

Appendix only: Technical details for *What's up with Australian inflation?*

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Full article: [What's up with Australian inflation?](#)

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This appendix provides further detail on the supply-demand decomposition described by [Saunders \(2022\)](#).

For further details on the estimation of labour market-sensitive inflation and the principal components analysis, see the [appendix for the previous QTC research article 'What's down with Australian inflation?'](#)

Supply-demand decomposition

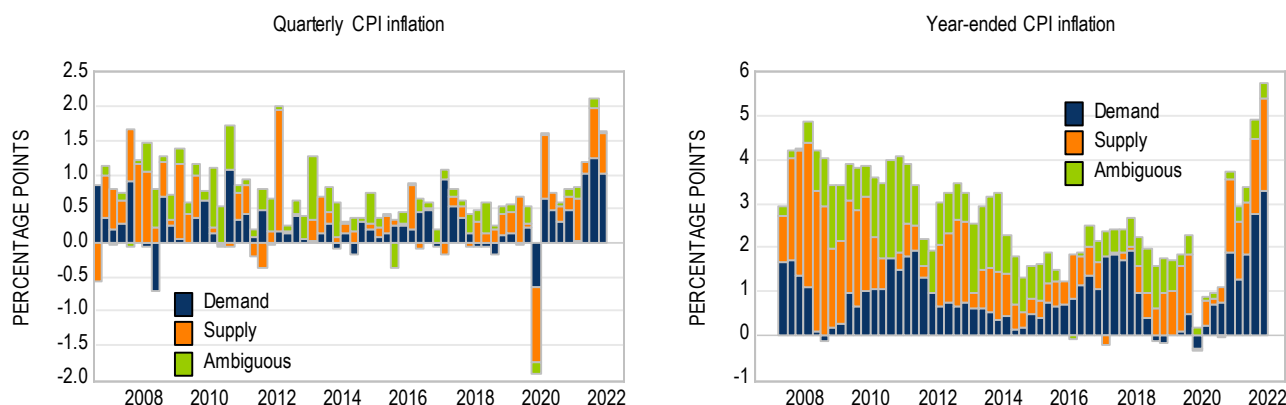
The approach used to estimate the supply-demand decomposition is similar to that used by [Zac Gross at Monash University](#) and [Adam Shapiro at the San Francisco Federal Reserve](#). I have made a couple of minor changes to the specifications used by Gross and Shapiro, though the broad conclusions are not sensitive to these changes.

The main difference relative to Gross's estimates is that I used a different measure of inflation. Gross provided estimates for headline CPI inflation, given the RBA focuses on CPI inflation when it makes its monetary policy decisions. I have instead used the household consumption price deflator for my estimates, as these prices are more consistent with the quantities data that are used in the exercise. My estimates also use time-varying weights, whereas Gross used fixed weights.

I have also applied some judgement to the classifications for my estimates. In particular, I have assumed that changes to vehicle operating costs since late 2020 have reflected supply factors. Much of the variation in this category appears to be driven by fuel prices, which have been heavily affected by supply disruption due to the Russia-Ukraine war. Prices for motor vehicle parts and accessories are also likely to have been affected by disruptions to global supply chains since late 2020.

Nonetheless, these modifications do not significantly change the conclusions from this analysis. Graph A1 shows updated contributions to CPI inflation based on the assumptions used by Gross. These results suggest that demand has increasingly driven inflation outcomes in recent quarters, with the trajectory similar to my results.

GRAPH A1: CONTRIBUTION TO HEADLINE CPI INFLATION
(UPDATE OF GROSS'S ESTIMATES)



Sources: Gross (2022), QTC Economic Research