



The call for new data frameworks to understand globalisation

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Overview

- 1. Importance of globalisation**
- 2. Large post crisis data efforts**
- 3. Examples of achievement**
- 4. A change in paradigm is needed**
- 5. Examples of value added**



1. The Financial Crisis: need to understand globalisation...

- 2007/09 Crisis highlighted key aspects of the global financial system
 - i. Financial institutions act globally
 - ii. Importance of cross-border & cross-sector exposures
 - iii. Role played by global assets and liabilities
 - iv. Domestic policies can have worldwide implications
 - Monetary spillovers
 - Supervisory aspects
 - Fiscal issues



1. ... especially financial globalisation...

- Three forces driving the expansion of international financial links with globalisation
 - Need to finance the expansion in cross-border trade (settlement of transactions)
 - Financing arrangements related to the fragmentation of production across countries in global value chains (GVCs)
 - Increasing need for managing balance sheet positions at a global level

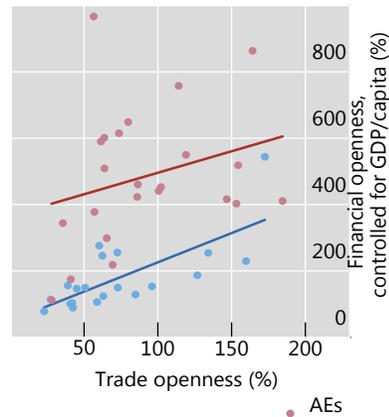


1. ... which has outpaced real globalisation...

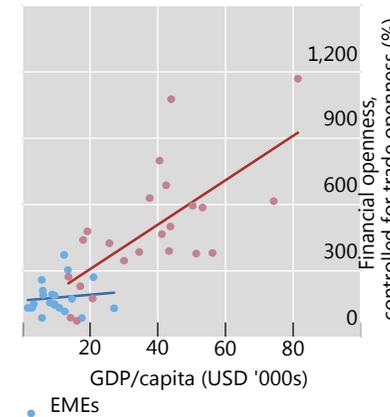
Financial openness has substantially outpaced real trade openness since the 1980s, especially for advanced economies

Financial openness increases with trade openness and GDP per capita

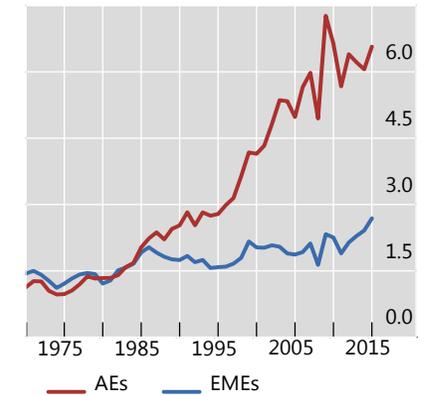
Financial and trade openness



Financial openness and GDP per capita



Ratio of financial openness to trade openness¹



Financial openness = (foreign assets + liabilities) / GDP; trade openness = (exports + imports) / GDP; financial openness controlling for GDP/capita (trade openness) = financial openness less that part explained by demeaned GDP/capita (trade openness) in a regression of financial openness on both GDP/capita and trade openness.

AEs = AT, AU, BE, CA, CH, DE, DK, EE, ES, FI, FR, GB, GR, IT, JP, LT, LV, NO, PT, SE, SI, SK and US; EMEs = AR, BR, CL, CN, CO, CZ, HU, ID, IN, KR, MX, MY, PE, PH, PL, RU, SA, TH, TR and ZA.

¹ Median across countries listed in each group. Excluding CH, CN, CZ, EE, HU, KR, LT, LV, PL, PT, RU, SI and SK.

Sources: Lane and Milesi-Ferretti (2017); World Bank; BIS calculations.

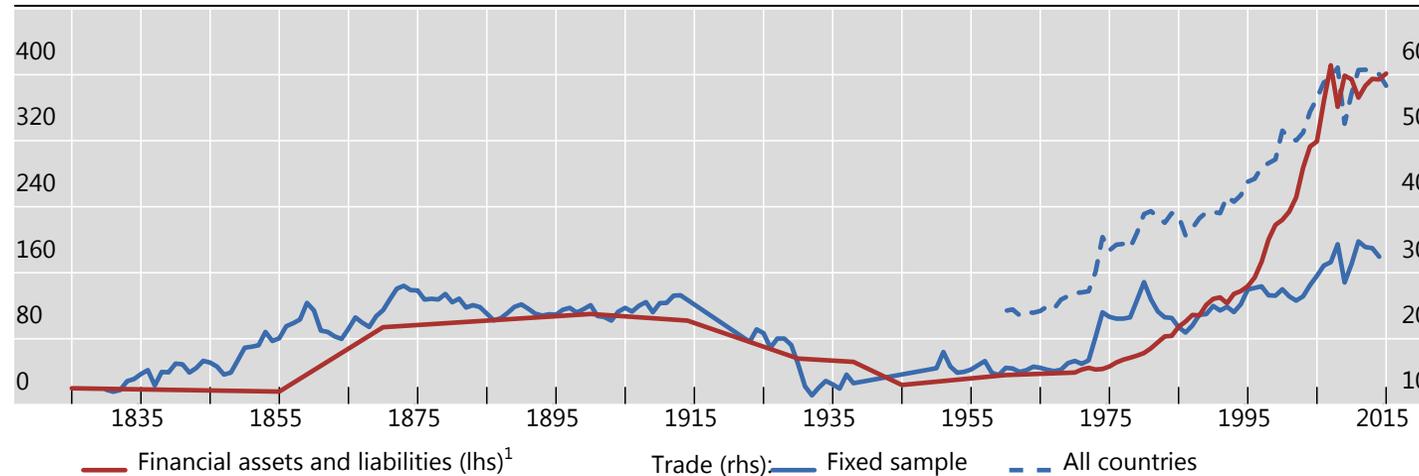


1. ... despite its recent peaking

**Globalisation
peak since the
GFC...
mainly
reflecting
apparent
banking
deglobalisation**

The second wave of economic globalisation has outstripped the first

As a percentage of country sample GDP



¹ Prior to 1970, calculated as external financial assets multiplied by two.

Sources: Federico and Tena-Junguito (2017); Lane and Milesi-Ferretti (2017); Obstfeld and Taylor (2004); Federal Reserve flow of funds accounts; IMF, *Balance of Payments Statistics*; World Bank; US Department of the Treasury; McKinsey Global Institute analysis; BIS calculations



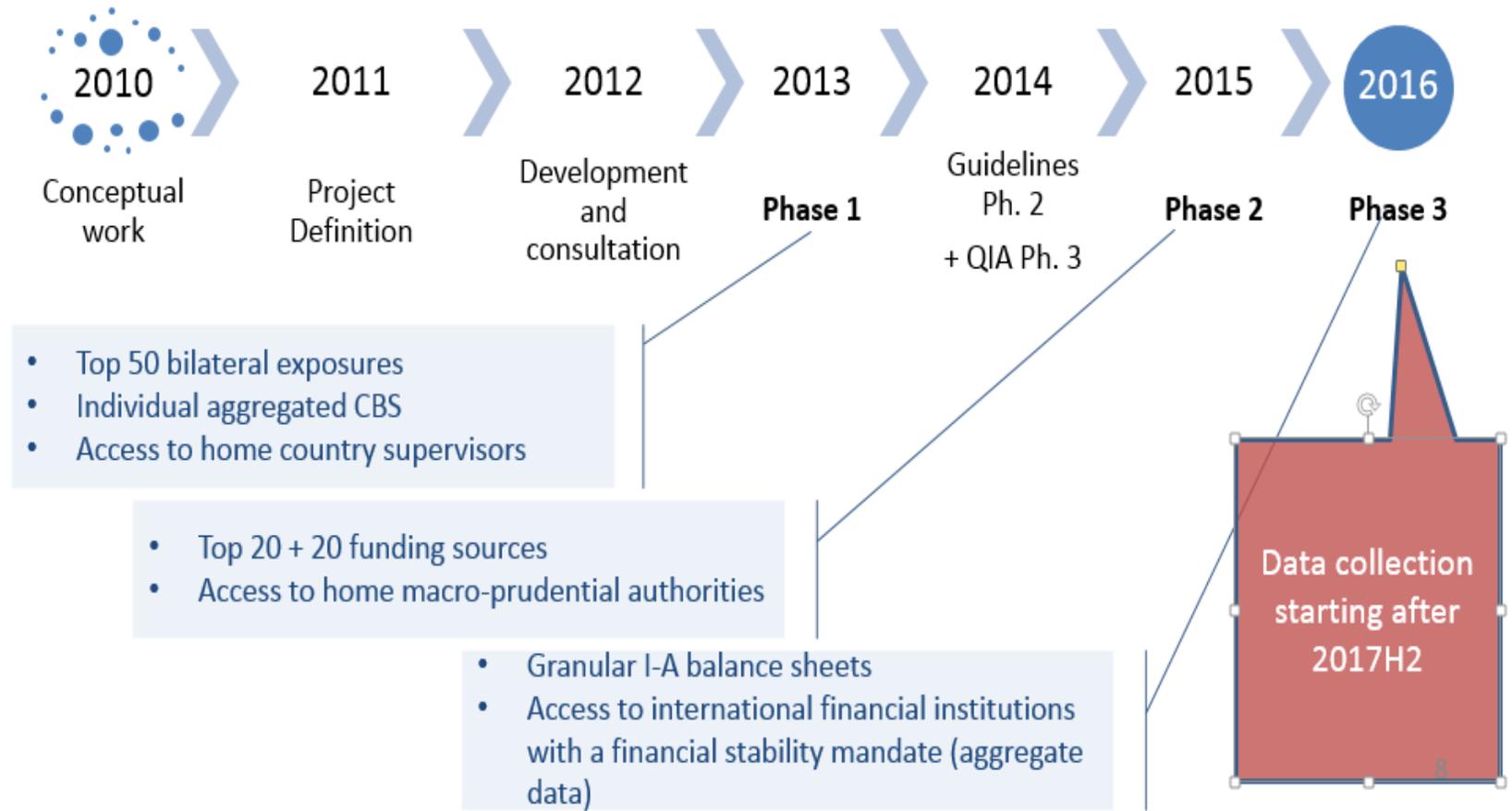
2. Large post-crisis data efforts

- Collecting comparable international data is key to understand the global financial system
- G20-endorsed Data Gaps Initiative (DGI)
 - *DGI – I (2009-2015): The integration of economies and markets (...) highlights the critical importance of relevant statistics that are timely and internally consistent as well as comparable across countries*
 - *DGRI- II (2016-2020): Implementing collection and dissemination of comparable, timely, integrated, high quality, and standardized statistics for policy use*
- Significant progress already – at the macro and the micro level



3. Examples of achievement (i): financial institutions are global

We now have an International Data Hub to collect and analyse data for the world G-SIBs!



Source: FSB.

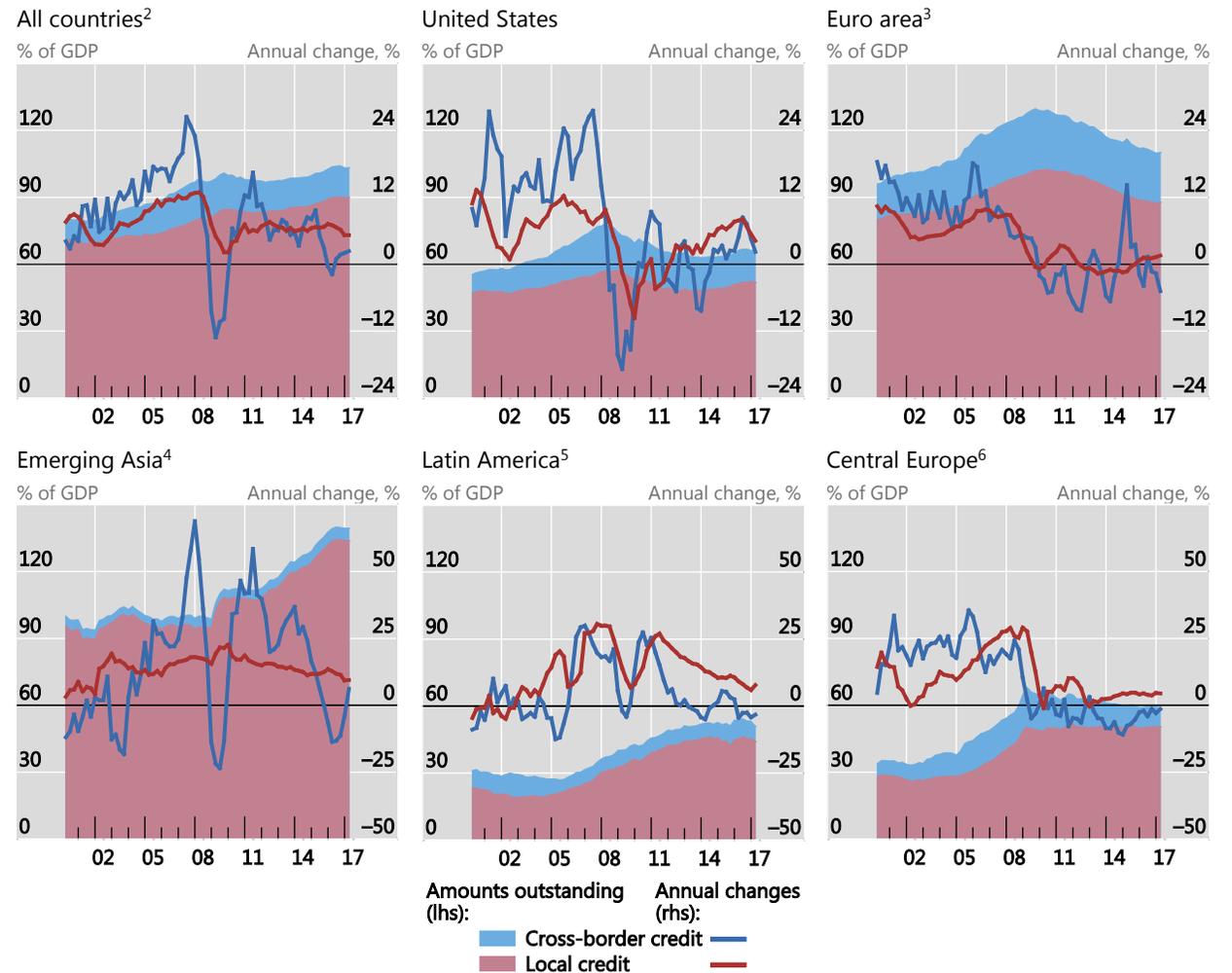


3. Ex of achievement (ii): cross-border & sector linkages

We now have more consistent information on credit flows vis-a-vis counterparty countries and sectors!

Cf BIS "Global Liquidity Indicators"

Global bank credit to the private non-financial sector, by residence of borrower
Banks' cross-border credit plus local credit in all currencies¹



Further information on the BIS global liquidity indicators is available at www.bis.org/statistics/gli.htm.



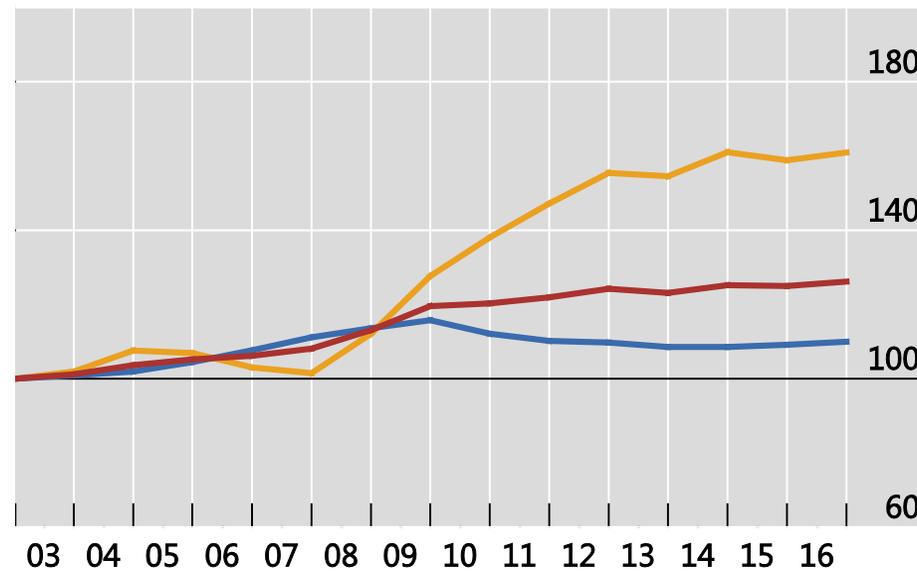
3. Examples of achievement (iii): global debt data

Private and public debt patterns before and after the Great Financial Crisis¹

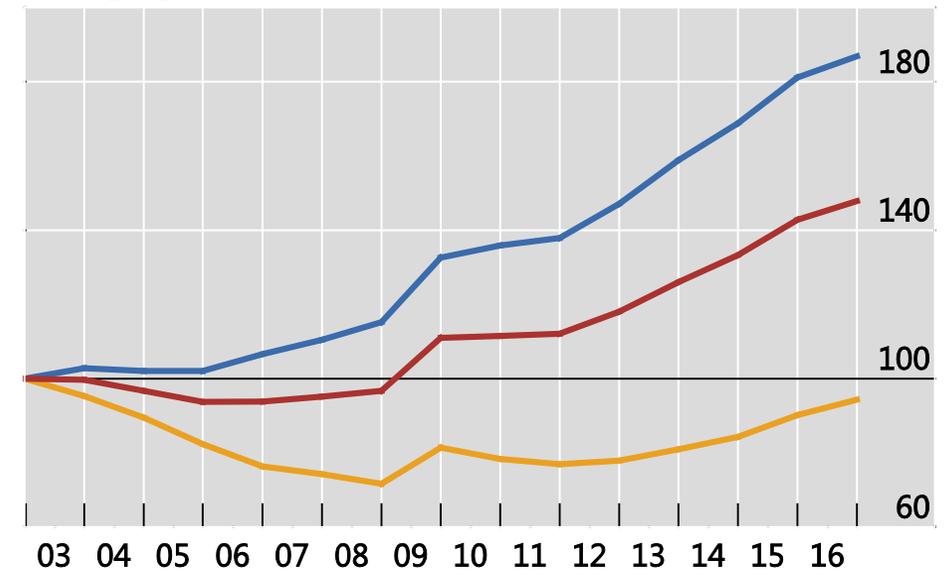
2002 = 100

We now have better data to compare debt across countries & sectors !

Advanced economies



Emerging market economies



— Total — Private — Public

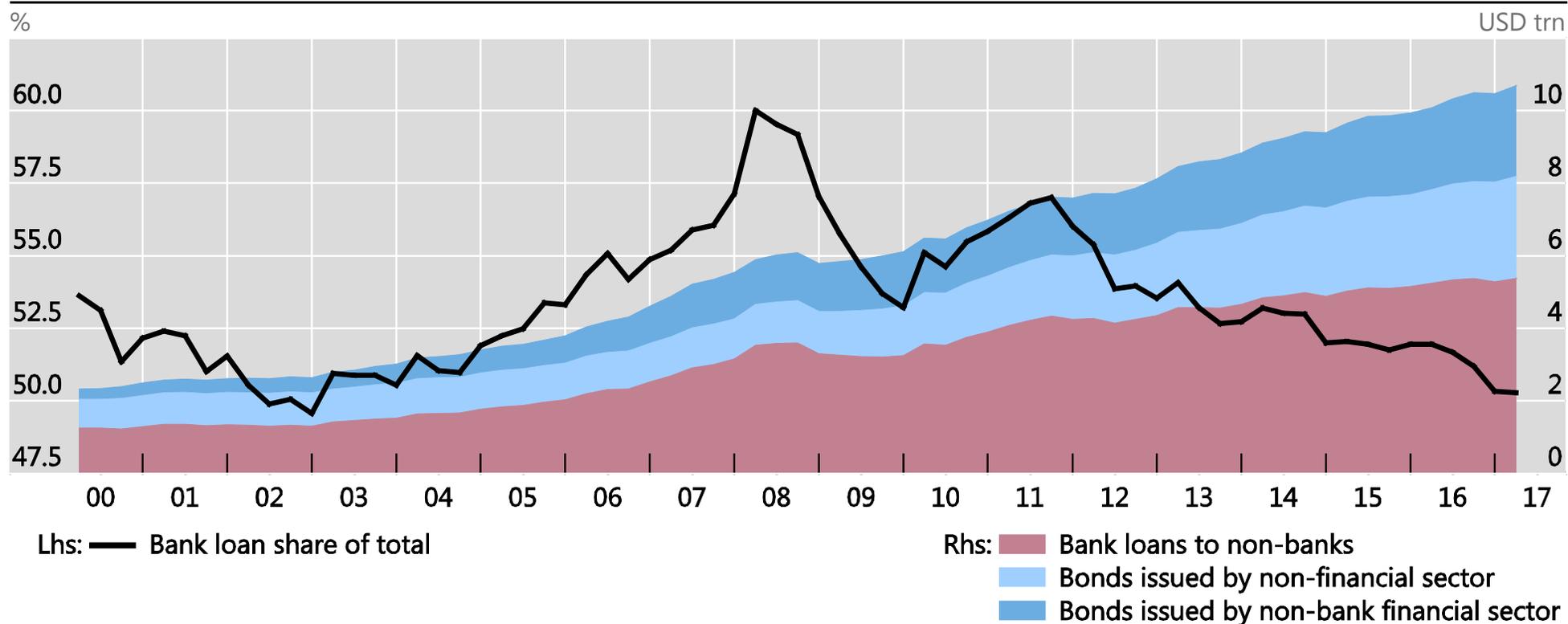
¹ Evolution of total, private (non-financial sector) and public debt in % of GDP in advanced and emerging economies, 2002–16. Weighted averages based on GDP and PPP exchange rates. Market values, except EMEs' public debt in nominal terms.

Sources: BIS; author's calculations.



3. Ex. of achievement (iv): spillovers of domestic policies

US dollar-denominated credit to borrowers outside the United States



Source: BIS global liquidity indicators (see www.bis.org/statistics/gli.htm).

\$ credit to non-banks outside US represents \$ 10½ trillion

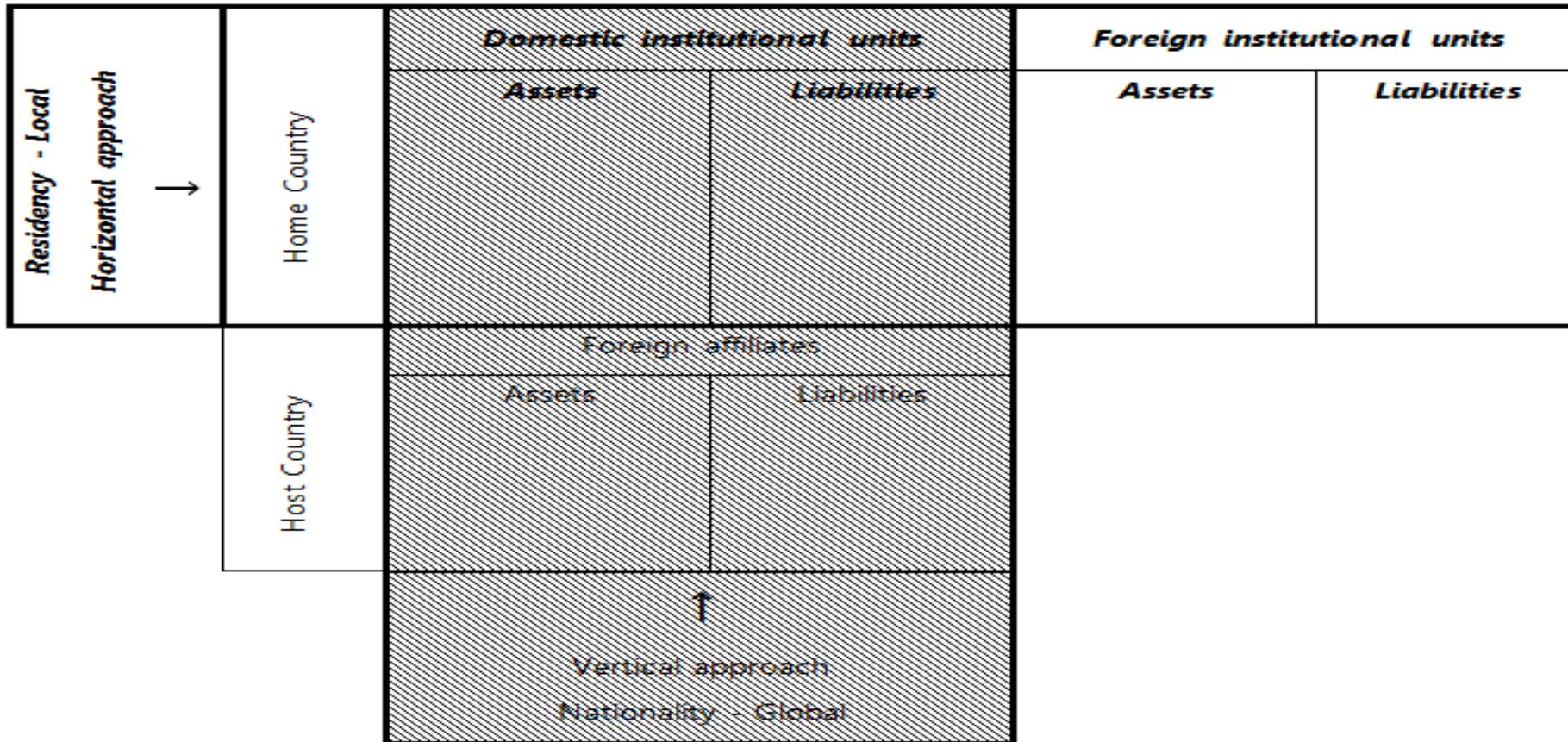


4. But understanding globalisation also requires a change in paradigms...

- Increased role played by global companies / but international comparisons still rely on the residency-based SNA framework
- Usual country statistics do not integrate the impact of the activities of national groups outside domestic boundaries
- Especially for the financial sector:
 - Role of affiliates: foreign branches / subsidiaries
 - Cross-border claims / local claims



... and a framework to assess financial positions & exposures on a consolidated basis...



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



4... to better understand the functioning of the global economy...

- Nationality-based consolidated data help to understand:
 - who takes the underlying economic decisions?
 - who supports the final risk and needs to hold buffers?
 - in which country resides the ultimately responsible unit?
- Nationality-based datasets can complement traditional residency-based statistics
 - Use of information on a residency basis but also on a group basis
 - New data opportunities to construct such information



4... by collecting global data based on economic units...

- **Different approaches**

- Statistical /Business accounting /Supervisory

- **Group-level information**

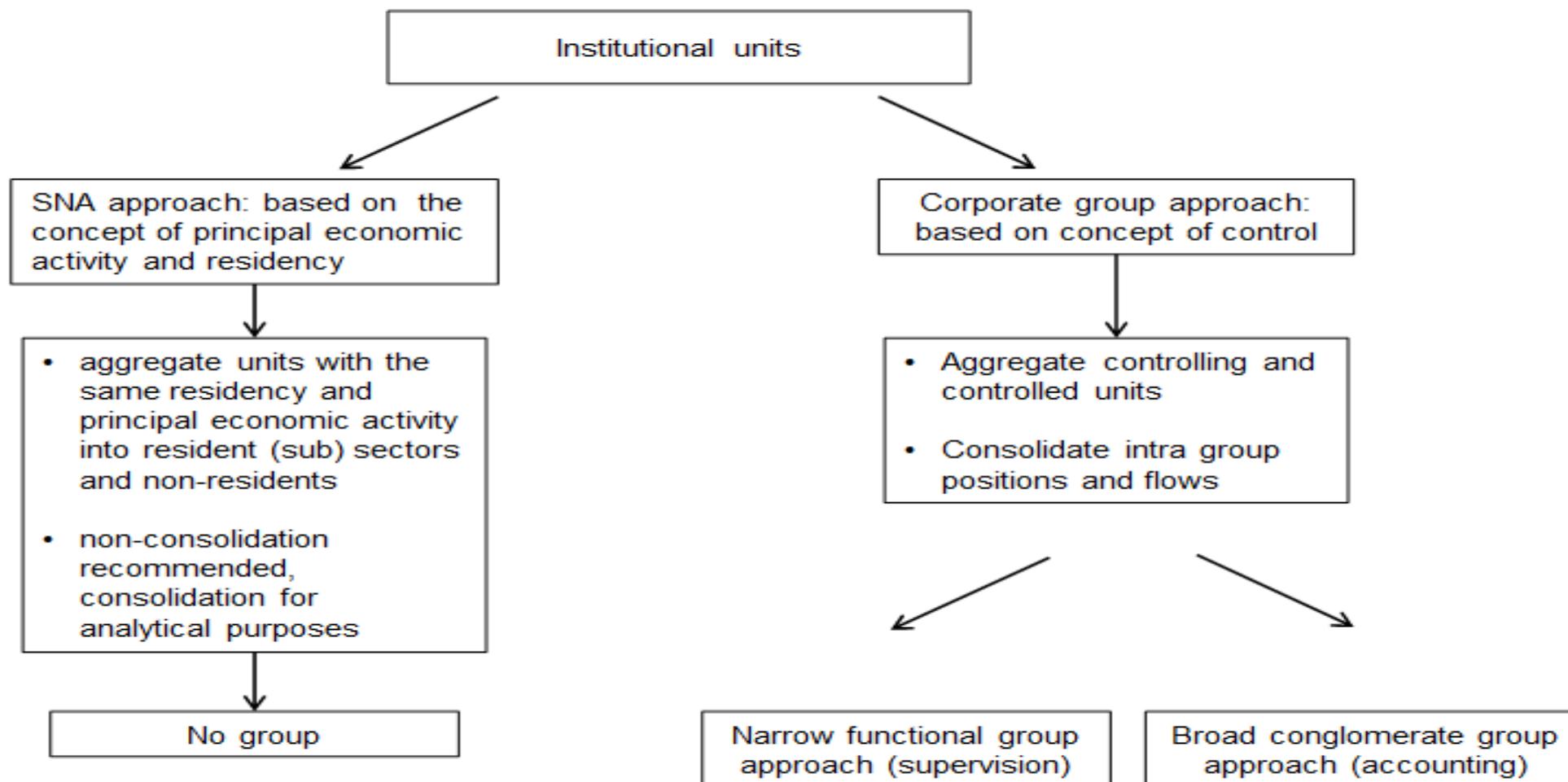
- Concept of control & ownership
- Definition of a corporate group

- **Nationality classification**

- Institutional units need to be “associated with” or “assigned to” a particular home country
- Need to “look through” the chain of controls between home and host countries



4... despite various challenges



5. Examples of value added (i): assessing the foreign exposures of banking systems

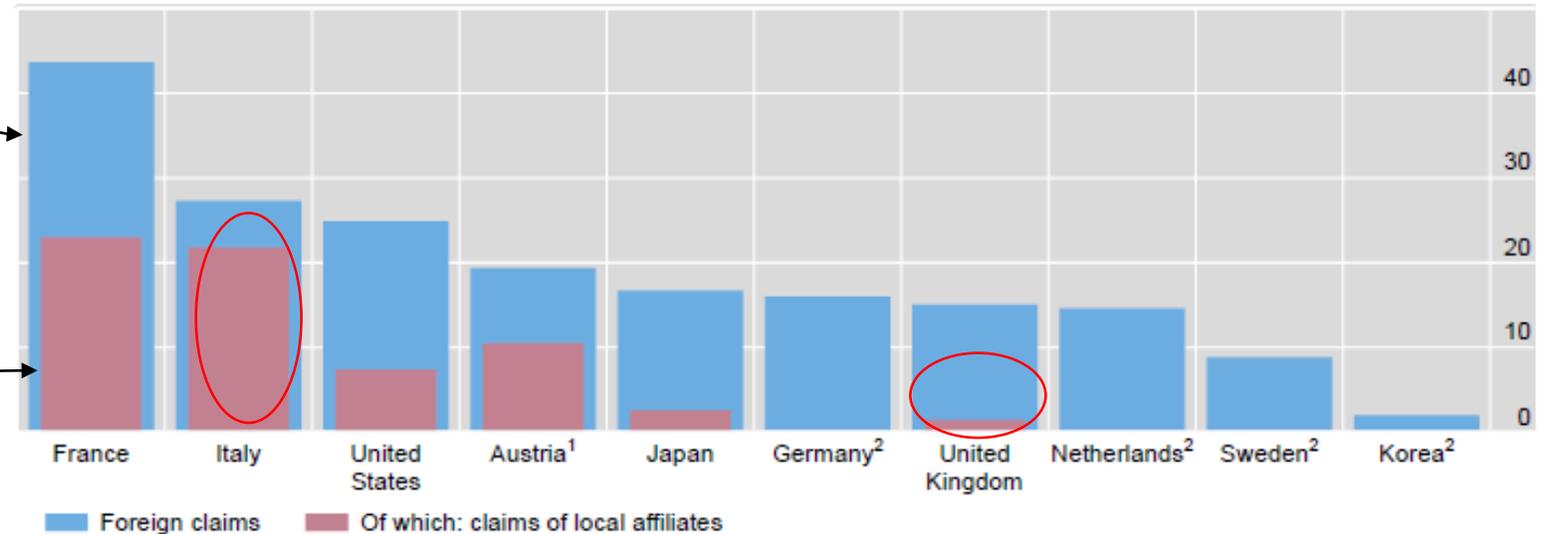
- ***Banks' foreign claims on Russia in 2014 (blue)***

- ***Importance of the claims booked by local affiliates (pink)***

- ***Looking at cross-border claims is not enough***

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

At end-September 2014, in billions of US dollars



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 was not shown.

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

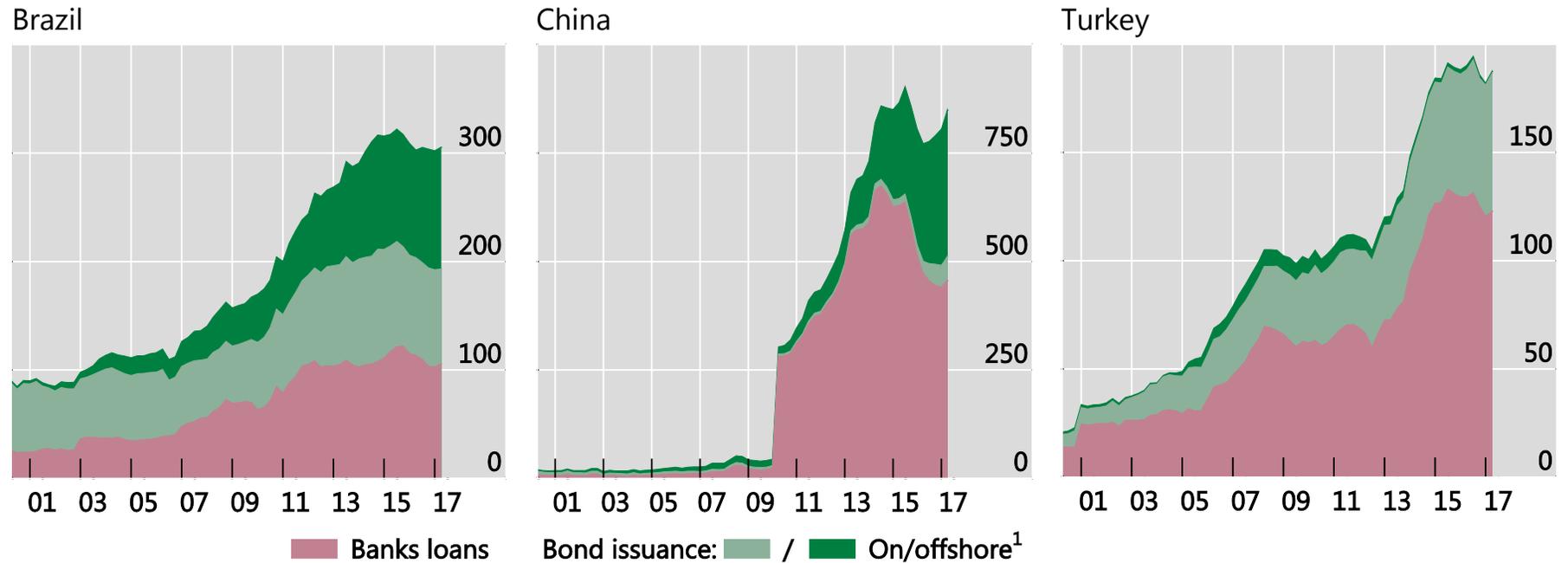


5. Ex. of value added (ii): assessing debt issued by local firms

US dollar-denominated credit to non-banks, including offshore issuance

In billions of US dollars

- **Debt issuance: the 2nd phase of global liquidity**
- **Issuance by (non-resident) affiliates can be large**



For definitions and sources, see www.bis.org/statistics/gli.htm. Breaks in series occur in the period in which data on LLFX become available for the respective country: for Brazil, Q4 2002; for China, Q1 2010; for Turkey, Q4 2000.

¹ Offshore bond issuance is defined as the 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.

Source: BIS global liquidity indicators.



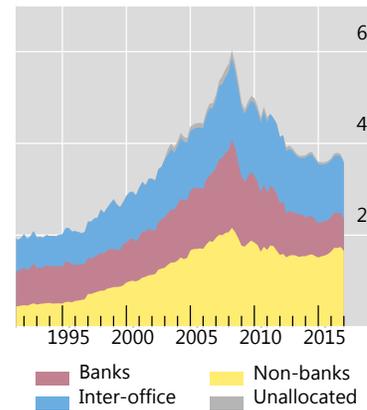
5. Ex. of value added (iii): analysing the financial globalisation peak

- **Banks' cross-border claims have fallen**
- **Consolidated data to avoid double counting inter-office positions**
- **Fall confined to European banks (cf BIS 2017 Annual Report)**

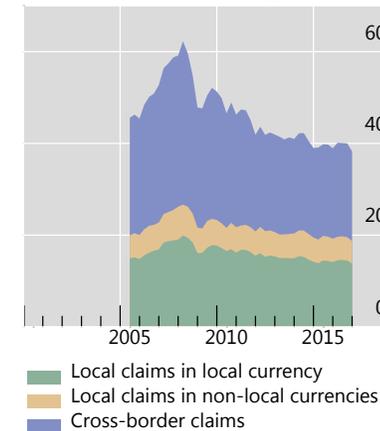
Deglobalisation? Locational vs consolidated perspectives

As a percentage of world GDP

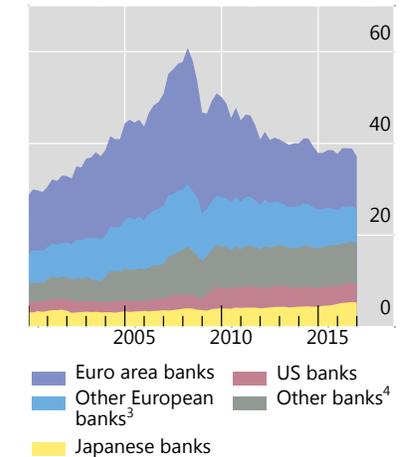
Locational cross-border bank claims¹



Consolidated foreign bank claims²



Foreign claims, by banking system²



¹ Total cross-border claims (including inter-office positions) reported by banks in all reporting locations on borrowers worldwide. ² Consolidated foreign claims (excluding inter-office positions) of banks headquartered in all reporting countries on borrowers worldwide. Foreign claims include both cross-border claims and the local claims of banks' overseas affiliates, but exclude claims on residents of banks' home countries. The split of local claims into local claims in local currencies and local claims in non-local currencies is derived by applying the share of local claims (all currencies) in foreign claims from the ultimate risk statistics to the total foreign claims value in the immediate borrower statistics. ³ Banks headquartered in CH, DK, GB, NO and SE. ⁴ Banks headquartered in AU, BR, CA, CL, HK, IN, KR, MX, PA, SG, TR and TW.

Sources: IMF, *World Economic Outlook*; BIS consolidated (immediate borrower and ultimate risk basis) and locational banking statistics.



Thank you!!

Questions?

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References:

- BIS 87th Annual Report (2017)

<http://www.bis.org/publ/arpdf/ar2017e.pdf>

- Consolidation and corporate groups: an overview of methodological and practical issues, IAG reference document (2015)

<http://www.bis.org/ifc/publ/iagrefdoc-oct15.pdf>

