Small and Large Price Changes and the Propagation of Monetary Shocks

by Alvarez, Le Bihan and Lippi (ALL)

Discussion by

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The Paper

Documents
- Small and large changes in individual prices
- The size distribution of price changes displays positive excess kurtosis.

Formulates a general model
- Nests canonical models of price adjustment
  - Multiproduct firms and random menu costs on firms' products
- Predicts the effectiveness of monetary policy depends on 1) ε, 2) kurtosis, and 3) frequency of price adjustment

Great paper!

- Sufficient statistic is novel in this literature—and extremely useful!
  - Models in the literature often opaque and cumbersome

- Bridges gap between empirical and theoretical work
  - Empirical work focused on frequency of adjustment.
  - ALL show kurtosis at least as important

- Admirable thoroughness (appendixes A to S)
  - Any question a reader might have is already answered!

Great paper! (cont.d)

- Thoroughness and generality makes the job of a discussant impossible!
  - Perfect paper in the literature

- So…I will discuss the literature

What if we introduce durables in the model?

- Flexibility of Durables is all that matters for the effectiveness of monetary policy
  - Barsky et al (AER 2007), largely neglected in the literature

- Prediction of model with durables counterfactual
  - In data: durables' prices are fairly flexible (Klenow and Malin and others)
  - In model: following an expansionary monetary intervention, if durables' prices are more flexible, prices of durables increase. Leads to a contraction in durables
  - Counterfactual:
    - Monetary policy is expansionary
    - Response of GDP is driven entirely by durables, whereas nondurables and services show no response

Durables in a NK model (cont.d)

- To rescue the NK model, need wage rigidity
  - Together with big adjustment costs!

- Why so much work on the analysis of micro data on price adjustment, then?
  - We should be looking only at wages
  - If prices, only durable goods'
  - Conclusion also stems from other fully-fledged models.
    - I.e., in Christiano, Eichenbaum and Evans (JPE 2005), all that matters for the effectiveness of monetary policy is wage rigidity; price rigidity plays a tiny quantitative role--- if any.

Back to ALL

- Model could be reformulated for wage rather than price adjustments

- Same for empirical work: indeed, there is evidence that firms adjust all wages at once
  (Olivei and Tenreyro, 2007---survey evidence):
  - US firms revise wages once a year, typically in Q4---changes implemented in Jan 1. (Timing of optimization decision versus timing of actual change maybe important!)
  - Timing of wage adjustments due to 'fiscal year end'.
  - Effectiveness of monetary policy is seasonal—consistent with seasonality in frequency
  - Bunching of wage adjustment consistent with a ALL's idea of a (fixed) menu cost that applies to all workers.

Implications for policy makers

- Can central bankers use the simple sufficient stat to predict the effectiveness of their intervention?
  - Not yet! (Even if Barsky et al. were not a concern)
  - In a more complex model with more general cost shocks, adjustment costs, financial frictions, etc., there will be other variables involved.
    - For trade guys life is easier, because they ignore all adjustment costs and any transition—ss analysis; here, short term adjustment is critical
- Still ALL succeed in providing a simple sufficient statistic to compare across a class of models
  - Insightful academic (and pedagogic) contribution!

Summary

- High academic value added!

- Not ready for policy implementation – but opening a new and promising way, which may (should) reset the standards in the literature

- Literature needs to think harder about durables
  - empirical focus should be on the adjustment of durable's prices---and wages!