

IFC Satellite meeting at the ISI World Statistics Congress on "*Assessing international capital flows after the crisis*"

Rio de Janeiro, Brazil, 24 July 2015

## From local to global: assessing financial positions on a consolidated nationality basis<sup>1</sup>

Bruno Tissot,

Bank for International Settlements and Irving Fisher Committee on Central Bank Statistics

---

<sup>1</sup> This presentation was prepared for the meeting. The views expressed are those of the author and do not necessarily reflect the views of the BIS, the IFC or the central banks and other institutions represented at the meeting.

---

# From local to global: assessing financial positions on a consolidated nationality basis

Bruno Tissot

Head of Statistics and Research Support, BIS  
& Head of Secretariat, Irving Fisher Committee on Central Bank Statistics (IFC)

*Session 3: Should residence-based data be completed by nationality information?*

# Highlights

1. Information needs
2. Accessing group-level information
3. Use of consolidated data: *can it add value?* – the BIS experience



- 1. Information needs: a global approach for assessing exposures?**
  - A. Concept of Exposure**
  - B. The Data Gaps Initiative (DGI)**
  - C. Can the residency-based approach of the national accounts be complemented?**
  - D. A framework for assessing financial positions & exposures**



## 1.A – Concept of exposure

- **Selected quotes** (Investopedia)

- *"Financial exposure is the amount that one stands to lose in an investment".*
- *"Market exposure, also known as "exposure," represents the amount an investor can lose from the risks unique to a particular investment."*
- *"Credit Exposure is the total amount of credit extended to a borrower by a lender. "*

- **BIS banking statistics**

- In contrast to the country where the actual counterparty resides, the country of ultimate risk is defined as the country in which the guarantor of a financial claim resides and/or the country in which the head office of a legally dependent branch is located.
- Transfer of risk: from the country of the immediate risk to the country of "ultimate risk".



## 1.B – The Data Gaps Initiative (DGI)

- Crisis highlighted the lack of data on cross-border exposures
  - *"Data deficiencies were mostly in relation to cross-border transactions"*
  - *"Onshore corporates (...) used offshore entities to raise finance and provide implicit guarantees, and this was unknown to policy makers"...*
  - *"Authorities were unaware of significant corporate exposure to exchange rate derivative products because these were booked outside of their jurisdictions"*
  - *For instance, firms "acquired foreign exchange exposures through derivatives contracts booked on foreign markets"*



## 1.B – The Data Gaps Initiative (DGI) – Past...

- DGI Recommendation #13

- "A more comprehensive approach is needed (... to) identify such cross-border exposures".
- "Need to address the methodological and practical issues of handling the concept of consolidation and the definition of corporate groups"
- "The IAG to investigate the issue of **monitoring and measuring cross-border**, including foreign exchange derivative, **exposures** of nonfinancial, and financial, corporations with the intention of **promoting reporting guidance and the dissemination of data.**"



## 1.B – The Data Gaps Initiative (DGI) – ... and Future

- G-20 renewed interest (September 2014)
  - Update on IMF, FSB and BIS work on addressing data gaps as regards foreign currency exposures
- Further DGI-related initiative?
  - Improve the consistency and dissemination of data
  - Focus on non-bank financial and non-financial corporations
  - Cross-border exposures including through foreign affiliates and intra-group funding



## 1.C – Can the residency-based approach of the national accounts...

- System of National Accounts Framework (SNA 2008)
  - Units that are resident in a specific economic territory
  - Flow of Funds and corporates' financial positions
- Ongoing globalisation of economic activities: challenges
  - Real sector (international corporations, BoP, investment)
  - Financial sector: role of affiliates (foreign branches and/or subsidiaries)

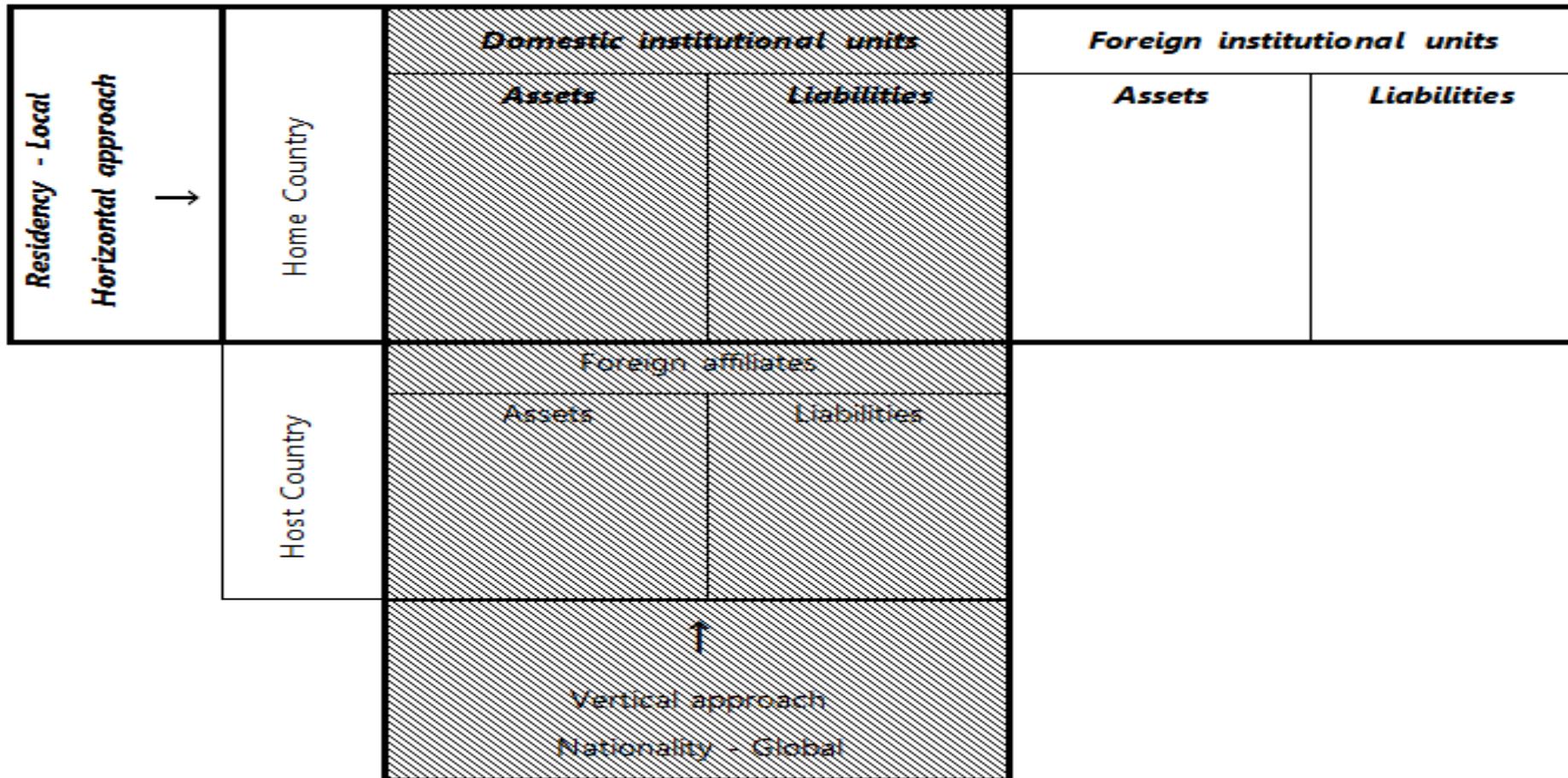


## 1.C – ... be complemented?

- Use of information on a residency basis but also on a group basis
- Nationality-based approach
  - Who makes the underlying decision?
  - Who takes on the risk?
  - Who needs to hold sufficient capital to cover global potential losses?
- Approaches are complementary



# 1.D – Framework for assessing financial positions & exposures



- Residency approach: all resident institutional units
- Nationality approach: delineates financial positions vertically

## 2. Accessing group-level information

- A. Three main approaches to group-level information
- B. Classification of economic units
- C. The concept of control
- D. Defining a corporate group
- E. Challenges



## 2.A – Three main approaches to group-level information

- Business accounting
  - Principle of global consolidation for national corporate entities
  - IFRS standards
  - But national GAAPs
- Supervisory
  - Key supervisory information distinguishes between “home” and “host” country responsibilities
  - But global financial business model increasingly includes banks and non-banks, with a mixed and evolving nationality structure
- Statistical
  - Largely based on residency data (SNA, BOP)

## 2.B – Classification of economic units

- Sectoral classification
  - Main principal economic activity
  - But need for refinement (eg shadow banks)
  - Rest of the World is treated as an aggregate
- Nationality classification
  - Institutional units need to be “associated with” or “assigned to” a particular home country
  - Cooperation amongst various home and host countries
  - Reconciliation exercises



## 2.C – The concept of control

- Business accounting
  - Control = power to govern an entity so as to obtain benefits from its activities
  - Ownership as the criterion: more than half of the voting power
  - Other elements can be considered
- Supervisory
  - Jurisdiction where is located the home country supervisor
  - Entitled to exercise consolidated supervision
- Statistical
  - (economic) ownership is a pre-condition for control
  - Foreign Direct Investment: influence-based relationship
  - Multinational Enterprises: control-based relationship
  - Head office concept (oversees & manages the units)

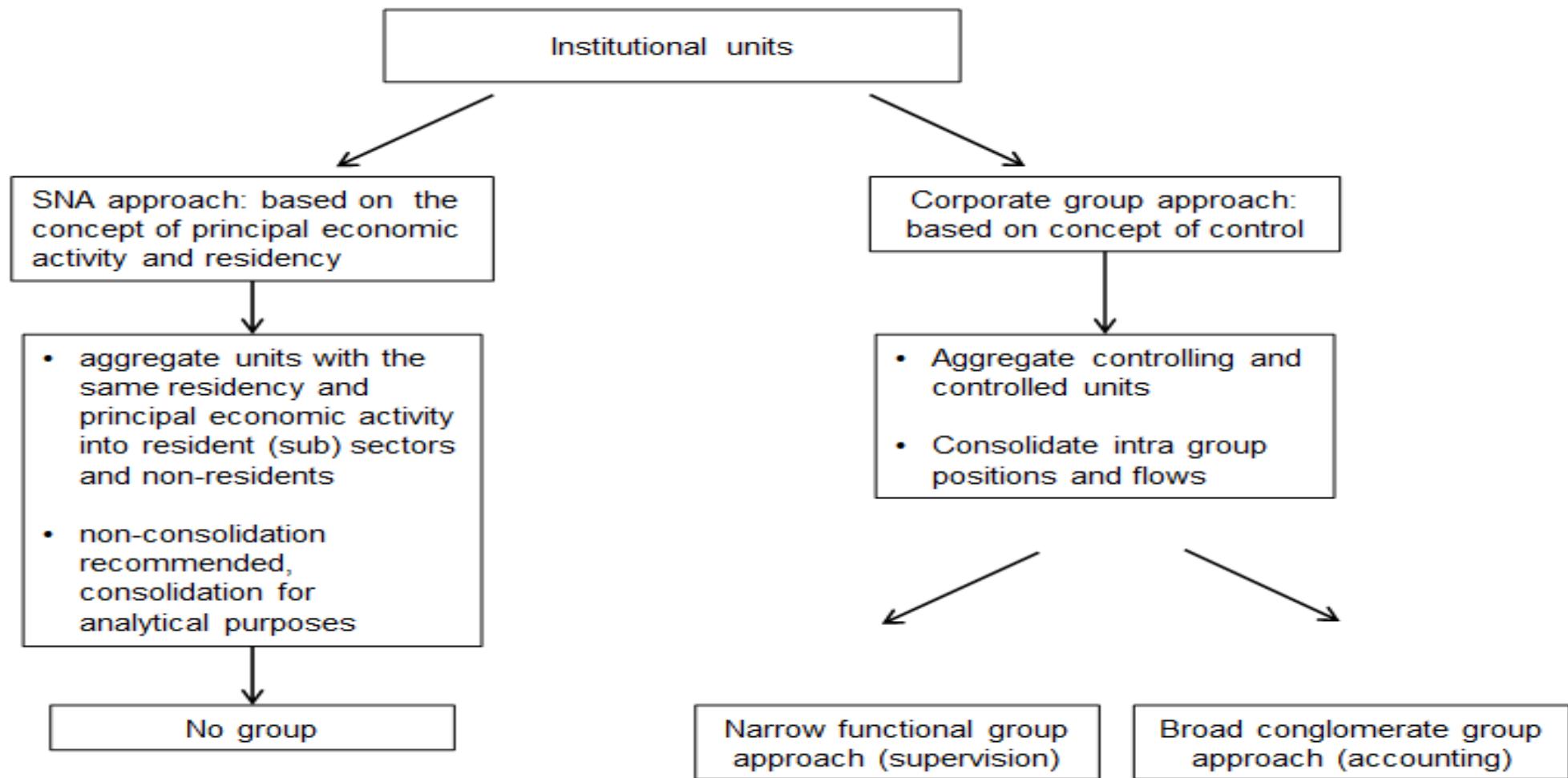


## 2.D – Defining a corporate group

- Business accounting (“conglomerate” view of a group)
  - Group comprises “a parent and all its subsidiaries”
  - Accounting view can be very broad
- Supervisory
  - Functional approach
  - Prudential view of a group can be significantly narrower
  - “Look through” the chain of controls and identify the ultimate risk holder
  - Three types of groups of corporations: Banking groups, Non-bank financial groups, Non-financial groups
- Statistical
  - Broad approach not recommended (institutional unit)
  - Consolidation is discouraged
  - SNA concept of “large groups and multinational corporations”



## 2.D – Assessing the financial position of a group



## 2.E – Challenges

- Differentiating between “influence” and “control”
- Large, complex groups: cf Joint Forum definition of financial conglomerate:  
→ at least 2 significant activities in banking / insurance / securities
- *What happens if?* Ring-fencing issues, branch vs subsidiary, level of guaranties



### 3. Usage of consolidated data: *can it add value?* – the BIS experience

3.A Shadow Banks (FSB exercise)

3.B Consolidated international banking statistics (CBS)

3.C Derivatives statistics

3.D International debt securities statistics (IDS)



## 3.A – Shadow banks: Consolidation issues

- Shadow banking
  - Credit intermediation involving entities and activities outside of the regular banking system
  - FSB *Global Shadow Banking Monitoring Report 2014*
- “Narrow shadow banks”
  - Sector only includes entities that meet specific criteria:
    - **Not (prudentially) consolidated in a banking group**
    - Part of the credit intermediation chain
    - Specific risks (maturity & liquidity transformation)
  - Caution in consolidating non-bank entities



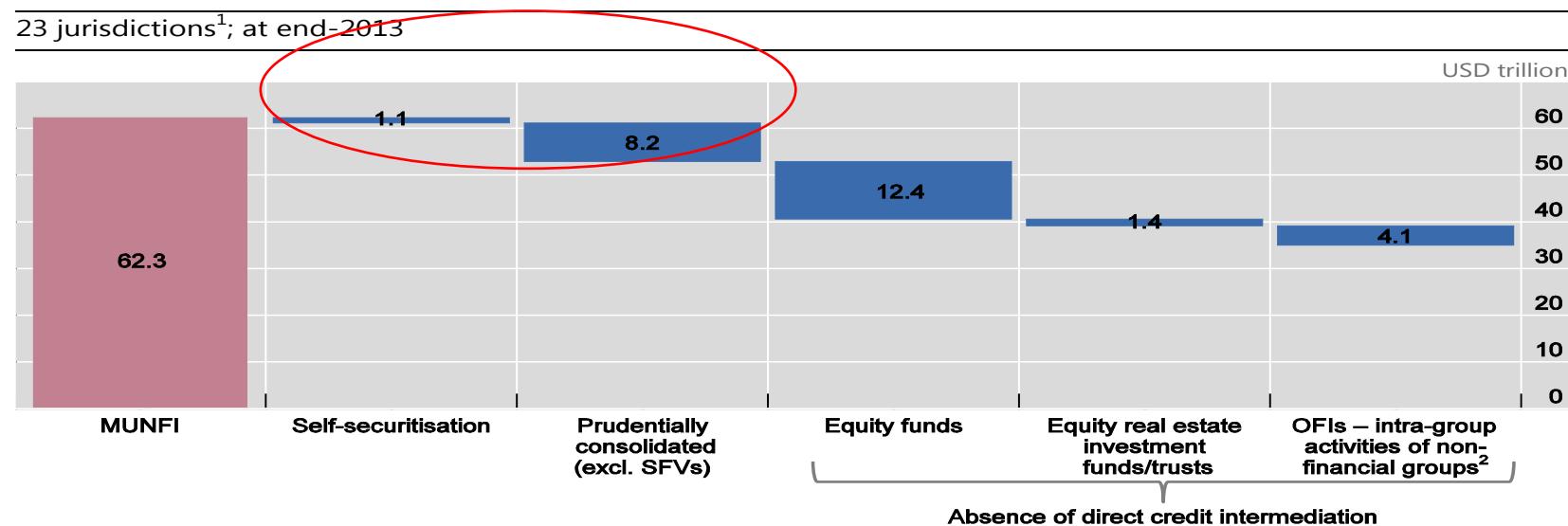
## 3.A – Shadow banks: Methodology

- “Macro-mapping”
  - Conservative estimate based on national Flow of Funds (FoF, balance sheet data) for all non-bank financial intermediation
  - Primary focus on “Other Financial Intermediaries”
- “Narrowing down”:
  - Use of more granular data (when available) to filter out entities
  - Exclude entities already prudentially consolidated into banking groups: mainly finance companies and broker-dealers
  - Structured Finance Vehicles (SFVs): products can remain on the balance sheet of the bank that originally provided the asset to be securitised (they are subject to consolidated banking supervision)



### 3.A – Shadow banks: Narrowing down exercise

- 23 jurisdictions reported granular data for 2013
  - Shadow banking estimate revised from \$62 to 35 trillion (-44%)
  - 12/13 growth revised from +6.6% to +2.4%
  - One third of the correction: prudential consolidation impact
  - Substantial revisions for some economies



<sup>1</sup> 23 jurisdictions reported more granular data for narrowing down. <sup>2</sup> OFIs which are part of a non-financial group and are created for the sole purpose of performing intra-group activities. This year, only Dutch non-financial SFIs are included in this narrowing down component.

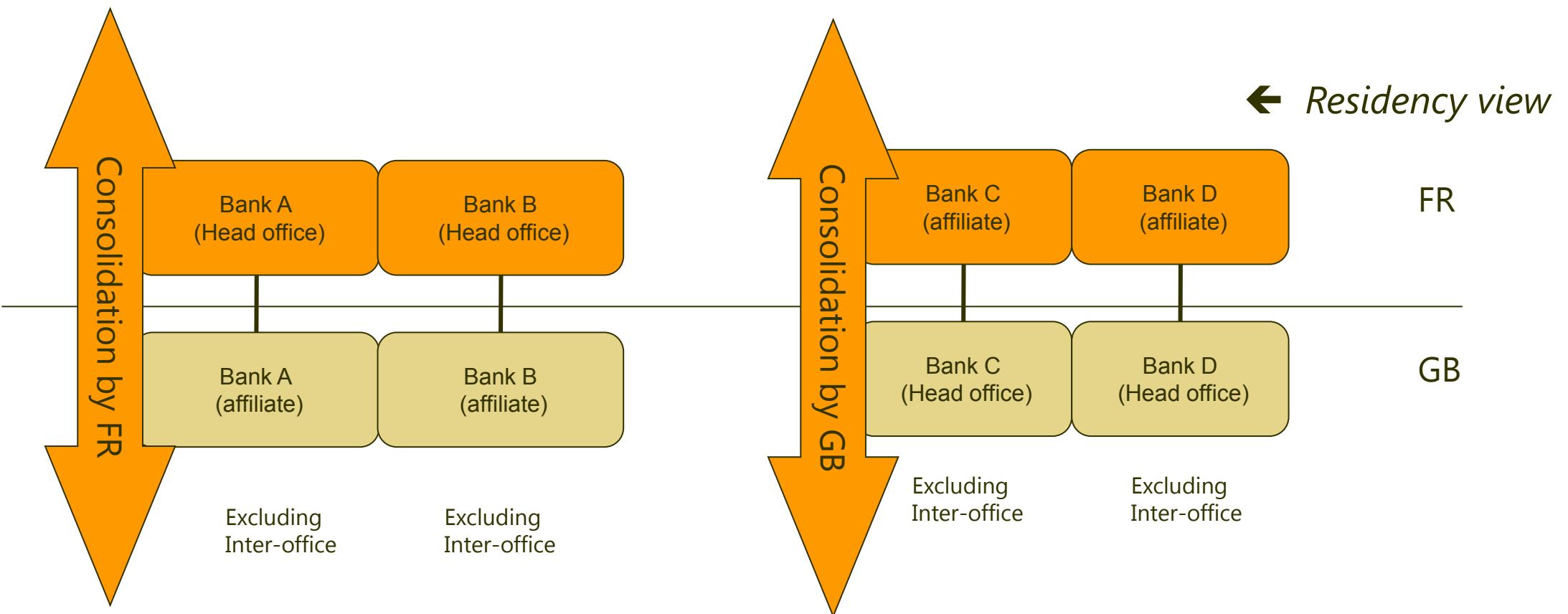
Sources: National financial accounts data; other national sources.



## 3.B – Consolidated international banking statistics

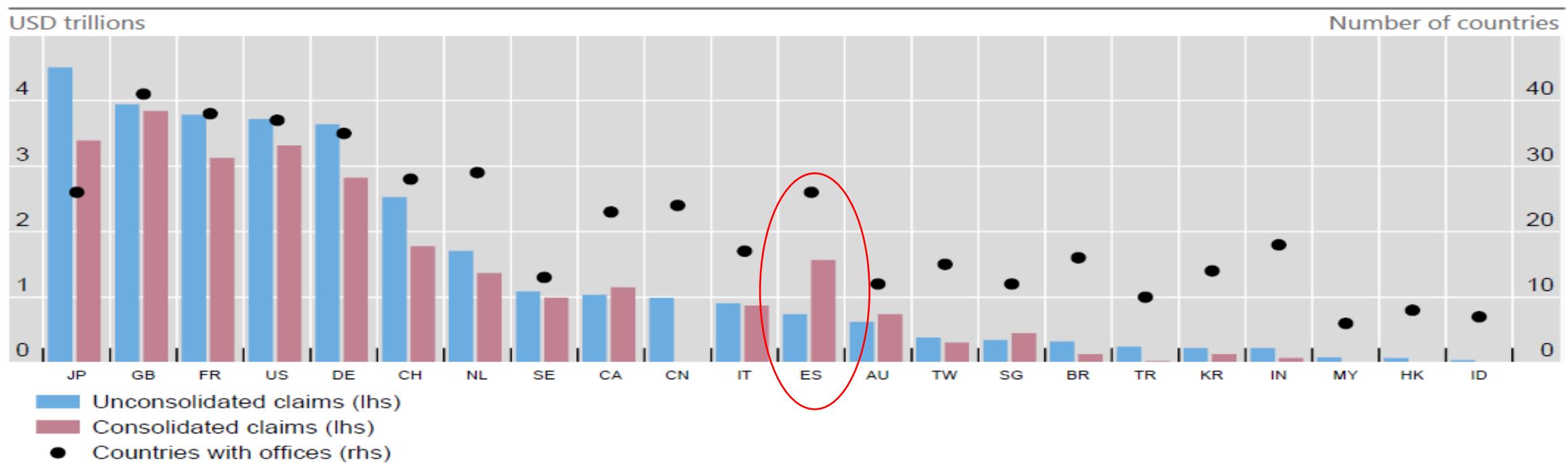
- Exposure of national banking systems (supervisory concepts)
  - All offices (including affiliates)
- 2 sets of consolidated banking statistics
  - Immediate borrower basis: Foreign claims of the banks of one country nationality consolidated worldwide
  - Ultimate risk basis (ie after adjusting for credit risk mitigants such as guarantees and collateral)

### 3.B – Consolidation of domestically-controlled banks



## 3.B – Consolidated international banking statistics

### International business of banks in reporting countries by home country of (parent) bank, within the BIS reporting area (44 countries for the LBS)

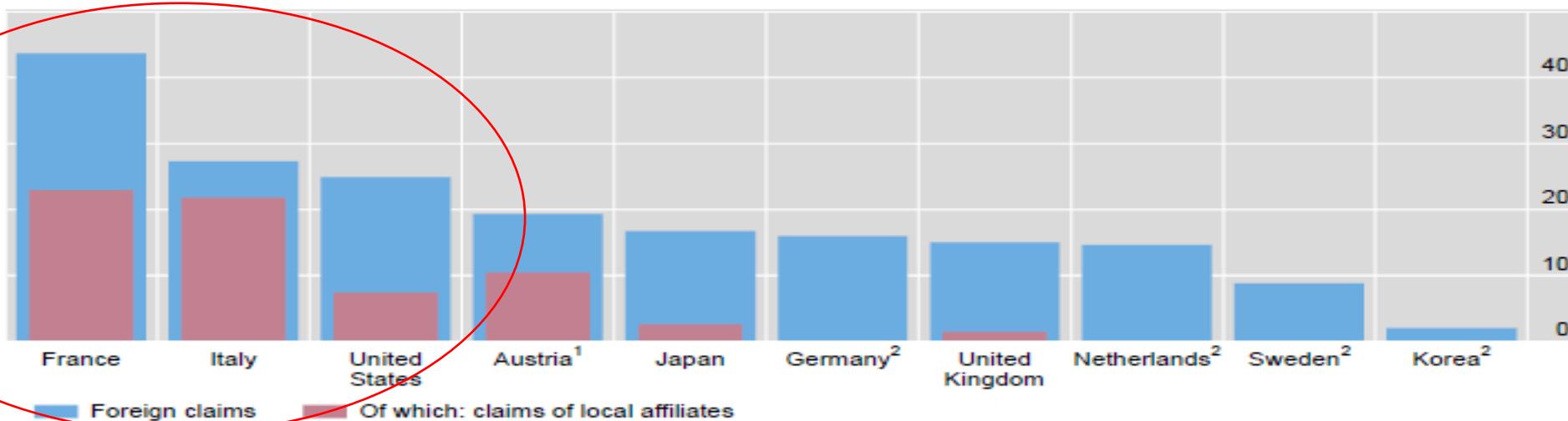


### 3.B – Consolidated international banking statistics

Foreign claims (ultimate risk basis) on Russia, by nationality of reporting bank

At end-September 2014, in billions of US dollars

Graph 7



<sup>1</sup> For Austrian banks, local claims represent claims in Russian roubles only and exclude claims in currencies other than rouble. <sup>2</sup> Due to confidentiality, the amount of local claims is not shown.

Source: BIS consolidated banking statistics (Tables 9D and 9E).

- Banks' foreign claims on Russia: \$196 billion on an ultimate risk basis
- French banks: even split between cross-border claims and claims booked by their local Russian affiliates
- US banks: mostly cross-border exposures



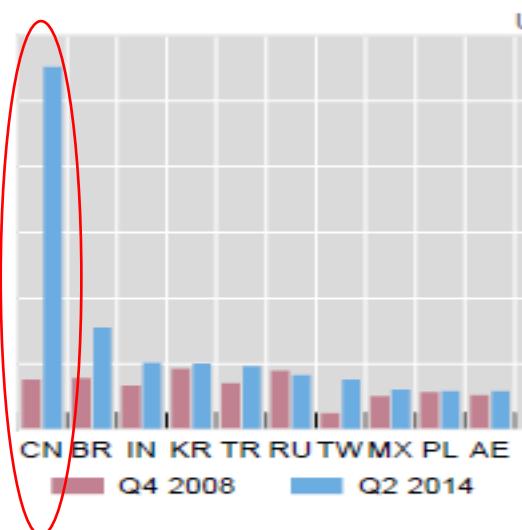
## 3.B – Consolidated international banking statistics

- Foreign claims on China amounted to around \$1.3 trillion in 2014, the fifth largest stock of claims on any individual country worldwide.
- Around two thirds are on Chinese banks.

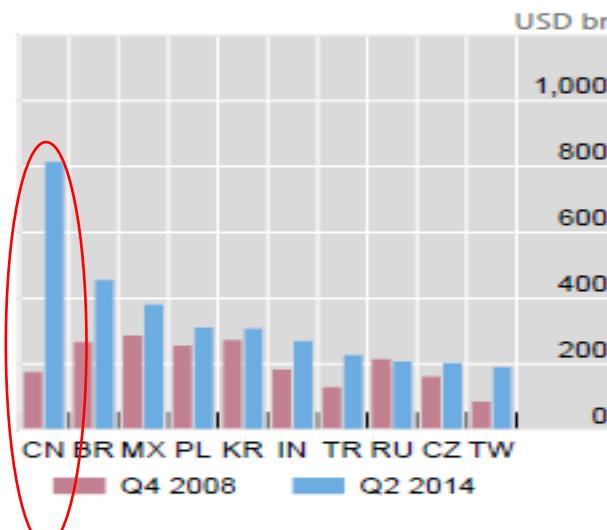
### The rise of China as an international bank lending destination

Claims of BIS reporting banks on emerging market economies, outstanding end-of-period stocks

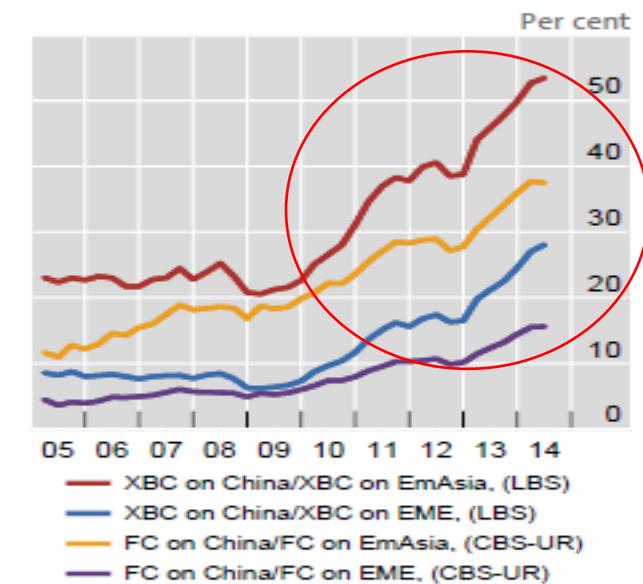
Cross-border claims<sup>1</sup>



Foreign claims<sup>2</sup>



Claims on China, as a share of claims on emerging Asia and on EMEs



AE = United Arab Emirates; BR = Brazil; CN = China; CZ = Czech Republic; IN = India; KR = Korea; MX = Mexico; PL = Poland; RU = Russia; TR = Turkey; TW = Chinese Taipei; EmAsia = emerging Asia-Pacific; EME = emerging market economies; XBC = cross-border claims; FC = foreign claims; LBS = locational banking statistics; CBS-UR = consolidated banking statistics on an ultimate risk basis.

<sup>1</sup> All reporting banks' cross-border claims (including banks' positions vis-à-vis their own offices) on the 10 largest EME borrowers as of end-Q2 2014. <sup>2</sup> All domestic banks' foreign consolidated claims (ultimate risk basis) on the 10 largest EME borrowers as of end-Q2 2014.

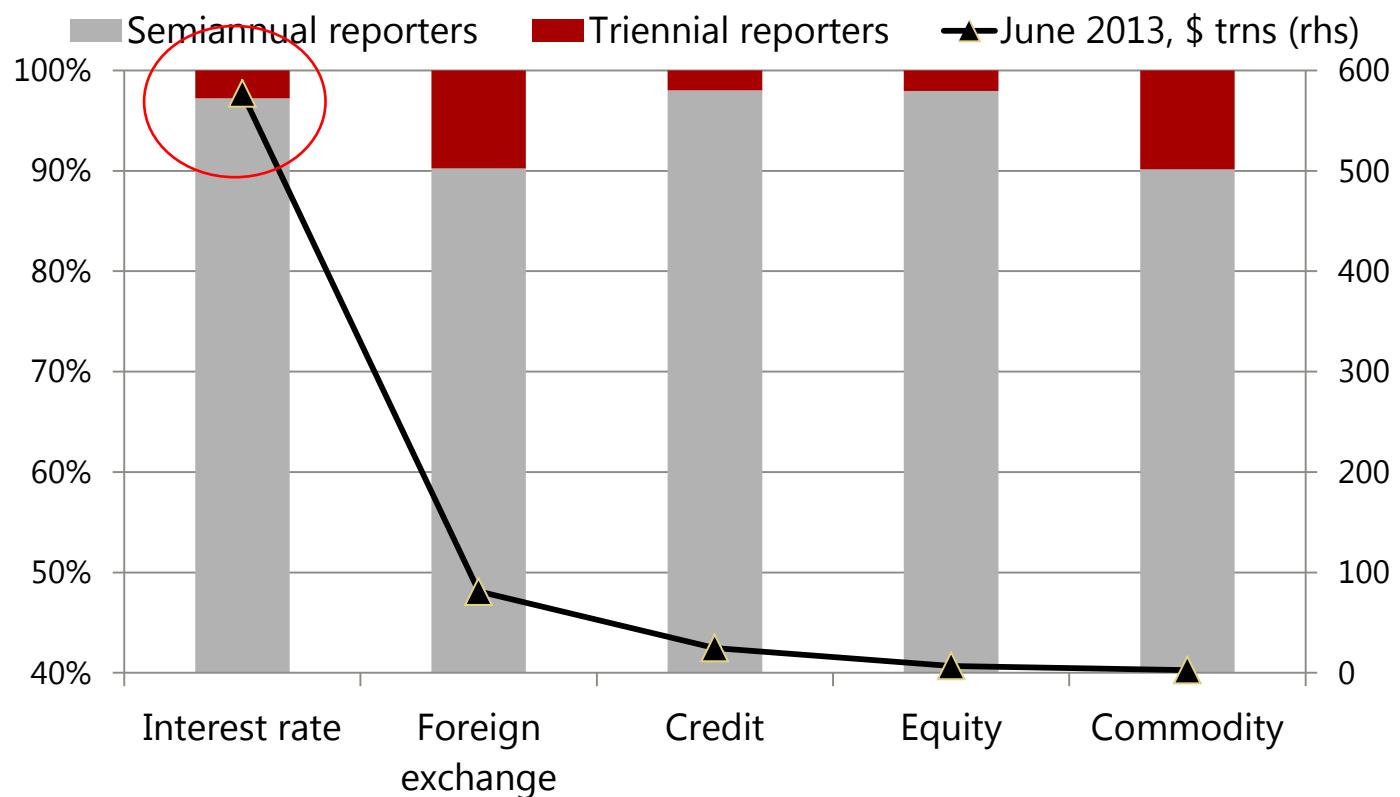
Sources: BIS locational banking statistics by residence (Table 6A); BIS consolidated banking statistics (Table 9D).



### 3.C – Derivatives statistics

- *BIS semi-annual data are consolidated.*
- *High global market coverage: institutions of the 13 surveyed jurisdictions control a large number of affiliates worldwide.*
- *Operations between affiliates of the same institution are excluded (for instance hedging operations conducted by a local branch with its parent entity, which merely reflects intra-group risk management practices).*

#### Share of the 13 reporting economies (8 G20)



## 3.D – BIS International debt securities statistics

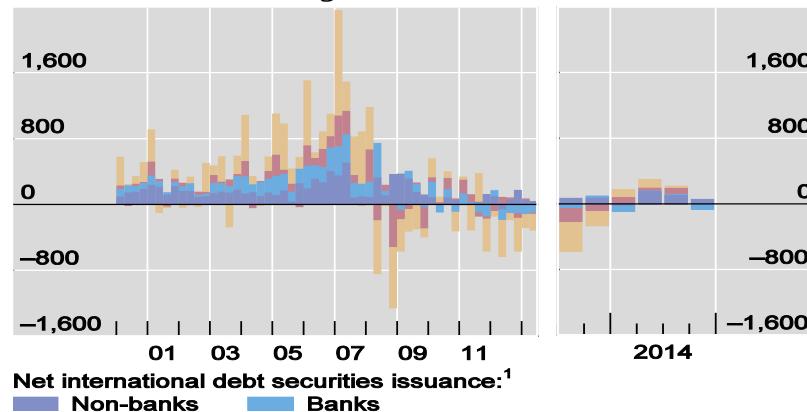
- International debt securities
    - Security-by-security database, very flexible
    - Multiple breakdowns
  - 2012 definition: debt securities issued in a foreign market (ie in a market other than the local market of the issuer), with several criteria:
    - currency of denomination
    - location of the primary/secondary markets (eg listing places)
    - governing law
- ➔(micro) data quality problems

### 3.D – BIS IDS: the “2<sup>nd</sup> phase of global liquidity”

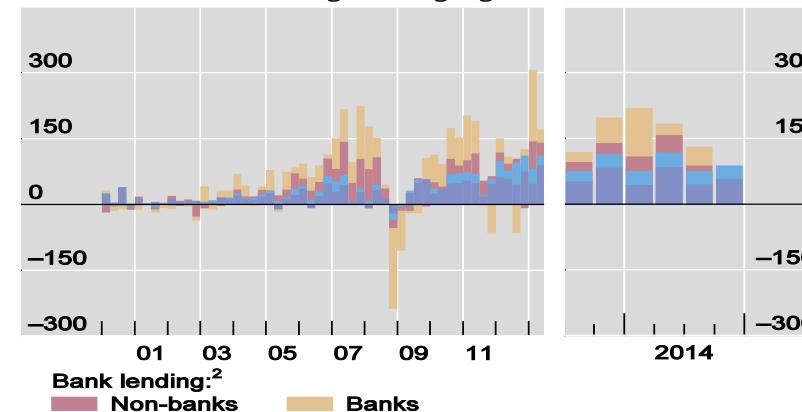
#### External financing flows

In billions of US dollars

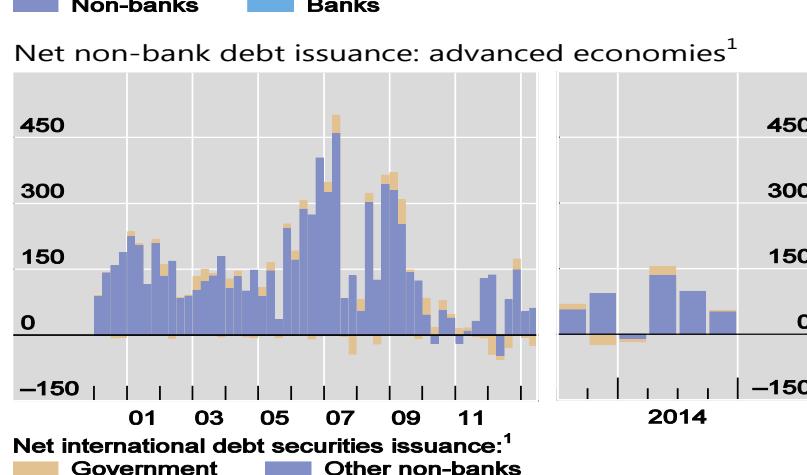
Debt and bank lending: advanced economies



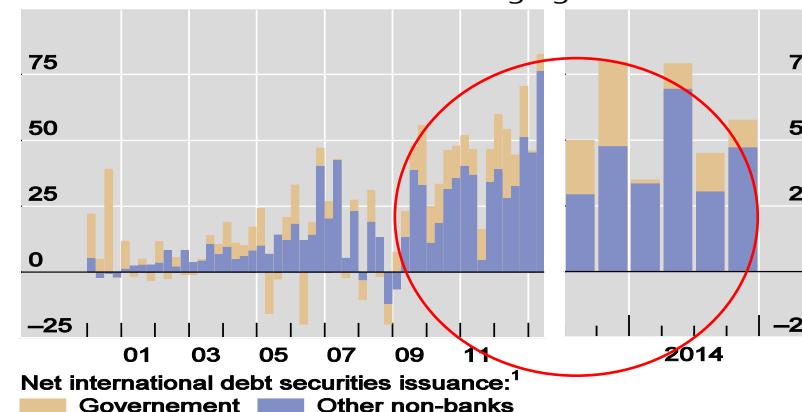
Debt and bank lending: emerging markets



Net non-bank debt issuance: advanced economies<sup>1</sup>



Net non-bank debt issuance: emerging markets<sup>1</sup>

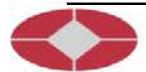


**Strong international issuance by EMEs**

**EME corporates increasingly relying on debt securities for funding**

<sup>1</sup> Net international debt issuance for all issuers, in all maturities, by nationality of issuer. In December 2012, the BIS revised the compilation of its debt securities statistics to enhance their comparability across different markets. International issues were redefined as debt securities issued outside the market where the borrower resides. <sup>2</sup> External loans of BIS reporting banks vis-à-vis individual countries; estimated exchange rate-adjusted changes.

Sources: Dealogic; Euroclear; Thomson Reuters; Xtrakter Ltd; BIS locational banking statistics by residence; BIS calculations.



BANK FOR  
INTERNATIONAL  
SETTLEMENTS



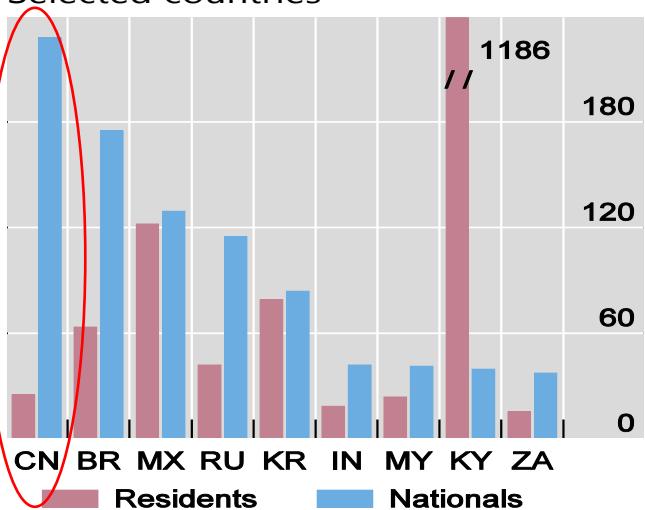
Restricted

### 3.D – BIS IDS: The residency/nationality nexus

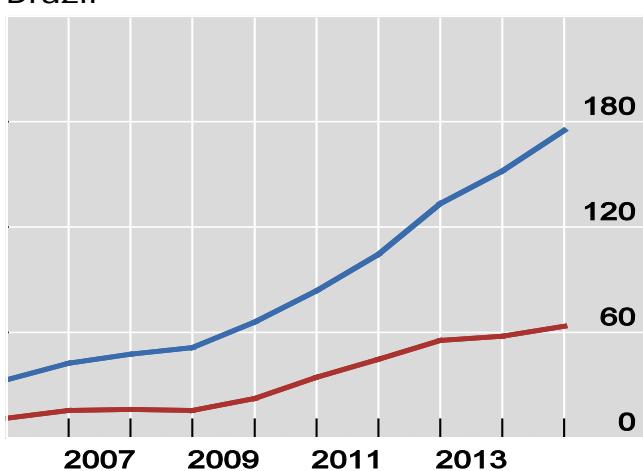
#### International debt securities<sup>1</sup>

Amounts outstanding, in billions of US dollars

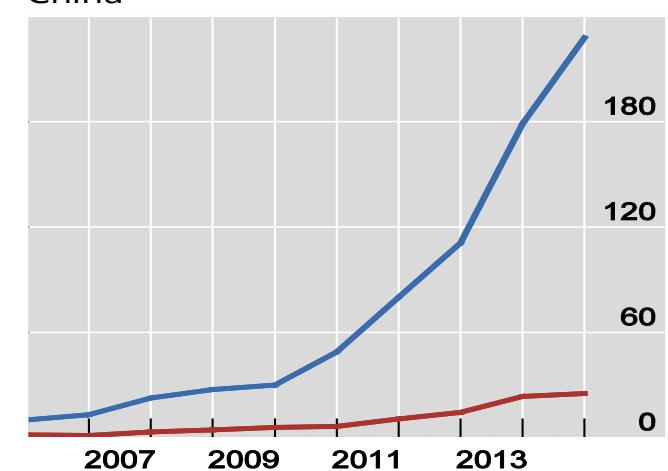
##### Selected countries<sup>2</sup>



##### Brazil<sup>3</sup>



##### China<sup>3</sup>



BR=Brazil; CN=China; IN=India; KR=Korea; KY=Cayman Islands; MX=Mexico; MY=Malaysia; RU=Russia; ZA=South Africa.

<sup>1</sup> Issued by non-bank financial corporations and non-financial corporations. <sup>2</sup> At end-June 2014. <sup>3</sup> At end-year, except 2014 at end-June 2014.

Sources: Dealogic; Euroclear; Thomson Reuters; Xtrakter Ltd; BIS debt securities statistics. See "BIS debt securities statistics: a comparison of nationality data with external debt statistics", Branimir Gruić and Philip Wooldridge, Proceedings of the seventh IFC Conference on "Indicators to support monetary and financial stability analysis: data sources and statistical methodologies", Basel, 4 and 5 September 2014, IFC Bulletin No 39 (2015).



# Thank you

Questions?

[bruno.tissot@bis.org](mailto:bruno.tissot@bis.org)

[IFC.secretariat@bis.org](mailto:IFC.secretariat@bis.org)

[statistics@bis.org](mailto:statistics@bis.org)

