



BANK FOR INTERNATIONAL SETTLEMENTS

Financial stability information needs: from local to global

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Highlights

1. Information needs
2. Accessing group-level information
3. Usage of consolidated data – 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
- New DGI Recommendation #14?
 - 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
 - Real sector (international corporations, BoP, investment)
 - Financial sector: role of affiliates (foreign branches and/or subsidiaries)

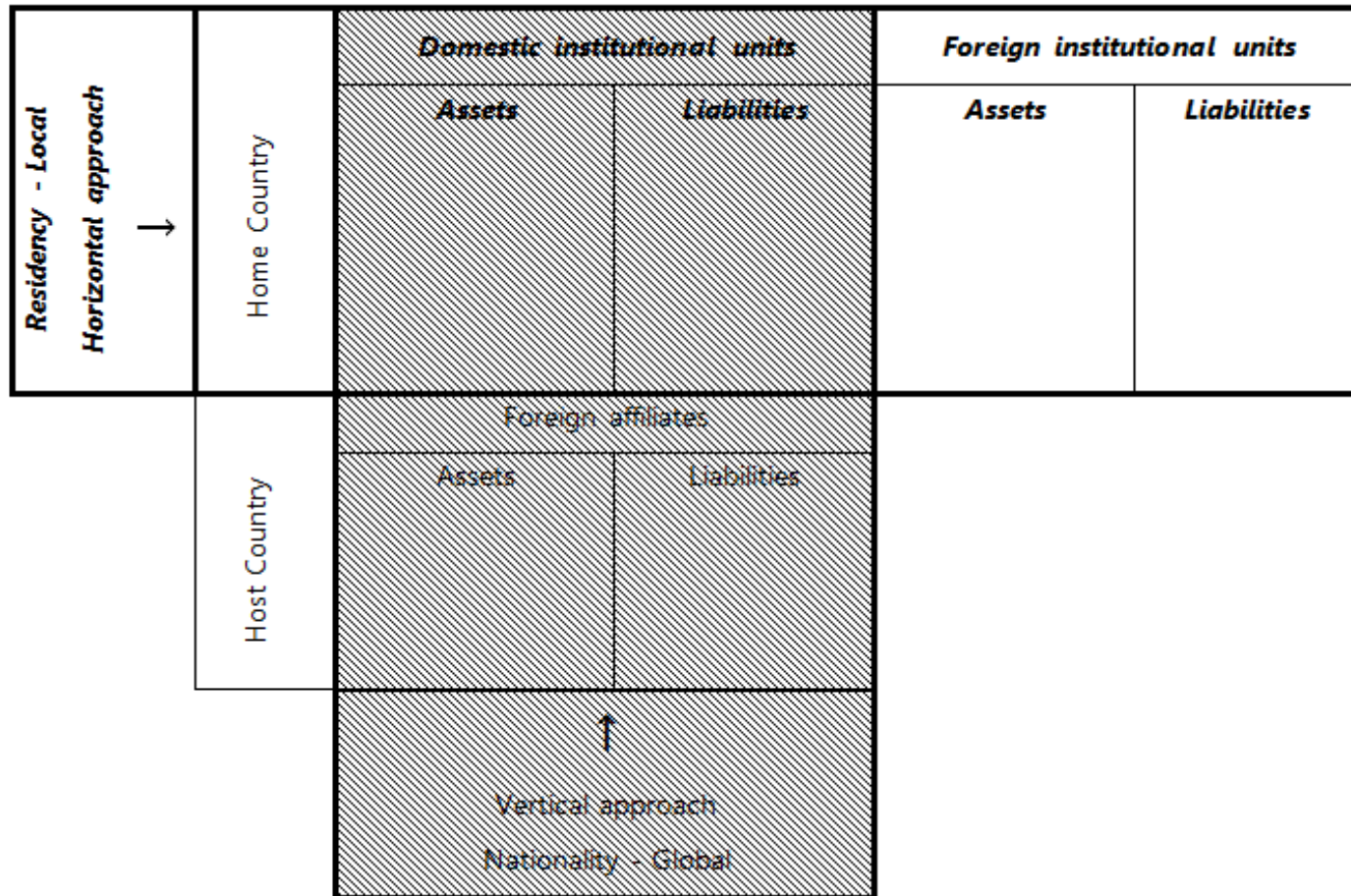


1.C – ... be complemented?

- 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. Influence versus control
- F. Cases of large, complex groups
- G. Consolidation: scope and issues



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)
 - BIS experience in compiling the International Banking Statistics (IBS) & International Debt Securities (IDS)



2.B – Classification of economic units

- Sectoral classification
 - Main principal economic activity
 - But need for refining sectoral classification (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
 - Reconciliation exercise amongst various home and host countries
 - Use of business registers?



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
 - Distinction between control and significant influence
- Supervisory
 - Jurisdiction where is located the home country supervisor
 - Entitled to exercise consolidated supervision
 - “Look through” the chain of controls and identify the ultimate risk holder
- Statistical
 - (economic) ownership is a pre-condition for control
 - Head office concept (oversees & manages the units)

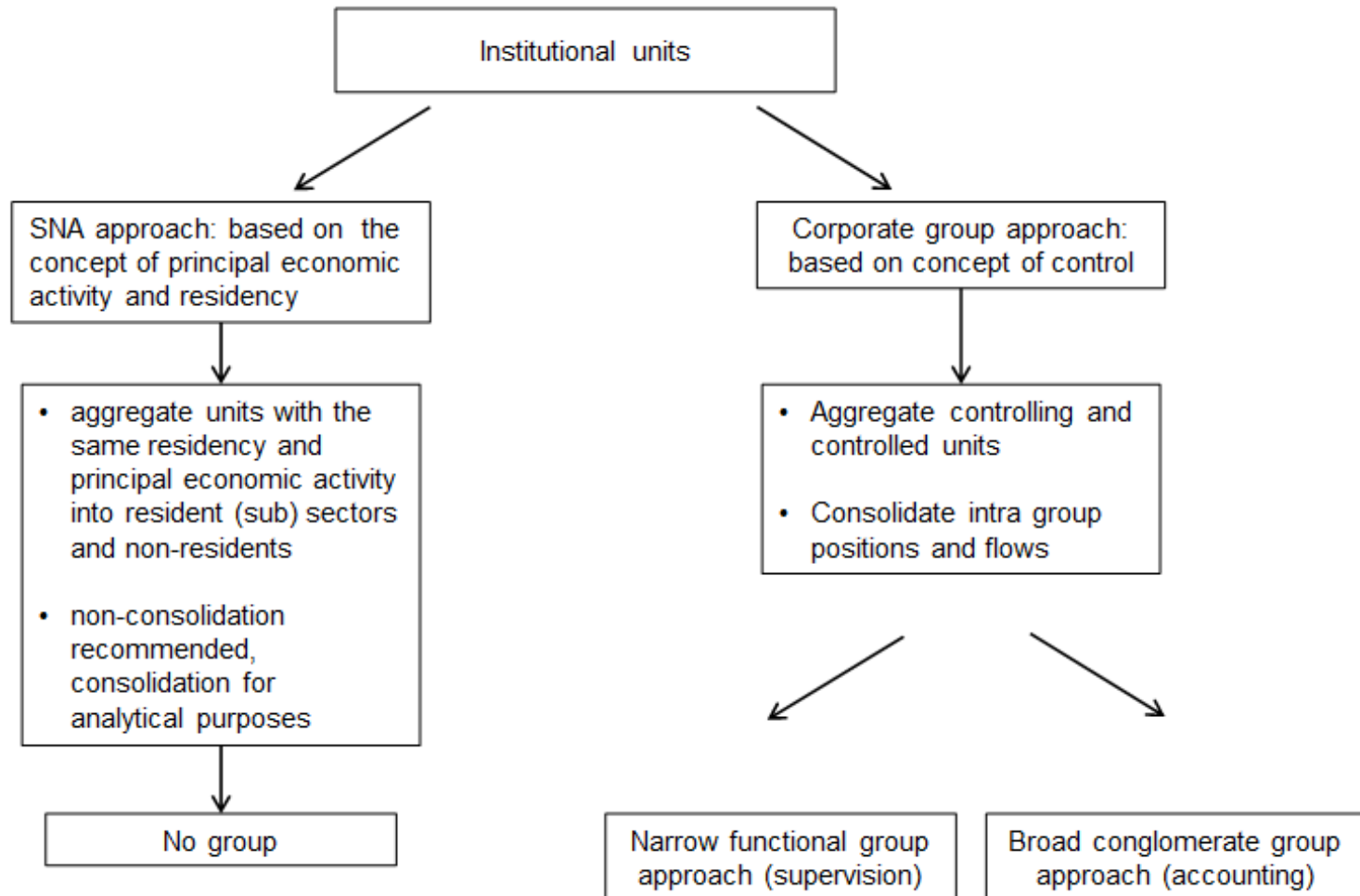


2.D – Defining a corporate group

- Business accounting (“conglomerate” view of a group)
 - Group comprises “a parent and all its subsidiaries”
 - Consolidated financial statements, line-by-line
 - Accounting view can be very broad
- Supervisory
 - Functional approach
 - Prudential view of a group can be significantly narrower (ex: IBS)
 - Three types of groups of corporations: Banking groups, Non-bank financial groups, Non-financial groups
- Statistical
 - SNA concept of “large groups and multinational corporations”
 - Broad approach not recommended (institutional unit)
 - Consolidation is discouraged



2.D – Assessing the financial position of a group



2.E – Influence versus control

- Challenges: differentiating between “influence” and “control”
 - Associate corporation
 - Other examples: organised group exerting significant “influence”
- Foreign Direct Investment: influence-based relationship
 - Investment giving control or significant influence on the management of a resident in another economy
 - Ownership of 10% or more
- Multinational Enterprises: control-based relationship
 - Power to take decisions and decide corporate strategy
 - Ownership of 50% or other factors (eg parent technology)
 - «Ultimate Controlling Parent»



2.F – Cases of large, complex groups

- Various concepts
 - Holding companies (financial corporations) vs/ head offices
 - Financial groups can comprise different entities
 - Definition of the Joint Forum of a financial conglomerate: at least 2 significant activities in banking / insurance / securities
- Issues
 - Risk is that excessively aggregated group-level information reduces transparency
 - Elements of the “shadow banking system”
 - Connections within and amongst corporations



3. Usage of consolidated data – 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 all of the following three criteria:
 - Part of the credit intermediation chain
 - Not (prudentially) consolidated in a banking group
 - Specific risks (maturity & liquidity transformation)
 - Caution in consolidating non-bank entities



3.A – Shadow banks: Methodology

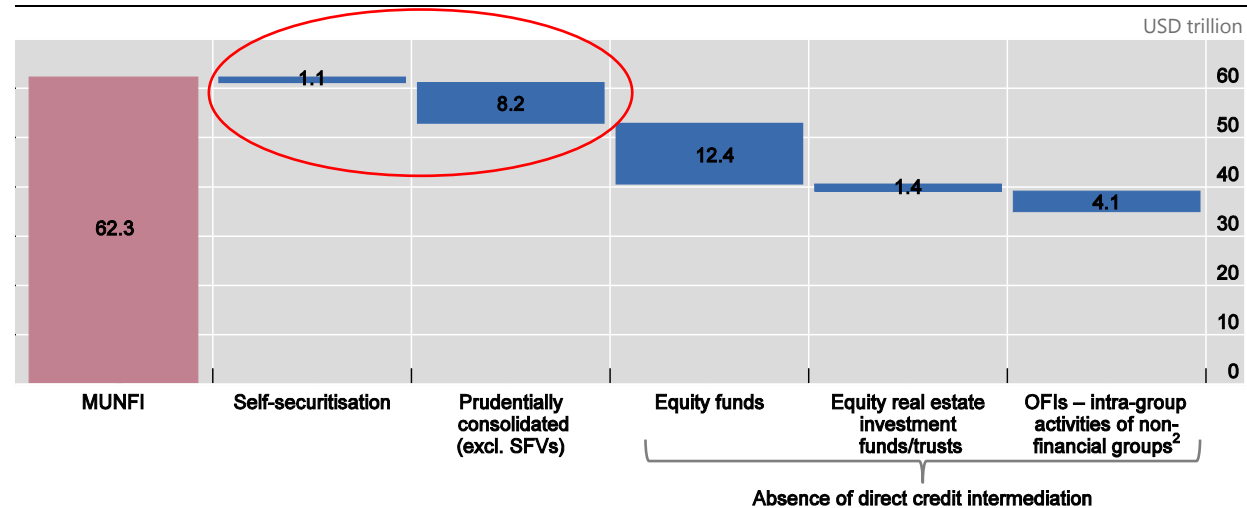
- “Macro-mapping”
 - Conservative estimate based on national Flow of Funds (FoF, balance sheet data) for all non-bank financial intermediation
 - Primary focus on “Other Financial Intermediaries”
- “Narrowing down”:
 - Use of more granular data (when available) to filter out entities
 - Exclude entities 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%)
 - One third of the correction due to prudential consolidation impact
 - 2012/13 growth revised from +6.6% to +2.4%

23 jurisdictions¹; at end-2013



¹ 23 jurisdictions reported more granular data for narrowing down. ² 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.

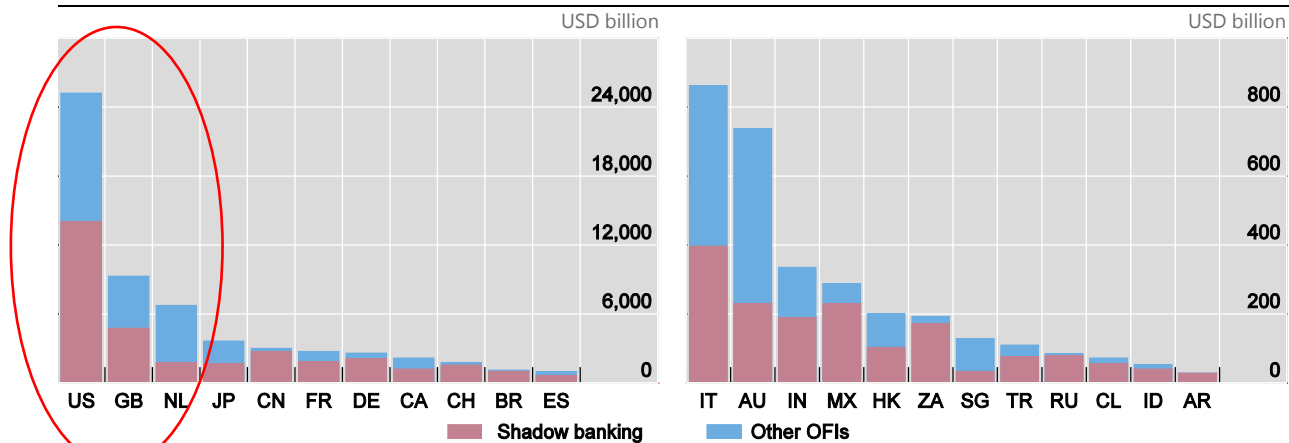


3.A – Shadow banks: Narrowing down, by country

- Substantial revisions for a number of advanced economies

Narrowing down shadow banking¹

By jurisdictions²; at end-2013



AR = Argentina; AU = Australia; BR = Brazil; CA = Canada; CH = Switzerland; CN = China; CL = Chile; DE = Germany; ES = Spain; FR = France; GB = United Kingdom; HK = Hong Kong; ID = Indonesia; IN = India; IT = Italy; JP = Japan; MX = Mexico; NL = Netherlands; RU = Russia; SG = Singapore; TR = Turkey; US = United States, ZA=South Africa.

¹ The sum of the two bars gives the size of the MUNFI measure. ² 23 jurisdictions reported more granular data for narrowing down.

Sources: National financial accounts data; other national sources.

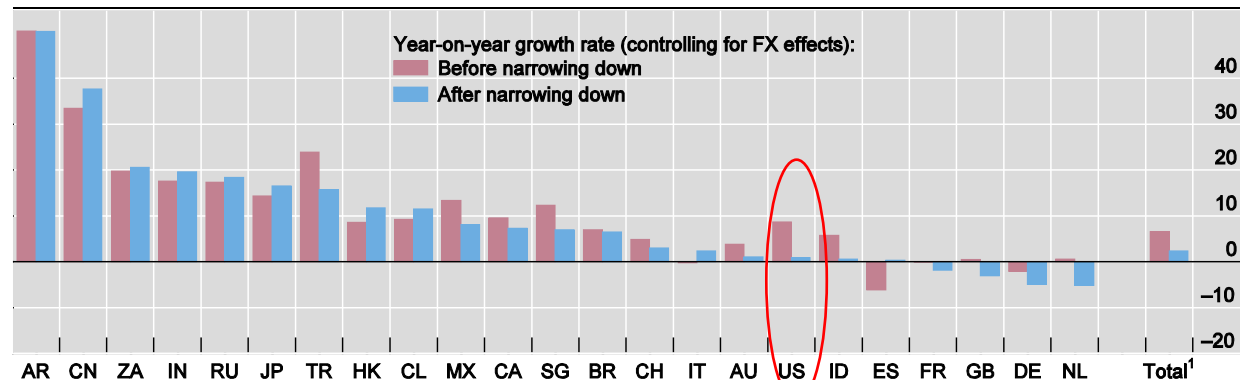


3.A – Shadow banks: Narrowing down, growth impact

- Annual growth of the narrow shadow banking system revised down substantially for some countries

Growth of shadow banking sector versus MUNFI estimate in 2013

By jurisdiction, in per cent



AR = Argentina; AU = Australia; BR = Brazil; CA = Canada; CH = Switzerland; CN = China; CL = Chile; DE = Germany; ES = Spain; FR = France; GB = United Kingdom; HK = Hong Kong; ID = Indonesia; IN = India; IT = Italy; JP = Japan; MX = Mexico; NL = Netherlands; RU = Russia; SG = Singapore; TR = Turkey; US = United States, ZA=South Africa.

¹ Weighted average of the jurisdictions shown.

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)
 - Cross-border claims on a worldwide consolidated basis

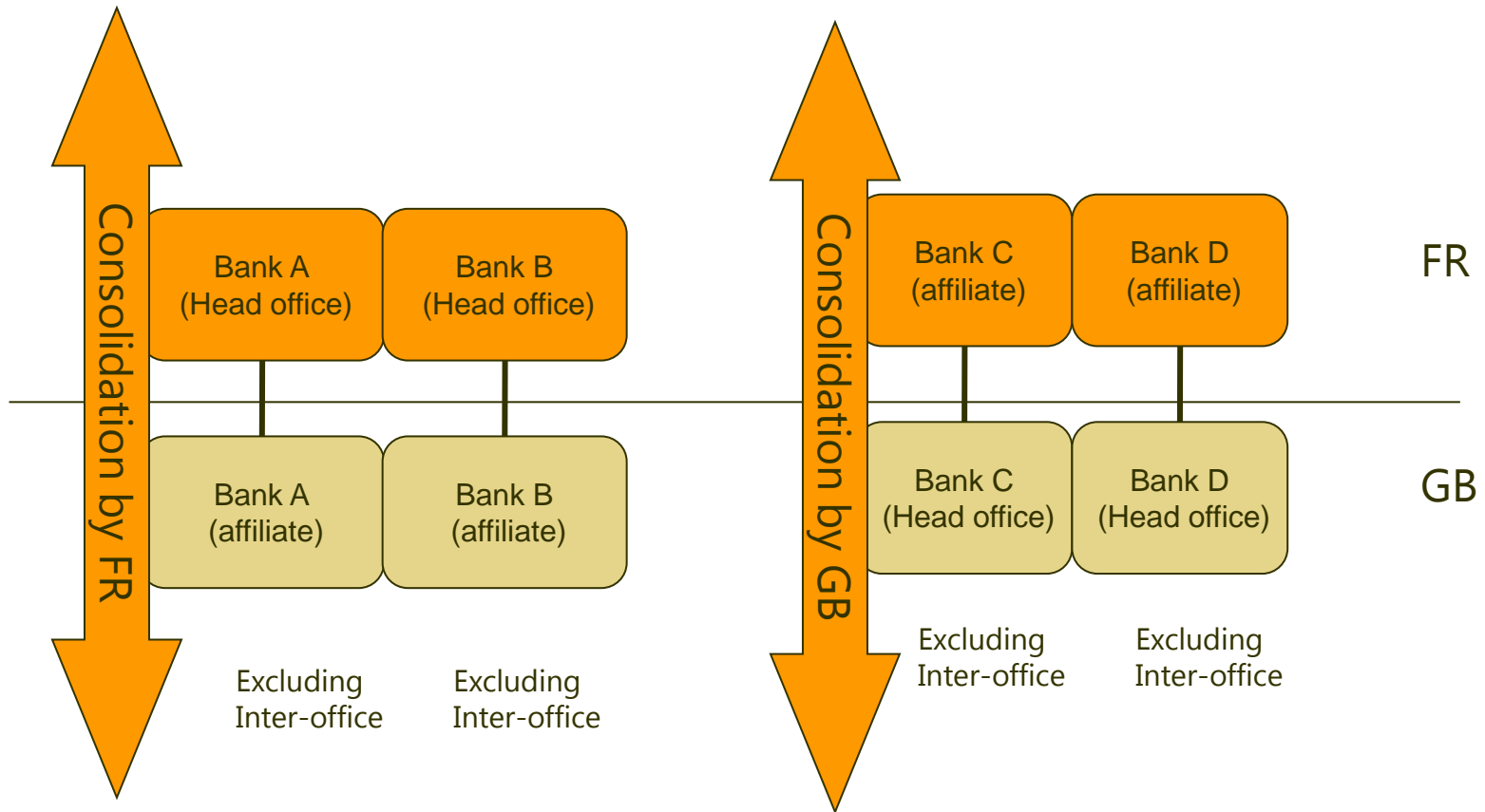
- 2 sets of consolidated banking statistics
 - Immediate borrower basis: Foreign claims of the banks of one country nationality consolidated worldwide

Ex: Claims booked by all offices of French banks vis-à-vis Chinese residents (including local & foreign currency positions of French banks' foreign affiliates located in China with Chinese residents)

- Ultimate risk basis (ie after adjusting for credit risk mitigants such as guarantees and collateral)

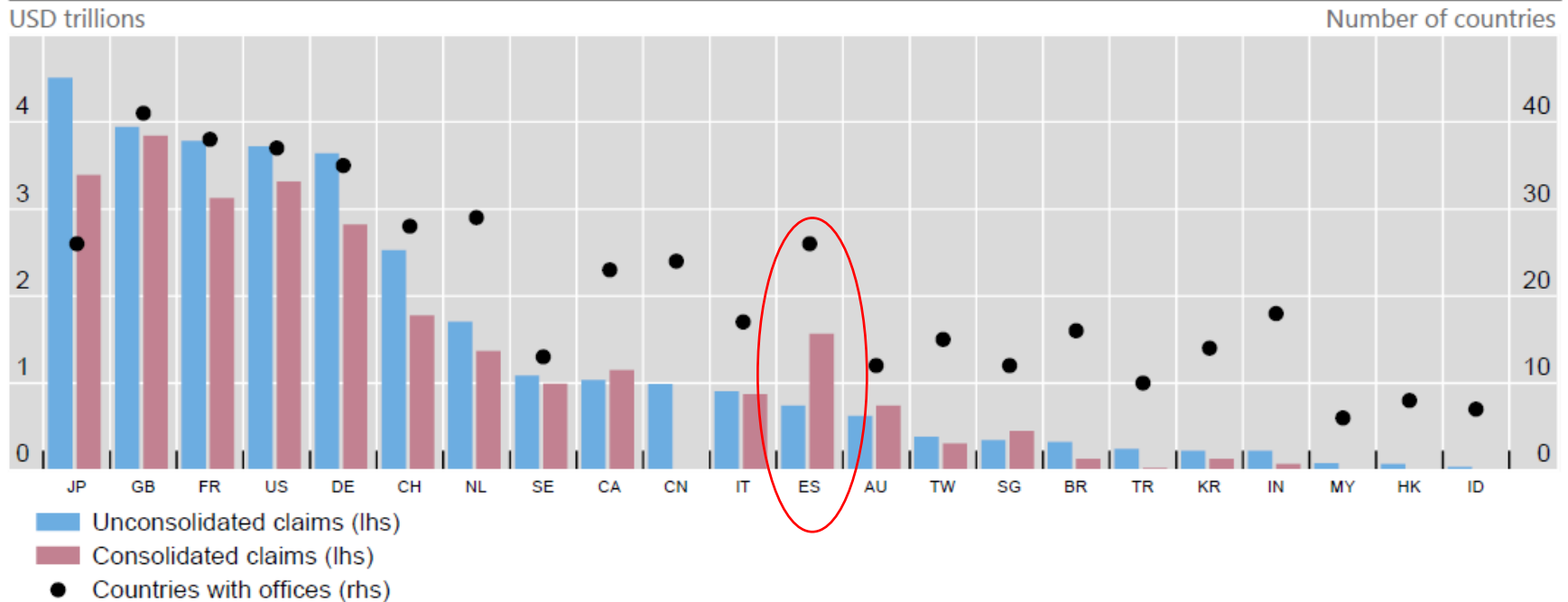


3.B – Consolidation of domestically-controlled banks



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)

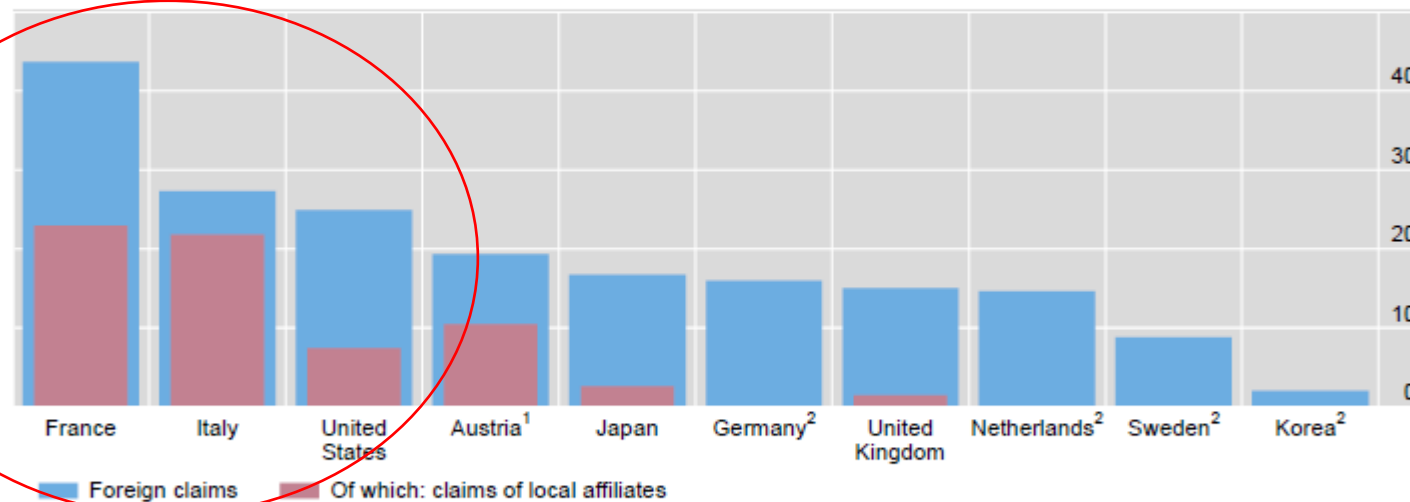


3.B – Consolidated international banking statistics

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

At end-September 2014, in billions of US dollars

Graph 7



¹ For Austrian banks, local claims represent claims in Russian roubles only and exclude claims in currencies other than rouble. ² 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*



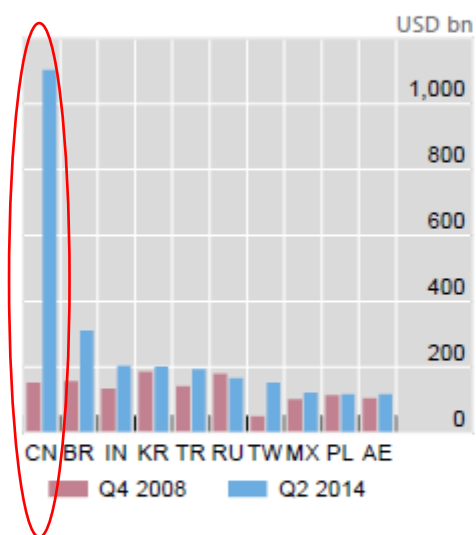
3.B – Consolidated international banking statistics

- 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.

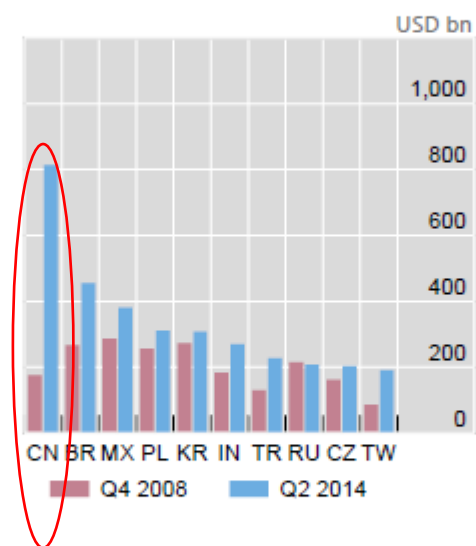
The rise of China as an international bank lending destination

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

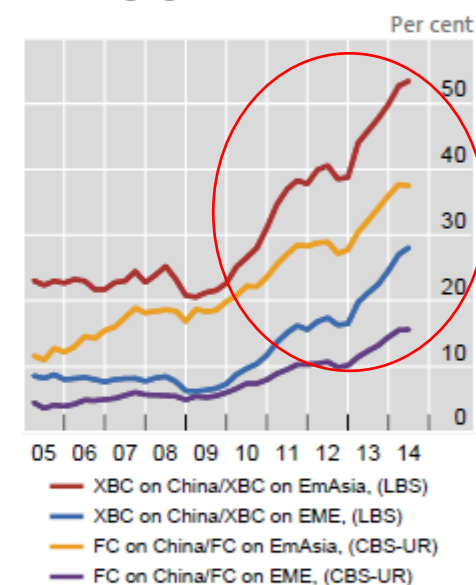
Cross-border claims¹



Foreign claims²



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.

¹ 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. ² All domestic banks' foreign consolidated claims (ultimate risk basis) on the 10 largest EME borrowers as of end-Q2 2014.

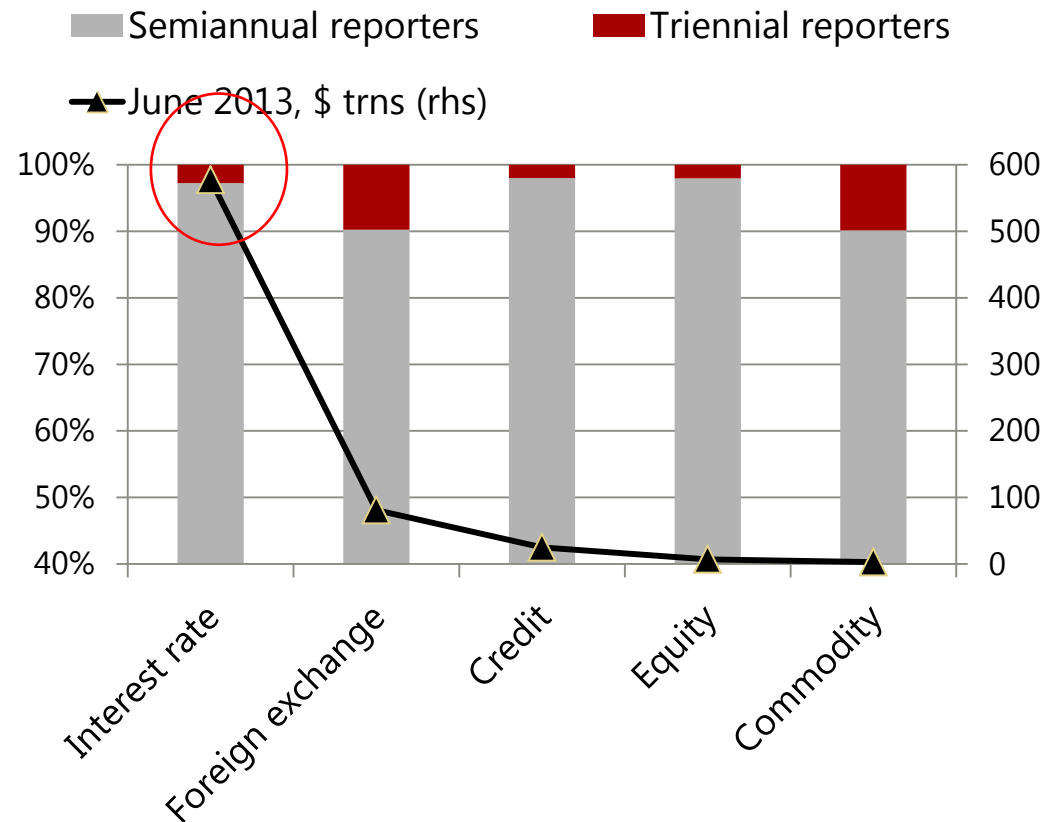
Sources: BIS locational banking statistics by residence (Table 6A); BIS consolidated banking statistics (Table 9D).



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
 - Gross issues, net issues, repayments, outstanding amounts
- 2012 definition: debt securities issued in a foreign market (ie in a market other than the local market of the issuer)
 - Criteria to distinguish international/domestic issues: currency of denomination, location of the primary/secondary markets (eg listing places), governing law
 - (micro) data quality problems: estimated 15% of the international debt securities identified by the BIS can have inconclusive available information

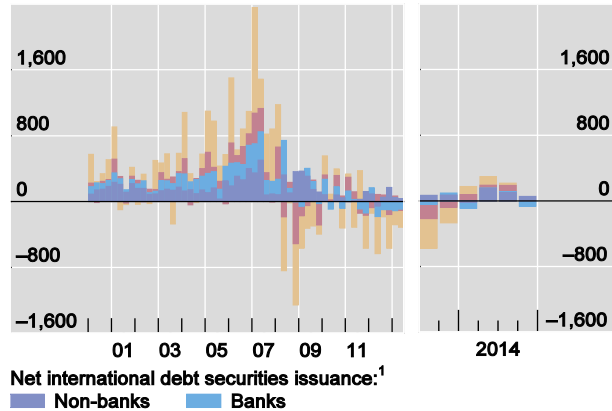


3.D – BIS IDS: the "2nd phase of global liquidity"

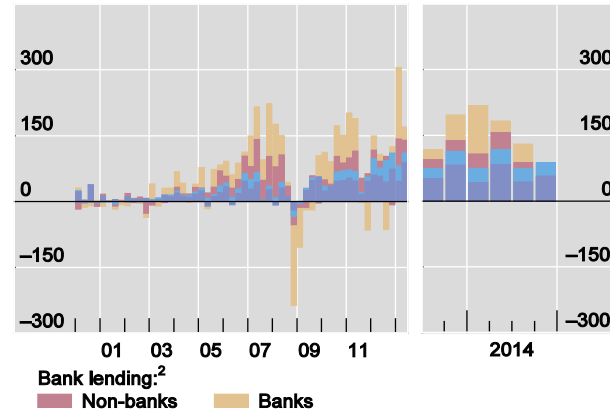
External financing flows

In billions of US dollars

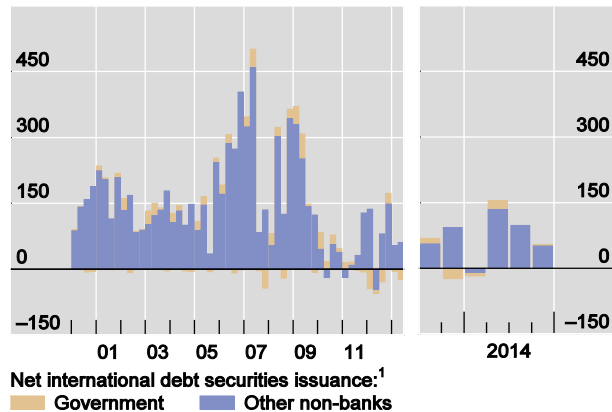
Debt and bank lending: advanced economies



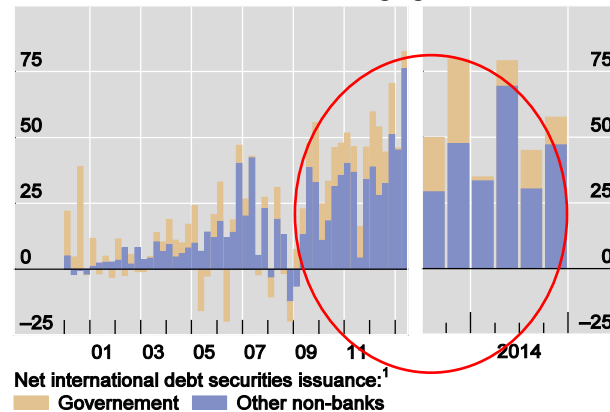
Debt and bank lending: emerging markets



Net non-bank debt issuance: advanced economies¹



Net non-bank debt issuance: emerging markets¹



Strong international issuance by EMEs

EME corporates increasingly relying on debt securities for funding

¹ 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. ² External loans of BIS reporting banks vis-à-vis individual countries; estimated exchange rate-adjusted changes.

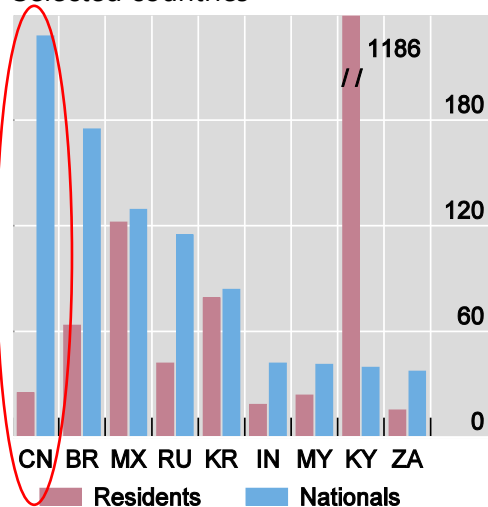
Sources: Dealogic; Euroclear; Thomson Reuters; Xtrakter Ltd; BIS locational banking statistics by residence; BIS calculations.

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

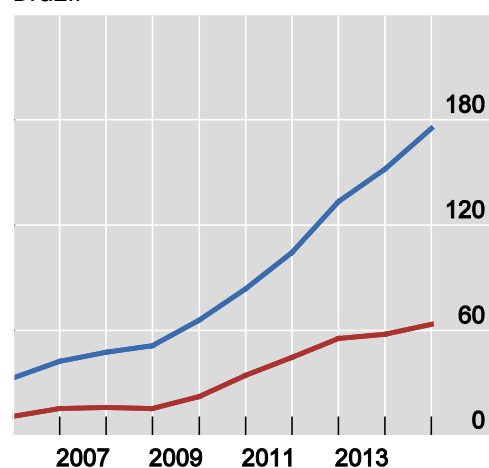
International debt securities¹

Amounts outstanding, in billions of US dollars

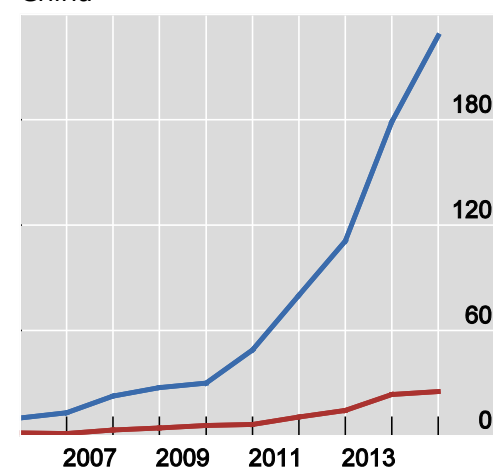
Selected countries²



Brazil³



China³



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

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

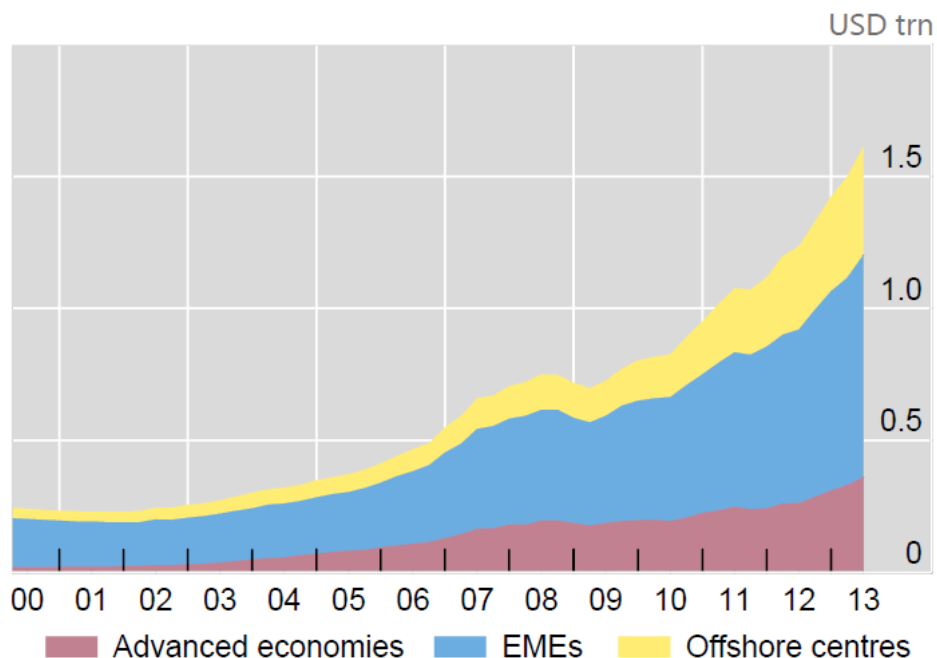
Sources: Dealogic; Euroclear; Thomson Reuters; Xtrakter Ltd; BIS debt securities statistics. See "BIS debt securities statistics: a comparison of nationality data with external debt statistics", Branimir Gruić and Philip Wooldridge, Proceedings of the seventh IFC Conference on "Indicators to support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



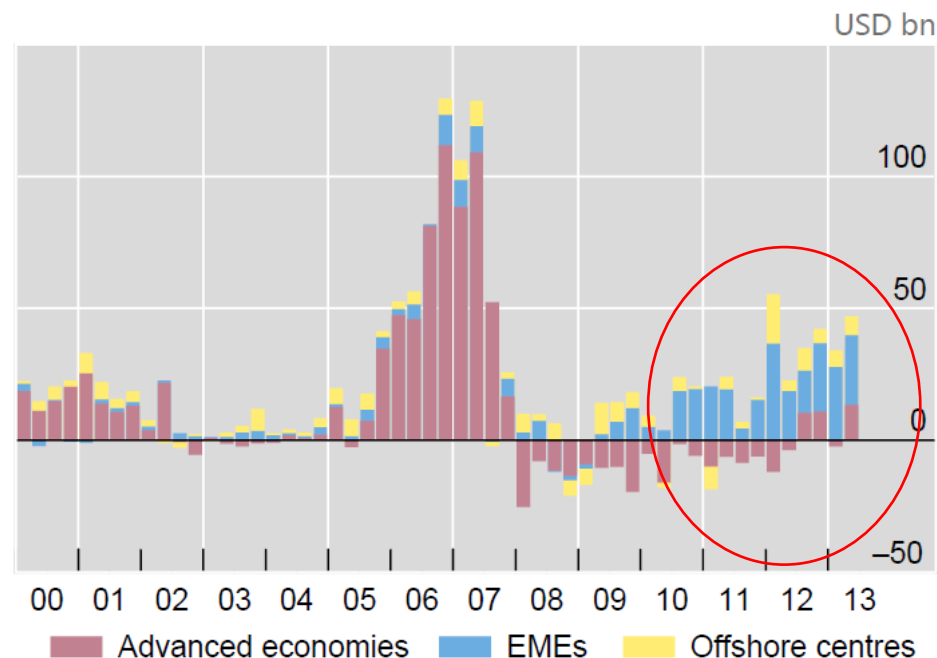
3.D – BIS IDS: EMEs' affiliates to raise funds abroad

International debt securities by EME financial and non-financial corporations

By residence of issuing subsidiary¹



By nationality of issuers resident in off-shore centres²



¹ Amounts outstanding. ² Net issuance.

Sources: IMF; Dealogic; Euroclear; Thomson Reuters; Xtrakter Ltd; BIS calculations.

