# Discussion of "Unbalanced Financial Globalization" by Capelle and Pellegrino

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# financial globalization

Large increase in external assets: from 50% of GDP in 1970 to 300% of GDP in 2020

▶ Did this improve capital allocation across countries?

#### Capelle and Pellegrino 2025:

- Neoclassical growth model to assess capital misallocation
- ► Imperfect substitutability between countries + wedges to explain data on gross flows
- Wedges on both inward and outward flows

#### Result:

- ▶ Both inward and outward openness increased in AE, only outward in EM
- ► Capital allocation got <u>worse</u>

## plan

- ► context: recent work on imbalances + recent work on neoclassical global economy
- ► model
- ► wedges



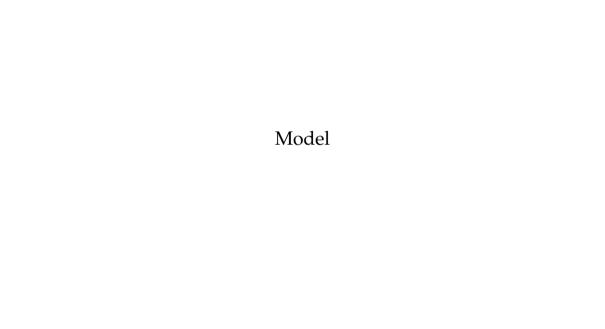
## context

### Global imbalances with heterogeneous countries:

- ► Mendoza, Quadrini, and Rios-Rull (2009): enforcement of contracts
- ► Caballero, Farhi, and Gourinchas (2008): ability to generate assets
- ▶ Mendoza and Quadrini (2010): US leverage before 2008 driven by external liabilities
- ► Mendoza and Quadrini (2024): EM have accumulated large stocks of reserves, AE have massively issued public debt over the last 50 years

#### Neoclassical growth and the global economy, starting with Lucas (1990)

- ► Kleinman, Liu, and Redding (2023): convergence with imperfect trade in goods and assets, iceberg costs and constant-elasticity substitution in both
- ▶ Pellegrino, Spolaore, and Wacziarg (2021): wedges and gravity



# simple model

Two periods, two countries, AK production, imperfect substitution of assets

► country *i*'s saver:

$$\max_{c_{i1}, c_{i2}, a_i} (1 - \sigma) \log(c_{i1}) + \sigma \log(c_{i2})$$
  
s.t.  $c_{i1} = \sigma^{-1} e_i - a_i$  and  $c_{i2} = R_i a_i$ 

- country *i*'s firm:  $y_i = z_i k_i$ , where  $k_i = \sum_{j=1,2} a_{j \to i}$
- ► country *i* asset split:  $a_i = a_{i \to i} + a_{i \to j}$

$$\frac{a_{i \to i}}{a_i} = \frac{z_i^{\beta} \cdot k_i}{z_i^{\beta} \cdot k_i + (z_j \cdot \tau_{i \to j})^{\beta} \cdot k_j} \text{ and } \frac{a_{i \to j}}{a_i} = \frac{(z_j \cdot \tau_{i \to j})^{\beta} \cdot k_j}{z_i^{\beta} \cdot k_i + (z_j \cdot \tau_{i \to j})^{\beta} \cdot k_j}$$

# equilibrium and static optimum

Conditional on  $\{a_i\}_{i=1,2}$ , maximize output:  $k_2 = e_1 + e_2$  and  $k_1 = 0$  optimal assuming  $z_1 > z_1$ 

#### Equilibrium:

- ▶ log utility:  $a_i = e_i$
- ▶ under assumptions on  $\{\tau_{1\rightarrow 2}, \tau_{2\rightarrow 1}\}$  and  $\{z_i\}_{i=1,2}$ , capital is

$$k_{1} = z_{2}^{\beta} \cdot \left( \frac{e_{1}}{z_{2}^{\beta} - z_{1}^{\beta} \cdot (\tau_{2 \to 1})^{\beta}} - \frac{e_{2} \cdot (\tau_{1 \to 2})^{\beta}}{z_{1}^{\beta} - z_{2}^{\beta} \cdot (\tau_{1 \to 2})^{\beta}} \right)$$

$$k_{2} = z_{1}^{\beta} \cdot \left( \frac{e_{2}}{z_{1}^{\beta} - z_{2}^{\beta} \cdot (\tau_{1 \to 2})^{\beta}} - \frac{e_{1} \cdot (\tau_{2 \to 1})^{\beta}}{z_{2}^{\beta} - z_{1}^{\beta} \cdot (\tau_{2 \to 1})^{\beta}} \right)$$

# comparative statics

Letting  $\beta = 1$  for simplicity,

$$y_{\text{global}} \Big| a_1, a_2 = z_1 k_1 + z_2 k_2 = z_1 z_2 \cdot \left( \frac{e_2 (1 - \tau_{1 \to 2})}{z_1 - \tau_{1 \to 2} \cdot z_2} + \frac{e_1 (1 - \tau_{2 \to 1})}{z_2 - \tau_{2 \to 1} \cdot z_1} \right)$$

Total output increases in  $\tau_{1\rightarrow 2}$  and decreases in  $\tau_{2\rightarrow 1}$  if  $z_2>z_1$ 

- ► facilitating outward flows out of the more productive country is ↓
- $\blacktriangleright$  facilitating inward flows into the less productive country is  $\downarrow$



## what kind of assets?

Wedge accounting is informative conditional on model

- ▶ neoclassical growth + asset demand system ⇒ wedges capture frictions
- ► can do counterfactuals

#### **Ouestions:**

- ▶ is demand for AE-issued assets driven by neoclassical forces?
- ▶ is supply of AE-issued assets driven by country size?

# reserves and public debt

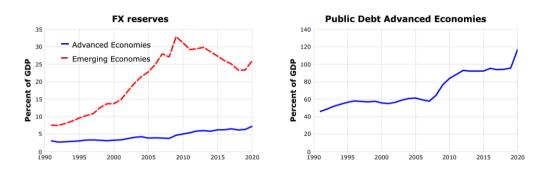


Figure: Mendoza and Quadrini (2024)

# other potential drivers of asset demand and supply

#### Global risk

- ▶ payoffs that countries produce have different correlation with global output/consumption
- ▶ growing in size <u>does not</u> lead to being able to issue assets with countercyclical returns
- ▶ global risk is important (Pellegrino, Spolaore, and Wacziarg (2021) incorporates it?)

#### Convenience/mandates

- ▶ inelastic demand for some types of assets
- ► nested demand system?

## Financial depth and intermediation capacity

▶ growth in size does not lead to growth in capacity to provide financial services



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