

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

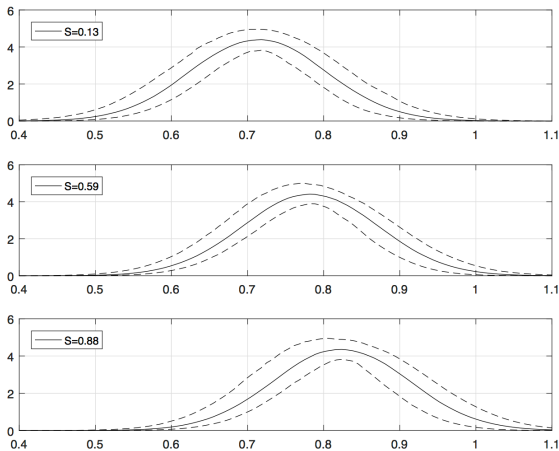
- Quantifies the role of the DCP invoicing share S_j in explaining the heterogeneity of pass-through elasticities across countries:
e.g. Switzerland (low S_j) vs Turkey (mid S_j) vs Argentina (high S_j)
- Uses Bayesian econometric techniques to estimate the following pass-through specification:

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

where $\gamma_{ij} | S_j \sim \mathcal{N}(\mu_{0,k} + \mu_{1,k} S_j, \omega_k^2)$ 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 γ_{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 γ_{ij} is about 16%

Comment 1: Assumptions

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

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

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

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- Why this richness in the distribution

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

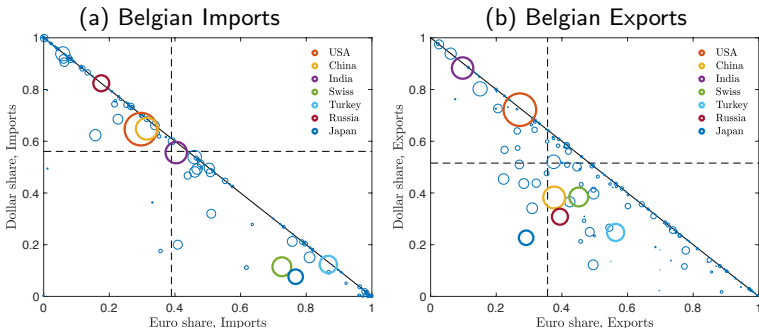
- ① Can one tradeoff less richness here and relax constant $\bar{\gamma}$?
- ② What is the role of $K = 2$ vs $K = 1$? Heavy tails?
- ③ What is the shape of $\pi_1(S_j)$ and its role in fitting $\mathbb{E}\{\gamma_{ij} | S_j\}$?
— $\mathbb{E}\{\gamma_{ij} | S_j\}$ looks pretty linear and $\text{std}(\gamma_{ij}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

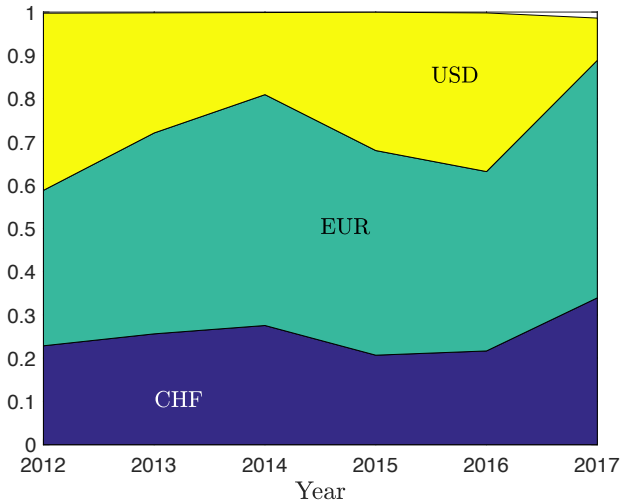
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- Variation in S_{ij} and use of third currencies (PCP) in Belgium



Trend: Swiss imports from Belgium

Amiti, Itskhoki and Konings (2018b) "Dominant Currencies..."



Comment 3: Structural Equation

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$$\Delta p_{ij,t} = \theta \cdot S_{ij}^{\$} \Delta e_{\$j,t} + (1 - \theta) \cdot \Delta \tilde{p}_{ij,t},$$

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

$$\Delta \tilde{p}_{ij,t} = \left[\alpha_i + \beta_i \varphi_j^i + \gamma_i w_{ij} \right] \Delta e_{ij,t} + \beta_{\$} \varphi_j^{\$} \Delta e_{\$j,t} + \dots$$

- 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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- as horizon increases, $\Delta \tilde{p}_{ij,t}$ should become more important than $\Delta e_{\$j,t}$ in explaining $\Delta p_{ij,t}$
- most surprising is the role $\Delta e_{\$j}$ 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?