MEASURING INTERNATIONAL FINANCIAL INTEGRATION: NEW CHALLENGES

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Measuring international financial linkages: The big picture context

Substantial improvement in data availability…

- IIP reporting
- Bilateral data: banking (BIS), portfolio (CPIS), FDI (CDIS)

But increased disconnect between data and economic linkages

Key challenges:

- measuring the impact of activity by multinational corporations on macro and financial aggregates
- Establishing exposures in portfolio positions given the role of investment funds in financial centers and security issuance offshore

Key distortions

- Activity by multinational corporations (MNC) and globalization more generally distort volume, composition, and geographical pattern of global capital flows and external positions
  - MNC incorporation in low-tax countries
  - MNC use of SPEs to channel funds through financial centers
  - EM offshore issuance of debt securities
  - “Warehousing” of investment fund activity In financial centers (IRE; LUX; Cayman Islands)

Background literature

- Lane and Milesi Ferretti (IMF ER 2018)
- Ongoing work with Katharina Bergant and Martin Schmitz

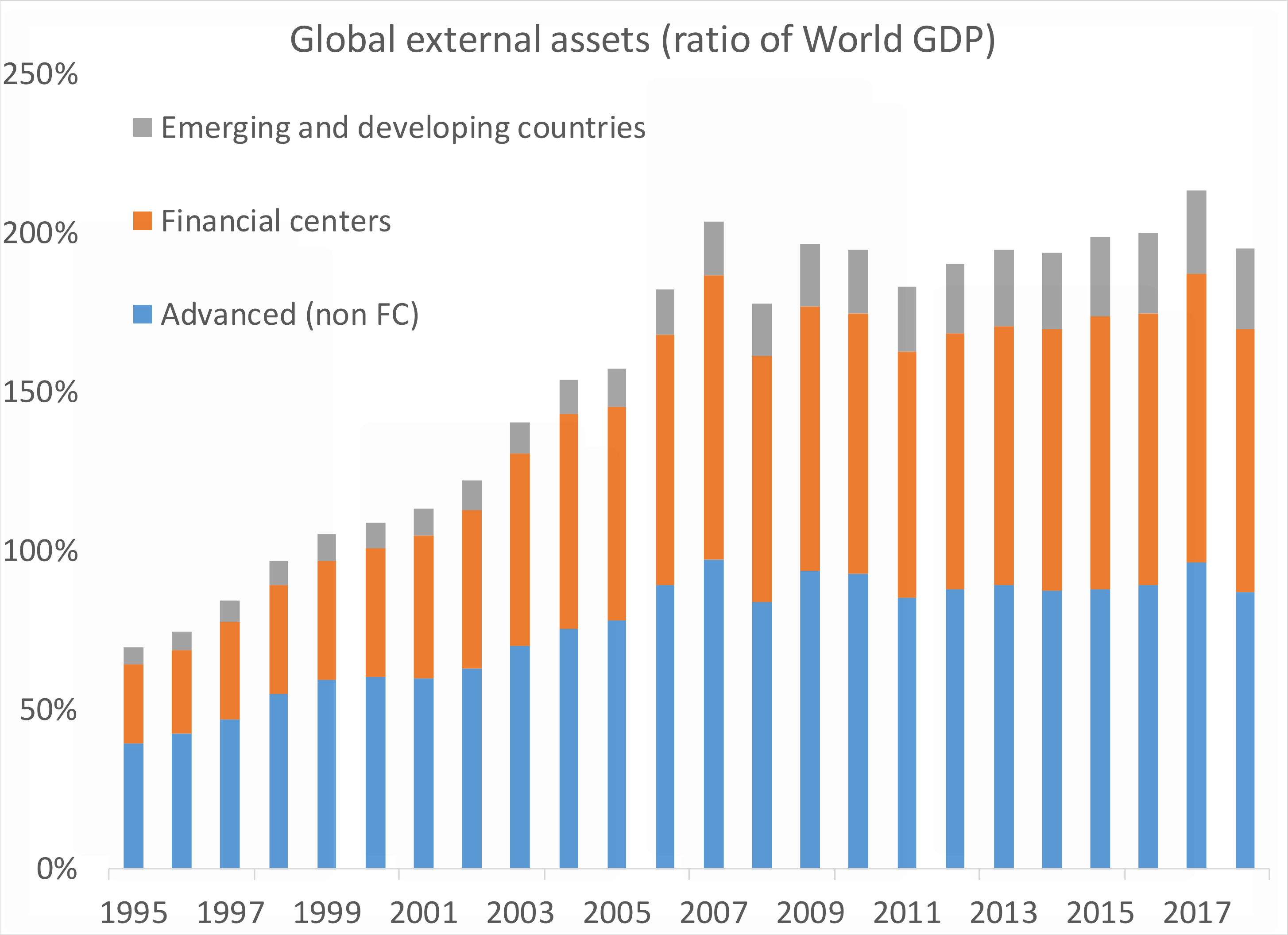
Related literature:

- Bertaut, Bressler, and Curcuru (2019)
- Coppola, Maggiori, Neiman, Schreger (2019)
- Damgaard, Elkjaer, and Johannesen (2019)

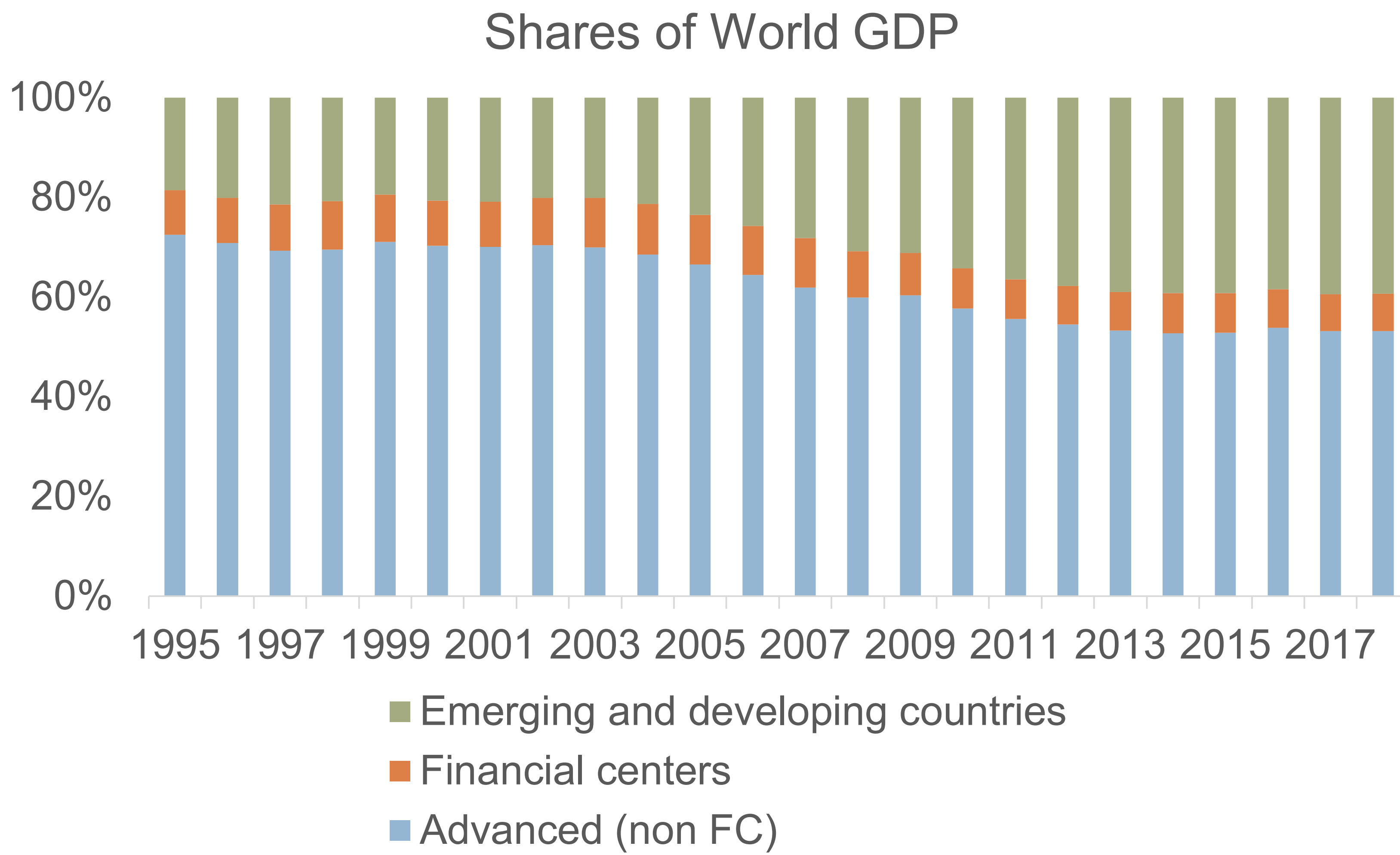
General objective:

re-map cross-border exposures to better reflect economic linkages

Documenting international financial integration



Documenting international financial integration: The GDP picture

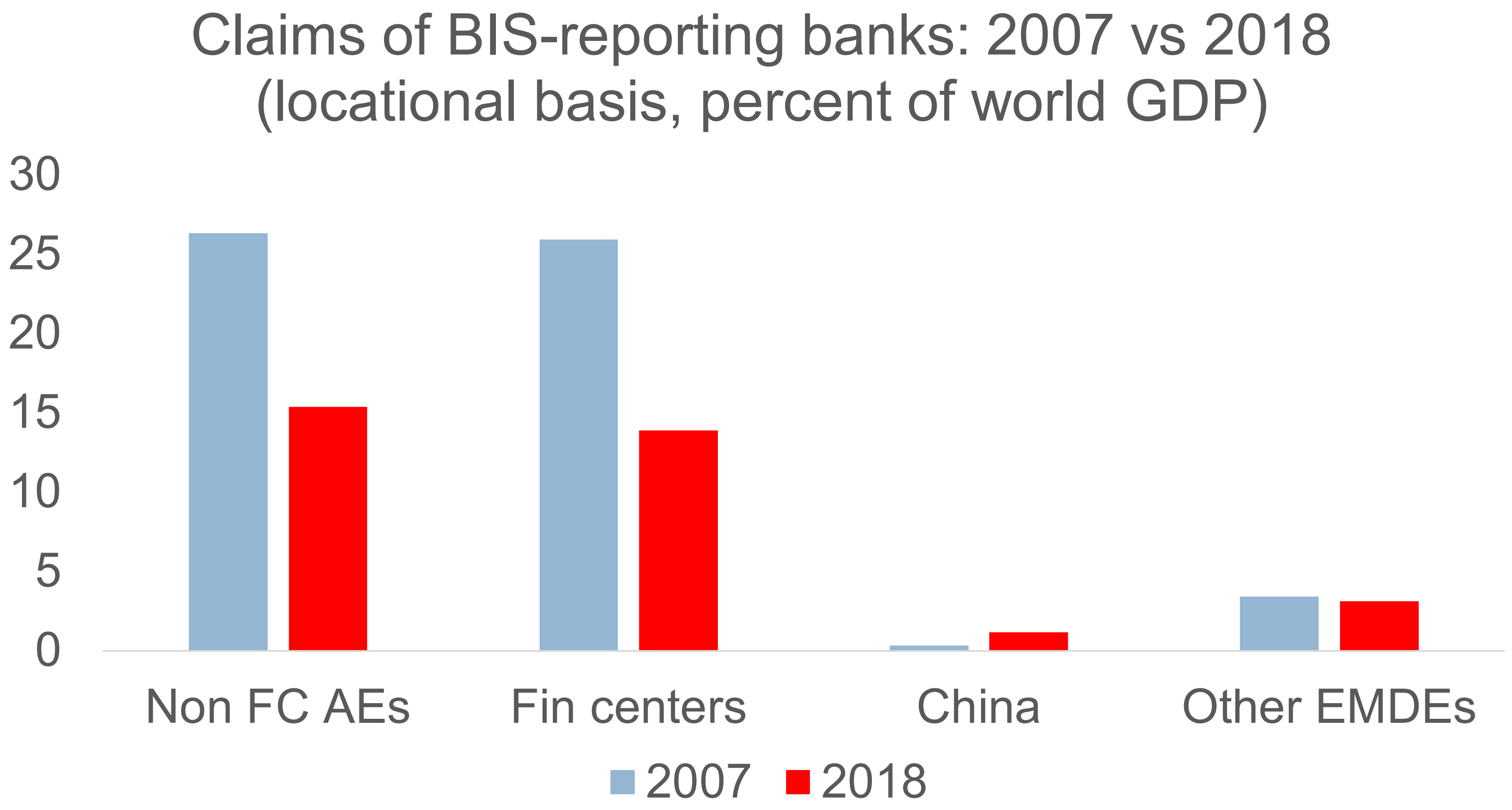


Documenting international financial integration: Why the slowdown?

- Much lower capital flows to and from advanced economies and financial centers
  - *Retrenchment in global banking*
  - *Euro area crisis*

- Increased weight of EMDEs in global GDP
  - *These economies have lower shares of external claims and liabilities to GDP, and hence lower the global share as they grow in importance*

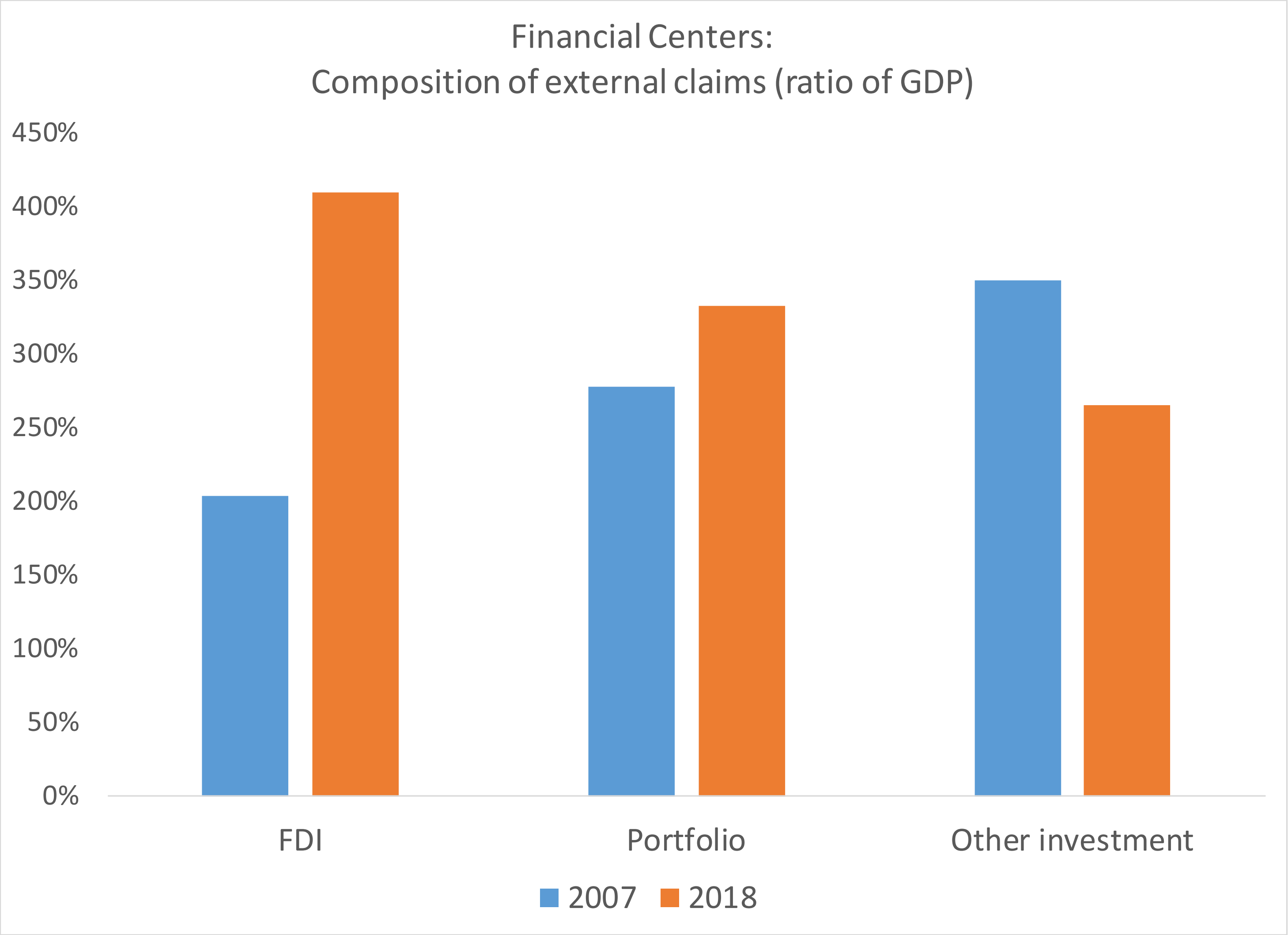
The retrenchment of global banking



Intermediation through financial centers: evolution since the crisis

- Pre-crisis: key role for banking centers (such as the UK and Switzerland)
- Post-crisis: Retrenchment in global banking, increased role for centers intermediating activity by MNCs and hosting the investment fund industry
  - Ireland
  - Luxembourg
  - Netherlands
  - Cayman Islands

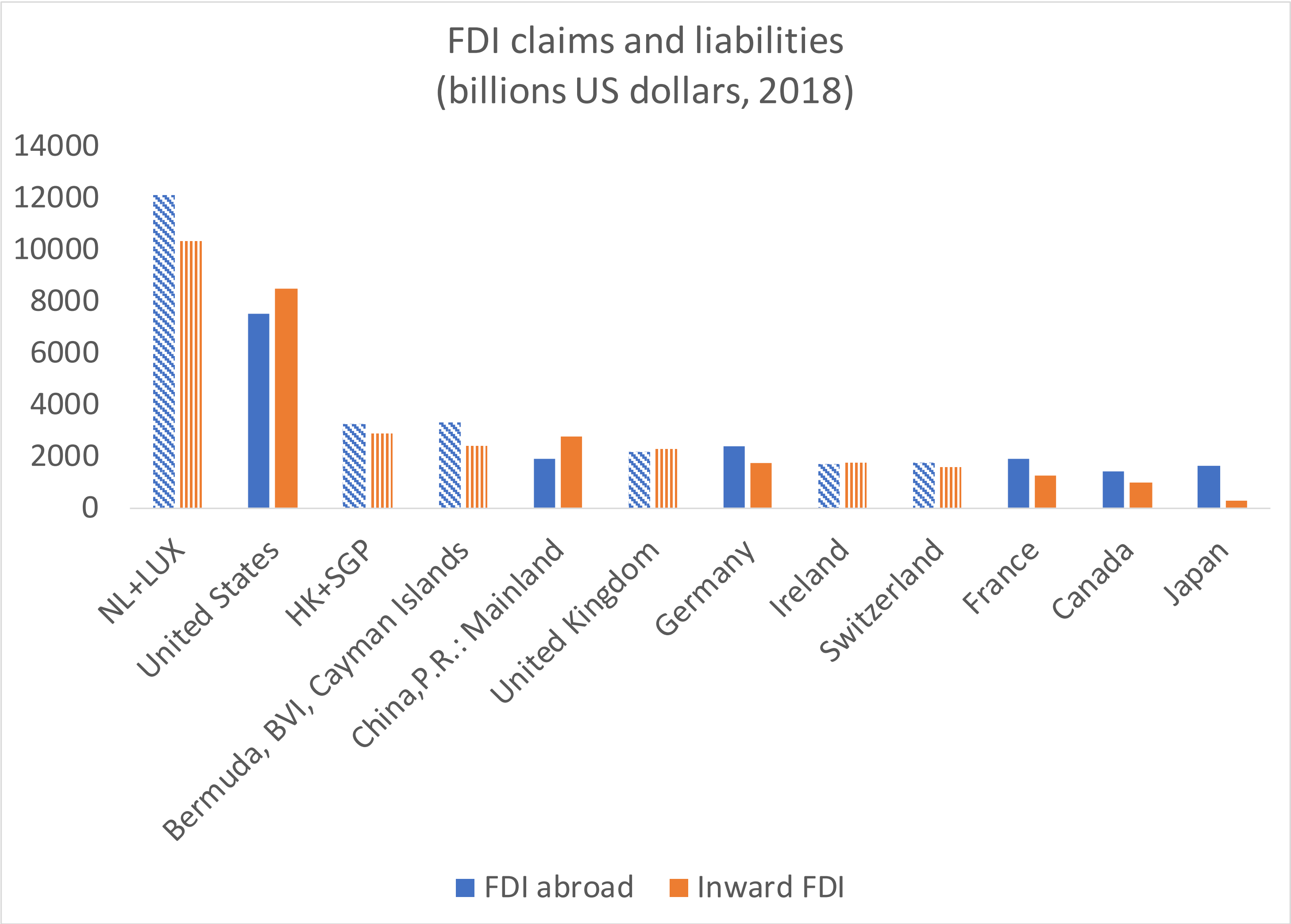
The shifting asset structure of financial centers



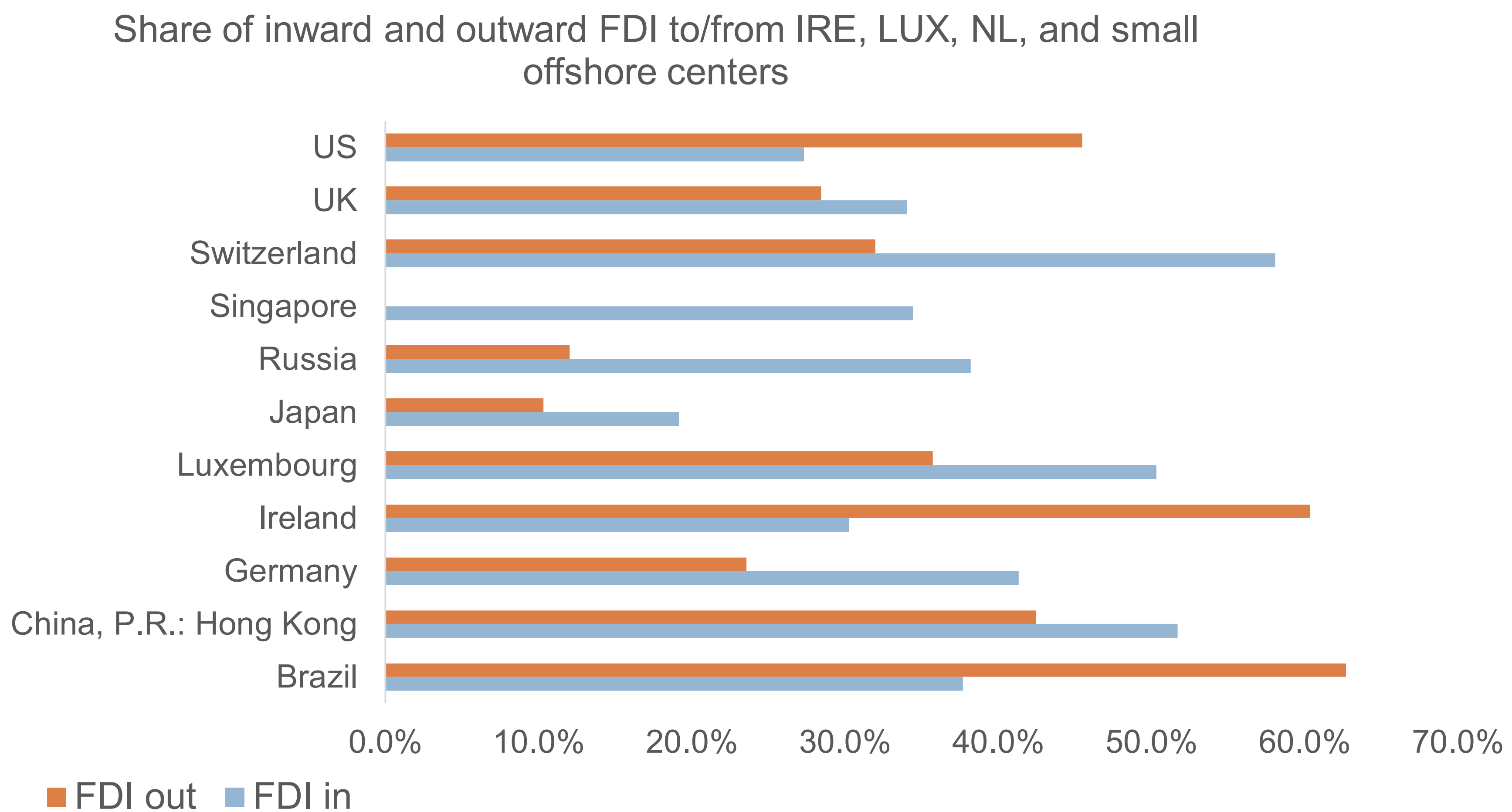
FDI statistics: the role of financial centers

- FDI largest component in financial centers' external claims and liabilities
- Over half of world's FDI claims are booked by FCs
- Factors explaining rising FDI:
  - Boom in SFEs/SPEs
  - Re-domiciling of MNCs to financial centers (e.g. Ireland)
  - Shifts in intellectual property capital towards FCs

FDI in financial centers—some figures



Bilateral FDI linkages are also distorted



Multinational corporations and international accounts

- The data on external positions are one facet of the increasingly complex challenge posed by *financial* activities of MNCs to the interpretation of national and international accounts
- In the past, impact on international accounts mainly through transfer pricing – impact on trade vs income (GDP vs GNP), but not necessarily on CA
- Now interpreting gross and even net flows and positions increasingly difficult, reflecting
  - Size of MNCs
  - Complexity of balance sheet structures (SFEs etc)
  - Ease to shift intangible capital across borders
- National accounts also affected : Irish example

Re-mapping FDI exposures

- Damgaard et al (IMF WP 2019/274) estimate the global FDI network allocating real investment to ultimate investor economies

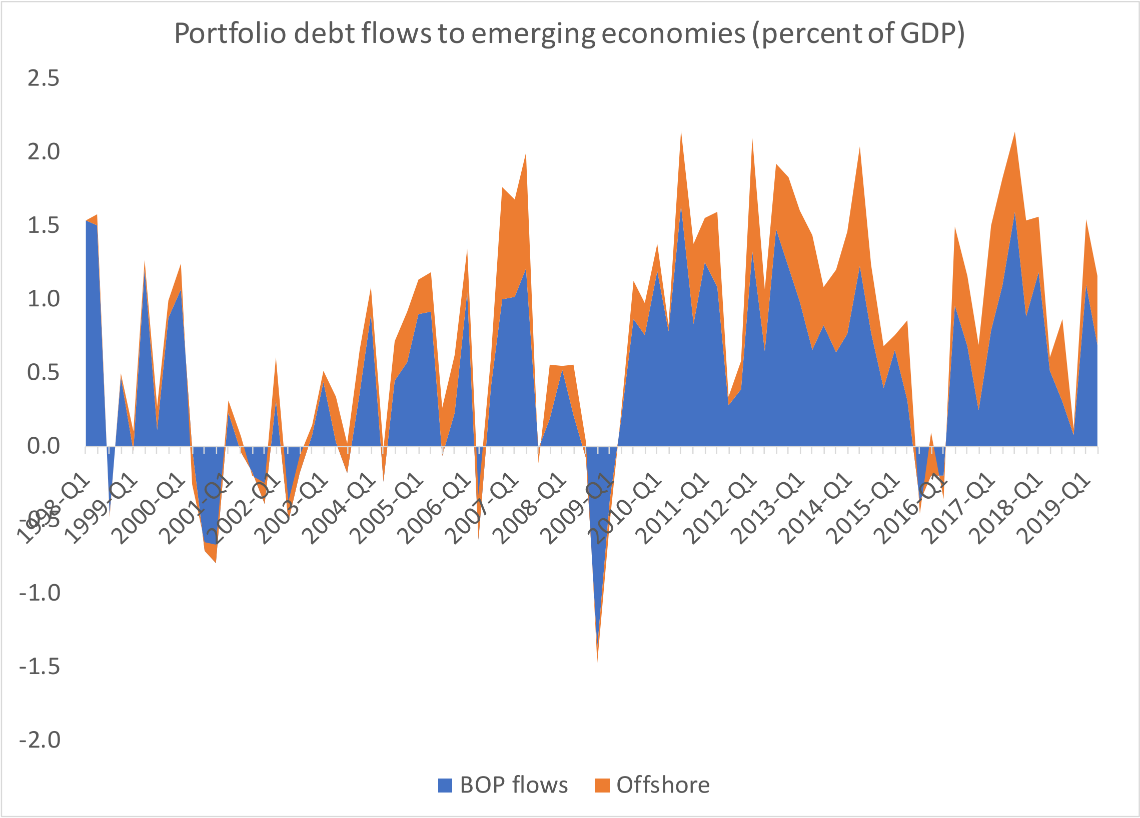
- Key findings:
  - "Phantom FDI" accounts for around 40% of the total

  - The real FDI links between the largest economies in the world are much higher than implied by standard FDI statistics based on immediate ownership

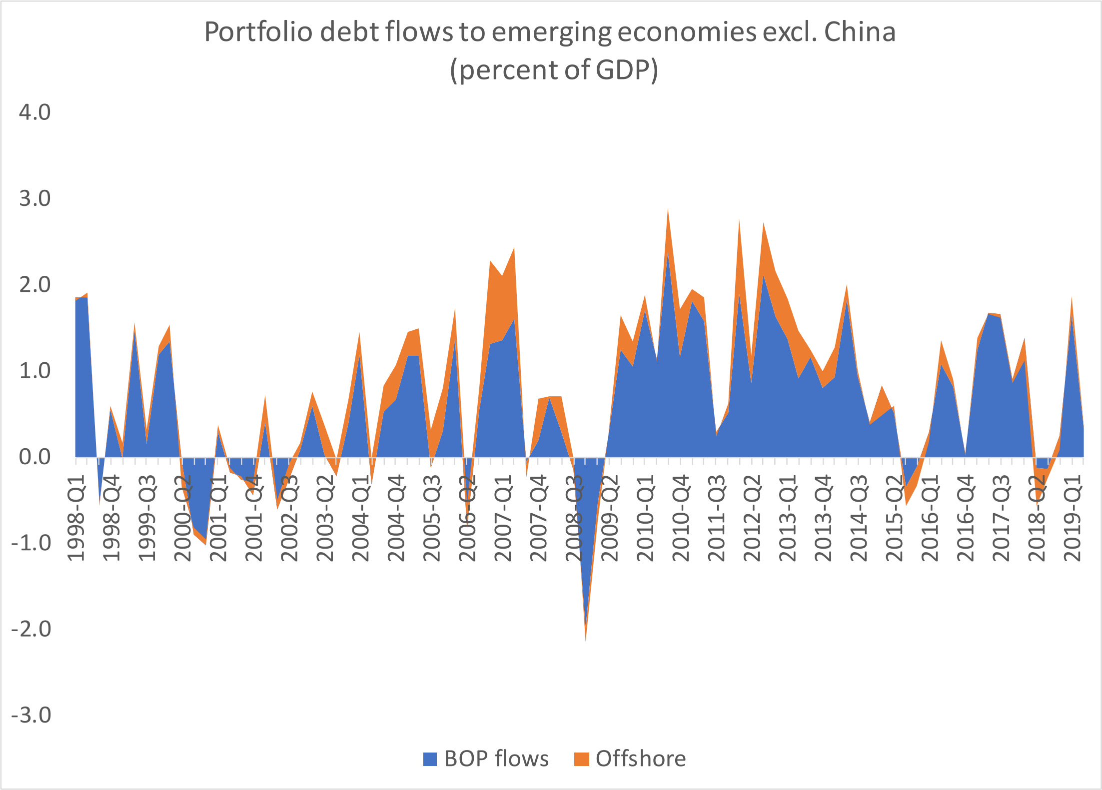
Portfolio investment statistics:
I. *Offshore issuance of debt securities*

- Very significant differences between nationality- and residence-based measures of corporate international debt securities
- Large offshore issuance by domestic firms: US, Germany, China, Switzerland
- Financial centers hosting offshore issuance: Cayman Islands, UK, Netherlands, Luxembourg, Ireland, Bermuda, Hong Kong, Singapore….
- Focus on emerging market economies

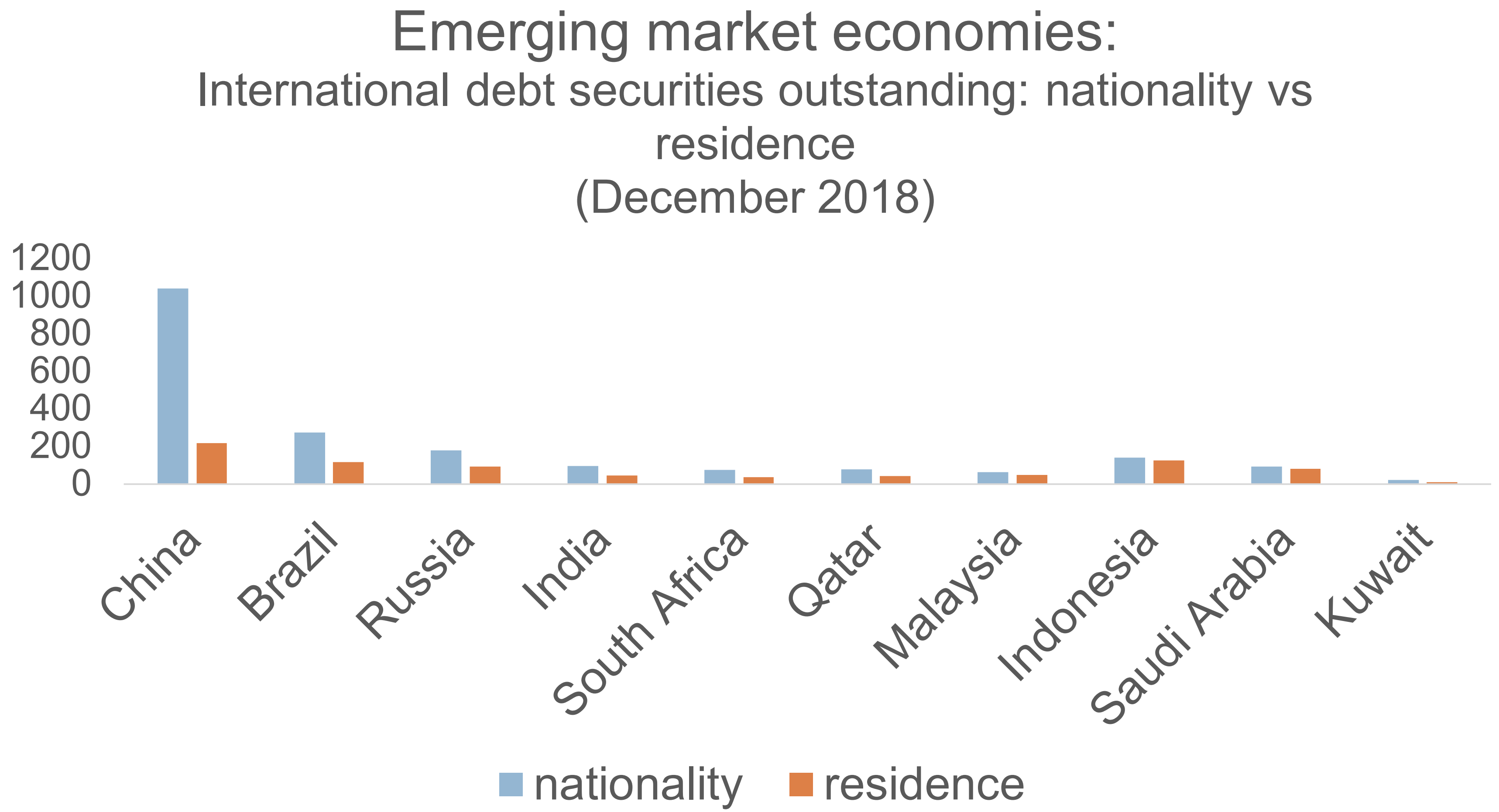
Portfolio debt flows to EMs: including offshore issuance



Portfolio debt flows to EMs: including offshore issuance (II)



Offshore portfolio debt issuance: countries and implications



Implications of offshore issuance for BOP flows

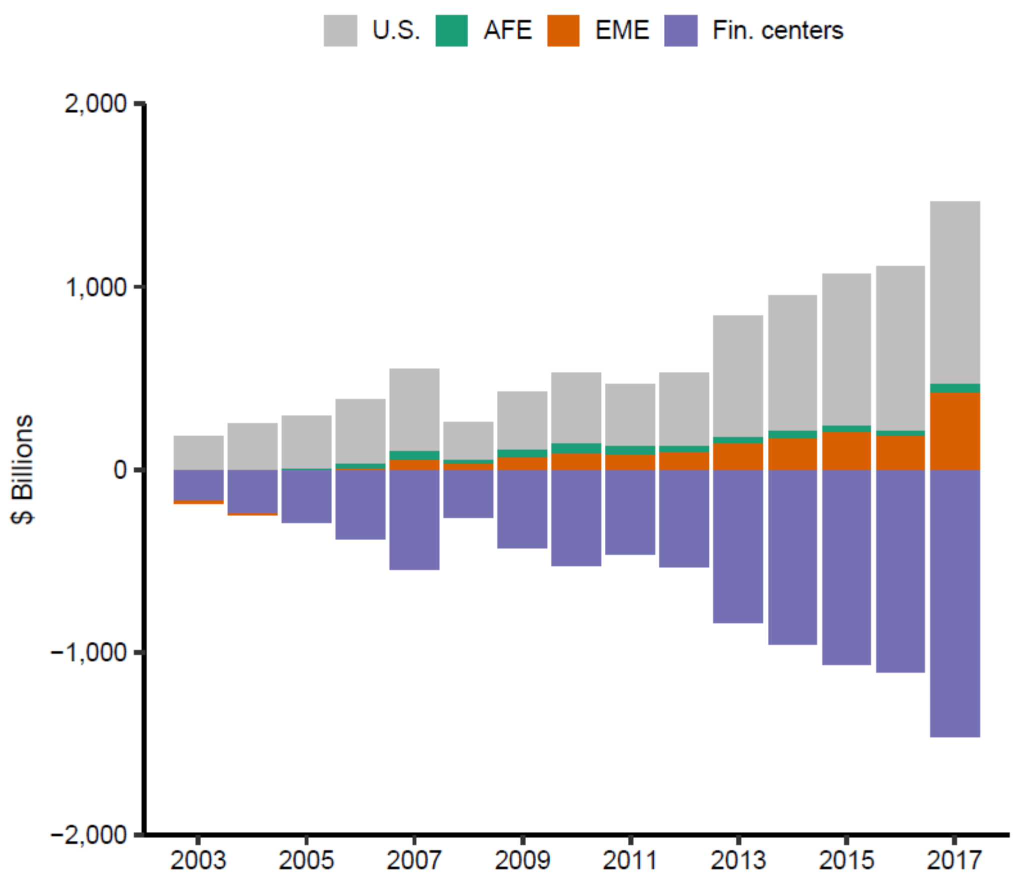
- Funds repatriated (via loans) to parent company: recorded as FDI inflow
- Strong correlation of net issuance of debt securities offshore with FDI inflows (Brazil; Russia; China)….
- …but weak correlation with BOP portfolio debt inflows
- Example: Brazil. Substantial corporate offshore issuance (primarily Cayman Islands)
- Repatriation through FDI loan transactions (large FDI debt position with the Netherlands: $80 billion)

Portfolio equity investment

- Sources of bias:
  - Incorporation of firms in financial centers
  - Investment funds

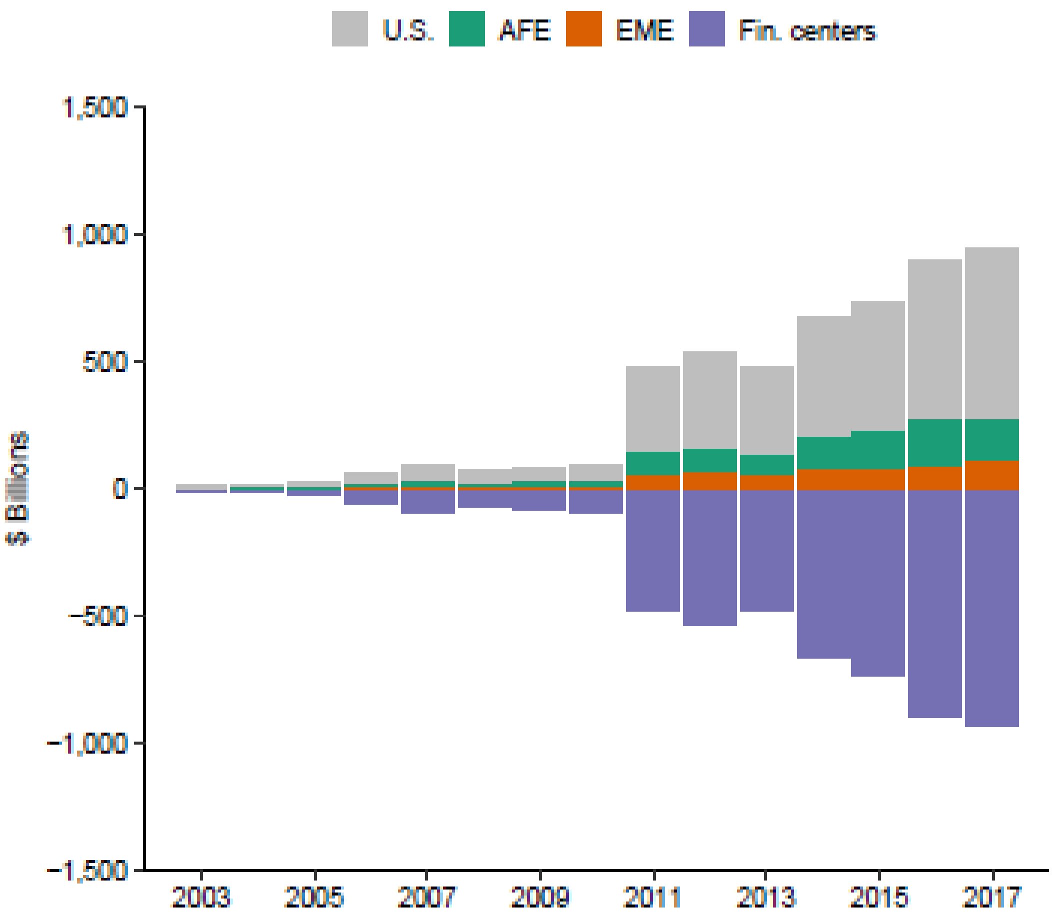
Residence to nationality re-map of US portfolio equity holdings of nonresident common stock (from Bertaut et al, 2019)

Figure 1c. Difference between nationality and residence basis holdings

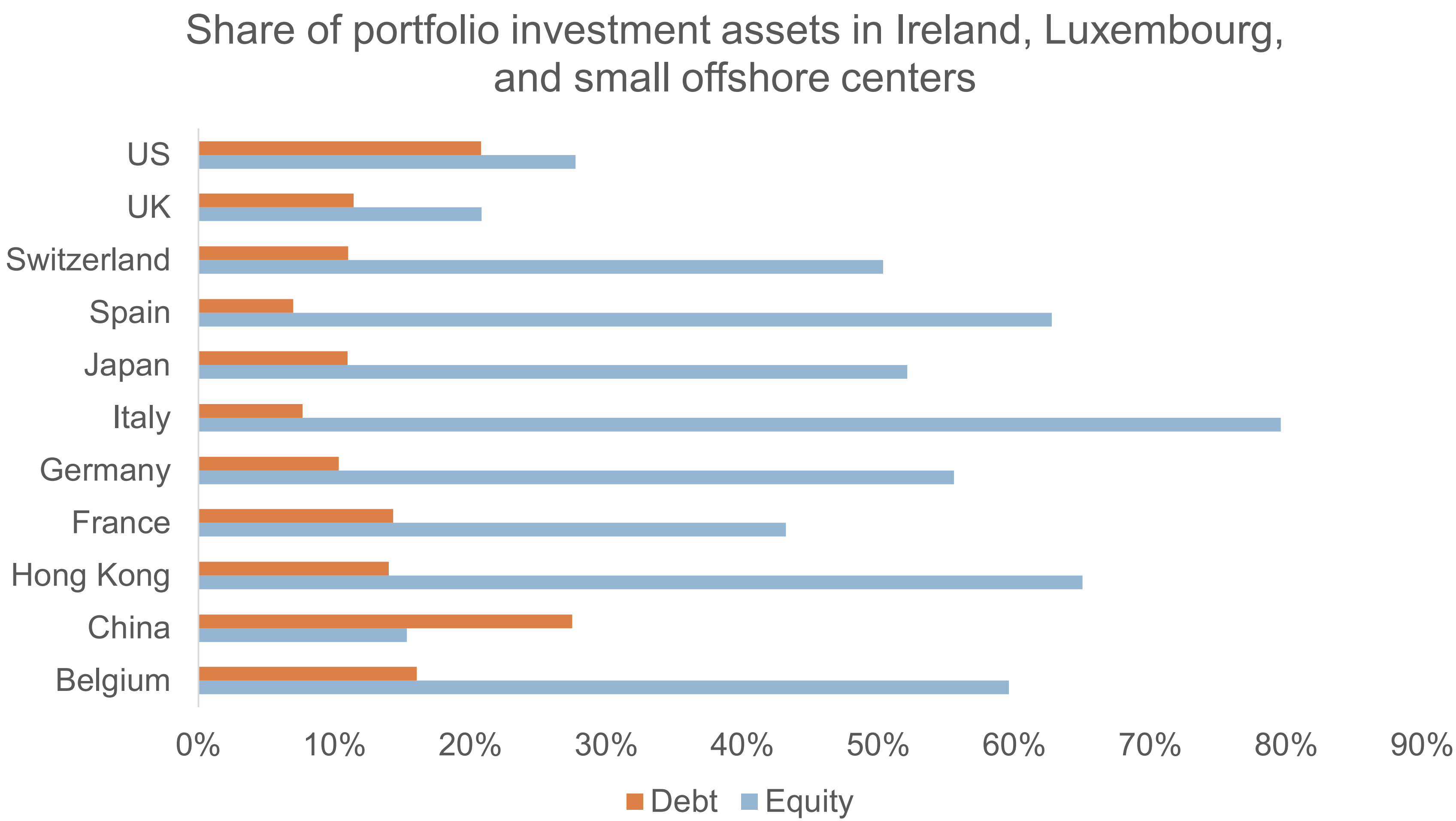


Residence to nationality re-map of US portfolio holdings of nonresident investment fund shares

Figure 4c. Difference between nationality and residence basis holdings



Investment fund bias even larger in Europe



Summary

- What do we mean by "integration"?
  - Cross-border lending
  - Global portfolio diversification
    - Private sector (pension funds, households…)
    - Government investment (reserves, SWFs)
  - International allocation of production (greenfield FDI, M&A)

- But other factors at play too:
  - Location/residence of asset managers (eg fund industry in Ireland, Luxembourg, Cayman Islands)
  - Cross-border activity of banks
  - Financial activity of nonfinancial MNCs (tax/regulatory arbitrage, balance sheet management)

Size of cross-border claims and "international financial integration"

- These additional factors imply a multiplication of apparent financial links and often involve "round-tripping"
- They attribute a disproportionate importance of financial centers in international financial linkages
- They also distort the composition of financial flows and cross-border exposures by instrument

How to improve things?

- Link external positions to domestic financial accounts
- Banking statistics: consolidated data
- Portfolio investment
  - Some re-mapping possible for common equity, offshore bonds
  - Severe challenges for "seeing through" investment funds

- FDI
  - Separate reporting of SFE
  - Statistics by ultimate source/destination
  - How to allocate "consolidated data" geographically?
  - How to deal with tax inversions