

Discussion of "Not all supply curves slope up" written by Edvin Ahlander, Mathias Klein and Evi Pappa

Jan Brůha

Czech National Bank

Heterogeneous Agents in Macroeconomic Models, 16 May 2024

Main findings



- Very interesting paper on an important topic the estimates of the supply price elasticity
- Very policy relevant
- Careful data analysis I applaud the authors for their effort
- The paper uses the instrumental-variable regression to estimate the elasticity and finds it is around 0.3.
- The elasticity may be:
 - lower in times of low-capacity utilization
 - higher in times of high and volatilize inflation (in line with recent empirical and theoretical research)
 - low for exporting firms and firms with high sales volatility and high unit labor costs.

Comments on the choice of instruments



Recall the estimating equation: $p_{i,t} = \alpha_i + \alpha_m + Pq_{i,t} + u_{i,t}$

- The main instrument is the global economic activity shocks identified based on Baumeister and Hamilton (2019). This shock is assumed to:
 - 1. to increase oil production,
 - 2. world industrial production -- this is what one wants (correlated with $q_{i,t}$)
 - 3. and the oil price does one want to have this effect? (uncorrelated with $u_{i,t}$?)
- For some sectors/firms, this can be fine, but for others less so.
- The analogical comment applies to alternative instruments considered in the paper -- ECB or Swedish monetary policy shocks as these shocks may affect the costs of firms via working capital channel

Additional points (1): exporting firms



- The paper finds that the price elasticity is lower for exporters
 - Why is it so?
 - Does it reflect international competition?
 - Or different cost structure (the need to pay transport costs)?
 - Does the analysis disentangle the industry effect from export effect?
 - If it is due to international completion, does it differ across exporting markets (e.g.EU versus oversees)?

• It can be also interesting to look at supply price elasticity of firms in industries, where Swedish firms face international competition (measured e.g. by imports/domestic VA).

Additional points (2): entry and exit



- Firms that enter or exit may have different supply price elasticity than the firms that stay at the market
- How did the entries and exists were dealt with in the empirical analysis?
 - The firms that enter / exit may be systematically different from the incumbents
 - How does it affect the official indeces?

Conclusion



Very interesting and policy-relevant paper

- To summary, I have three points to discussion:
 - 1. Validity of instruments
 - 2. Exporting firms
 - 3. The effect of entry / exit on the price behavior of firms