RBA's Reaction Function as Perceived by Forecasters[†]

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Melbourne Annual Macro Policy Meeting

30-31 October 2025

†. The views expressed in this paper are those of the authors and do not necessarily reflect the views of the Reserve Bank of Australia.

Why perceptions matter

- Monetary transmission depends on what markets **believe** about the reaction function.
- RBA Review: Clearer communication about strategy and decisions.
- *Fed response to news* channel (Bauer and Swanson 2023): Markets misread how the RBA maps data to decisions (Hambur and Haque 2024)

Key Questions

- What reaction function do market participants *perceive* the RBA to follow?
- How have those perceptions changed over time?

What we do

- Adapt survey-based design of Bauer, Pflueger, and Sunderam (2024a, 2024b).
- Use *survey data* on cash rate, underlying inflation and unemployment (Source: RBA market economist survey)
- Estimate forward-looking *perceived* policy rules.
- Link shifts in *perceived* coefficients to policy actions and communication

Model: perceived reaction function

Policy rule (what forecasters perceive)

$$i^{(j)}_{t,t+h} = \hat{\beta}_t i^{(j)}_{t,t+h-1} + (1-\hat{\beta}_t)\Big(r^{*(j)}_t + \pi^{*(j)}_t + \hat{\theta}_t(\pi^{(j)}_{t,t+h} - \pi^{*(j)}_t) + \hat{\delta}_t(u^{(j)}_{t,t+h} - u^{*(j)}_t)\Big) + e^{(j)}_{t,t+h},$$

Forecast-based regression (what we estimate)

$$i^{(j)}_{t,t+h} = \hat{\beta}_t\, i^{(j)}_{t,t+h-1} + (1-\hat{\beta}_t)\big(\hat{\theta}_t\, \pi^{(j)}_{t,t+h} + \hat{\delta}_t\, u^{(j)}_{t,t+h}\big) + \alpha^{(j)}_t + e^{(j)}_{t,t+h}.$$

Interpretation

- $\alpha^{(j)}_t$ absorbs long-run beliefs ($r^*,\ \pi^*,\ u^*$).
- Slopes ($\hat{\theta}_t,\ \hat{\delta}_t,\ \hat{\beta}_t$) common across horizons and forecasters (time-varying across t)
- Forecasters view the policy rule parameters as highly persistent.

Estimation approach

Data

- *RBA market economist survey*, quarterly (2015–2025).
- Around 20 forecasters with forecasts out to 2.5 years
- Forecaster $j \times$ horizon h panel: cash rate, trimmed-mean inflation, unemployment rate, WPI.

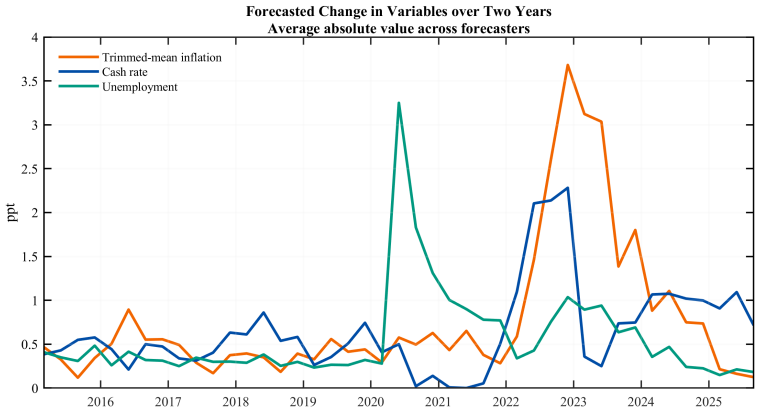
Estimator

- Arellano–Bond difference GMM
  - Instrument sets (robust to using fewer lags):
    - Cash rate: $i_{t-3}, \ldots, i_{t-6}$
    - Inflation: $\pi_{t-2}, \ldots, \pi_{t-6}$
    - Unemployment: $u_{t-2}, \ldots, u_{t-6}$
- Rolling four-quarter windows (robust to quarter-by-quarter estimation)

Identification

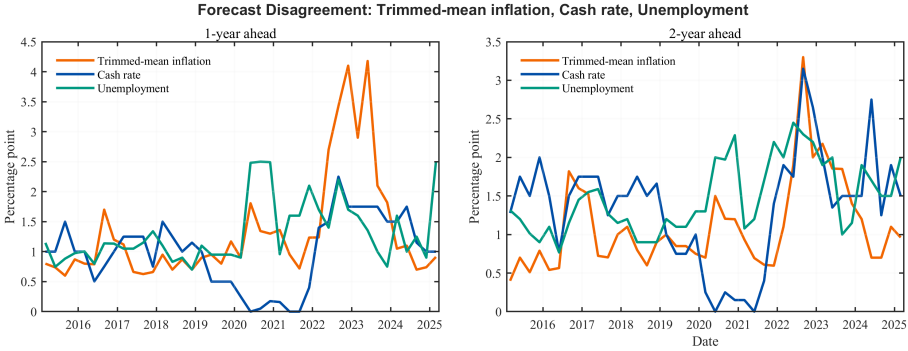
- Relies on both *within-forecaster, cross-horizon* and *cross-forecaster* variation

Cross-horizon variation



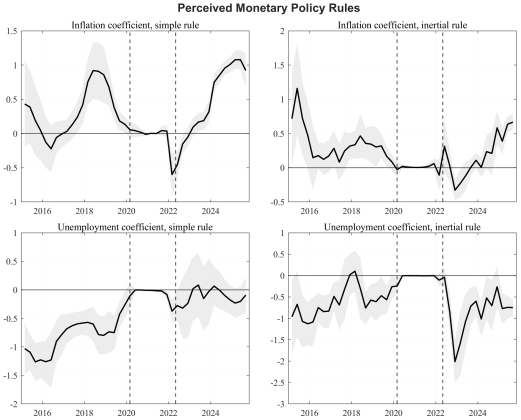
* Average cumulative absolute change calculated for each forecaster, and then averaged.
Sources: RBA Market Economist Survey

Cross-forecaster disagreement



Sources: RBA Market Economist Survey

Baseline perceived coefficients

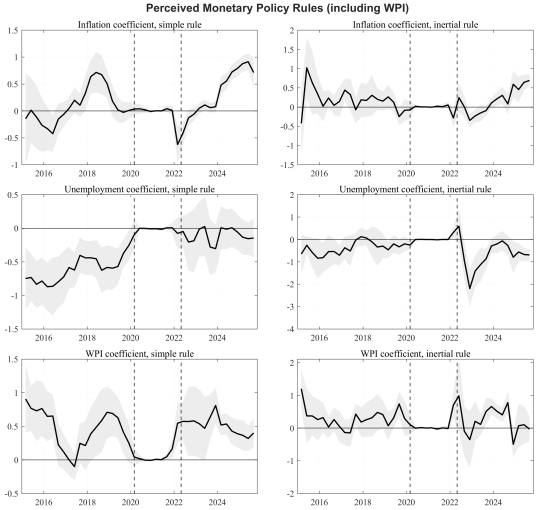


Notes: Coefficients of perceived monetary policy rules estimated using rolling 4-quarter panel regressions on survey data from RBA market economist survey from February 2015 to August 2025. The left panels show estimates of the simple rule and the right panels show estimates that allow for monetary policy inertia. Gray-shaded areas are 95% confidence intervals based on clustered standard errors (by forecasters and horizon). Vertical lines show the zero lower bound period between March 2020 and May 2022.

Sources: Authors' calculations; RBA

▸ Housing language ▸ Labour market language

Role of wages



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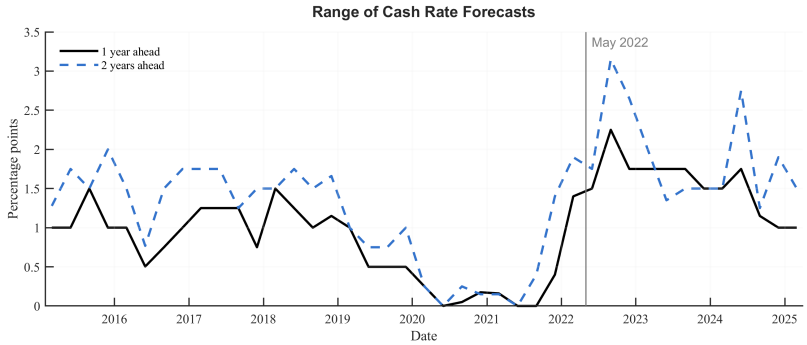
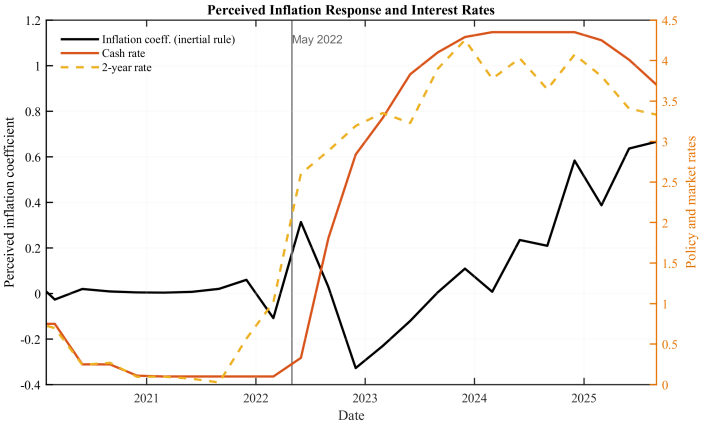
Uncertainty in policy-rate expectations



Notes: Range is defined as max minus min across forecasters at the indicated horizon.
Sources: RBA Market Economist Survey

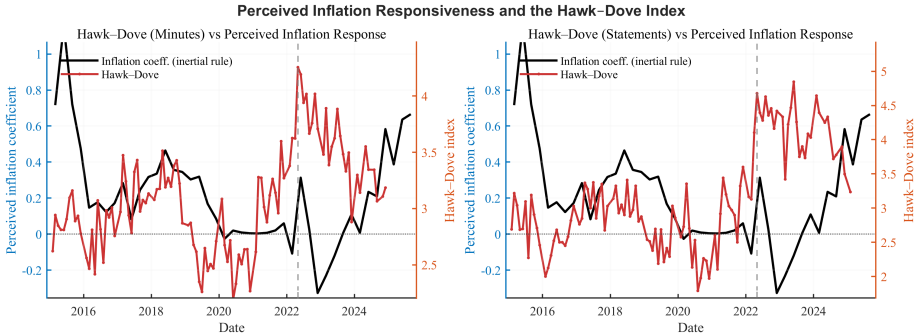
Rates and Perceived Inflation Response



Notes: Perceived inflation coefficient (left axis); cash rate and 2-year rate (right axis). Vertical line marks policy liftoff in May 2022.
Source: Authors' calculations; RBA.

▸ Policy Surprise

Policy Hawkishness and Perceived Inflation Response

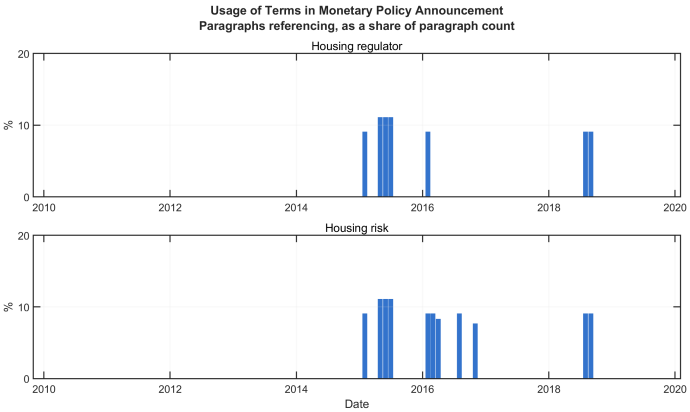


Notes: The perceived inflation coefficient (left axes) is the estimate from the inertial policy rule only. Hawk–Dove indices (right axes) are constructed from RBA Minutes and Statements.
Sources: Authors' calculations; RBA; Jones (2025)

Conclusion

- **Perceptions** evolved in phases mirroring policy environment
- Markets learn from *what is said*, but **perceptions are driven by actions** when uncertainty is high.
- **Policy implications**—be clear about which indicators matter and how, act consistently when those conditions are met, and monitor how communication is perceived.

Housing risk and regulation language



Notes: Housing words include: dwelling prices, housing credit, housing market, housing conditions and household debt. Risk words include: downside risk, concern(s) and risk(s). Regulator words include: regulator(s) and APRA. Abating words include: eased, declining, decline(s), easing, fall(s) and abate. Housing regulator includes a housing word and a regulator word. Housing risk includes a housing word and a risk word. All groups exclude any abating words.
Sources: Authors' calculations; RBA

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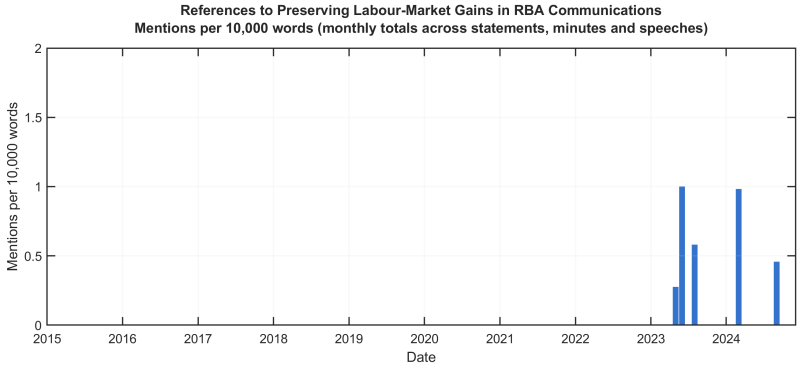
Language signals about the labour market



Notes: The series counts mentions of phrases related to preserving labour-market gains (e.g., "preserve the gains", "preserving gains") in RBA policy meeting statements, meeting minutes, and speeches. Values are monthly totals of mentions per 10{,}000 words across documents. Months with no documents are left blank (shown as gaps).
Sources: Authors' calculations; RBA

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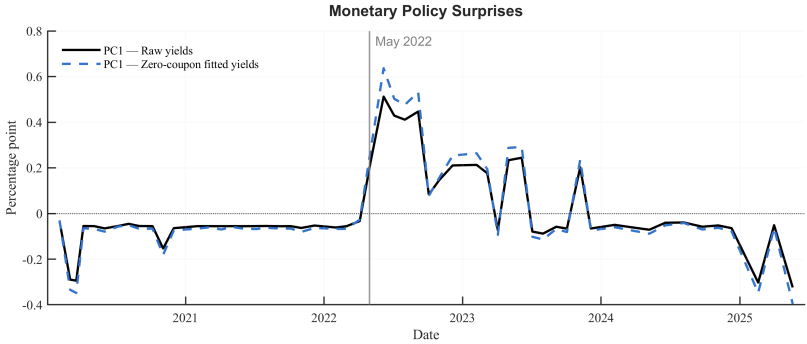
Monetary Policy Surprises



Monetary policy surprises, calculated as the first principal component of high-frequency changes around RBA announcements in raw and fitted zero-coupon yields with maturity up to 1 year. Vertical lines indicate liftoff in May 2022.
Sources: Authors' calculations; RBA

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References I

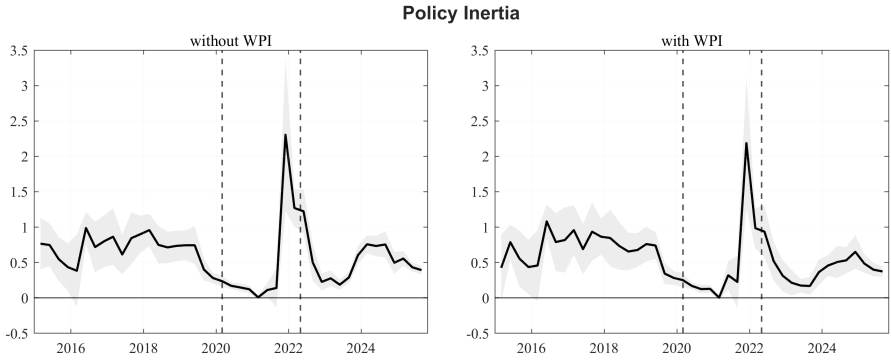
Bauer, Michael D, Carolin E Pflueger, and Adi Sunderam. 2024a. "Changing perceptions and post-pandemic monetary policy." In *Jackson Hole Symposium, Federal Reserve Bank of Kansas City, available at https://www. kansascityfed. org/Jackson% 20Hole/documents/10337/pflueger_jh. pdf.*

———. 2024b. "Perceptions about monetary policy." *The Quarterly Journal of Economics* 139 (4): 2227–2278.

Bauer, Michael D, and Eric T Swanson. 2023. "An alternative explanation for the "fed information effect"." *American Economic Review* 113 (3): 664–700.

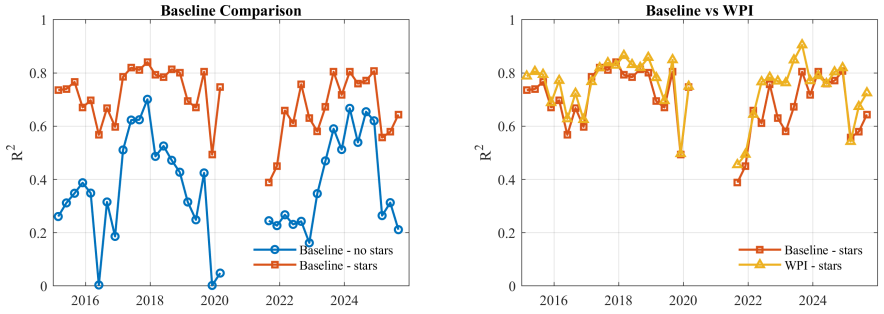
Hambur, Jonathan, and Qazi Haque. 2024. "Can We Use High-Frequency Data to Better Understand the Effects of Monetary Policy and Its Communication? Yes and No!" *Economic Record* 100, no. 328 (March): 3–43.

Perceived Policy Inertia



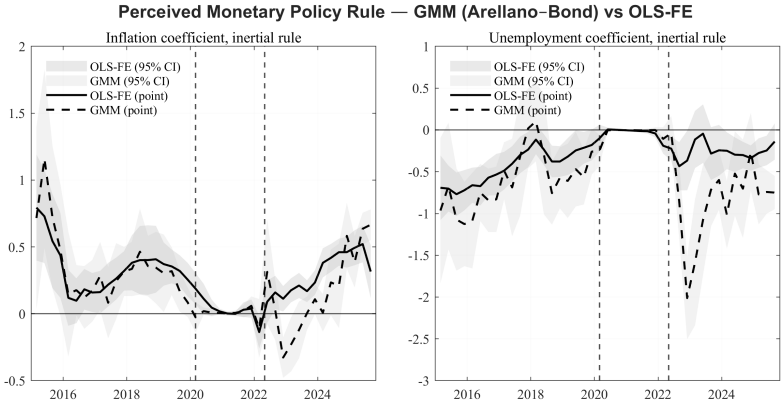
Sources: Authors' calculations; RBA

What drives cash-rate disagreement?



Rolling R^2 from forecaster–horizon Taylor-rule regressions. The left panel compares Baseline models with and without stars; the right panel compares the Baseline with the WPI extension.

Robustness: AB–GMM vs OLS (FE)



Notes: Coefficients of perceived monetary policy rules (inertial specification) estimated using rolling 4-quarter panel regressions on RBA market economist survey data (Feb 2015 – Aug 2025). Black lines are point estimates; grey areas are 95% confidence intervals with standard errors clustered by forecaster and horizon. Estimates labelled "GMM" use the Arellano–Bond estimator; "OLS-FE" runs OLS with forecaster fixed effects. Vertical dashed lines mark March 2020 and May 2022.
Sources: Authors' calculations; RBA

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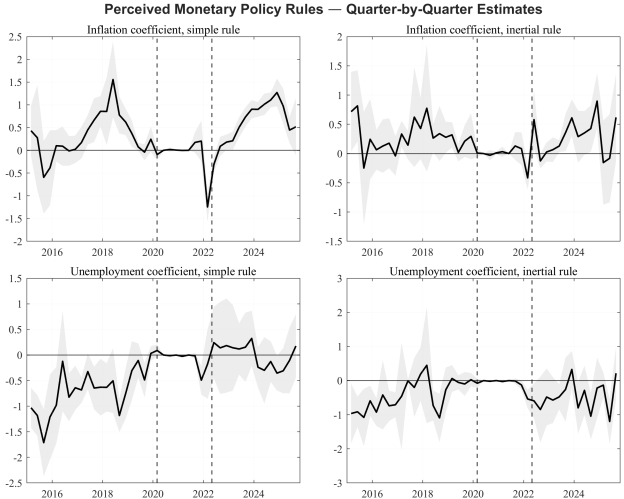
Robustness: Quarter-by-quarter estimates



Coefficients of perceived monetary policy rules estimated quarter-by-quarter from RBA market economist survey, February 2015 to August 2025. The left panels show estimates of the simple rule and the right panels show estimates that allow for monetary policy inertia. Gray-shaded areas are 95% confidence intervals based on clustered standard errors (by forecasters and horizon). Vertical lines show the zero lower bound period between March 2020 and May 2022.