



# Globalisation and financial stability risks: is the residency-based approach of the national accounts old-fashioned?

Bruno Tissot

Head of Statistics and Research Support, BIS

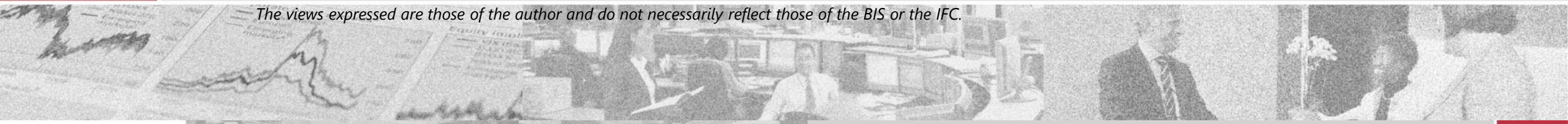
Head of the Secretariat of the Irving Fisher Committee on Central Bank Statistics (IFC)

**United Nations Economic Commission for Europe - Conference of European Statisticians**

***Group of Experts on National Accounts 16<sup>th</sup> Session "Measuring Global Production", Geneva, 2 June 2017***



*The views expressed are those of the author and do not necessarily reflect those of the BIS or the IFC.*



# Overview

- 1. Information needs: a global approach for assessing exposures?**
- 2. Group-level information**
- 3. Usage of consolidated / nationality-based data: can they add value? – the Basel experience**



# 1. Information needs: the Data Gaps Initiative (DGI)

- **Crisis highlighted the lack of data on cross-border exposures**
- **First phase of the DGI**
  - Methodological issues related to the concept of consolidation
  - Definition of corporate groups
  - IAG Reference Document on "*Consolidation and corporate groups*"
- **Second DGI phase**
  - Cross-border exposures
  - Focus on non-financial corporations
  - Work drawing on existing data collections



# 1. Information needs: can the residency-based approach of the national accounts...

- **System of National Accounts Framework**

- 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, investment)
- Financial sector: role of affiliates (foreign branches / subsidiaries)

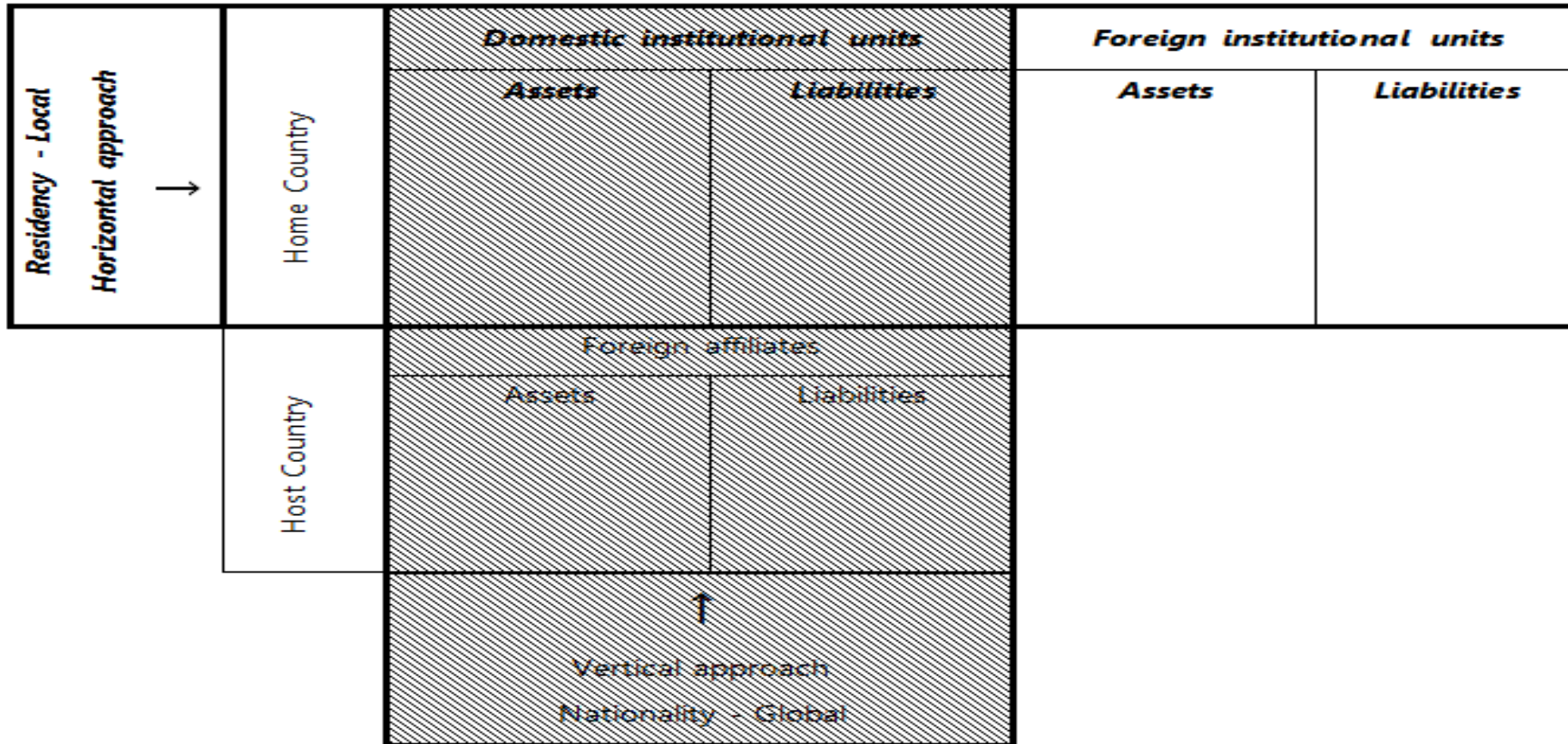


# 1. ... be complemented?

- 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?
- **Complementary approaches**



# 1. Information needs: a framework for assessing financial positions & exposures



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



## 2. Group-level information: three main approaches

- **Statistical**

- Largely based on residency data (SNA, BOP)

- **Business accounting**

- Principle of global consolidation for corporate entities
- IFRS standards, but national GAAPs

- **Supervisory**

- Supervisory distinction between "home" & "host" country responsibilities
- Global business model includes banks and non-banks
- Mixed and evolving nationality structure





## 2. Group-level information: classifying economic units

- **Sectoral classification**

- Main principal economic activity
- Need for refinement (eg shadow banks)
- Rest of the World 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 (to “look through” the chain of controls)
- Reconciliation exercises





## 2. Group-level information: the concept of control

### ● **Statistical**

- (economic) ownership is a pre-condition
- FDI (influence-based relationship) vs. MNEs (control-based)
- Head office concept (oversees & manages the units)

### ● **Business accounting**

- Power to govern an entity to obtain benefits from its activities
- Ownership 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



## 2. Group-level information: defining a corporate group

- **Statistical**

- Broad approach not recommended (institutional unit)
- Consolidation is discouraged
- SNA concept of "*large groups and multinational corporations*"

- **Business accounting** ("conglomerate" view of a group)

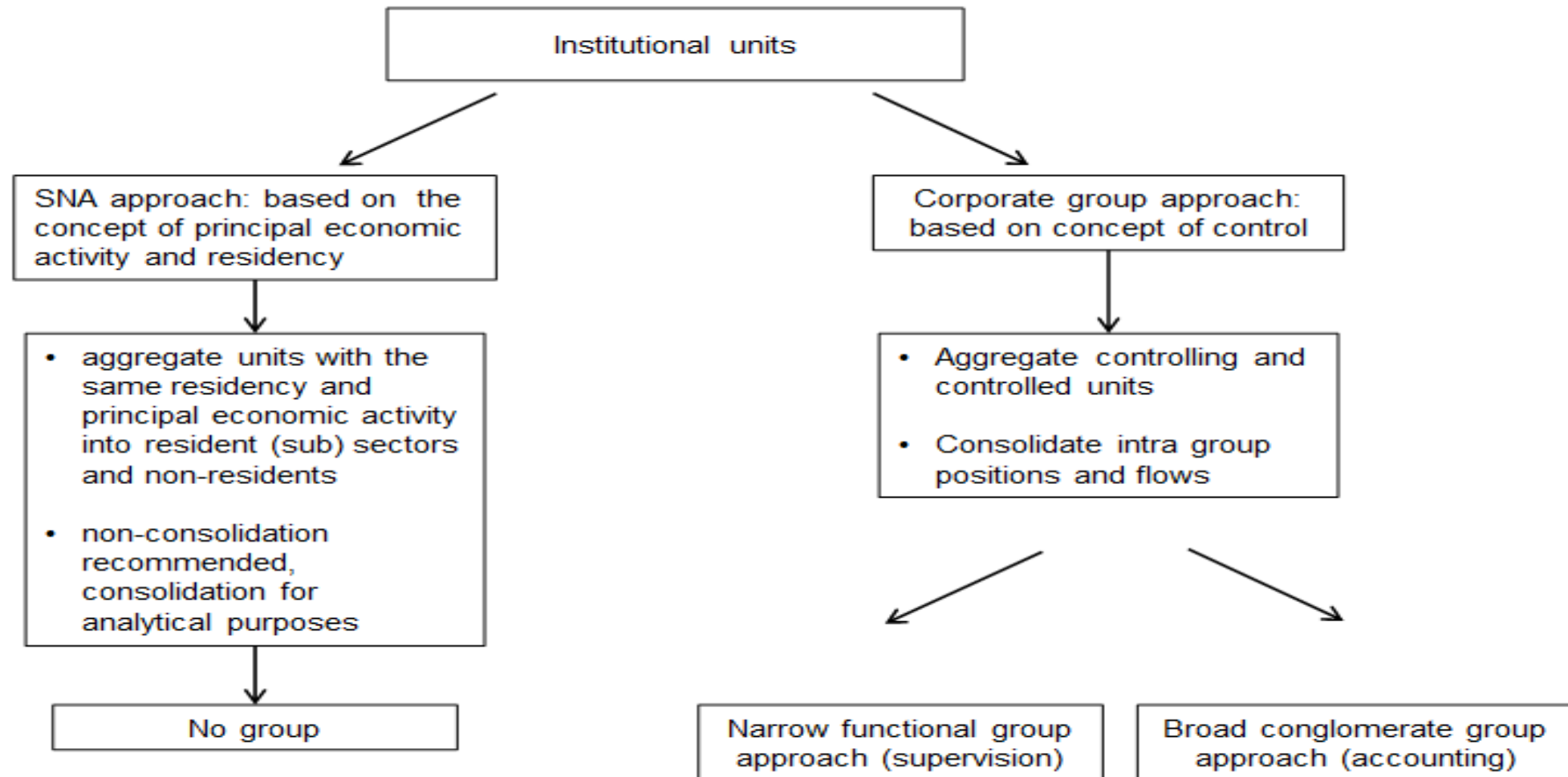
- Comprises "*a parent and all its subsidiaries*"
- Accounting view can be very broad

- **Supervisory**

- Functional approach: prudential view significantly narrow
- 3 types: Banking groups, Non-bank financial, Non-financial



## 2. Group-level information: assessment



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

- i. Consolidated international banking statistics**
- ii. International debt securities statistics**
- iii. Derivatives statistics**
- iv. FSB Shadow Banks Monitoring**



## 3.i Consolidated international banking statistics (CBS)

- **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)

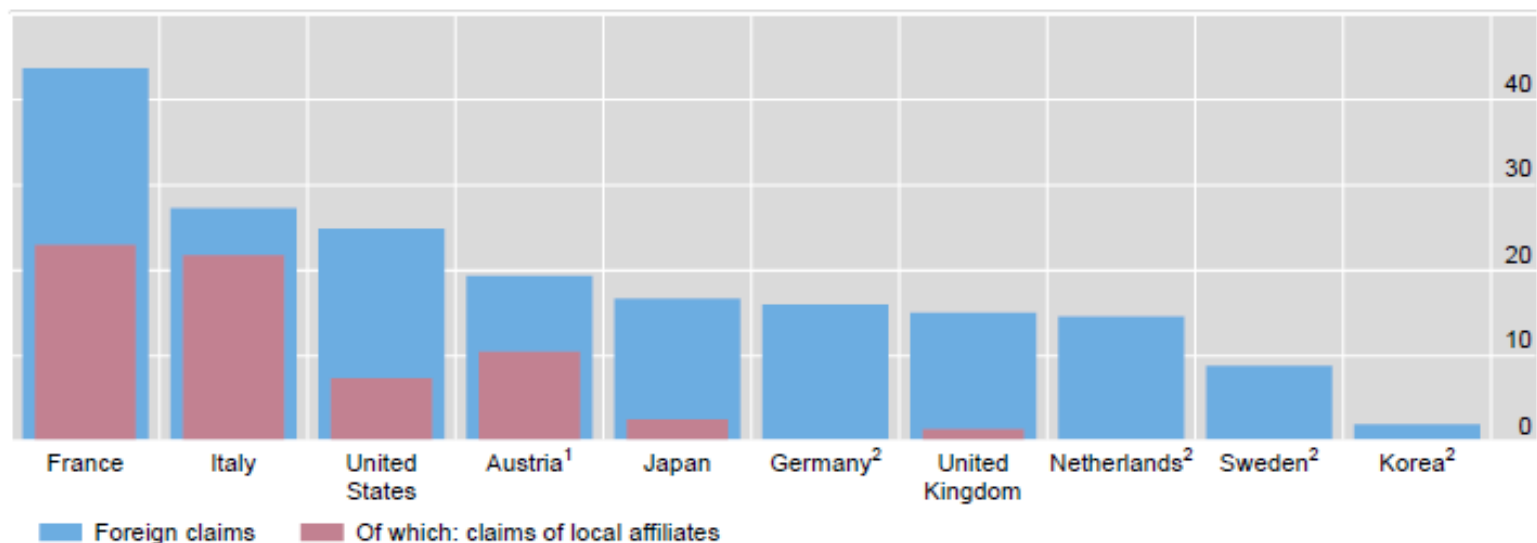


## 3.i BIS CBS: country exposures

- *Banks' foreign claims on Russia in 2014: about \$200 billion*
- *Even split cross-border claims / claims booked by local affiliates*

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

At end-September 2014, in billions of US dollars



<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 was not shown.

Source: BIS consolidated IBS; BIS (2015a).



## 3.ii BIS International Debt Securities (IDS)

- **Security-by-security database**
    - Very flexible (breakdowns)
    - Parallel identification nationality / residency
  - **2012 definition: debt securities issued in a foreign market** (ie market other than the local market of the issuer), using criteria:
    - currency of denomination
    - location of the primary/secondary markets (eg listing places)
    - governing law
- (micro) data quality problems

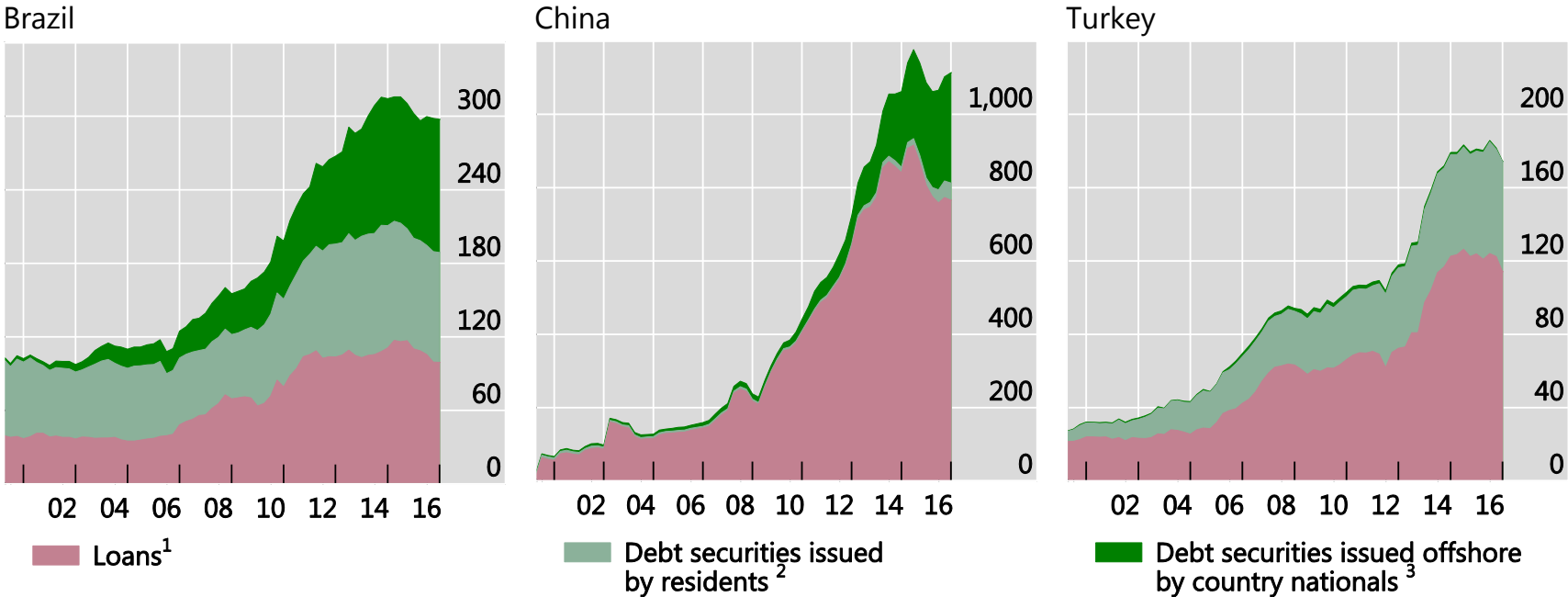




# 3.ii BIS IDS: the residency/nationality nexus

Credit to non-banks including offshore issuance

In billions of US dollars



<sup>1</sup> US dollar-denominated loans to non-bank residents of the country listed in the panel titles. For China, locally extended US dollar loans are estimated from national data on total foreign currency loans, assuming 80% are dollar-denominated. <sup>2</sup> Outstanding US dollar debt securities issued by non-bank residents of the country listed in the panel title. <sup>3</sup> Outstanding US dollar-denominated bonds issued offshore (ie outside the country listed in the panel title) by non-banks with the nationality listed in the panel title.

Sources: BIS locational IBS by residency; BIS International Debt Securities Statistics; national sources; BIS calculations.

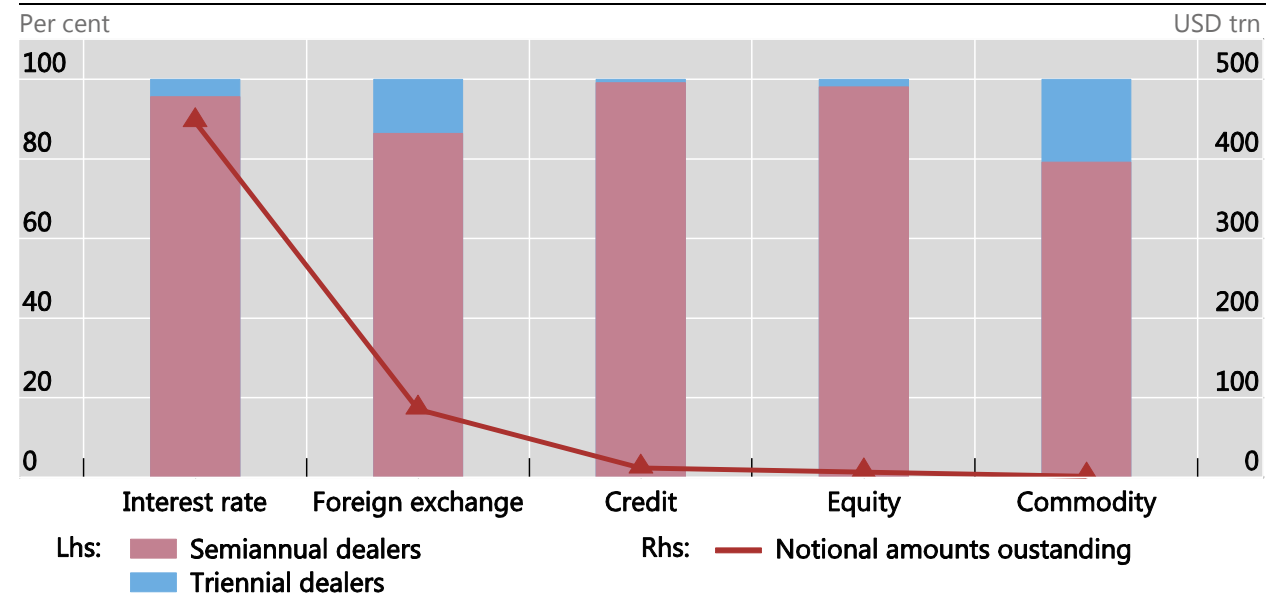
### 3.iii BIS Derivatives statistics

- *Data are consolidated*
- *High global market coverage: institutions of 13 jurisdictions control a large number of affiliates worldwide*
- *Operations between affiliates of the same institution are excluded*

### Share of the 13 reporting economies (8 G20) among 52 triennial reporters

Global OTC derivatives markets, by underlying risk

Contribution of Semiannual and Triennial dealers, end-June 2016<sup>1</sup>



<sup>1</sup> As a percentage of notional amounts outstanding at end-June 2016. Semiannual dealers refer to reporting dealers who participate in the semiannual survey, and Triennial dealers refer to those who participate only in the Triennial Survey, ie excluding semiannual dealers.

Source: BIS Triennial Central Bank Survey



## 3.iv Shadow banks: FSB Methodology

- **“Macro-mapping”**

- Conservative estimate based on national Flow of Funds & balance sheet data for non-bank financial intermediation
- Primary focus on *“Other Financial Intermediaries”*

- **“Narrowing down”:**

- Use of more granular data (when available) to filter out entities based on *“Economic Functions”*
- Exclude entities already prudentially consolidated into banking groups

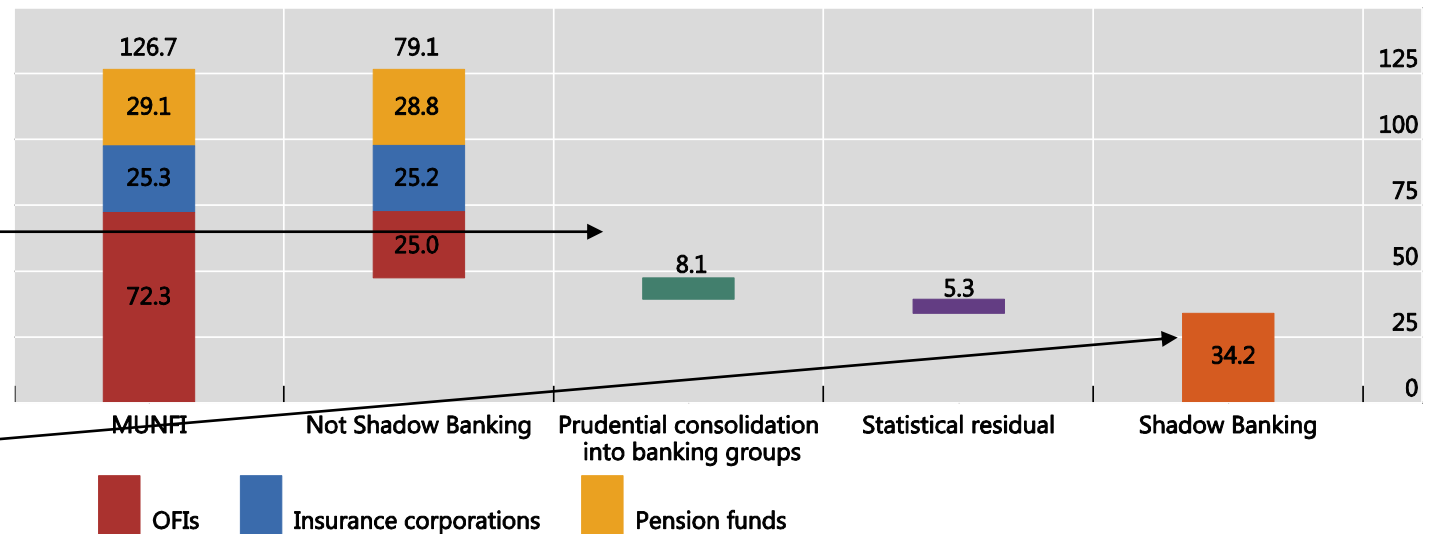


# 3.iv FSB Shadow Banks Monitoring

- 27 jurisdictions reported granular data for 2015
- \$8.1 trillion correction due to prudential consolidation
- Shadow banking estimated at \$34 trillion

## Contribution of prudential consolidation to FSB narrowing down of shadow banking estimation

Narrowing down shadow banking  
27 jurisdictions at end-2015, in trillions of US dollars



MUNFI = Monitoring Universe of Non-bank Financial Intermediation, includes OFIs, pension funds, and insurance corporations; OFIs also includes captive financial institutions and money lenders; Prudential consolidation into banking groups = assets of classified entity types which are prudentially consolidated into a banking group; Statistical residual = reported residual OFIs generated by the difference between total OFIs and the sum of all know subsectors therein; Shadow banking = narrow measure of shadow banking based on the economic functions.

Sources: National sector balance sheet and other data; FSB calculations.



Thank you!!

## Reference:

Inter-Agency Group on Economic and Financial Statistics (2015):  
'Consolidation and corporate groups: an overview of methodological  
and practical issues', *IAG reference document*, October.

## BIS Statistics:

<http://www.bis.org/statistics/index.htm?m=6%7C37>



About BIS | Research & publ

### About BIS statistics

Statistical tools ▾

Banking ▾

Securities ▾

Derivatives ▾

Global liquidity indicators

Credit to the non-financial  
sector

Credit-to-GDP gaps

Debt service ratios

External debt

Property prices ▾

Consumer prices

Effective exchange rates

Payment systems

Foreign exchange markets

## Questions?

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

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

