Discussion of “The Real Effects of Monetary Shocks: Evidence from Micro Pricing Moments”
by Hong, Klepacz, Pasten, and Schoenle

Volker Hahn
Approach

Question: Which micro moments are relevant for understanding the effectiveness of monetary policy shocks?

Idea:

- For a specific micro moment, split the data into an above-median and a below-median part.
- Construct an aggregate variable of interest (inflation, sales) for both parts of the data.
- Estimate a VAR that contains these new macro variables.
- Check whether monetary policy shocks affect the two macro variables differently.
Results

- A higher frequency of price adjustment means
  1. a stronger response of inflation to monetary policy shocks.
  2. a weaker response of sales to monetary policy shocks.
- Kurtosis is irrelevant for understanding the effects of monetary policy shocks.
- Puzzle: What about Alvarez et al. (2016)’s sufficient-statistic approach?
- Model comparison: Calvo vs menu-cost model (Calvo Plus model)
Comments on the main approach

- simple yet powerful idea
- kurtosis-irrelevance result intriguing
  - role of measurement errors and heterogeneity
- straightforward extensions of the approach
  - effects of other shocks (government-spending shocks)
  - non-monotonic effects of micro moments: split at terciles
  - relevance of other micro moments (size of price changes, skewness, product turnover, frequency of sales,...)
- a micro moment found to be relevant could just be correlated with a truly relevant, unobservable variable.
- It is not completely obvious that a micro variable that is found to be relevant according to their approach is also relevant in a model without heterogeneity.
Comments on the relationship to ALL

- Puzzling that, in contrast with ALL, higher kurtosis can imply smaller effect of monetary policy on output.
- in ALL, kurtosis increases monotonically with
  1. the fraction of free adjustments and
  2. the number of products that a firm produces.
- in the model considered in the paper, shocks are leptokurtic.
- There are more parameters that can affect kurtosis.
- in the paper, for given frequency of price adjustment, kurtosis can be increased by lowering menu costs and lowering the Calvo parameter.
- The high-kurtosis sector has low $\alpha_j = 0.138$. As the frequency of price adjustment is 0.25, most price changes are ”not of the Calvo type” and thus lead to a low degree of monetary non-neutrality.
- Hence no contradiction.
Comments on Comparison Calvo vs Menu Costs

- Multiproduct firms or real rigidities might increase the monetary non-neutrality in the high-kurtosis sector (Midrigan 2011, Gertler Leahy 2008)
- Other calibration targets might be more favorable to the menu-cost model (corr. of freq of price adjustment with inflation).
- It might be instructive to show the distribution of price changes.

My overall conclusion:
- Kurtosis may be less relevant for understanding the effects of monetary policy than previously thought.
- Other factors, in addition to the ones considered by ALL, influence kurtosis in more general models. Hence, no clean relationship between kurtosis and monetary non-neutrality (for fixed frequency).
- Support for Hahn Marencak (2019)?
Discussion of “Price Trends over the Product Life Cycle and the Optimal Inflation Target”
by Adam and Weber

Volker Hahn
Summary

► Question: How high should a central bank’s (the Bank of England’s) inflation target be?
► Answer: In the case of the UK, it should be quite high (2.6% to 3.2%).
► How can such a high rate be optimal in an NK model?
  ► Think about different expenditure items, Calvo pricing, and increased productivity over a product’s lifecycle
  ► Within each expenditure item, there are inefficient and efficient relative price differences.
    1. Efficient price dispersion comes from productivity differences
    2. Inefficient price dispersion comes staggered price setting
  ► Positive inflation can minimize inefficient price dispersion (efficient price dispersion unaffected by changes in steady-state inflation).
Contribution

- document heterogeneity across expenditure items
  - age trends in relative prices, freq. of price adjustments, turnover rates, ...
- extension to Adam and Weber (2019), NK model with product items with different forms of heterogeneity
- derive a formula to determine the optimal steady-state inflation
- derive also an approximate formula that incorporates only some dimensions of heterogeneity.
- one key component in the formula \((g_z/q_z)\) can be easily obtained by estimating the rate of relative price decline in an expenditure item over a product’s lifecycle
- apply the formula to ONS data
- Quite surprising: Mismeasuring quality improvements involves a biased estimate of \(g_z/q_z\) but does not lead to an inaccurate optimal inflation target
impressive formula for optimal inflation rate that relies on observable values, the approximate formula is quite intuitive, careful application to UK

Why are relative prices declining over the lifetime of a product?
  - This paper: learning by doing over a product’s lifecycle (and new products are only moderately better)
  - Alternative explanations: Skimming/Intertemporal price discrimination (see Stokey 1979 and others)
  - people might prefer new products (this could be incorporated by assuming that, for some products, effective quality decreases over their lifetime)

goods whose prices are declining most, contribute the most to a high inflation target (e.g. Ladys Scarf 20% relative price drop per year)

Perhaps one could exclude items where, arguably, ”newness” matters
Comments

- How good is the linear approximation of the optimal-inflation formula?
- Why not compute optimal inflation using the nonlinear formula?
  - $\alpha_z$ and $\delta_z$ can be directly calculated
  - even if they could not be measured accurately, the approximate formula would suggest that they do not matter anyway
- Show results regarding the quantitative relevance of $\beta(\gamma^e)^{1-\sigma} \to 1$. (for $\sigma = 1$, has the interpretation that the social planner treats all generations equally?)
Comments

- Is there evidence that price changes are synchronized within expenditure items?
- What would the optimal inflation rate according to Adam and Weber (2019, AER) be?
- How high are the welfare losses for steady-state inflation rates of 0% or 2%?
- Heterogeneity with respect to $\theta$? Does not influence optimal inflation?
- The relative productivity growth rates of expenditure items are obtained from relative inflation rates. If quality changes are not measured correctly for some expenditure items, bias could result.
- Parameters might depend on the level of inflation.