Why Do Supply Disruptions Lead to Inflation? Survey Evidence from the COVID Pandemic

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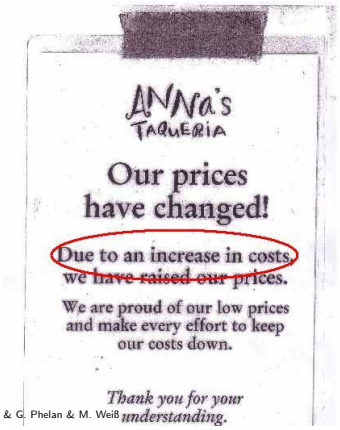
October 1st, 2025

Justifying Price Increases (Restaurant)



Theory: Model Overview

- Model of rational, Bayesian, agents
  - Previous literature: "fairness" (Kahnemann et al (1986), Rotemberg (2005))
  - Goal: use game theory to explain this
    We do not assume the result, we derive it
    Boils down to firm incentives, and how they depend on shocks
- Firms more information, and set a price
  - Consumers less informed, but can learn from the price
  - What is the strategy? Do they offer a sticky or a flexible price?
- Strategic environment
  - Firms concerned of consumers' reactions to price changes
  - Consumers wary of being exploited, respond strategically

We show: Stickiness arises endogenously

Theory: Price Adjustment

Proposition

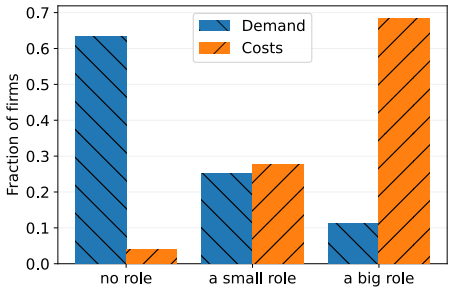
- *Firms adjust to ζ iif α is high enough*
- *Firms adjust to k for all α*

- Reason:
  - Demand ζ: If fraction of informed is high enough, IC constraint satisfied $\Longrightarrow$ firms adjust prices. Otherwise, sticky price.
  - Supply k: No IC constraint, since no strategic motives. Firms always adjust prices.

  (in PBE, consumers will infer costs, firms "enjoy" credibility to adjust prices and hence consumers find price increases "acceptable")
- Notice: if α low, prices adjust to k but not to ζ
  Different than standard models
- Our survey provides support to this prediction

Survey: Main Result: Reason for Increasing Prices

Figure: Roles Played by Higher Demand and Higher Costs



Counterfactuals: Predicted Inflation

	Friction: Exogenous (Calvo)	Friction: Endogenous (Incentive Based)
FRACTION ADJUSTERS		
To Demand	59.0*	11.0*
To Supply	59.0*	100.0
To Both	59.0*	11.0
PREDICTED INFLATION		
By Demand	2.5	0.5
By Supply	4.2	7.2
Total	6.9	7.7

Notes: Numbers in (%). * denotes calibrated values.