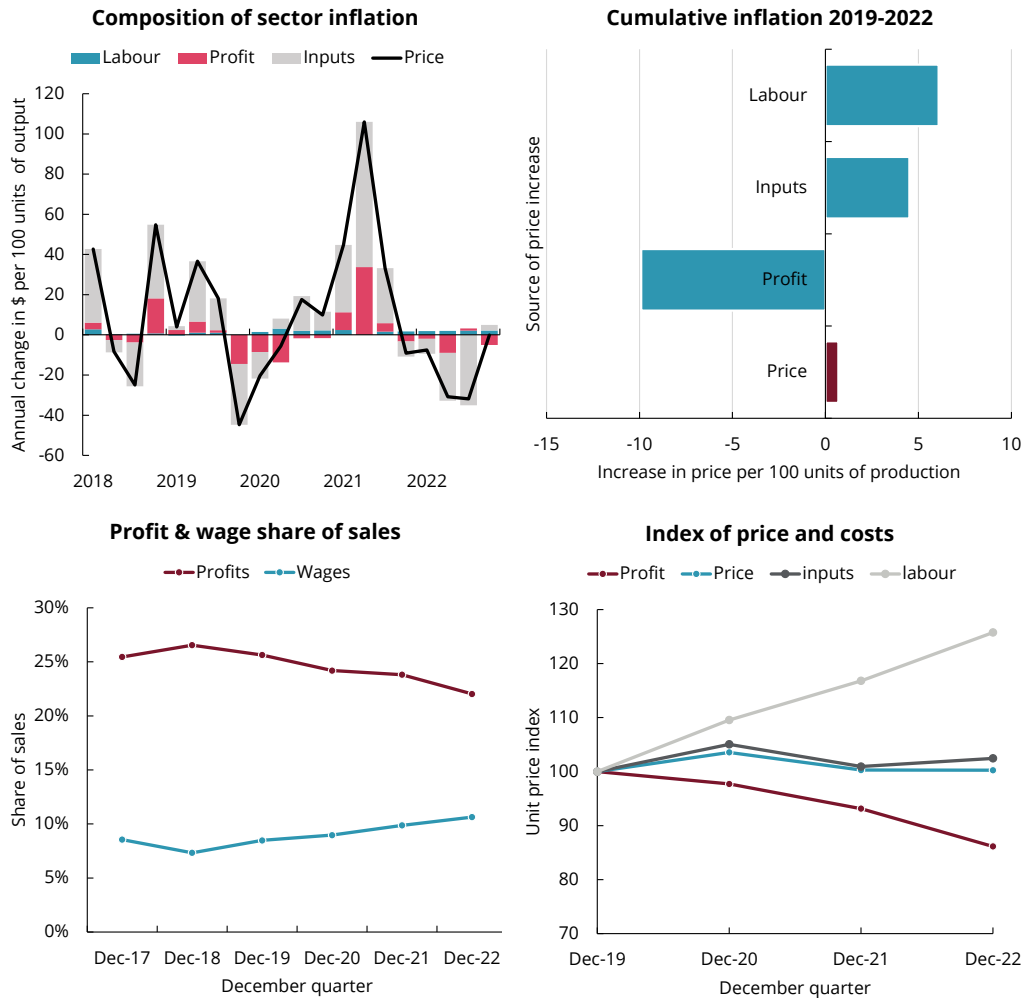
Education and Training



Source: Statistics NZ, Sense Partners

4.6. Electricity, Gas, Water and Waste Services

Electricity, Gas, Water and Waste Services

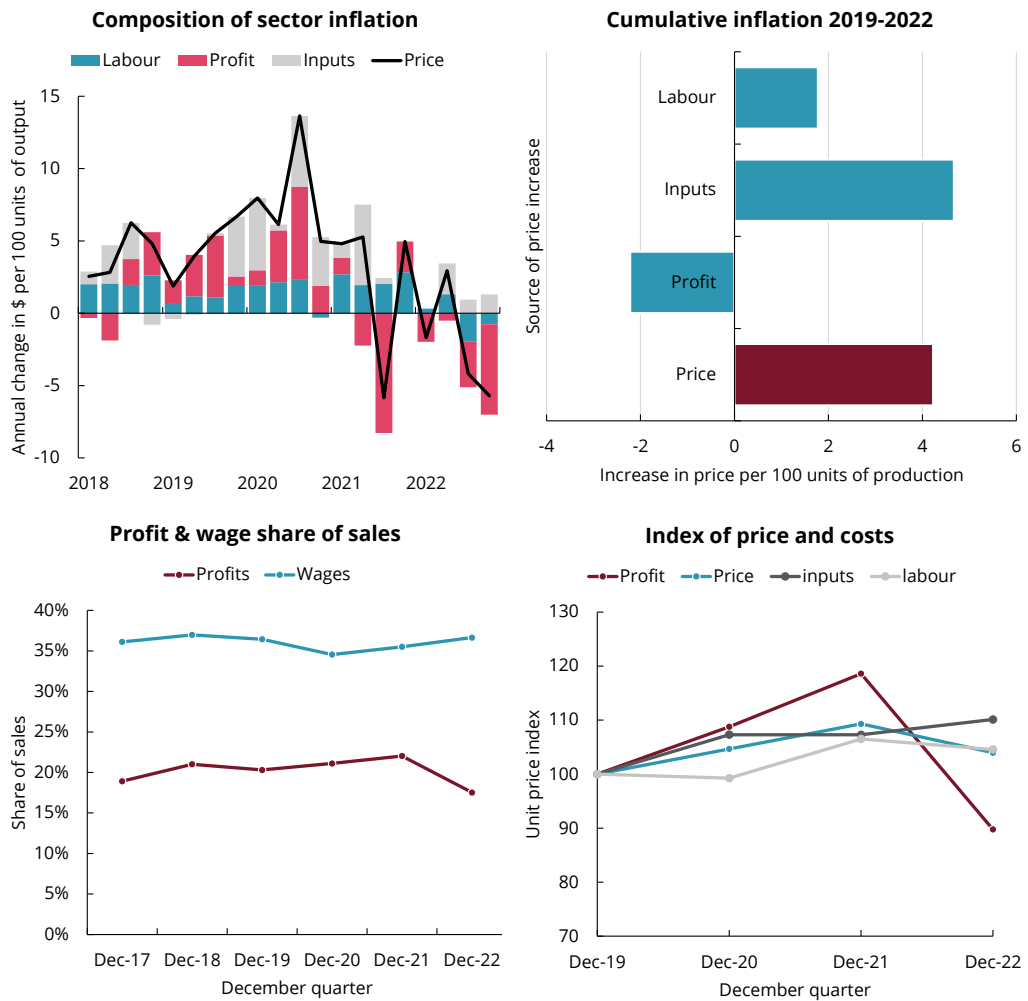


Source: Statistics NZ, Sense Partners

4.7. Health Care and Social Assistance

Note: The private health sector is small and not well measured. Exercise caution in using these statistics.

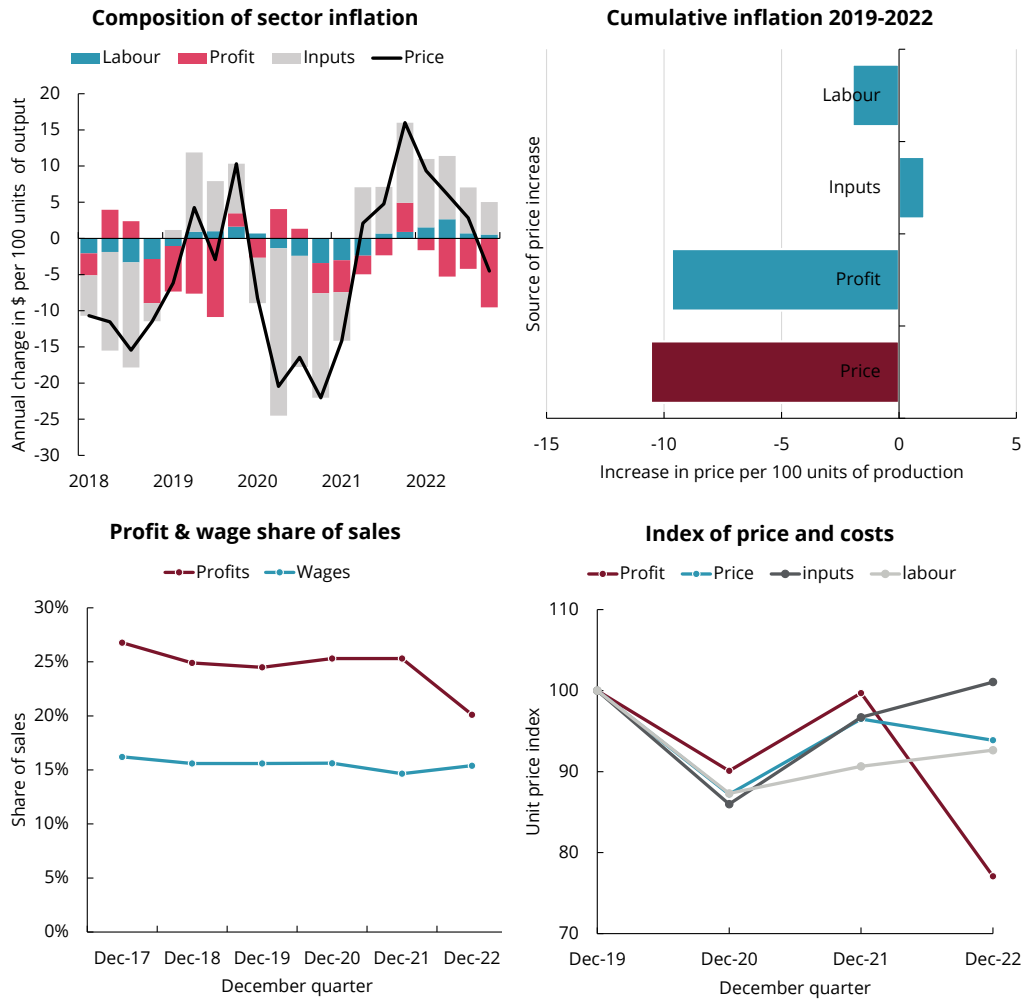
Health Care and Social Assistance



Source: Statistics NZ, Sense Partners

4.8. Information Media and Telecommunications

Information Media and Telecommunications

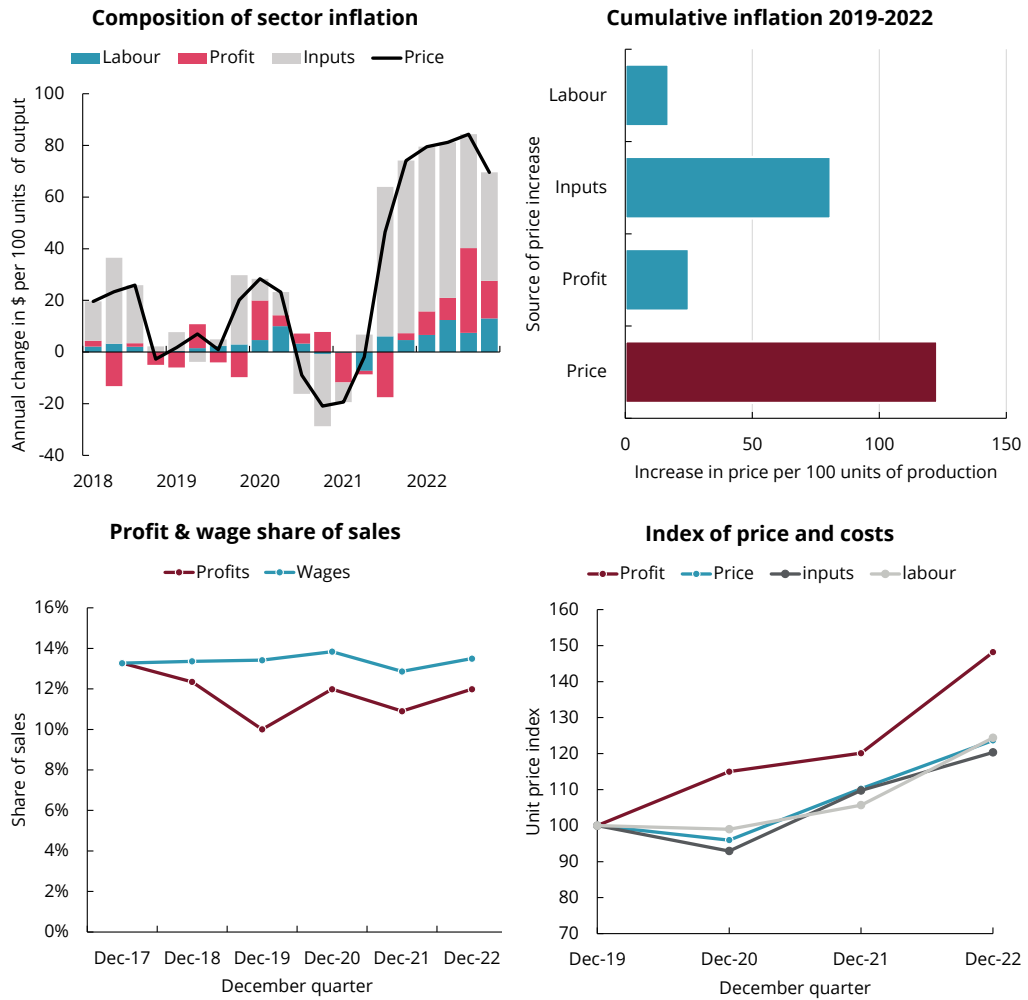


Source: Statistics NZ, Sense Partners



4.9. Manufacturing

Manufacturing

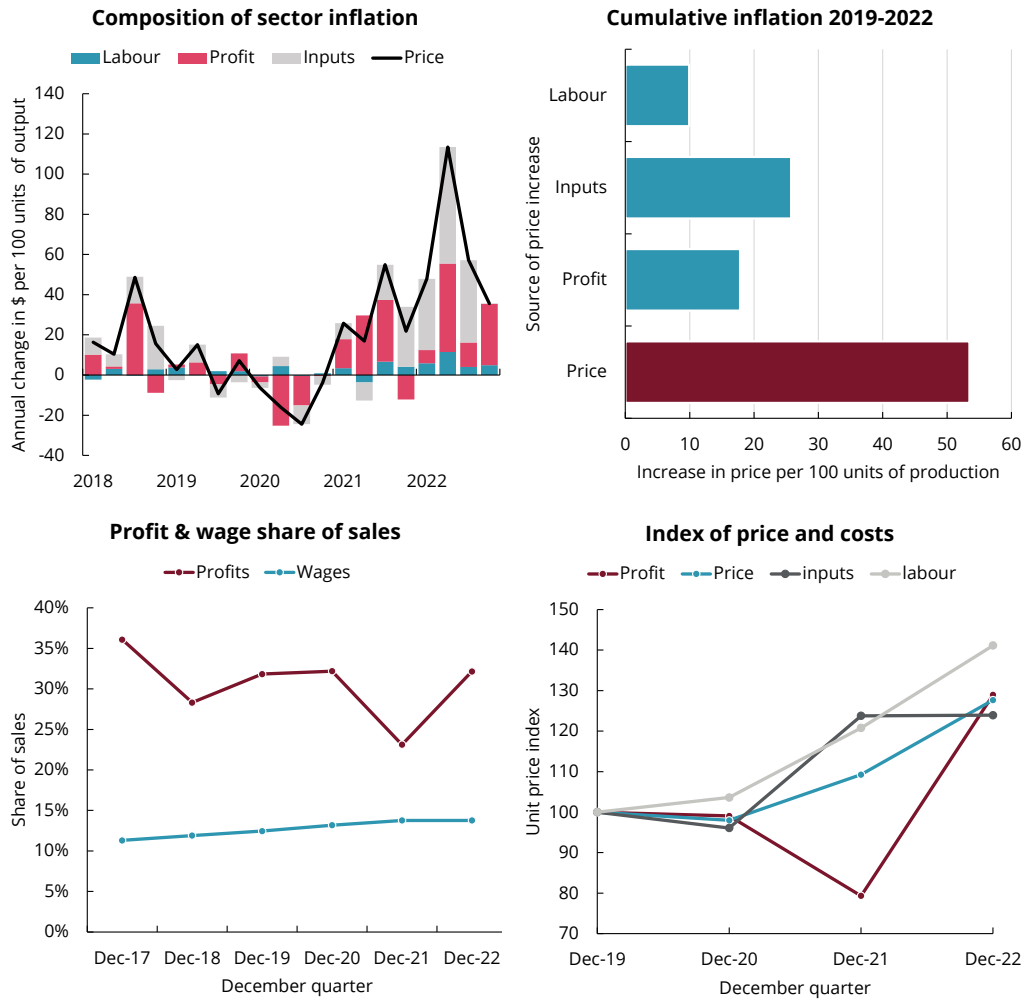


Source: Statistics NZ, Sense Partners



4.10. Mining

Mining



Source: Statistics NZ, Sense Partners



4.11. Professional, Scientific, Technical, Administrative and Support Services

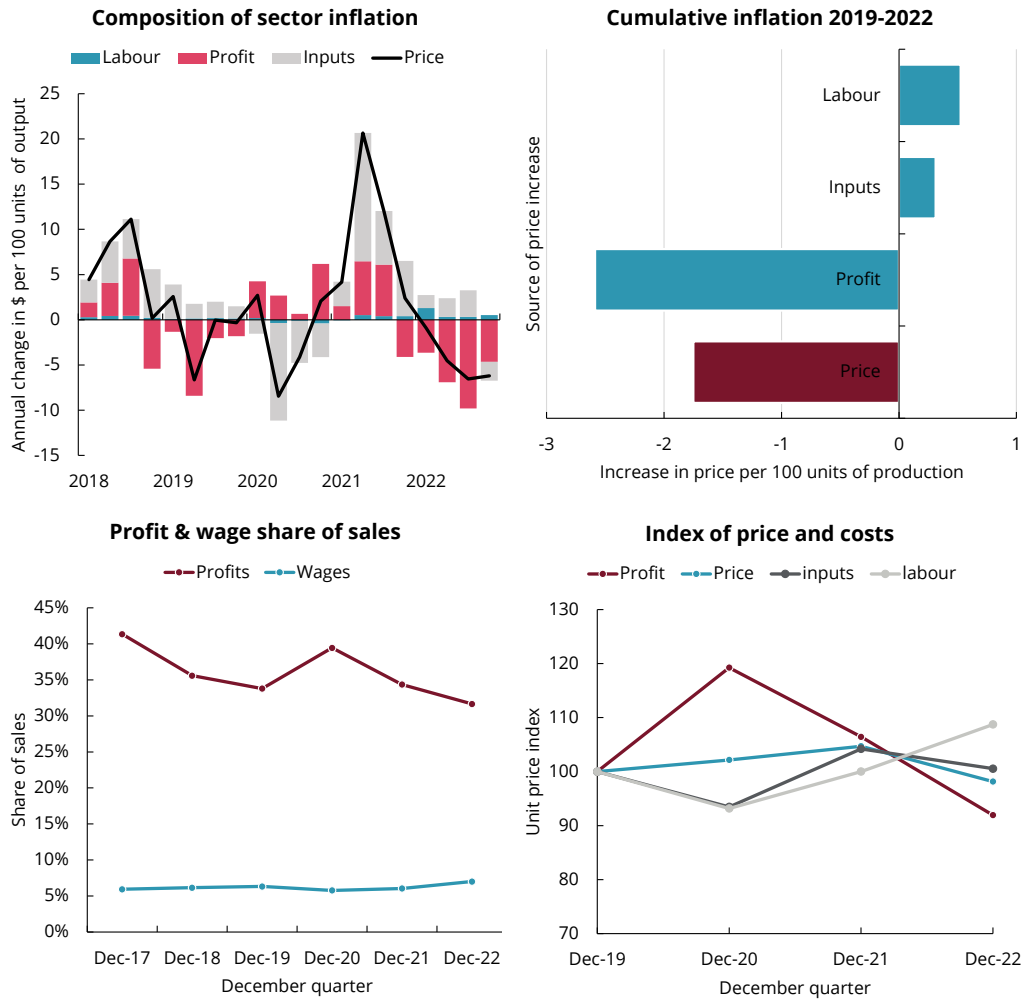
Professional, Scientific, Technical, Administrative and Support Services



Source: Statistics NZ, Sense Partners

4.12. Rental, Hiring and Real Estate Services

Rental, Hiring and Real Estate Services

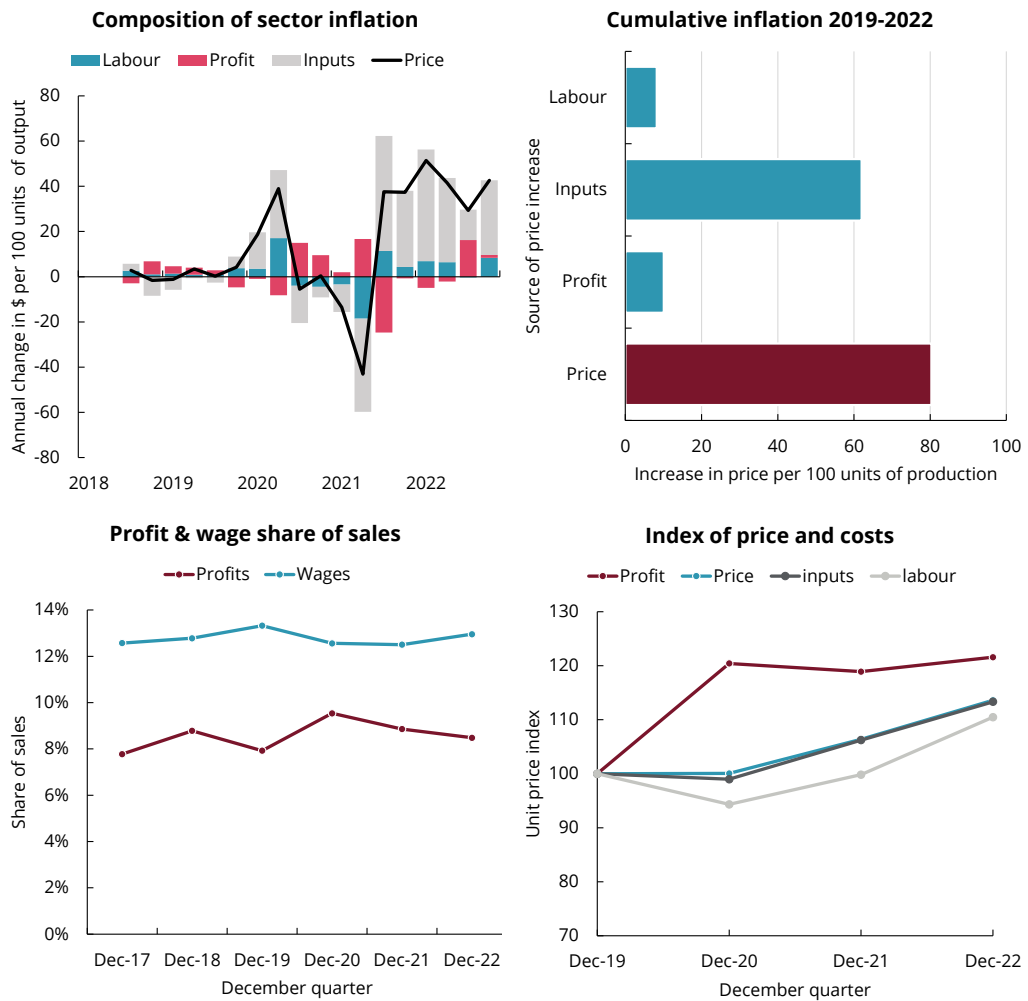


Source: Statistics NZ, Sense Partners

4.13. Retail Trade and Accommodation

Note: Retail and accommodation sector financial data is available for five fewer quarters than other industries, hence no price decomposition is possible for the March 2018 and June 2018 quarters.

Retail Trade and Accommodation

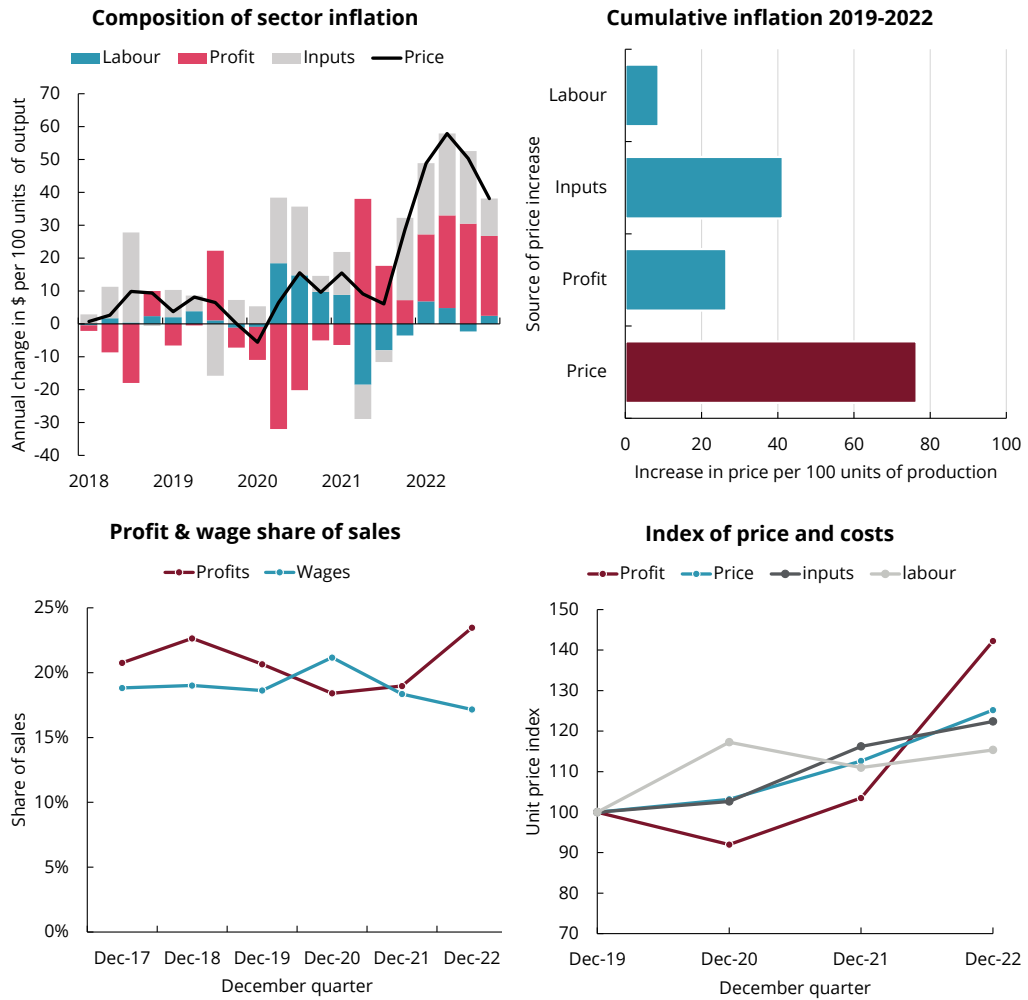


Source: Statistics NZ, Sense Partners



4.14. Transport, Postal and Warehousing

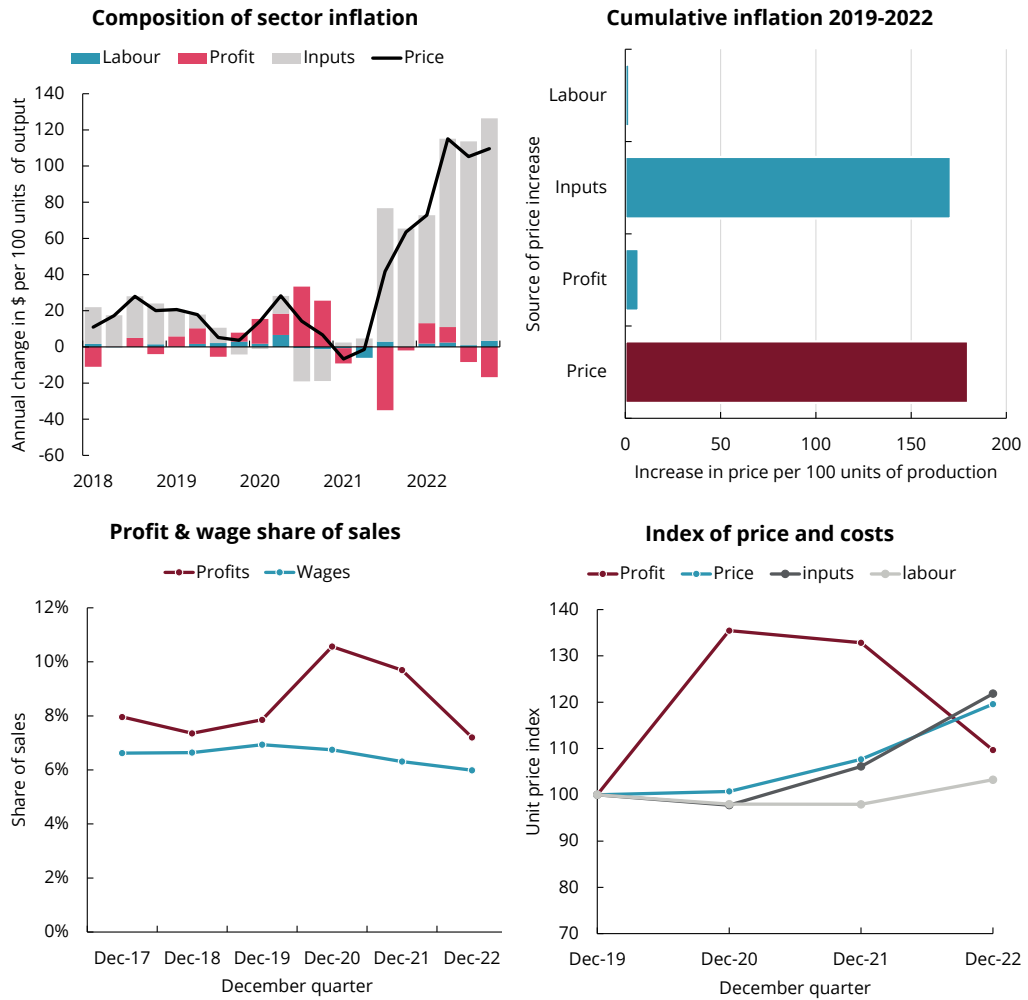
Transport, Postal and Warehousing



Source: Statistics NZ, Sense Partners

4.15. Wholesale Trade

Wholesale Trade



Source: Statistics NZ, Sense Partners

