

Financial Globalization, 1970-2015: Winners and Losers

Capelle & Pellegrino (2021)

Discussion by Ricardo Reyes-Heroles

Federal Reserve Board

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Overview 1/2

- **What?** Quantify the aggregate and distributional consequences of financial globalization around the world from 1970-2015.

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- **What?** Quantify the aggregate and distributional consequences of financial globalization around the world from 1970-2015.
- **Why?** Long and rapid process of financial globalization
 - Profound implications for global economic activity
 - No conclusive evidence on winners / losers
- **How?** Propose and conduct a **wedge accounting exercise** based on a **gravity model of international investment**.
 - Model of international investment (PSW, 2021) that delivers gravity-type equations for foreign asset demand.
 - Frictions in international capital markets
 - Idiosyncratic taste shocks for specific location-specific investments
 - **Invert model to recover frictions**
 - Recover **financial globalization wedges** (FGW)—assumptions required because of data availability issues
 - Conduct counterfactuals

- **Methodological contribution:**

- Inversion of model to back out FGW given available data for 1970-2015
[Reyes-Heroles (2016), EKNR (2016), and other macro-trade papers...]

- **Novel quantitative results:**

- Uneven financial globalization \Rightarrow global misallocation of capital
- Financial globalization \Rightarrow increased inequality between countries
- Financial globalization \Rightarrow effects on inequality within countries depend on level of development

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- Financial globalization \Rightarrow effects on inequality within countries depend on level of development

\rightarrow Nice paper with a clear contribution! Clean framework and easy to implement.

The Model

Country $i \in \{1, \dots, N\}$ produces homogeneous final good used for con. or inv.

- **Technologies:** $y_{it} = z_i n_{it}^{v_i} h_{it}^{\eta_i} k_{it}^{1-v_i-\eta_i}$
- **Resources:** $\sum_{i=1}^I y_{it} = \sum_{i=1}^I (k_{it+1} + c_{it})$
- **Saving:** Investors save a constant share of their income

$$s_i = \gamma_i (v_i + \eta_j) y_i = \gamma_i (v_i + \eta_j) (w_{it} \ell_i + m_{it} n_i)$$

- **Bilateral investment positions:** Share that country i 's investors invest in country h (if $\epsilon = 1$)

$$\pi_{hi} = \frac{(1 - \tau_{hi}) r_h k_h \exp(\mathbf{d}'_{hi} \beta)}{\sum_{l=1}^I (1 - \tau_{li}) r_l k_l \exp(\mathbf{d}'_{li} \beta)} \rightarrow \text{Gravity!}$$

- **Asset Markets Clearing:**

$$k_i = \sum_{h=1}^I a_{ih} = \sum_{h=1}^I \pi_{ih} s_h$$

Inverting the model

Note that there are $l \times (l - 1)$ π_{hi} 's and τ_{hi} , but

$$\underbrace{\pi_{hi}}_{\text{No panel data}} = \frac{(1 - \tau_{hi})(1 - \nu_h - \eta_h)y_h \exp(\mathbf{d}'_{hi}\beta)}{\sum_{l=1}^l (1 - \tau_{li})(1 - \nu_l - \eta_l)y_l \exp(\mathbf{d}'_{li}\beta)},$$

and panel data is only available for aggregate external asset and liability positions.

→ **Reduce dimensionality** of τ_{hi} : $1 - \tau_{hi} = (1 - \tau_h^{\text{in}}) \times (1 - \tau_i^{\text{out}})$

$$\Rightarrow \pi_{hi} = f\left(\left\{\tau_l^{\text{in}}\right\}_{l=1,\dots,l}, \mathbf{X}\right) \Rightarrow k_i^e \equiv \sum_{h \neq i} a_{ih} = \sum_{h \neq i} f\left(\left\{\tau_l^{\text{in}}\right\}_{l=1,\dots,l}, \mathbf{X}\right) s_j^e$$

→ System of l equations and l unknowns → *Nice!*

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Comment 1: What do the assumptions on frictions imply for identification?

- Is τ_i^{in} isomorphic to productivity z_i ? $R_i \propto (1 - \tau_{hi})r_h$
- Is τ_i^{out} isomorphic to home-bias in models that feature such parameter?
- Euler equation wedge? [Reyes-Heroles (2016), EKNR (2016)]

Model Choice

Comment 2: Does the model miss any key forces?

- Wedge accounting/decomposition \Rightarrow **Correct** model by assumption
- Do we think this is the correct model for the analysis? Why?
 \rightarrow Paper is missing a discussion on this issue.

Okawa and van Wincoop (2012): “Not surprising therefore, we find that a gravity specification for asset trade is much less robust to changes in model assumptions than in the trade literature.”

Specific issues:

- 1 Portfolio diversification arises from investor heterogeneity, **not risk aversion**. No risk at all.
- 2 Asset demand depends on only **one relative price**.

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- ② Asset demand depends on only **one relative price**.

Very nice paper with thought-provoking results!