Retailer Markup and Exchange Rate Pass-Through: Evidence from the Mexican CPI Micro Data

Discussion

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Inflation and Exchange Rate in Mexico

Shaded areas indicate U.S. recessions

Sources: Board of Governors, World Bank

myf.red/g/kMBc
Overall: Nice and relevant paper!

Plan for the discussion:

- Summary of the paper
- Relation to the literature
- Assumptions of the model
- Validating the hypothesis
- Few additional exercises
Model with nested CES preferences to obtain markups for retailers

- Assume fixed taste parameters and flexible prices
- Markups are more flexible when retailers share increase

Attenuation bias in ERPT when the store type is not used as control
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Attenuation bias in ERPT when the store type is not used as control

\[ d \log p_{gr,\tau} = d \log c_{gr,\tau} + \frac{\partial \log M_{r,\tau}}{\partial \left( \frac{p_{r,\tau}}{p_{\tau}} \right)} d \log \left( \frac{p_{r,\tau}}{p_{\tau}} \right) + \frac{\partial \log M_{r,\tau}}{\partial \left( \frac{p_{\tau}}{p} \right)} d \log \left( \frac{p_{\tau}}{p} \right) \]

\[ < 0 \]

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\[ <0 \]

Then, estimate:

\[ \Delta \tilde{p} = \theta \Delta \tilde{e}_t + \beta_{r\tau} + \alpha_t + \epsilon_{gr\tau t} \]
Comment 1: Benchmark results to previous literature

- Reproduce previous estimates and compare:
  - Current estimates are larger than those in the literature even after the correction (Kochen-Samano report 0.1% to a 1% increase in ER)

- Why not estimate MRPT?
  - Current specification: $d \log p_{grTt} = dp_{grTt} - d \log p_{grTt-h}$
  - Harder to compare to previous estimates/literature
  - Response to ER depends on each individual product price-setting
Comment 2: Controlling for the frequency of price adjustment (FPA)

- Partially proxies for changes in the importance of price-spell censoring, which can in turn potentially affect measures of ERPT

- Potential way of validating the hypothesis of the paper. From Gopinath-Itshoki we know:
  - Higher mark-up elasticity both lowers pass-through and FPA (reductions in curvature of profit function)
Comment 3: Estimating the impact of markups on ERPT without observing them

- Are the implied markups/shares of your estimation reasonable?
  - Report statistics and/or a plot of the distribution of the estimated fixed effects.
  - Approximate the retail concentration in a given city using DENUE. Report the correlation of estimated fixed effects for a given city with those approximated using DENUE.
HHI for retailers: Nielsen Data Mexico (Argente-Hsieh-Lee)

Supermarkets

Kernel = epanechnikov, bandwidth = 0.0335

Density vs. Herfindahl of Retailers
Retailers within store type have market power

Pharmacy

Herfindahl of Retailers

Density

kernel = epanechnikov, bandwidth = 0.0574
For some types of store, high concentration in small cities

Price Club

Density

Herfindahl of Retailers

kernel = epanechnikov, bandwidth = 0.0781
Comment 4: Other exercises

- Compute time varying ERPT (Berger-Vavra), does it change when Wallmart entered Mexico?

- During this period, and given your estimated pass-through, what does a change in ER implies for aggregate inflation?