Discussion of

Dollar Invoicing and the Heterogeneity of Exchange Rate Pass-Through

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Dominant Currency Paradigm (DCP)

- This paper is part of the influential DCP agenda, which has produced a number of important insights:
  1. Exchange rate fluctuations leave Terms of trade (ToT) stable with consequences for the (lack of) expenditure switching
  2. Depreciations against the dollar, rather than the trade partner, drive import prices and import quantities
  3. Appreciation of the dollar leads to a decline in global trade

- The effects are stronger:
  1. the larger is the share of DCP invoicing
  2. the stickier are the price in the currency of invoicing
This paper

- Quantifies the role of the DCP invoicing share $S_j$ in explaining the heterogeneity of pass-through elasticities across countries:
  e.g. Switzerland (low $S_j$) vs Turkey (mid $S_j$) vs Argentina (high $S_j$)

- Uses Bayesian econometric techniques to estimate the following pass-through specification:

  $$\Delta p_{ij,t} = \gamma_{ij} \Delta e_{s_j,t} + (\tilde{\gamma} - \gamma_{ij}) \Delta e_{ij,t} + \lambda_{ij} + \delta_t + \varepsilon_{ij,t},$$

  where $\gamma_{ij} | S_j \sim N(\mu_0,k + \mu_1,k S_j, \omega_k^2)$ w/prob $\pi_k(S_j)$, $k = 1..K$

- The goal is to characterize the density $f(\gamma_{ij} | S_j)$
  — that is, what is the distribution of ERPT elasticity conditional on the country’s DCP invoicing share in imports
Findings on $f(\gamma_{ij}|S_j)$

1. High average pass-through $\gamma_{ij}$ from dollar exchange rate $\Delta e_{\$j}$
2. $\mathbb{E}\{\gamma_{ij}|S_j\}$ increases by about 0.15 over the range of $S_j$
3. $R^2$ of $S_j$ in explaining variation in $\gamma_{ij}$ is about 16%
Comment 1: Assumptions

- Why a constant $\tilde{\gamma}$ in

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2. because trade that is not invoiced in $ is in LCP
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• Why a constant $\bar{\gamma}$ in

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1. to economize on the number of parameters
2. because trade that is not invoiced in $ is in LCP

• Why this richness in the distribution

$$\gamma_{ij}|S_j \sim \mathcal{N}(\mu_{0,k} + \mu_{1,k} S_j, \omega_k^2) \text{ w/prob } \pi_k(S_j), \ k = 1..K$$

1. Can one tradeoff less richness here and relax constant $\bar{\gamma}$?
2. What is the role of $K = 2$ vs $K = 1$? Heavy tails?
3. What is the shape of $\pi_1(S_j)$ and its role in fitting $E\{\gamma_{ij}|S_j\}$?
   — $E\{\gamma_{ij}|S_j\}$ looks pretty linear and $\text{std}(\gamma_{ij}|S_j)$ looks pretty constant
Comment 2: Data Limitations

- Ideally, one needs $S_{ij}$ — invoicing share by country pair, while the available data is at the country level, $S_j$

- The paper justifies it with the micro data on Columbia
  - In Columbia, $S_{ij}$ varies little across $i$
  - Columbia is an unfortunate example, since $S_j \approx 100\%$ dollar
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- Variation in $S_{ij}$ and use of third currencies (PCP) in Belgium

![Graphs showing trade shares in Belgium](image-url)
Trend: Swiss imports from Belgium

Amiti, Itskhoki and Konings (2018b) “Dominant Currencies...”
Comment 3: Structural Equation

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- Partially sticky prices (assume \( S^L_{ij} = 0 \) for simplicity):
  \[ \Delta p_{ij,t} = \theta \cdot S^S_{ij} \Delta e_{$,j}$,t + (1 - \theta) \cdot \Delta \tilde{p}_{ij,t}, \]

where desired price adjustment \( \Delta \tilde{p}_{ij,t} \) has a complex structure (see AIK 2014 and 2018b):

\[ \Delta \tilde{p}_{ij,t} = \left[ \alpha_i + \beta_i \varphi^i_j + \gamma_i \omega_{ij} \right] \Delta e_{ij,t} + \beta^S \varphi^j \Delta e_{$,j}$,t + \ldots \]

- as horizon increases, \( \Delta \tilde{p}_{ij,t} \) should become more important than \( \Delta e_{$,j}$,t \) in explaining \( \Delta p_{ij,t} \)
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- most surprising is the role \( \Delta e_{s,j} \) plays beyond annual horizon: price stickiness vs endogenous monetary policy response?
Comment 4: Quantities

- Interesting to see the results for quantities?
- What is the heterogeneity in the implied elasticities?
- Why results for quantities are less precise?