

# 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

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# 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

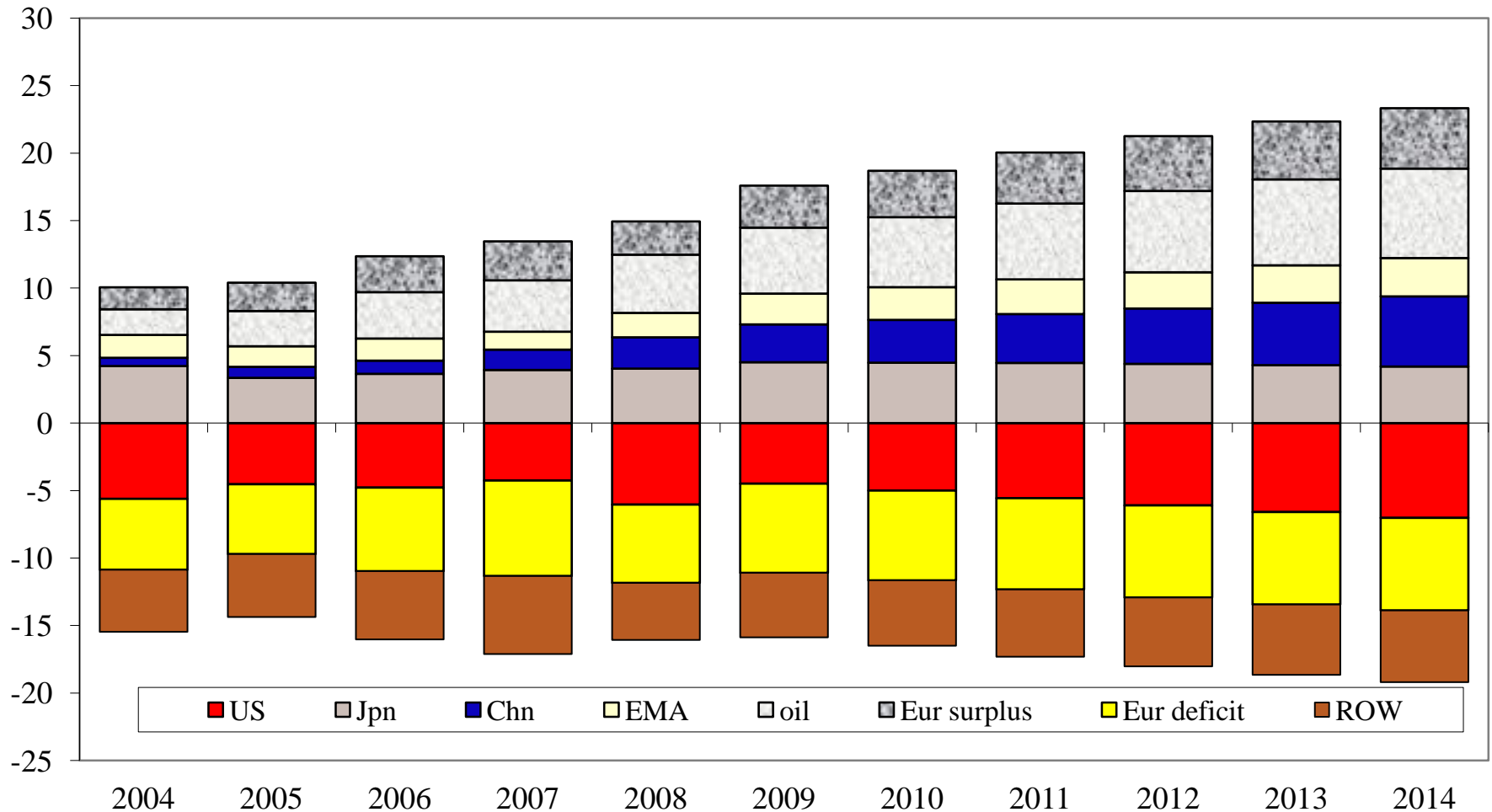
- Kubelec and Sa (2009, 2010)
  - ▣ Bilateral positions for 18 countries, 1980-2005
  - ▣ Relies on estimation to fill gaps
- Daude and Fratzscher (2007)
  - ▣ Gravity-type equations for bilateral FDI, portfolio, and banking positions
- BIS research (Patrick McGuire et al)
- Many studies on bilateral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

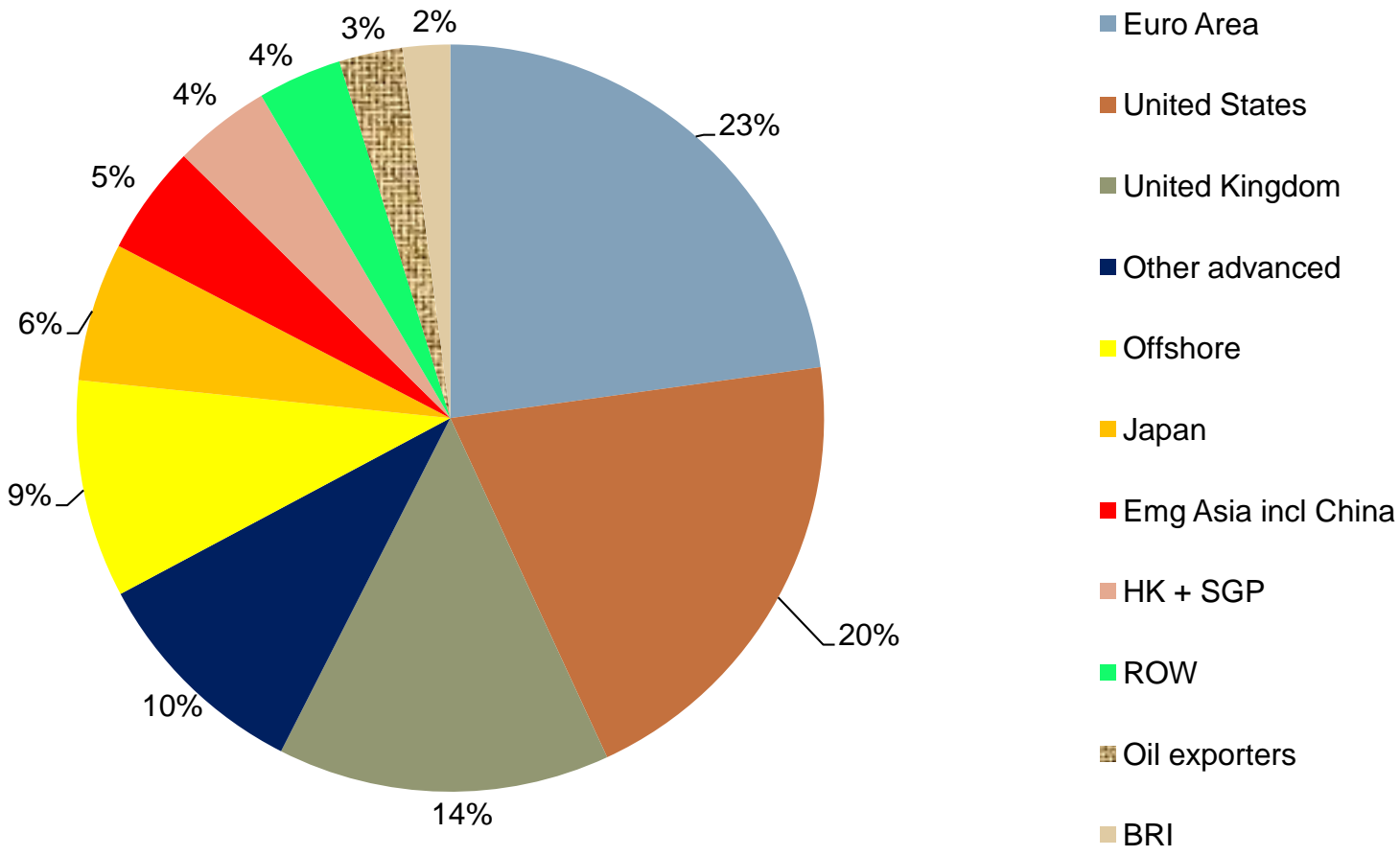
## I. Net external positions





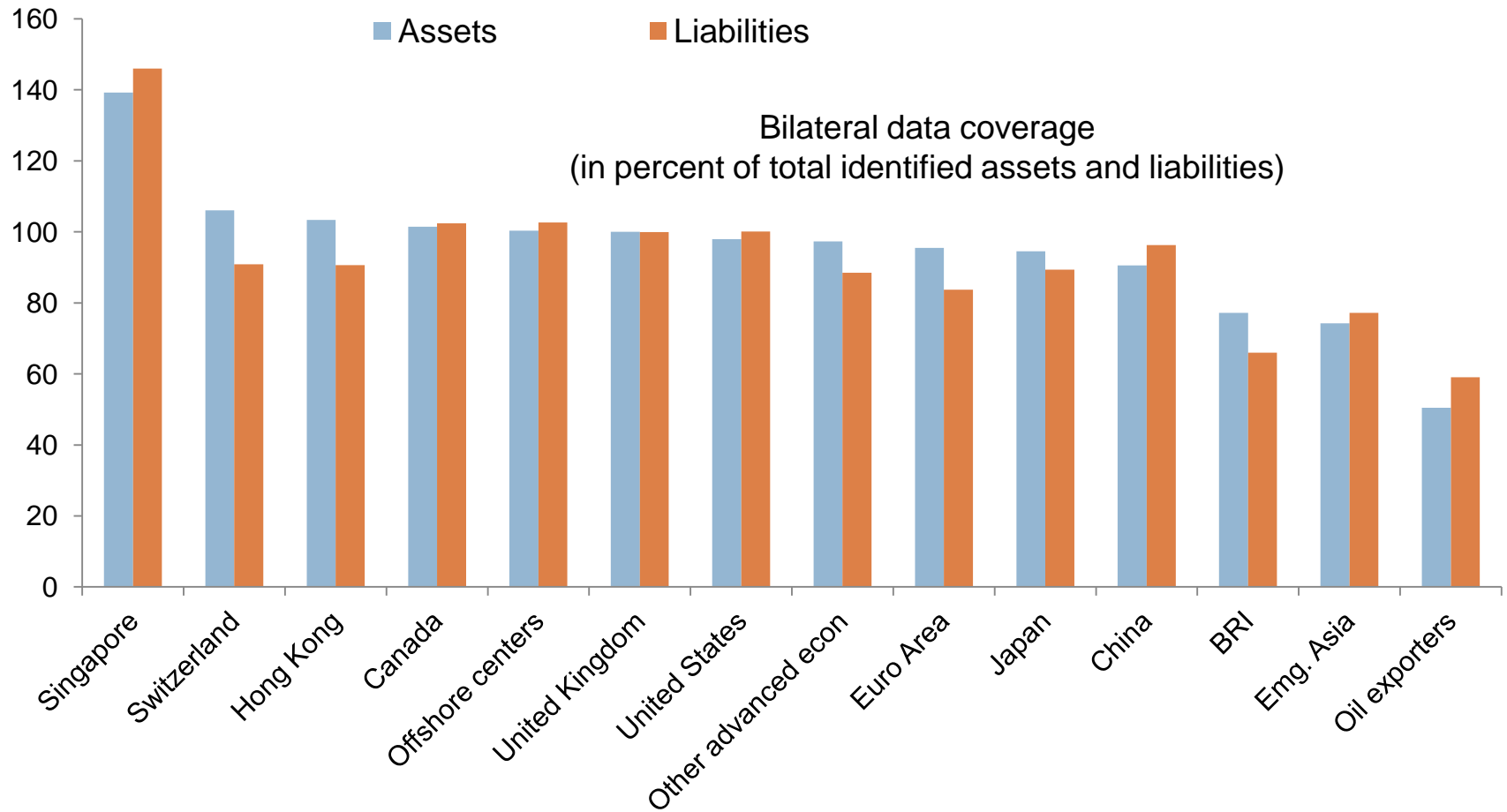
# What do we know from aggregate data?

## II. Gross external assets



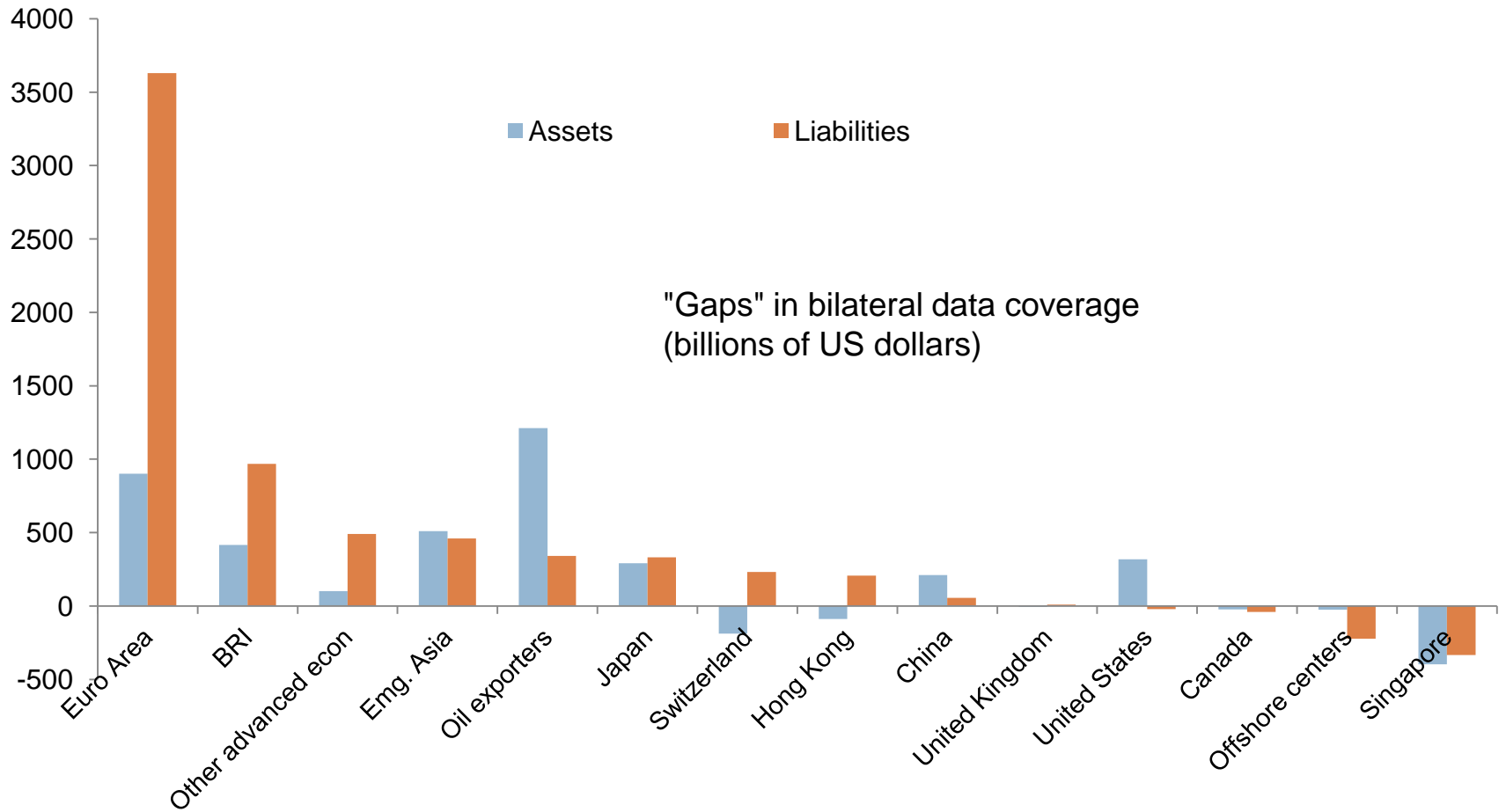
# Data coverage

(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?

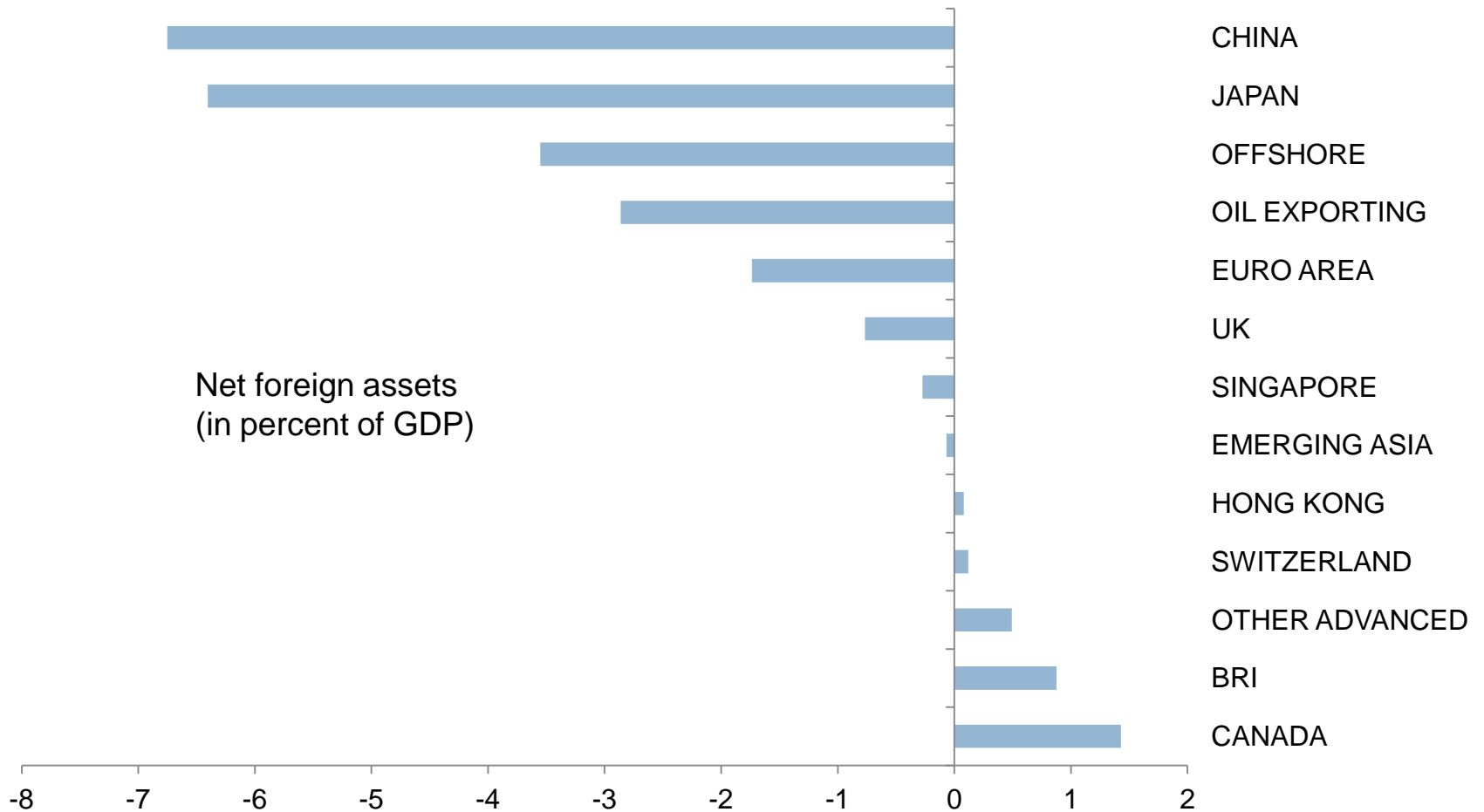
*Table. Liabilities without an identified partner (USD bill)*

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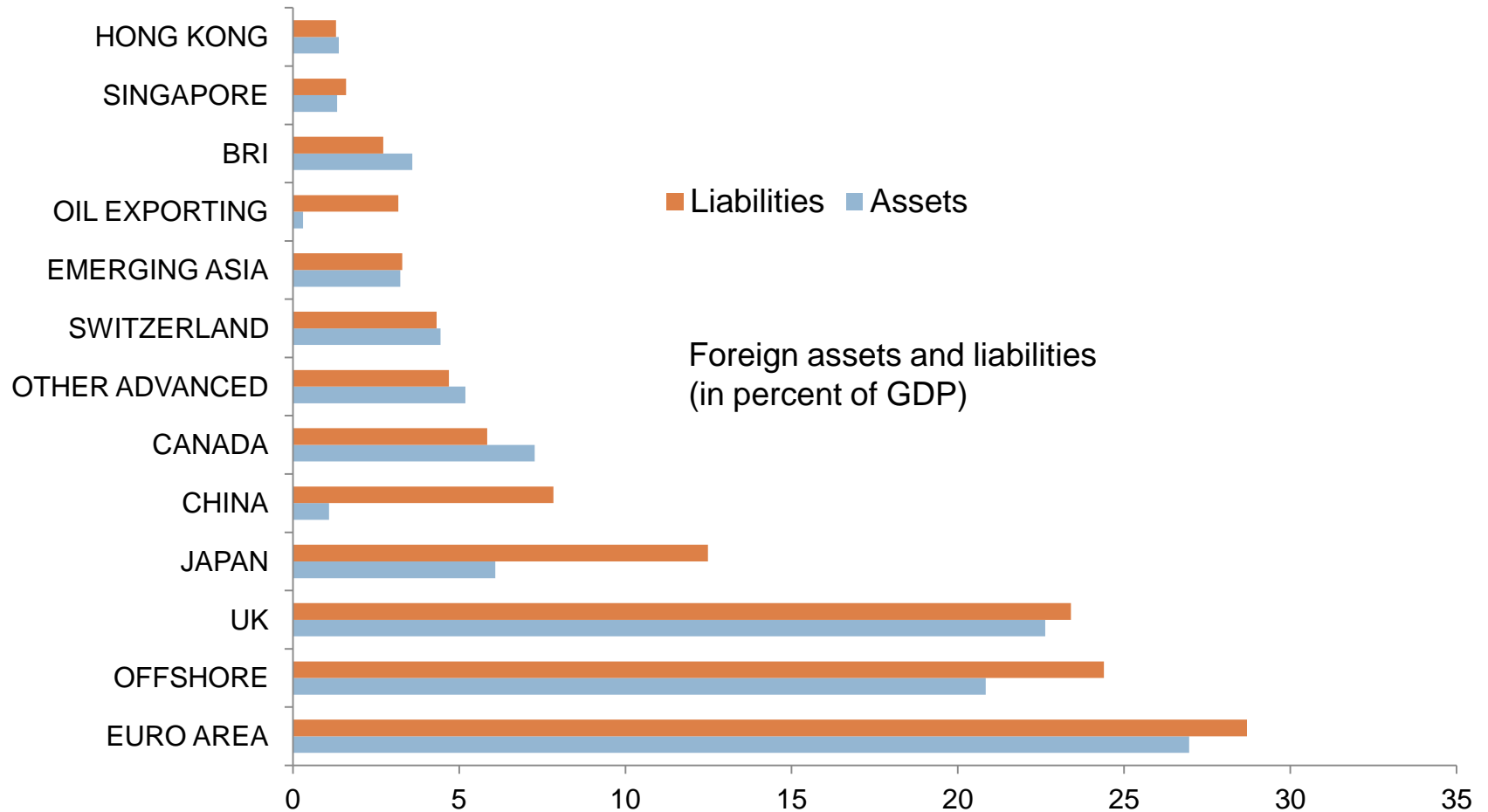
Portfolio equity		Portfolio debt	
Total euro area	2,271	Total euro area	1,357
Luxembourg	1,100	France	415
Ireland	733	Netherlands	260
Netherlands	271	Italy	248
Spain	106	Germany	167

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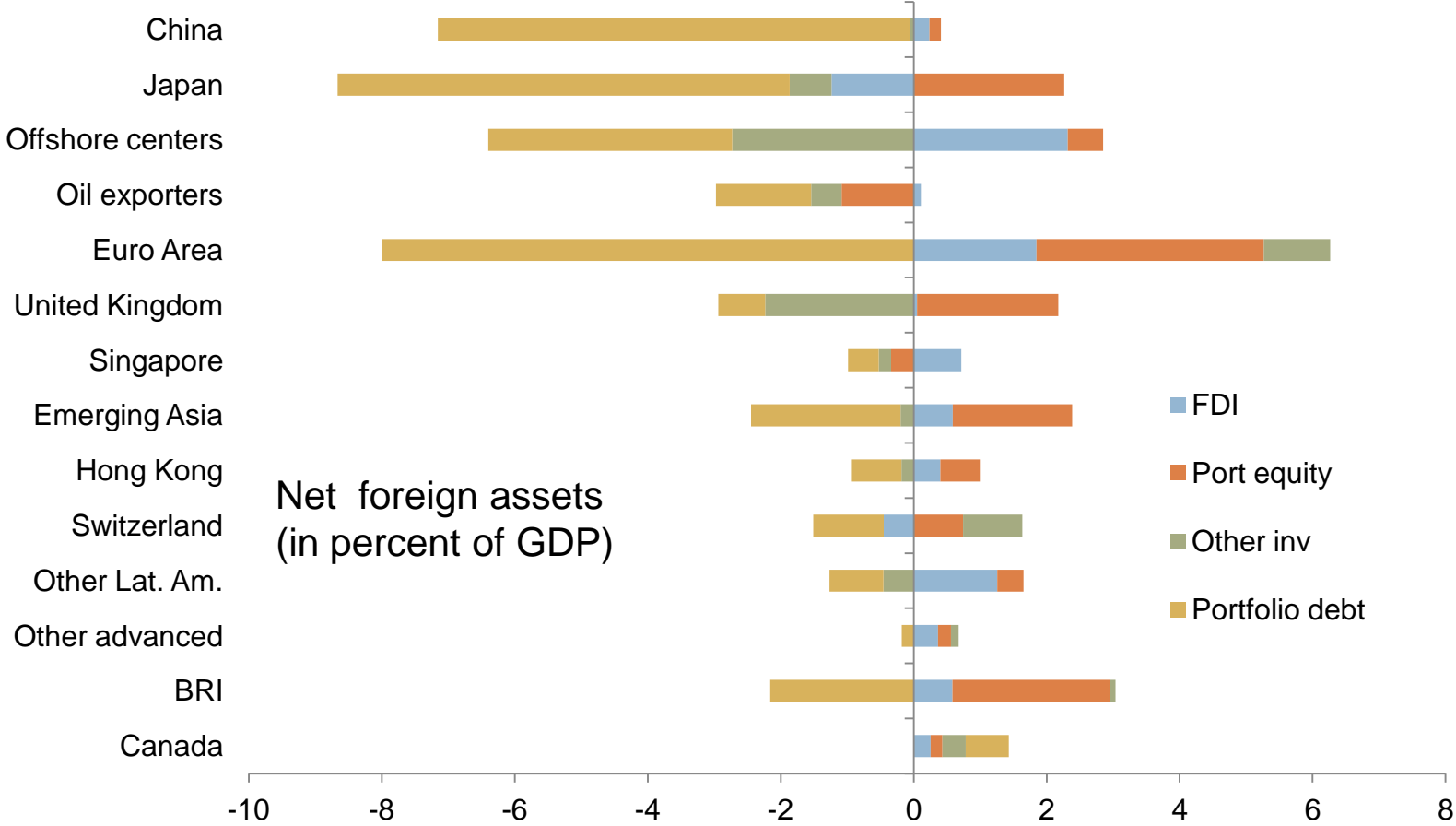
# The United States: net position



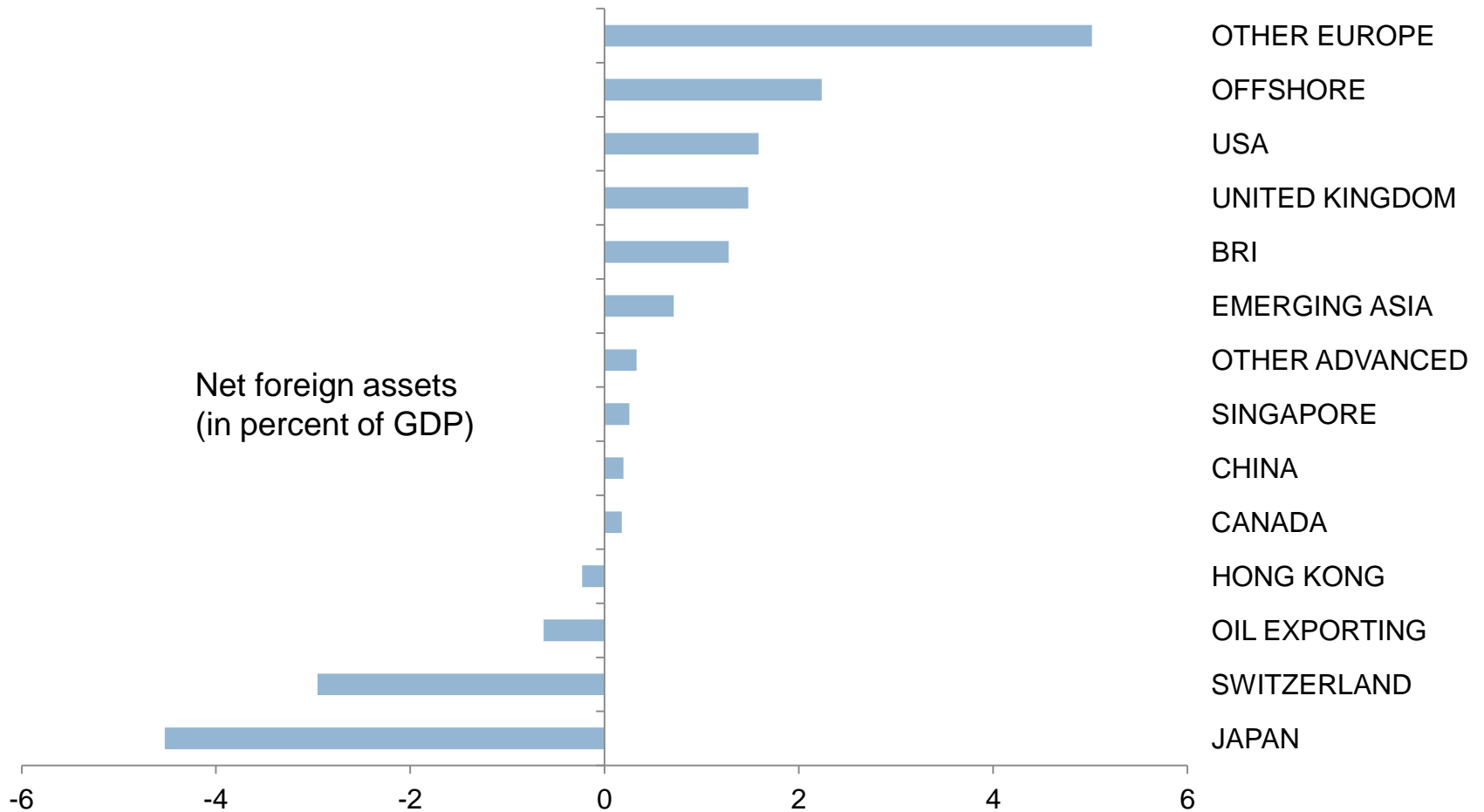
# The United States: gross position



# United States: composition of net position

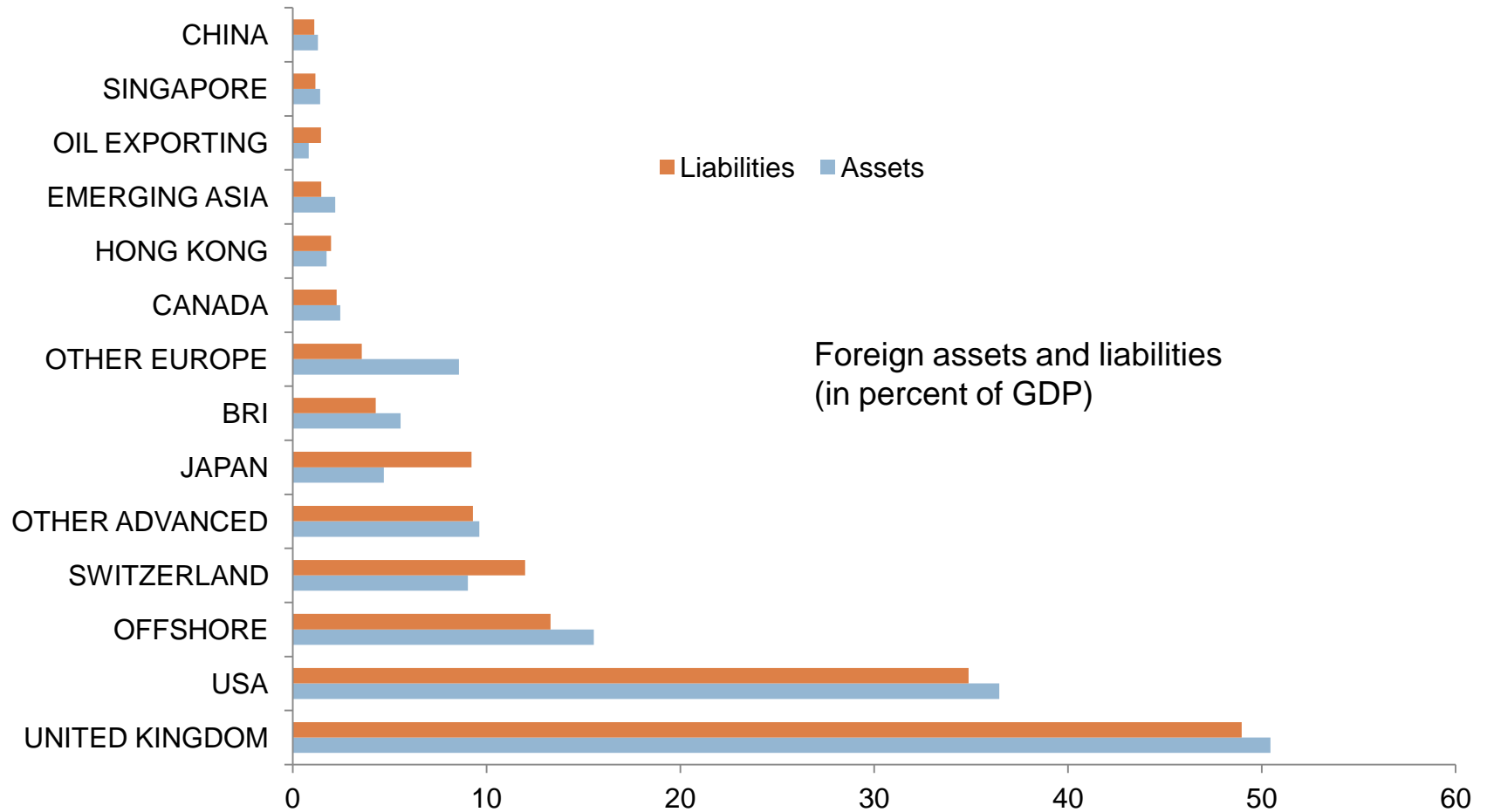


# Euro Area: net position

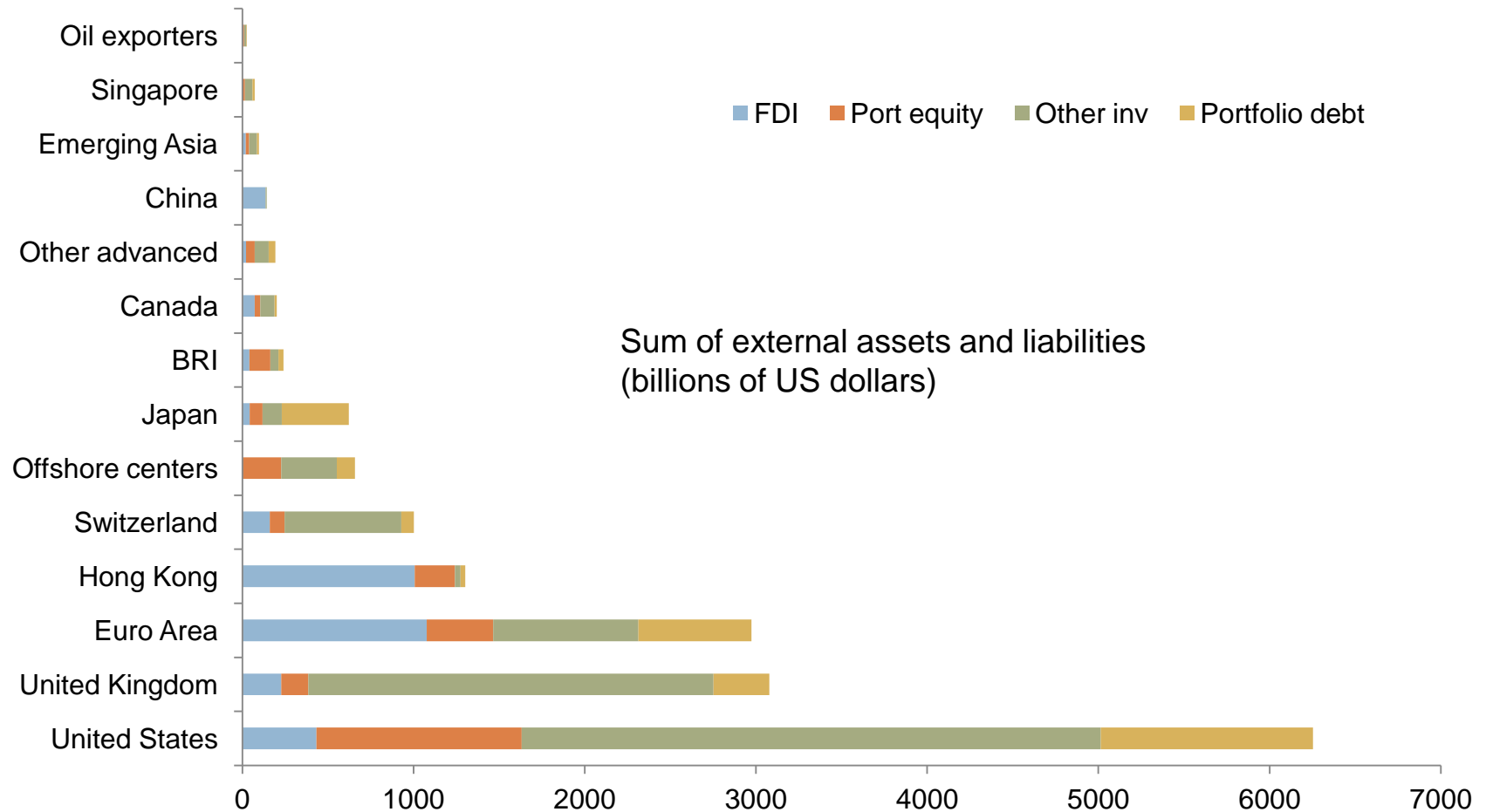




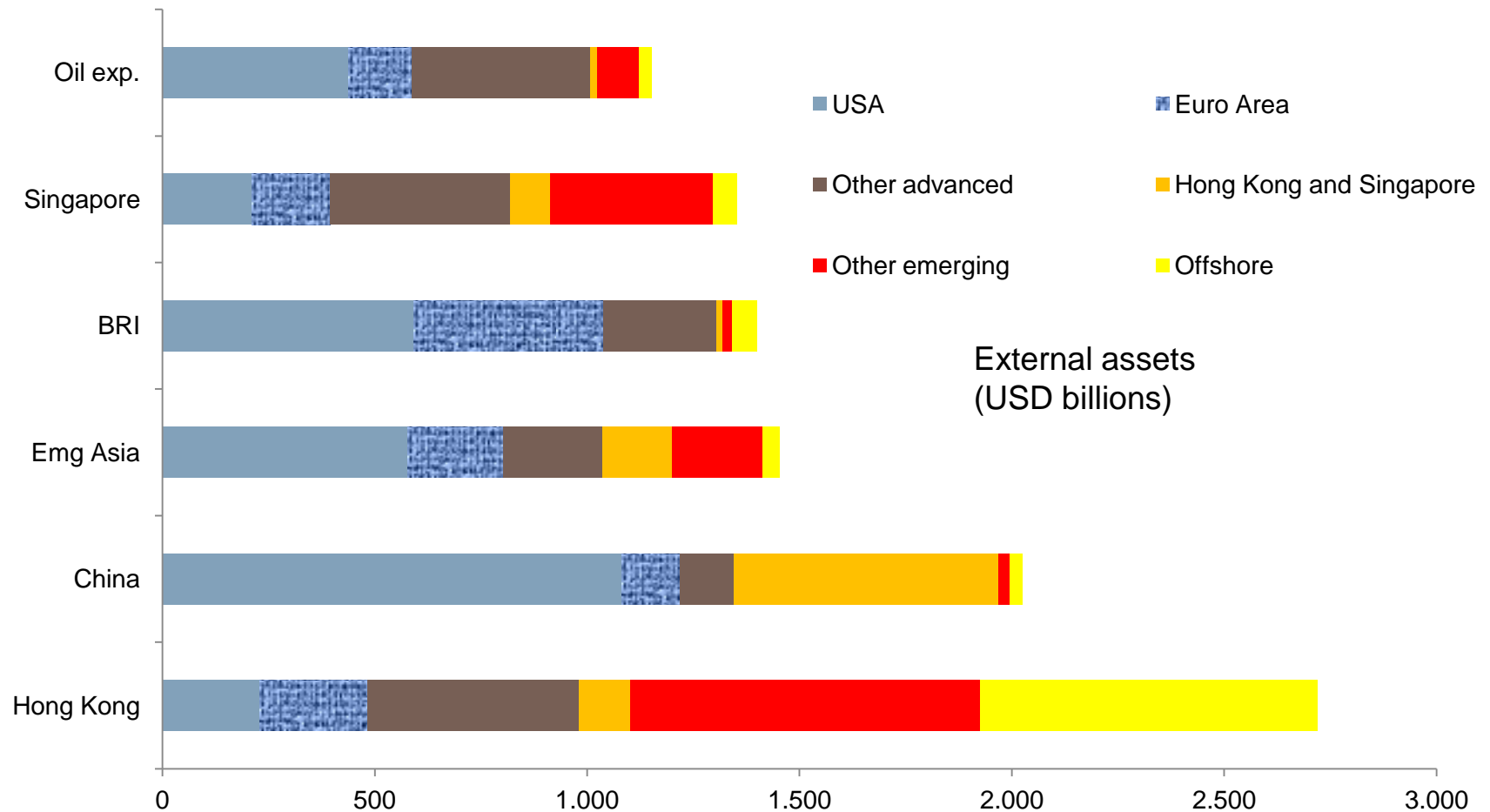
# Euro area: gross positions



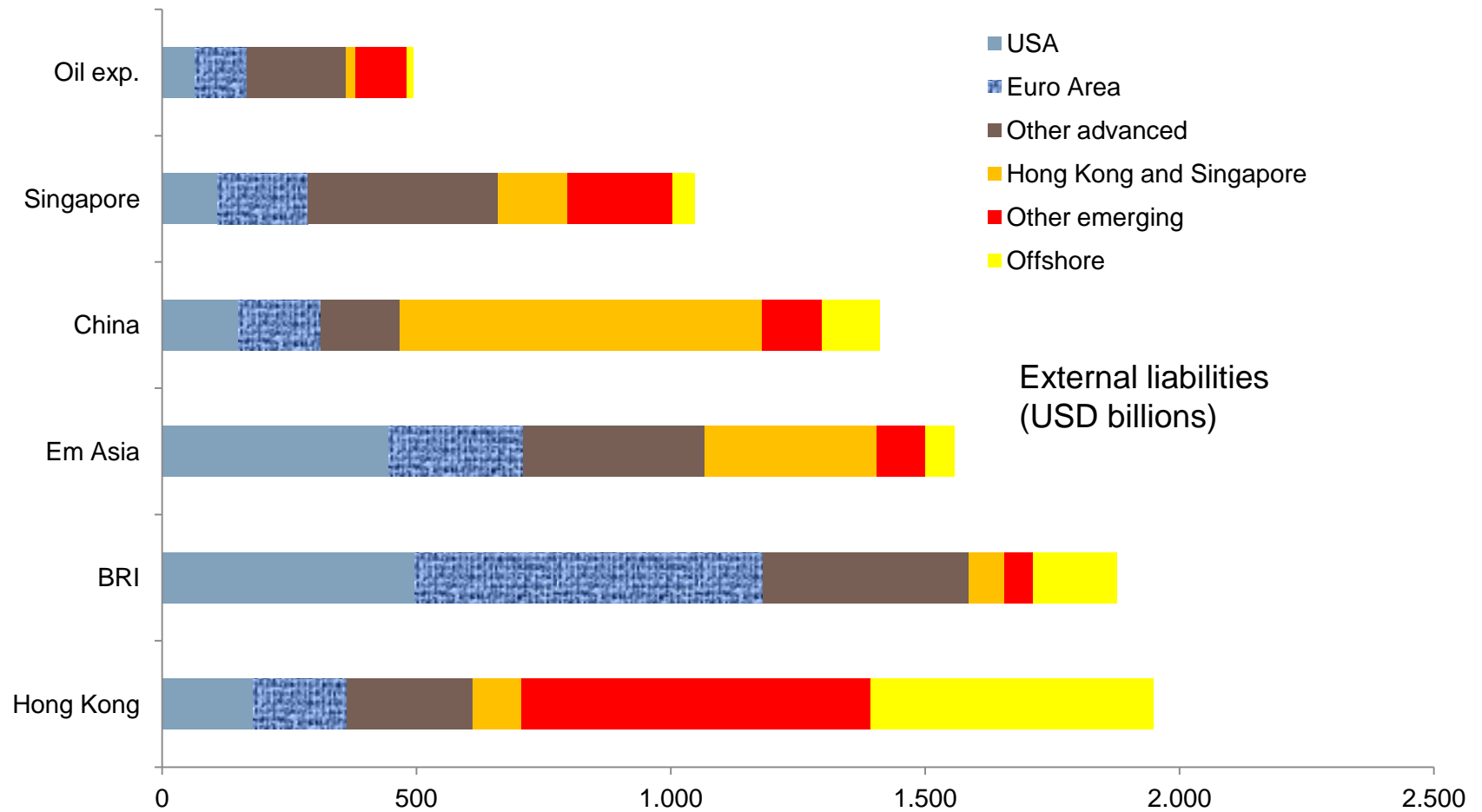
# The importance of offshore centers



# The external portfolio of emerging markets: I. Assets

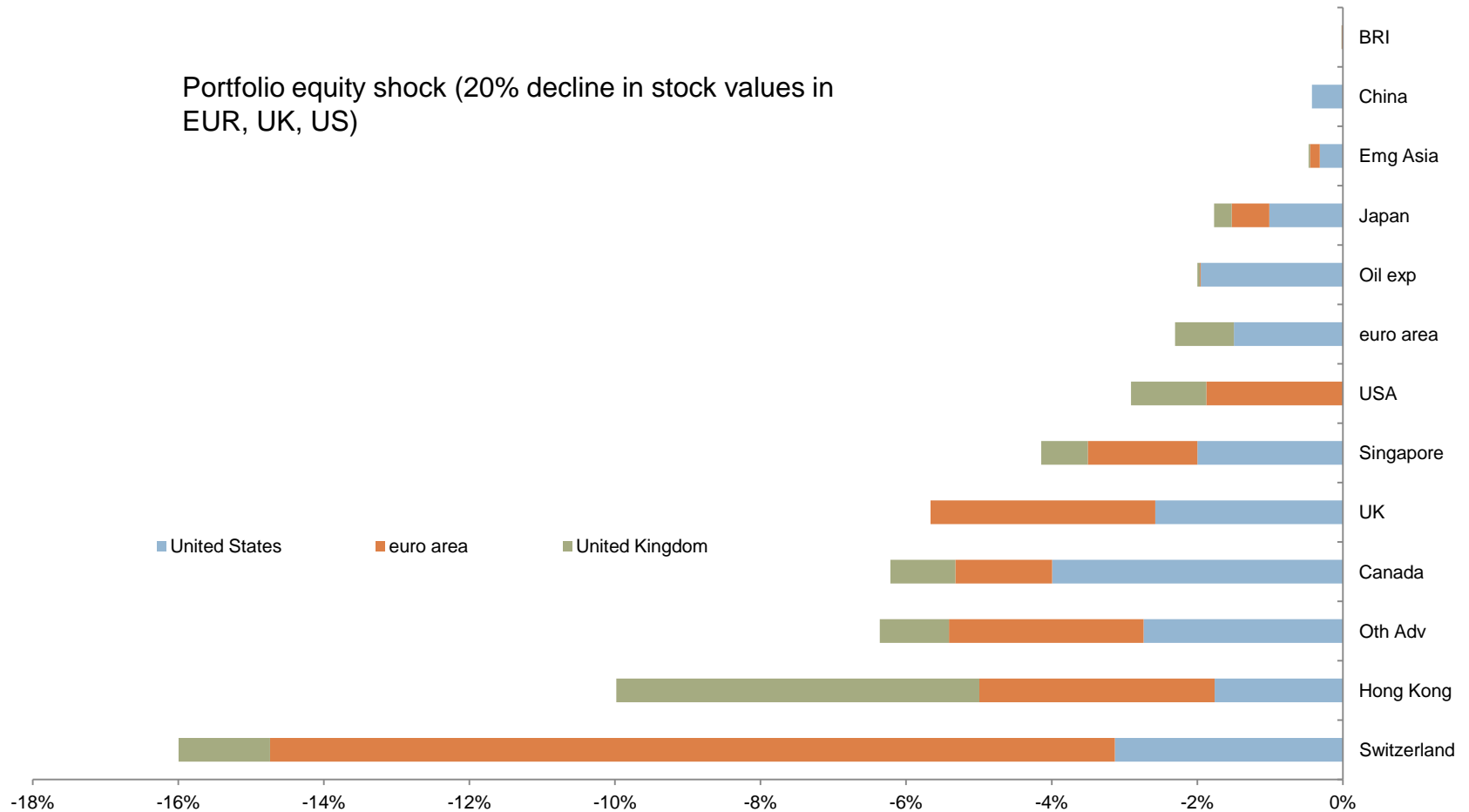


# The external portfolio of emerging markets: II. Liabilities



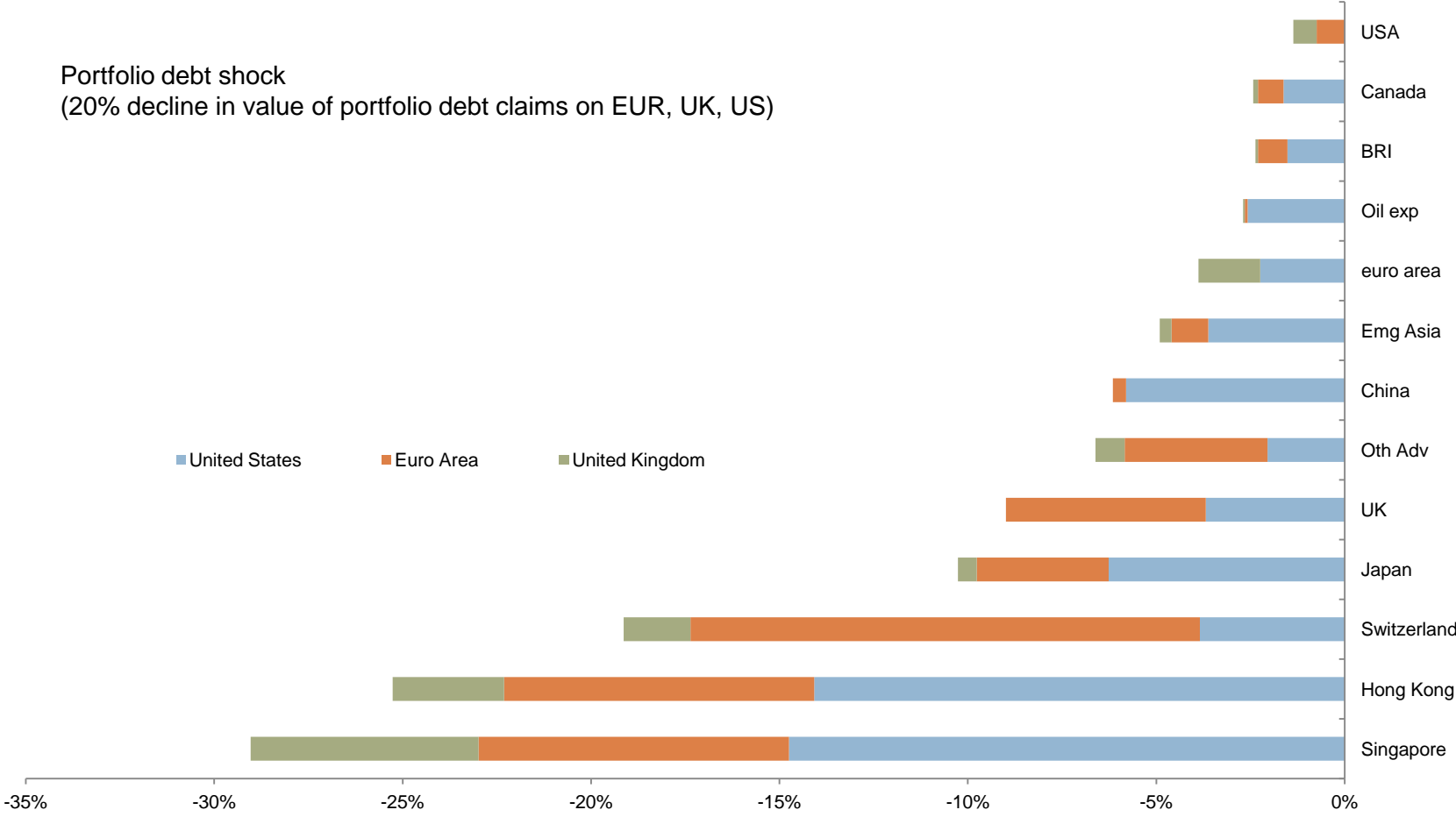
# Decline in value of portfolio equity claims on US, euro area, UK

Portfolio equity shock (20% decline in stock values in EUR, UK, US)

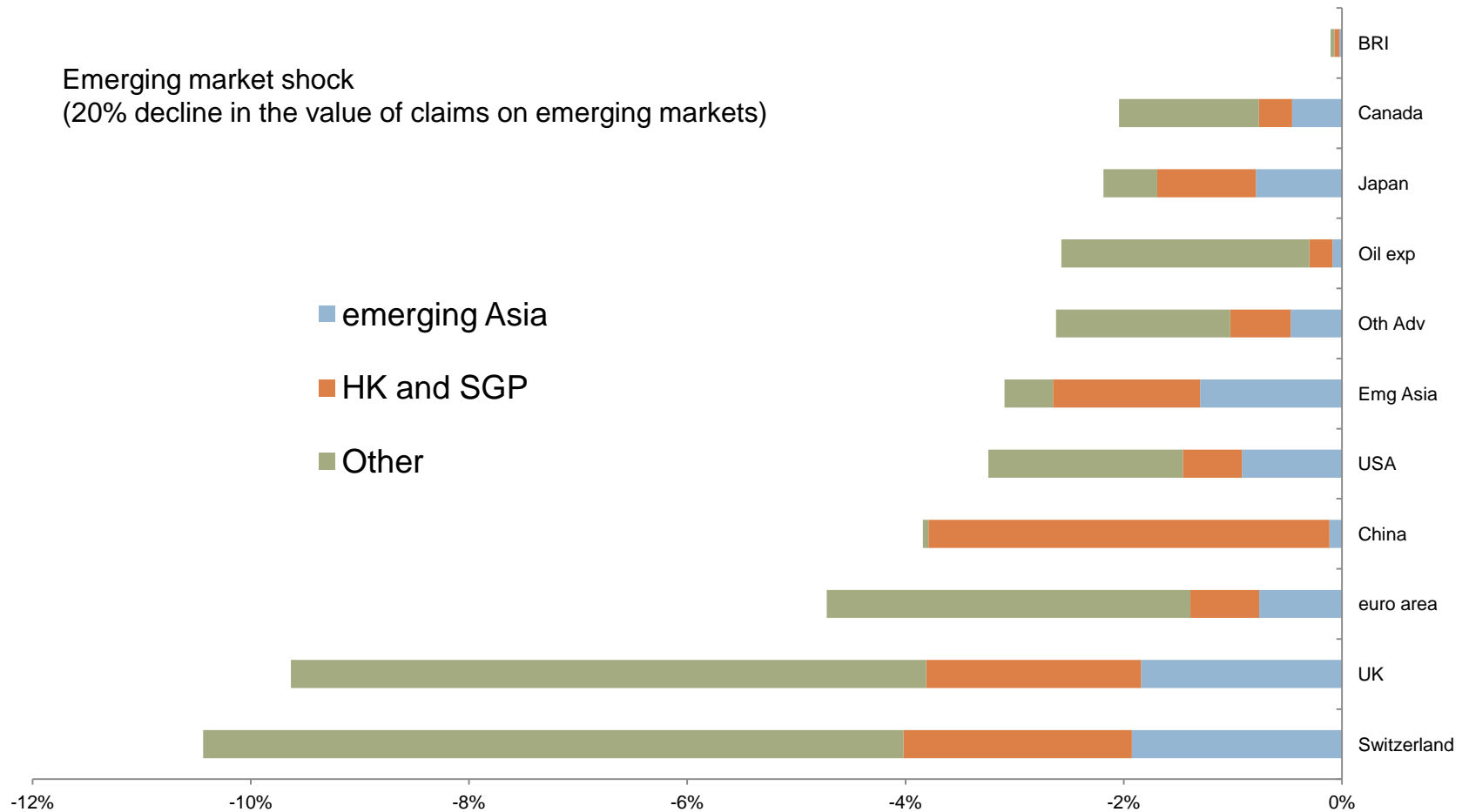


# Decline in value of portfolio debt claims on US, euro area, UK

Portfolio debt shock  
(20% decline in value of portfolio debt claims on EUR, UK, US)



# 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 residence-based 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

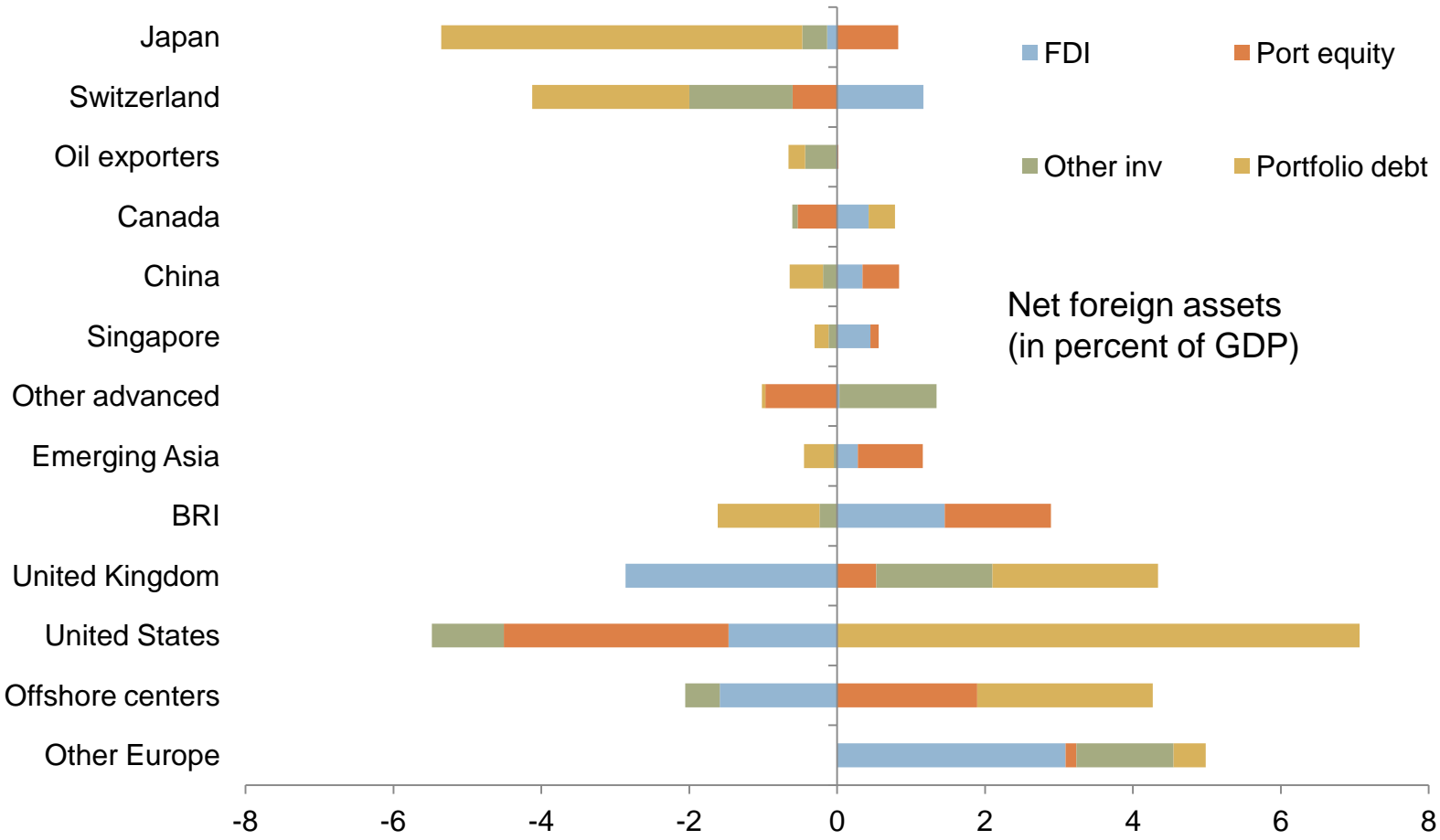
# Summary (II)

- 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’

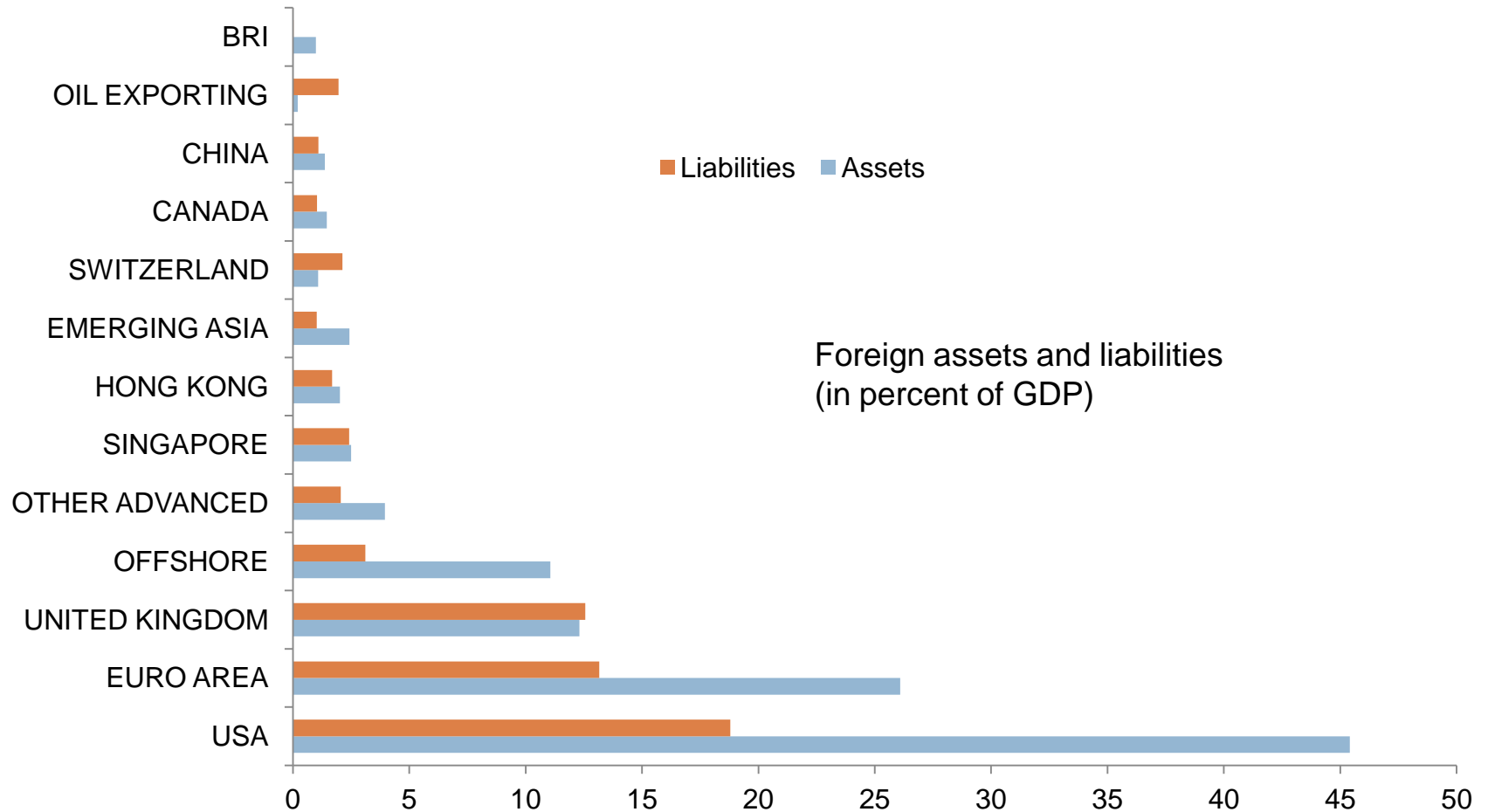
# Extra charts



# Euro Area: composition of net position



# Japan's foreign assets and liabilities



# United Kingdom: composition of gross position

