

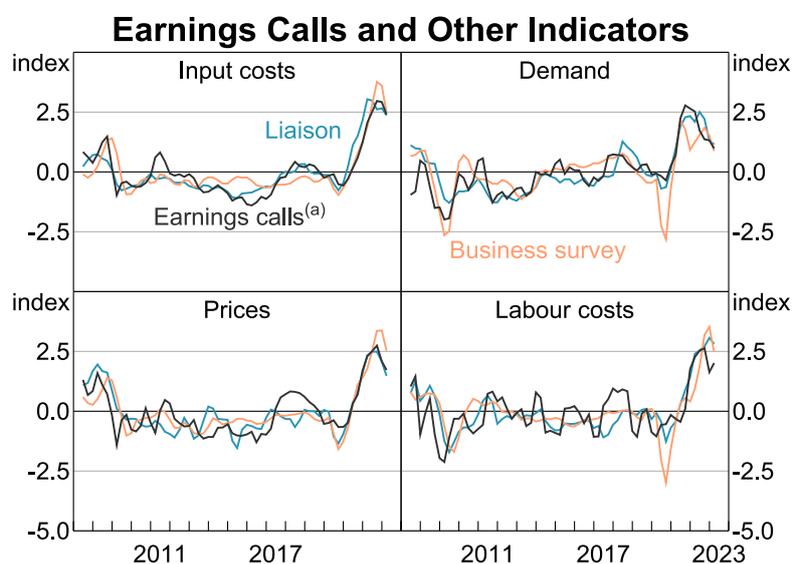
## Non-technical summary for ‘Firms’ Price-setting Behaviour: Insights from Earnings Calls’

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Earnings call transcripts are a rich and timely source of information about firms’ own business conditions and economic and financial conditions more broadly. Earnings call transcripts also offer qualitative information that is not captured by traditional financial statements or other quantitative data. The sentiment and language used by executives during these calls provide additional context, nuance and insights that are valuable for economists trying to understand how firms make choices and how those choices affect prices. In this paper, we use earnings call transcripts from Australian firms as a complement to information gathered from other sources and to better understand firms’ price-setting behaviour.

We process and analyse over 700,000 paragraphs of text extracted from around 5,500 transcripts collected since the start of 2007. To do this, we use a state-of-the-art large language model. Broadly speaking, these models are artificial intelligence algorithms that use deep learning and are trained on massive amounts of textual data. The model is used to group paragraphs within the transcripts into pre-selected categories related to input costs (including labour costs), demand, prices and supply shortages, and the tone of these discussions are used to construct sentiment indicators.

Once aggregated across all firms, our newly constructed sentiment indicators complement information obtained from our business liaison program and from regular surveys of business conditions (see the figure). This is useful for economic analysis, providing confidence in the signal extracted from these ‘soft’ indicators. Our new indicators also track official statistics for consumer and producer price inflation as well as growth in labour costs. This is helpful because, using the flexible methodology outlined in this paper, earnings calls can be used to construct a host of firm-level indicators that may not be available from other sources.



Notes: Series are standardised to measure the number of standard deviations each series is from its mean value. Rolling quarterly six-month average.

(a) Zero-shot classifier.

Sources: Authors’ calculations; NAB; RBA; Reuters.

Because our new indicators are available at the firm level, we also use them to examine the association between the sentiment of firms’ discussions about final prices and the sentiment of their discussions about input costs and demand. This allows for inferences to be drawn about the determinants of the pricing behaviour of firms, which could be relevant for understanding the dynamics of the inflation process. Our results are consistent with firms using pricing strategies that focus on a mark-up over costs. They are also

consistent with firms being more reactive to rising, rather than falling, input costs. Finally, we document sizable heterogeneity in pricing behaviour across industries. These experimental findings appear to indicate that aggregate price-setting behaviour could depend on the source of the shocks firms face (demand- or cost-driven), the direction of the shock (with firms reacting more to cost increases relative to decreases), and which industries are most affected. Taken together, this underscores the importance of continuing to develop rich multisector models of the economy to better understand firms' reactions to different types of shocks.