

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 Marenchak (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

Comments

- ▶ 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?
 - ▶ α_z and δ_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 $\beta(\gamma^e)^{1-\sigma} \rightarrow 1$. (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 θ ? 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