Micro and macro cost-price dynamics in normal times and during inflation surges

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Summary

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- **Theory**:
  - Derive testable implications for the mappings from price gaps to adjustment probabilities and expected adjustments
- **Empirics**:
  - Test the implications by directly recovering the gap distribution from posted prices and marginal costs
  - Find supportive evidence for state-dependence
- **Calibrated quantitative model:**
  - Reproduce inflation dynamics from marginal costs dynamics
  - Compare model dynamics under alternative price setting frictions

Price Gaps in Sticky-Price Literature

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    Adam, Alexandrov and Weber (2024)
- Gagliardone, Gertler, Lenzu and Tielens (2025):
  - Recover price gaps *directly* using posted prices and marginal costs data

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- For simplicity, assume away strategic complementarities ($\Omega = 0$)
- Then price gap $x_{t-1}(f)$ is:

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- Is constant markups + $\mathbb{E}[x(f)] = 0$ enough?

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Empirical Insights

- Observing price gap distribution shows:
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  - Both support state-dependence and reject pure Calvo
- Which model implications require observing price gaps to be tested?
  - Can you recover price gap distribution according to Alvarez, Lippi and Oskolkov (2022) and compare it with the actual one?
  - Can you provide more insights into the dynamics or cross-industry heterogeneity of the gap distribution and/or hazard function?

Minor Comments

- How important is the degree of strategic complementarity for the distribution of gaps and your results?
- Can you test your model by comparing estimates of ϕ?

$$h_b = (1 - \theta^0) + \phi(x_b^2 + \sigma_b^2) + u_b$$

$$\pi_b = \phi_b^0 x_b + \phi x_b^3 + \omega_b$$

- What are the implications of aggregating individual product prices to construct the firm price index?

$$P_{ft} = \prod_{p \in \mathcal{P}_{ft}} \left(\frac{P_{pt}}{P_{pt-1}} \right)^{\bar{s}_{pt}} P_{ft-1}$$

Final Remarks

- Carefully executed paper with invaluable insights into price gap distribution – a key object of sticky-price models
- Big advantage with respect to the literature due to direct observation of price gaps
- I think you could leverage your advantage even more!