Discussion of “Pricing Under Distress”
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1. Monetary policy effectiveness
   - higher in times when firms adjust less their posted prices

2. Pricing under uncertainty (risk), with endogenously sticky prices from menu costs
   - realization of higher demand dispersion $\rightarrow$ more flexible (weaker non-neutrality)
   - 'riots': news of higher demand dispersion $\rightarrow$ less flexible (stronger non-neutrality)
This paper: Keys

1. Monetary policy effectiveness
   - higher in times when firms adjust less their **posted prices**

2. Pricing under uncertainty (**risk**), with endogenously sticky prices from **menu costs**
   - realization of higher demand dispersion → more flexible (weaker non-neutrality)
   - 'riots': **news of higher demand dispersion** → less flexible (stronger non-neutrality)

My discussion

1. Monetary policy effectiveness
   - higher in times when firms adjust less their **price plans**

2. Pricing under uncertainty (**risk and ambiguity**), with endogenously sticky prices from **lack of confidence over possible demand shape**
   - realization of higher demand dispersion → more flexible (weaker non-neutrality)
   - 'riots': **loss of confidence** → less flexible (stronger non-neutrality)
What the paper does (in a nutshell)

- Empirics: Quasi natural experiment of Chilean Riots in 2019
  - posted price changes have lower frequency & larger size
  - rule out supply-based forces

- Theory insight & quantitative model:
  - on news vs realization of idiosyncratic demand dispersion
  - account for change in pricing by news about higher demand dispersion

- Timing matters: monetary policy is more (less) effective under news (realization)
Comment (1): Micro-moments & monetary effectiveness

1. Frequency of price changes: not enough

- models: Taylor, Calvo, menu costs, rational inattention, etc.
- all can be made consistent with data on frequency of price changes
- but state-dependency ('selection effect') \(\rightarrow\) lower monetary effectiveness
- kurtosis/frequency as sufficient statistic in standard models (Alvarez-Lippi)
- holding constant selection effect (kurtosis) then frequency is enough

In these standard models: conditional on changing price, close perfectly the price gap, BUT...
Comment (1): Reference prices & monetary effectiveness

2. But data are more 'complicated': kurtosis/frequency may not be enough

- conditional on price change, return to a previously posted price
- appears as memory in prices/reference prices/price plans
  (Eichenbaum et al. 2011, Kehoe, Midrigan 2015, Matejka 2015, Stevens 2014)
- very strong evidence (control for sales etc), challenging for standard menu cost
- conditional on changing price, likely close imperfectly the price gap
  (since zero probability that frictionless new price = previous price)
- flexibility of price plans (vs. posted prices) now crucial for monetary non-neutrality
- quantify price plan moment: do price plans appear more/less sticky during riots?
Comment (2): Pricing under uncertainty

Uncertainty as Risk (impose full confidence in probability assessments)

- **Stochastic volatility**: level of demand (this paper), productivity (Vavra 2014)
  - anticipation (less flexible) vs realization (more flexible)

- **Learning under risk**: 
  - about idiosyncratic productivity: 'wait and see' vs volatility of beliefs 
  - Baley, Blanco 2018: volatility of beliefs dominates → more flexibility 
  - about demand shape: experiment more in bad times 
    (Rothschild 1974, Bachmann, Moscarini 2011)

Uncertainty also as Ambiguity

- Allows for lack of confidence in demand shapes (Ilut, Valchev, Vincent 2020)
- consistent with large decision-theory and managerial literature
Comment (2): Pricing under uncertainty

Figure 4: Riots in Chile: Oct.18 - Nov.17

Risk: 'Pricing under distress’
(higher demand dispersion)
Comment (2): Pricing under uncertainty

Figure 4: Riots in Chile: Oct.18 - Nov.17

Risk: 'Pricing under distress'
(higher demand dispersion)

and/or

Ambiguity: 'Paralyzed by fear'
(less confident in demand shapes)
Pricing under ambiguity: Plausible Prior Demand Functions
Pricing under ambiguity: Worst-case prior is conditional on price

\[ m(p) \]

\[ m(p; \hat{p}) \]

\[ m(p; \hat{p}) \]

\[ m(p; \hat{p}) \]

\[ m(p; \hat{p}) \]
Pricing under ambiguity: As if kinked expected demand
Pricing under ambiguity: Kinks at observed past price levels
Paralyzed by fear

- Kinks from lower uncertainty at previously posted prices $\Rightarrow$
  endogenous, time-varying and history-dependent cost of price change $\Rightarrow$ prices
  1. are sticky: do not want to move and face higher uncertainty
  2. display memory: price changes likely to move back to 'safer' prices (price plans)
  3. exhibit both small and large changes

- Significant and persistent monetary non-neutrality (not summarized by kurtosis)

- More ambiguity ('the riots')
  1. less flexibility & larger price changes (like 'pricing under distress')
  2. more sticky price plans
  3. stronger monetary effectiveness (both posted prices and price plans are stickier)
Conclusion

- Great paper: empirics, theory insights, quantitative model
- Rich and important policy implications