Twenty-Third Meeting of the IMF Committee on Balance of Payments Statistics Washington, D.C.
October 25-27, 2010

Bilateral Cross-Border Holdings and Global Imbalances A View on the Eve of the Global Financial Crisis

**Prepared by the Research Department International Monetary Fund** 

# BILATERAL CROSS-BORDER HOLDINGS AND GLOBAL IMBALANCES:

A VIEW ON THE EVE OF THE GLOBAL FINANCIAL CRISIS

Gian Maria Milesi-Ferretti, Francesco Strobbe, and Natalia Tamirisa International Monetary Fund, Research Department

This paper should not be reported as representing the views of the IMF. The views expressed are those of the author(s) and do not necessarily represent those of the IMF or IMF policy.

#### Introduction

- Two phenomena over the last decade
  - Emergence of global imbalances
  - Financial integration (growth of cross-border flows)
- Worries about global imbalances...
- ...but initial transmission of the crisis through gross exposures
- Bilateral perspective key in understanding crisis transmission
- Relation between the two phenomena?

### What we do in this paper

- Construct a dataset of bilateral external assets and liabilities for all the major "players" for 2007
  - US, euro area, Japan, China
  - Financial centers: UK, Switzerland, Hong Kong, Singapore, offshore centers
  - Surplus regions: emerging Asia, oil exporters
  - Large emerging markets: Brazil, Russia, India
  - Other advanced economies: Canada, Australia, New Zealand, Denmark, Norway, Sweden
  - Emerging markets in Europe

#### Research Questions

- Is there a relation between the geographical pattern of global imbalances and that of financial integration? Are major financial partners each other's main creditors and debtors, and in what financial instruments?
- How do size and composition of countries' gross and net external positions affect the transmission of macroeconomic and financial shocks?

### Data strengths and weaknesses

#### Strengths:

- Network of cross-border financial linkages from a geographical (residence) perspective
- Consistent with balance of payments data

#### Weaknesses:

- No information on currency of denomination
- Does not necessarily measure ultimate exposures

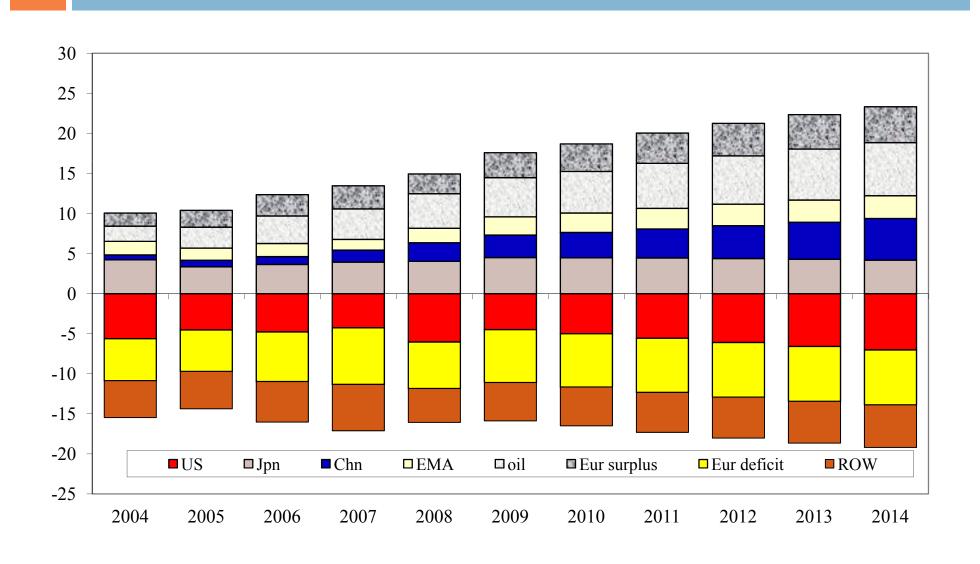
#### Related work

- Kubelec and Sa (2009, 2010)
  - Bilateral positions for 18 countries, 1980-2005
  - Relies on estimation to fill gaps
- Daude and Fratzscher (2007)
  - Gravity-type equations for bilateral FDI, portfolio, and banking positions
- BIS research (Patrick McGuire et al)
- Many studies on bilateral positions for specific asset categories (portfolio, banking etc)

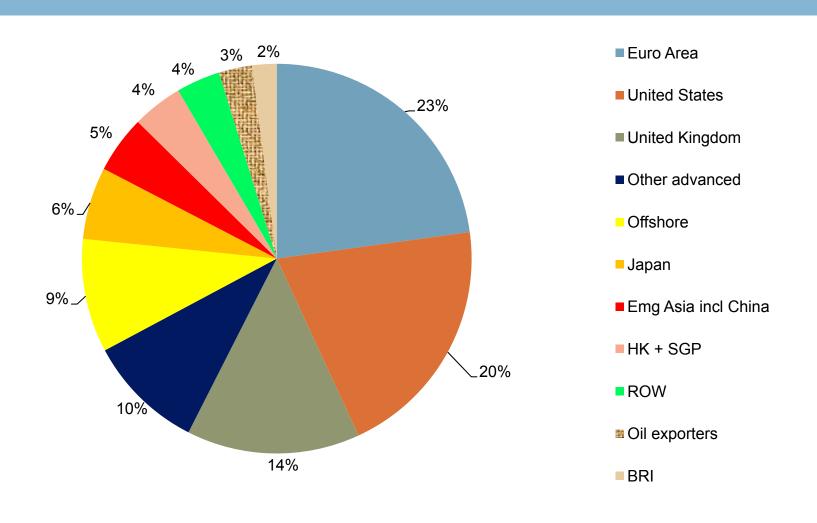
#### The Bilateral IIP Data

- Summary of the financial relationship between a country's residents and the ROW at year-end
- Instruments
  - FDI (book or market value)
  - Portfolio (equity and debt)
  - Other investment
  - Reserves
  - Limited reporting of data on financial derivatives
- Main Data Sources
  - IMF's Coordinated Portfolio Investment Survey (CPIS)
  - BIS locational banking statistics
  - Eurostat, OECD, UNCTAD for FDI
  - National sources (example: US portfolio liabilities, UK IIP, euro area IIP etc)
- Data reported or derived from partner country sources (very limited reliance on estimated data for FX reserves)

# What do we know from aggregate data? I. Net external positions

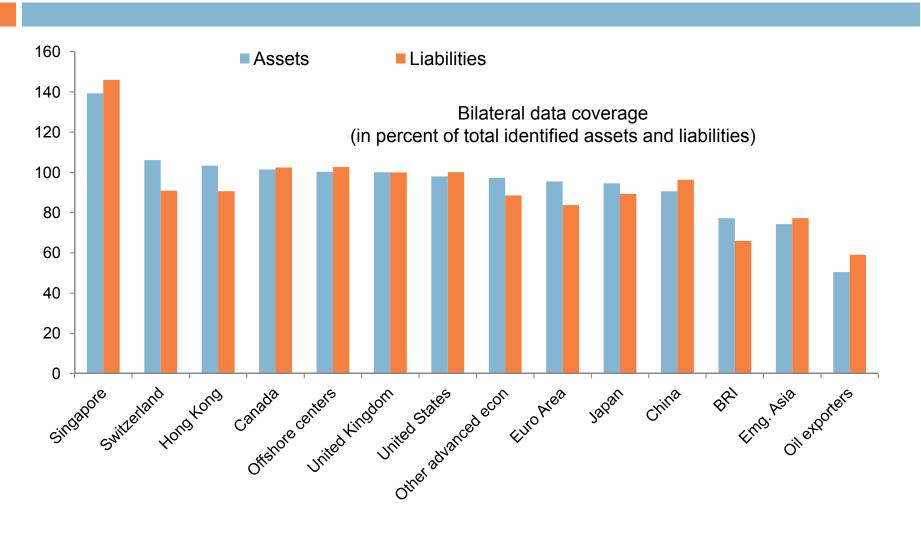


## What do we know from aggregate data? II. Gross external assets



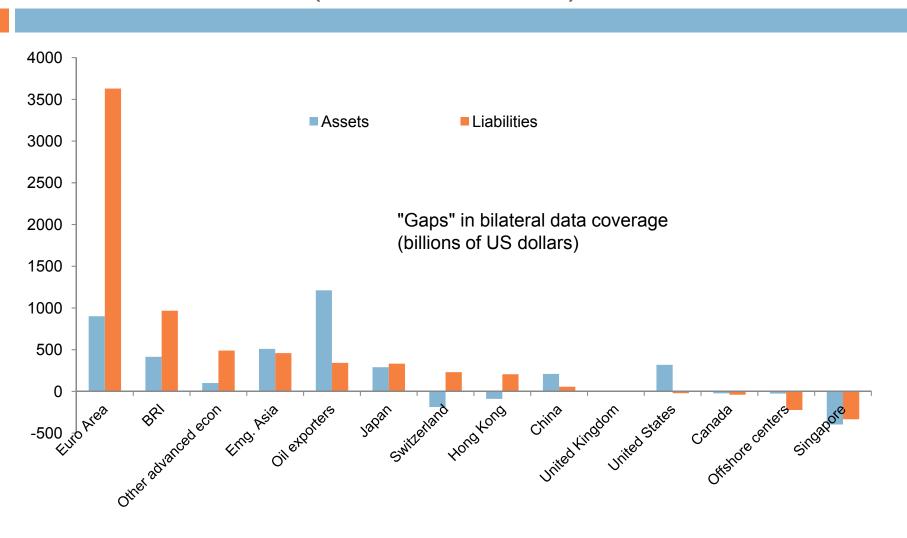
#### Data coverage

(in pct of total reported assets and liabilities)



### Gaps in data coverage

(billions of USD)



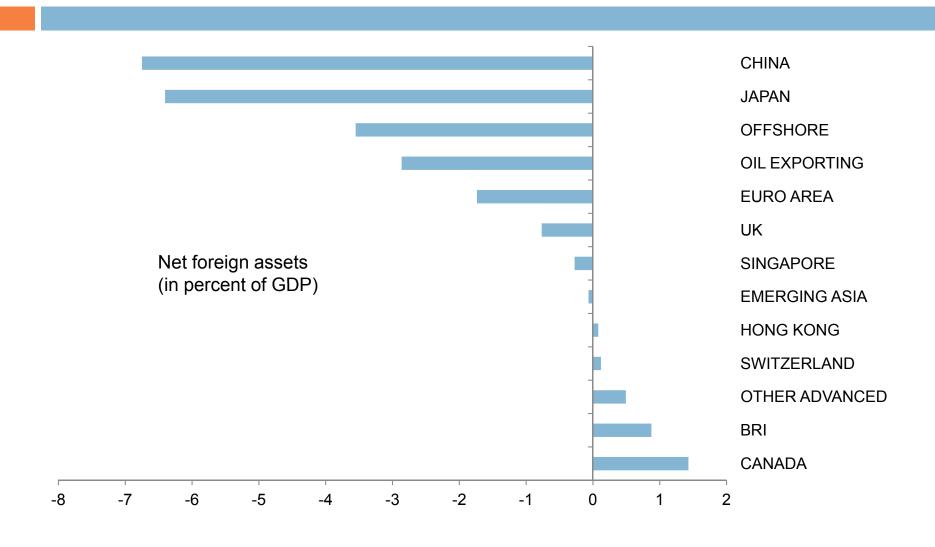
#### Missing portfolio claims on the euro area

Oil exporters? Offshore centers? Reserve holders? Under-reported euro area claims?

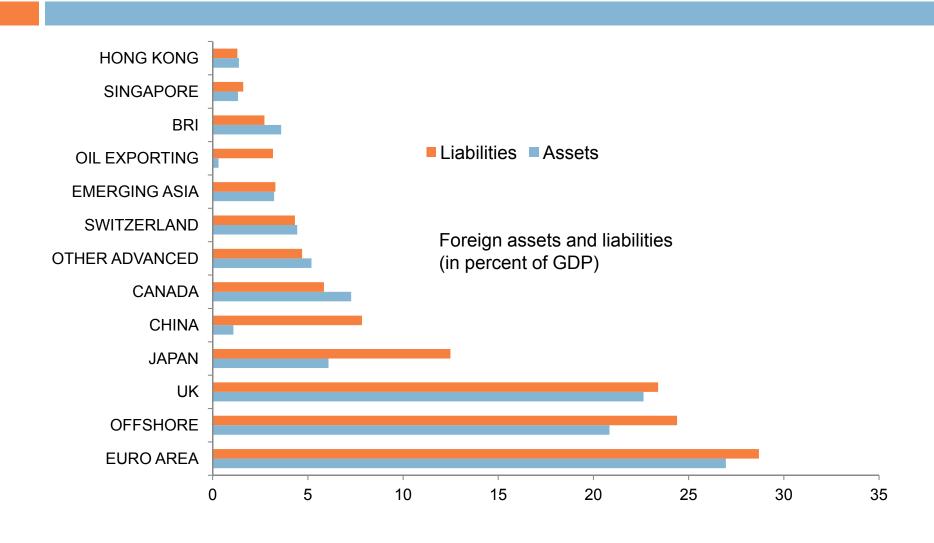
Table. Liabilities without an identified partner (USD bill)

Portfolio equity		Portfolio debt	
Total euro area	2,271	Total euro area	1,357
Luxembourg	1,100	France	415
Ireland	733	Netherlands	260
Netherlands	271	Italy	248
Spain	106	Germany	167

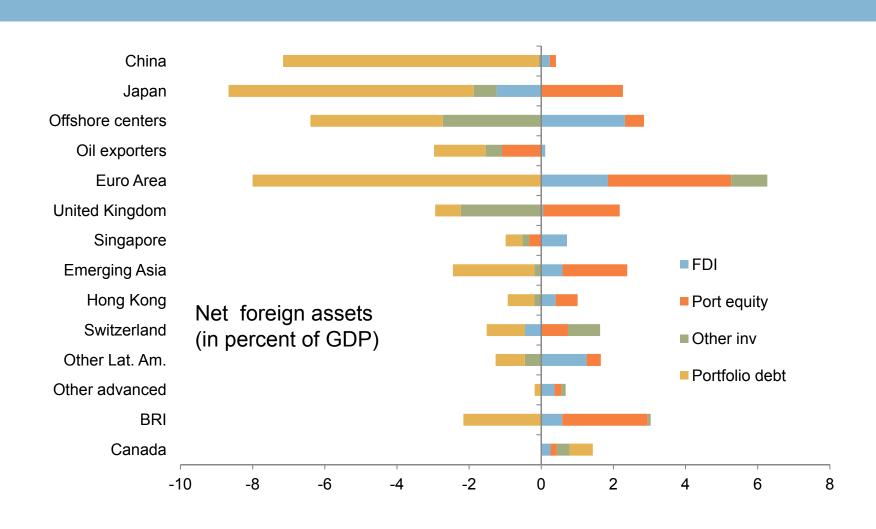
### The United States: net position



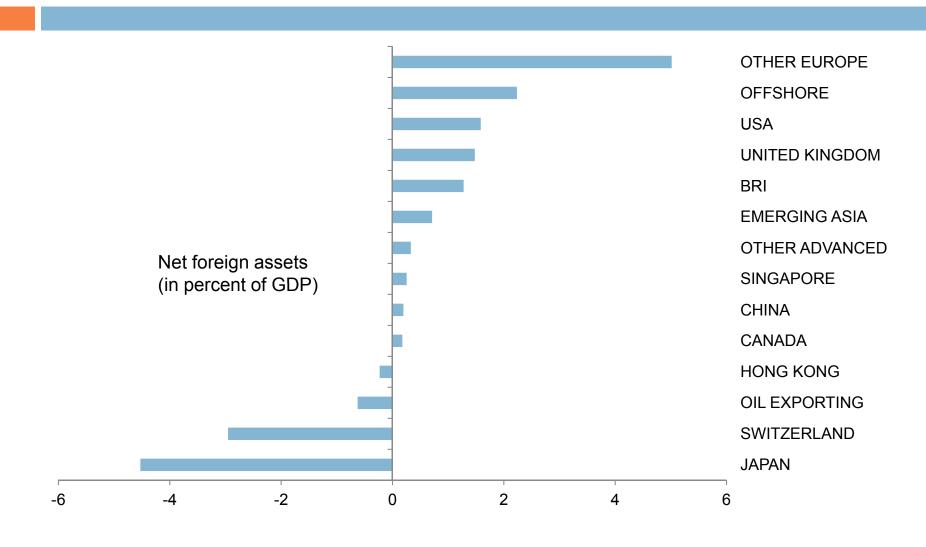
### The United States: gross position



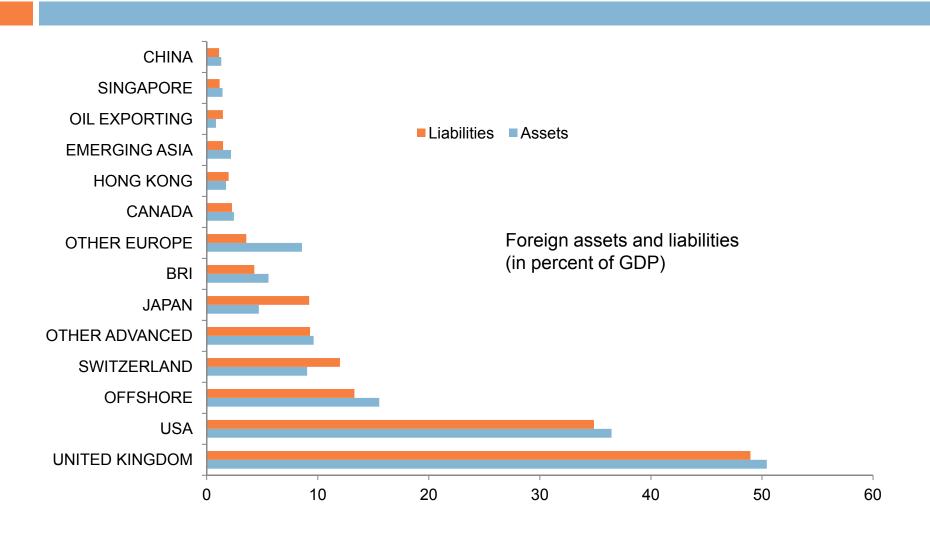
#### United States: composition of net position



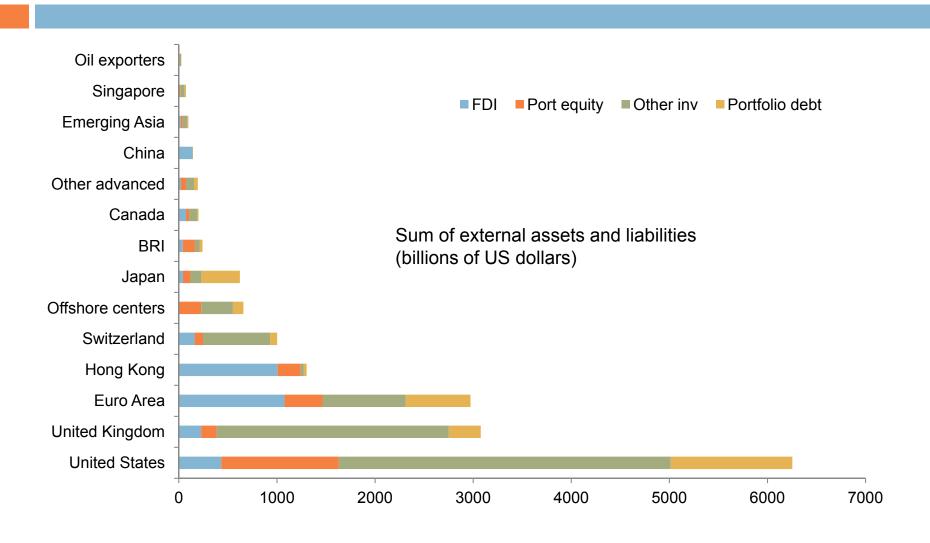
## Euro Area: net position



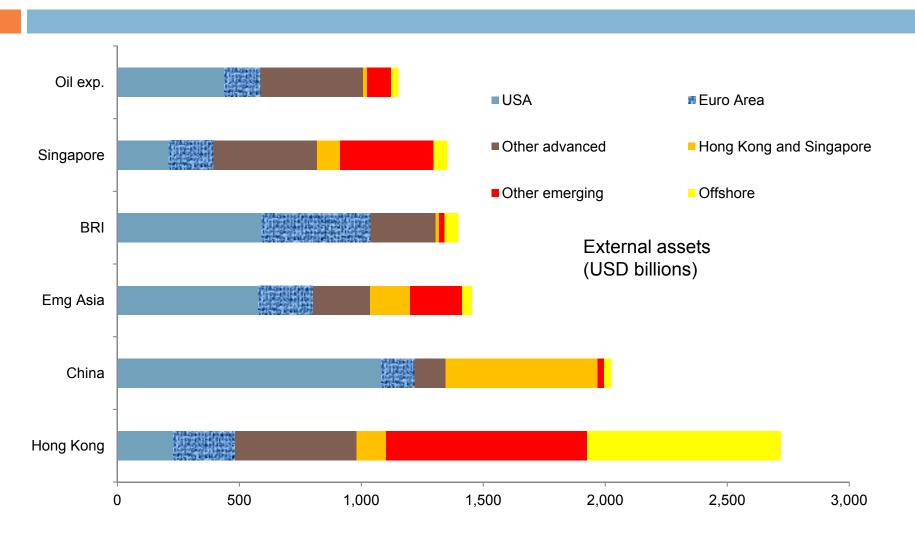
## Euro area: gross positions



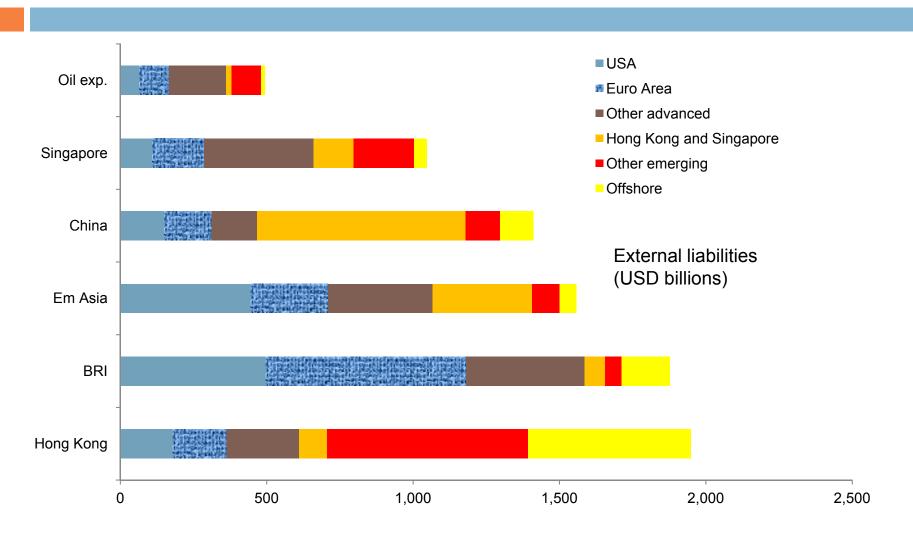
### The importance of offshore centers



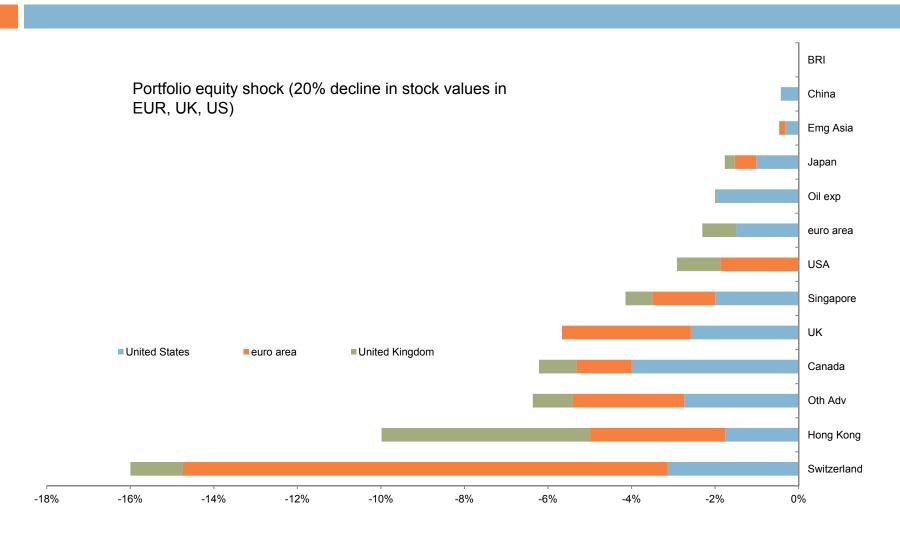
## The external portfolio of emerging markets: I. Assets



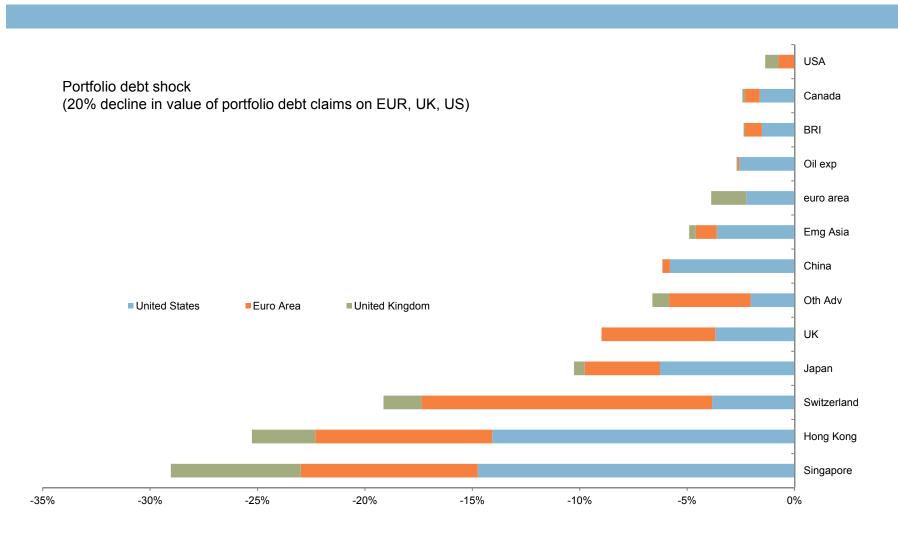
## The external portfolio of emerging markets: II. Liabilities



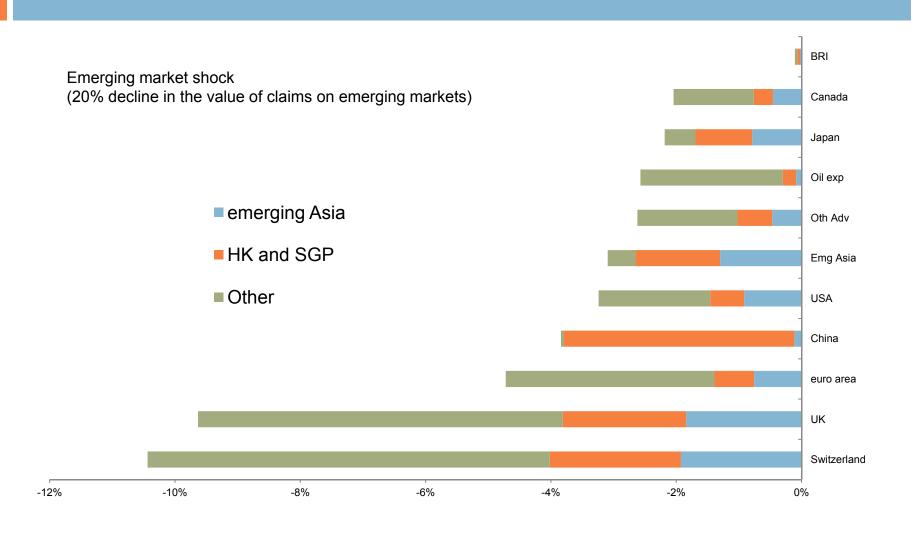
# Decline in value of portfolio equity claims on US, euro area, UK



# Decline in value of portfolio debt claims on US, euro area, UK



# Impact of a decline in value in claims on emerging markets



## Work in progress

 Relation between residence-based and ultimate-exposure data for claims and liabilities associated with banks

- Smaller role of international financial centers
  - Example: much smaller positions of UK banks vis-à-vis euro area than suggested by residencebased data

### Summary

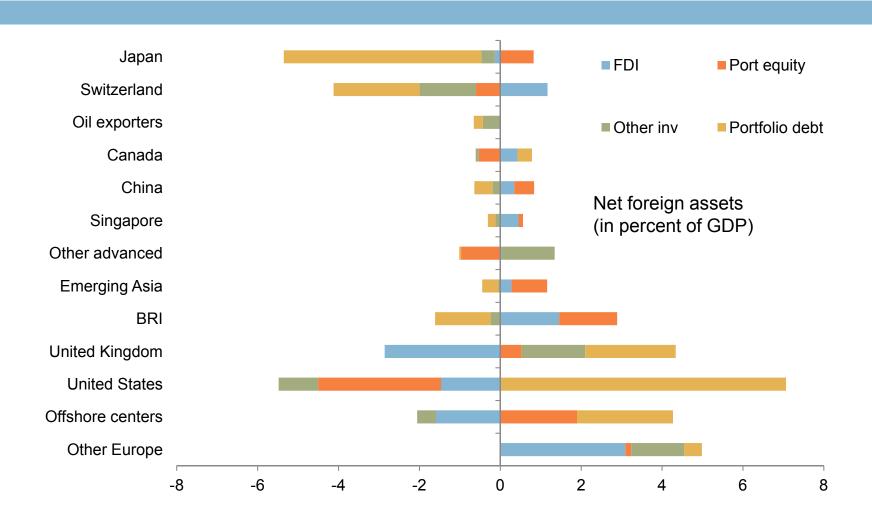
- Data work piece of a complex puzzle...
  - Sectoral exposures
  - Currency exposures
  - Ultimate exposures
- ...data gaps still serious (particularly for offshore centers, oil exporters, emerging markets)
- ....but a useful map of cross-border financial linkages

## Summary (II)

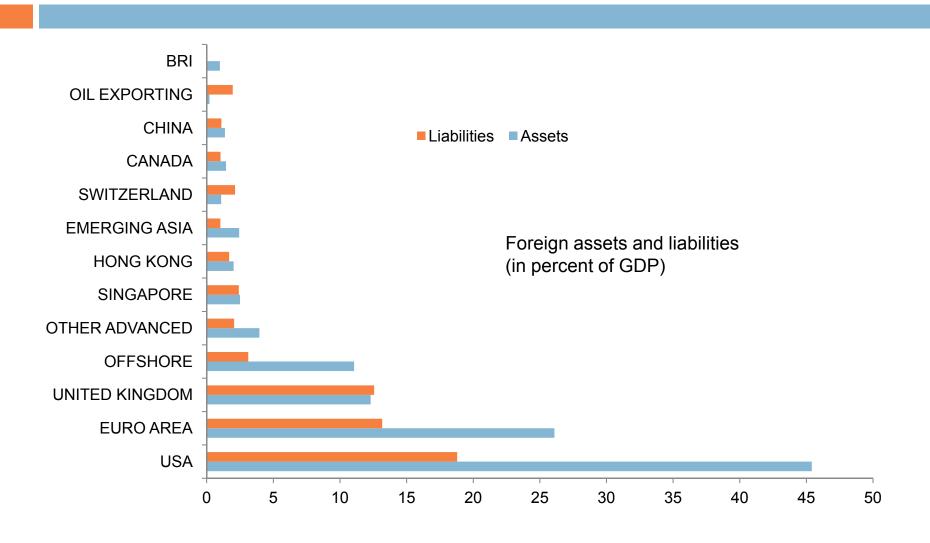
- Intriguing stylized facts
  - Lack of correspondence between net and gross positions
  - Large role of international financial centers
  - Heterogeneity in gross and net portfolio structures
    - US systematically "long equity, short debt"
  - More limited role of emerging markets
- Analysis sheds light on what can lie behind data coverage 'holes'

### Extra charts

#### Euro Area: composition of net position



#### Japan's foreign assets and liabilities



#### United Kingdom: composition of gross position

