Discussion - The Inflation Accelerator

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Paper in a nutshell

- New Keynesian model
  - Calvo-type time-dependent pricing
  - Specificity: firms produce a continuum of goods
  - Extensive margin decision: how many (but not which) goods to reprice
- Rationalize the joint dynamics of extensive and intensive margin

$$\pi_t = \Pr(\text{price change}) \times \mathbb{E}\left[\text{price \% change} \mid \text{price change}\right]$$

- Slope of Phillips Curve (PC) is state-dependent and increases with inflation
  - Standard Calvo predicts a concave PC
- More tractable than menu costs models
  - One additional state variable (within-firm misallocation) *vs.* the whole distribution

Literature reassessing inflation dynamics in the aftermath of COVID

Starting point: High inflation in 2022, flat PC and small changes in output

Competing explanations

- Shift of PC
  - Cost-push shocks (standard medium-scale DSGE; Dao et al., 2020)
  - De-anchoring of expectations (Beaudry et al., 2025)
- Non-linear PC
  - Rapidly expanding literature

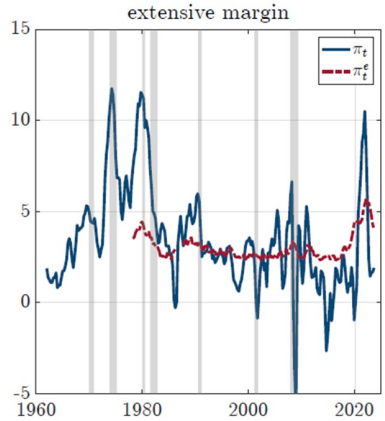
Literature on convex Phillips curves

$$\text{Slope of PC} = \frac{\partial \pi}{\partial \text{Output Gap}} = \frac{\partial \pi}{\partial \text{Marginal Cost}} \times \frac{\partial \text{Marginal Cost}}{\partial \text{Output Gap}}$$

- Marginal cost convex in the output gap:
  - Capacity constraints (Boehm et al., 2022); increasing returns (Baek & Lee, 2025)
  - Labor mkt (Benigno & Eggertsson, 2024); rigidity (Schmitt-Grohé & Uribe, 2022)
- Price setting is convex in marginal cost:
  - Kinked demand (Harding et al., 2023)
  - Menu costs (Blanco et al., 2024a, 2024b)
  - Rotemberg (Reiter and Wende, 2024)
  - Time-dependent: Calvo-based PC is concave (Kocherlakota, 2024)
    - **This paper** endogenizes extensive margin in Calvo

Strengthen motivating evidence

- Important to measure contribution of extensive margin to inflation
- Decomposition based on Klenow & Kryvtsov (2008) in appendix
  - Sensitive to assumptions: Montag & Villar (2023) find a minor effect



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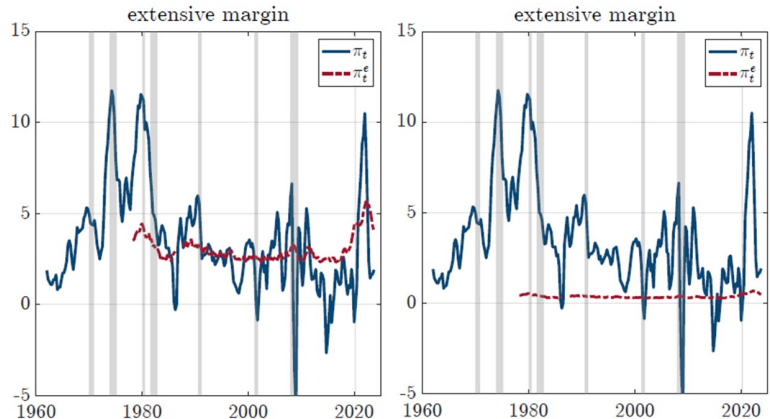

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Suggestions

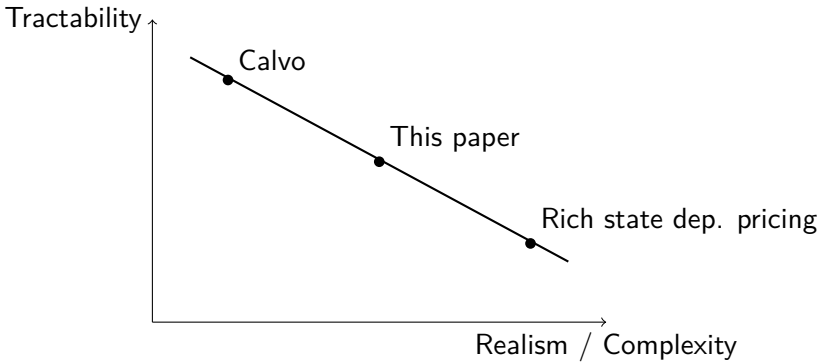
1. Bring evidence early in paper
2. Investigate sensitivity to alternative assumptions and decompositions
3. Use assumption-free decompositions (only when $\pi_t > 0$)

$$\ln \pi_t = \ln \Pr(\Delta p \neq 0 \mid t) \; + \; \ln \mathbb{E}[\Delta p \,\% \mid \Delta p \neq 0,\, t]$$

$$1 = \frac{\ln \Pr(\Delta p \neq 0 \mid t)}{\ln \pi_t} + \frac{\ln \mathbb{E}[\Delta p \,\% \mid \Delta p \neq 0,\, t]}{\ln \pi_t}$$

Qualifying tractability

- More tractable than rich menu costs models
- But still need third order approximation
- Difficult to estimate using log-likelihood techniques and scale up
- Compare third order to second/fourth order



What does the model miss relative to menu costs models?

Suggestions: comparison and validation

- *Extensive and intensive margin* of price changes
- *Dispersion* of price changes and markups
  - Data: dispersion went up after pandemic (?)
  - Prediction in menu-cost models; do data favor your mechanism?
- *Selection*: no selection in this paper, strong selection in menu costs
  - Compare with empirical evidence
  - Implications?
- *Other moments* the model matches better or as well as menu cost

Organization and presentation

Streamline model variations

- Preferences, non-linear model vs. third-order vs. first-order approximation; steady state vs gaps; quarterly vs smoothed quarterly

Show non-linearity of inflation responses

- Paper focuses on output response to monetary shock

Implications for the drivers of inflation?

- Compare contributions of different shocks across models (Calvo/menu costs)?
- How much of the 2021–2023 inflation is re-attributed across shocks? Which shocks are "soaked up" by a convex PC?

Conclusion

A very important paper

Exciting avenue for future research and flexible framework for policy use!