Irving Fisher Committee on
Central Bank Statistics

BANK FOR INTERNATIONAL SETTLEMENTS

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Complementing residence-based external debt data with issuances by subsidiaries abroad: a tool for risk analysis in emerging market economies[1]

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[1] 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.

Assessing international capital flows after the crisis

BANCO CENTRAL DO BRASIL

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Complementing residence-based external debt data with issuances by subsidiaries abroad: a tool for risk analysis in emerging market economies

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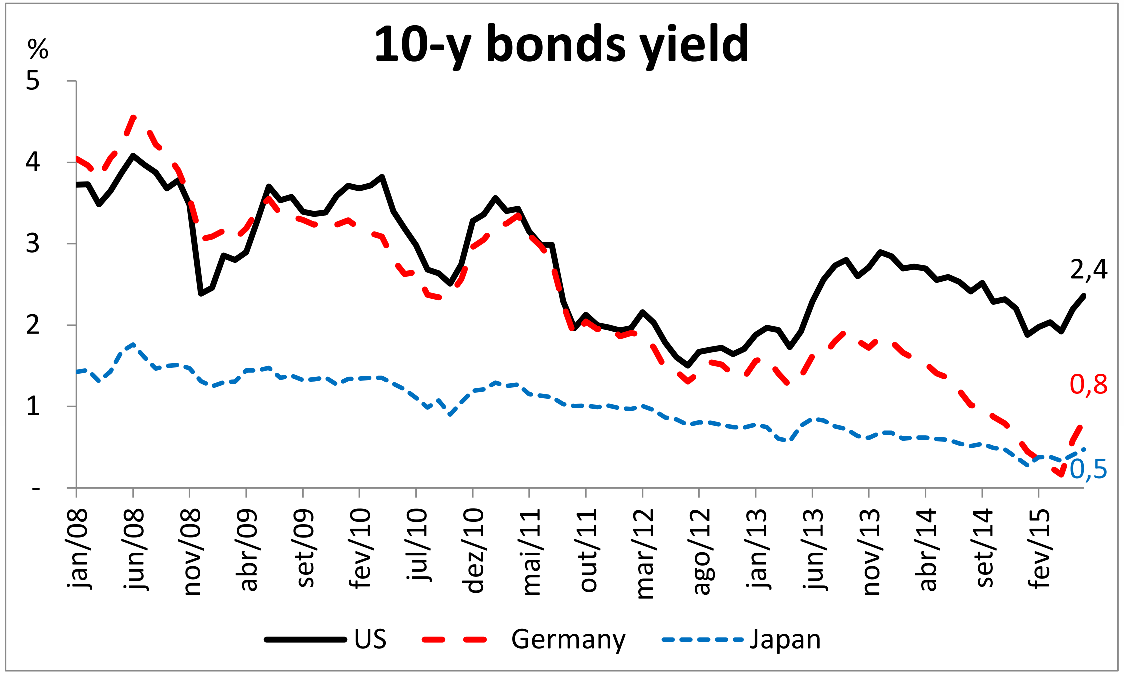
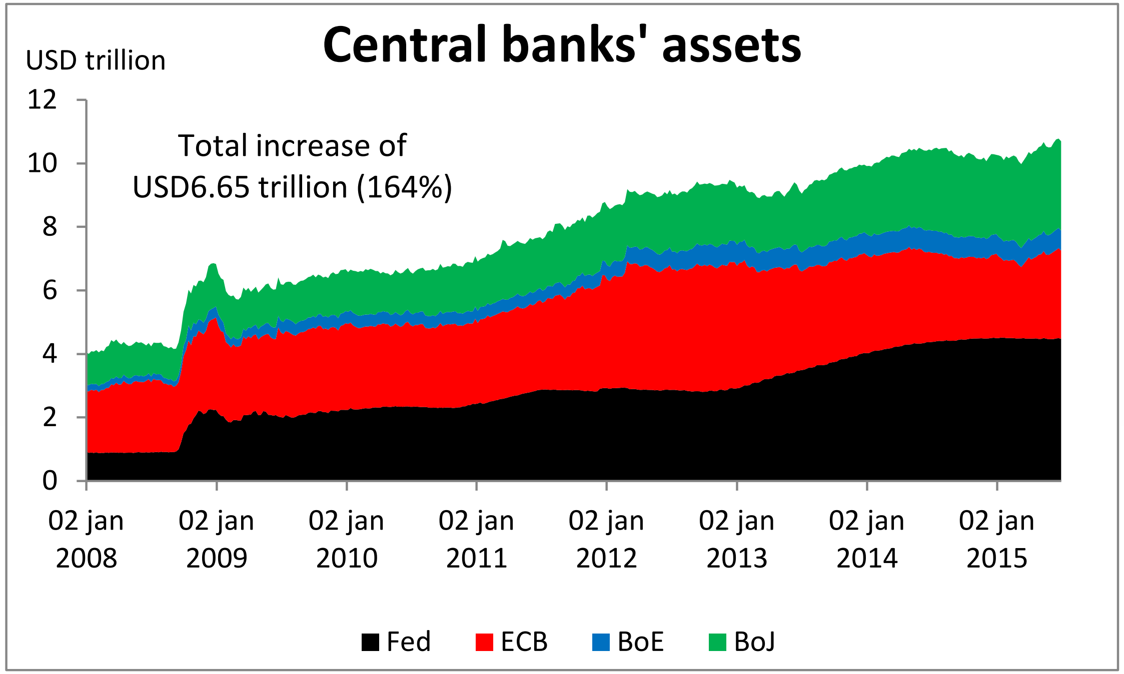
Rio de Janeiro – July 24th, 2015

1. Introduction

High and ever increasing liquidity in the international financial markets post-crisis: very low (short- and long-term) interest rates and unconventional monetary policies in advanced economies' central banks.

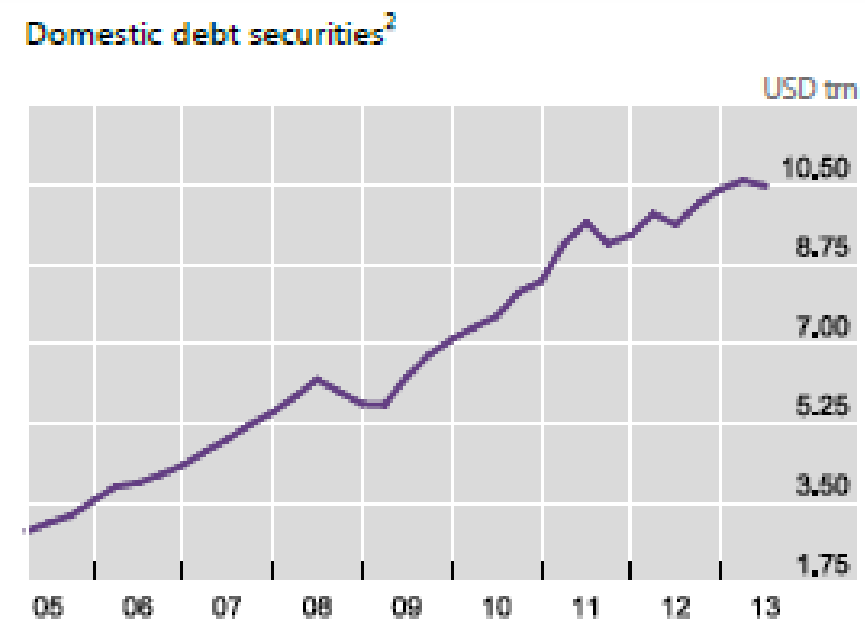


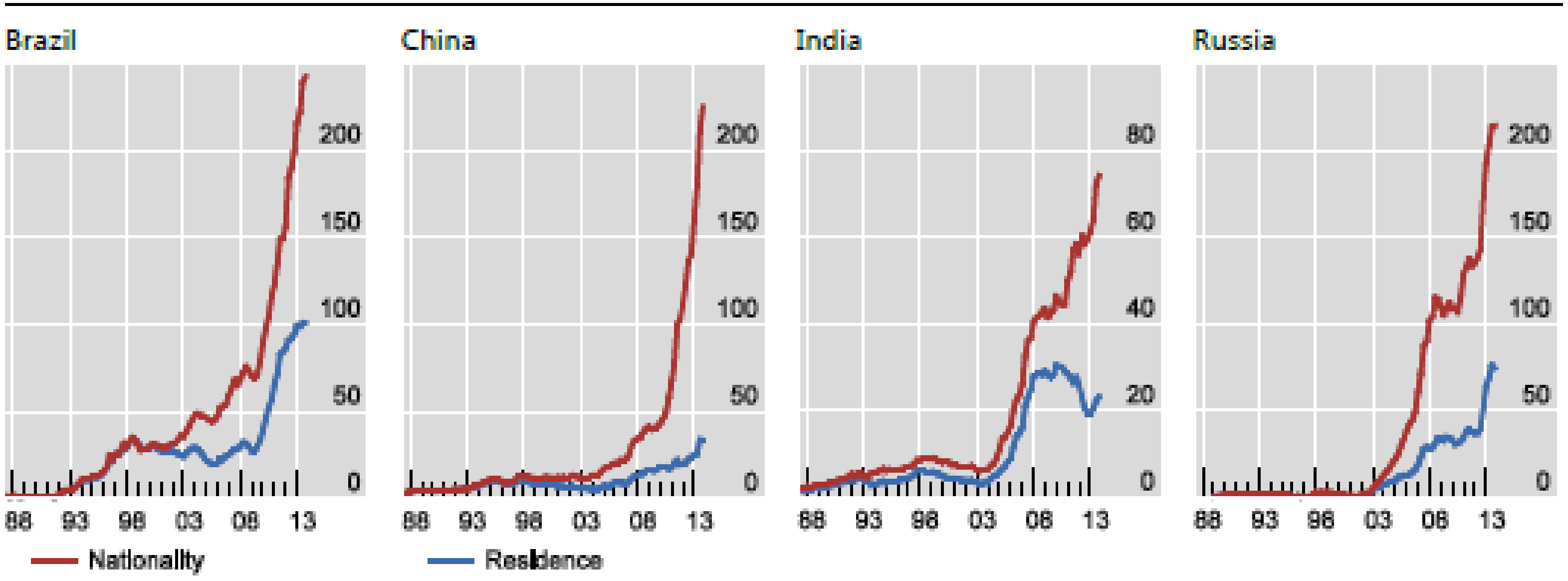


1. Introduction (cont.)

International financial markets with lower volatility, reduction in risk aversion and EME's ratings upgrade, while investors are searching for yield.

Increased internationalization of EME financial markets, both domestic and abroad.





2. Internationalization of EME financial markets

EME's issuing debt securities in their local markets and currencies to non-residents. World Bank estimates that non-residents hold **26.6% or more** of local currency bonds (2013).

EME's corporations (financial and non-financial) issuing debt securities in foreign markets using affiliates. **About half** EME corporate issuance from 2010 was made through overseas affiliates. Main issuers are corporations from BRIC countries, Malaysia and Thailand.

Among the reasons (besides high liquidity) for this practice are:

reach a broader investor base (that would find it hard to invest locally);
better market conditions for funding: domestic dollar lending, internationalization of firms, investment projects, foreign trade operations, and rolling-over foreign currency loans;
try to avoid capital controls measures and/or tax/regulatory arbitrage.

3. Data Gaps Initiative (DGI)

In 2009, the DGI already pointed out to the need for “***improved data on international financial network connections***”, “*better capture the build-up of risk in the financial sector*” (and also non-financial) and “*monitor the vulnerability of domestic economies to shocks*”.

In fact, DGI recommendation #13 was aimed at “*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*”.

The 2010 DGI Progress Report specifically mentioned that “***locally-owned nonfinancial corporations were using offshore entities to borrow funds***” and that this was a data gap (not in traditional BOP/EXD data) and a potential risk for financial stability.

3. DGI (cont.)

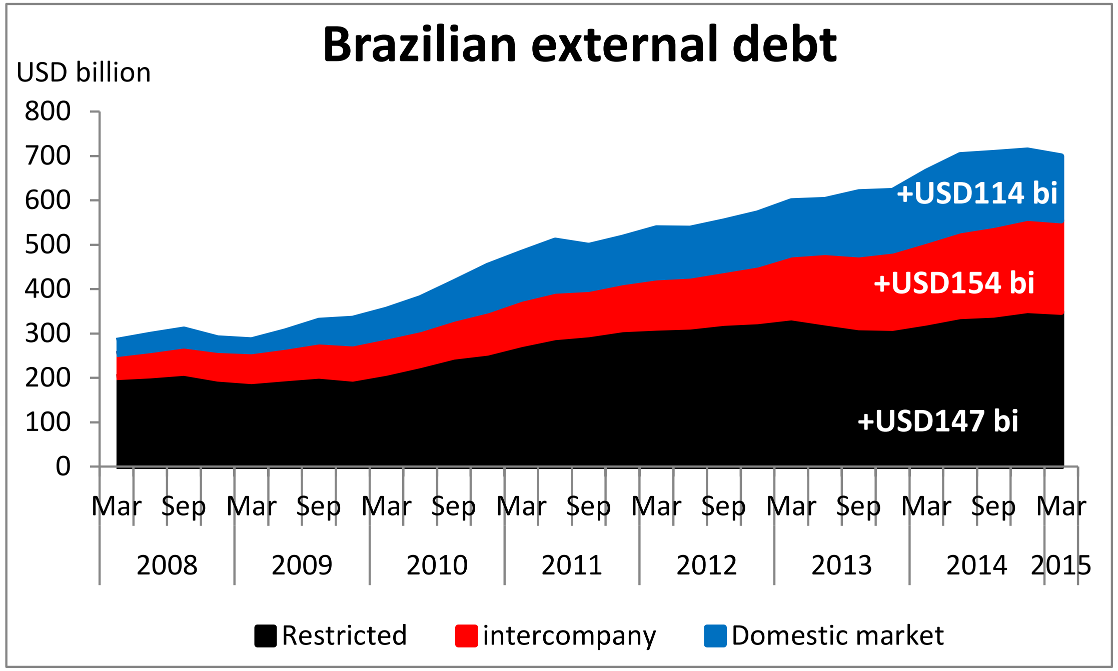
To address recommendation #13, an IAG working group was created, led by the BIS.

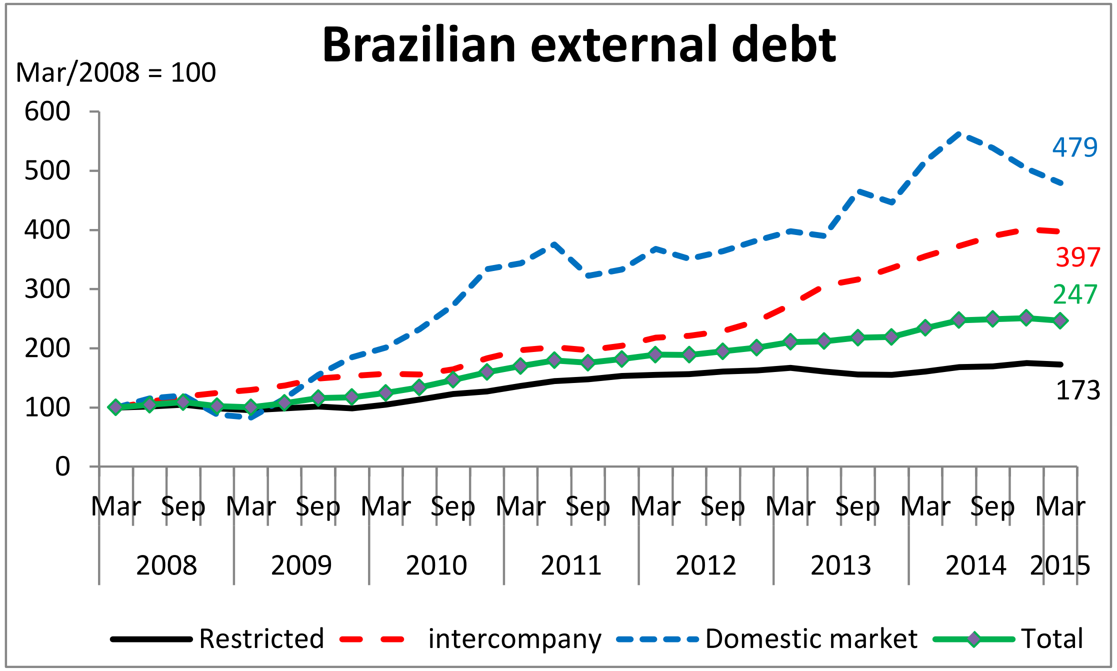
The WG sponsored a workshop on January 2011 on "***Residency/Local and Nationality/Global Views of Financial Positions***" (published by the IFC on February 2012), discussing methodological and practical issues, how to consolidate available information and what are the existing data gaps. A reference paper was expected to be published by the end of 2014.

The completion of recommendation #13 was made mainly on the conceptual ground. There are not yet specific methodological standards or guidelines nor reporting templates for data on corporations (both financial and nonfinancial) on a consolidated basis (in addition to the usual residency-based perspective).

4. The Brazilian case

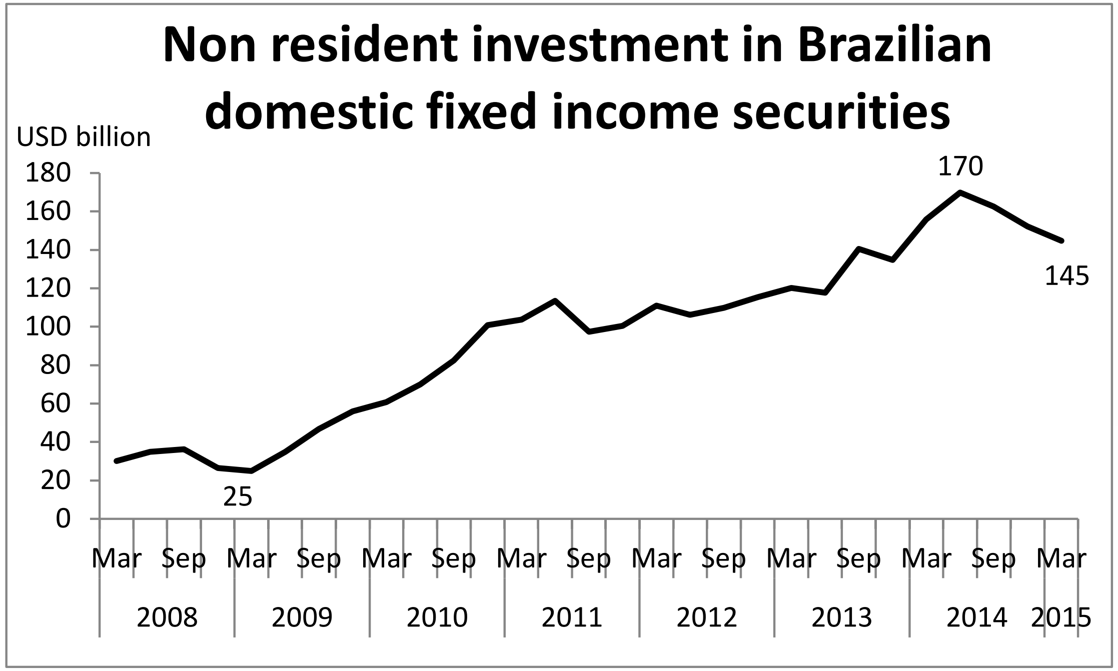
Significant capital inflows, impacting external debt. All external debt "categories" show important increases (in USD). Such increases are more pronounced in domestic debt securities and intercompany loans, not in "traditional" external debt (in %).

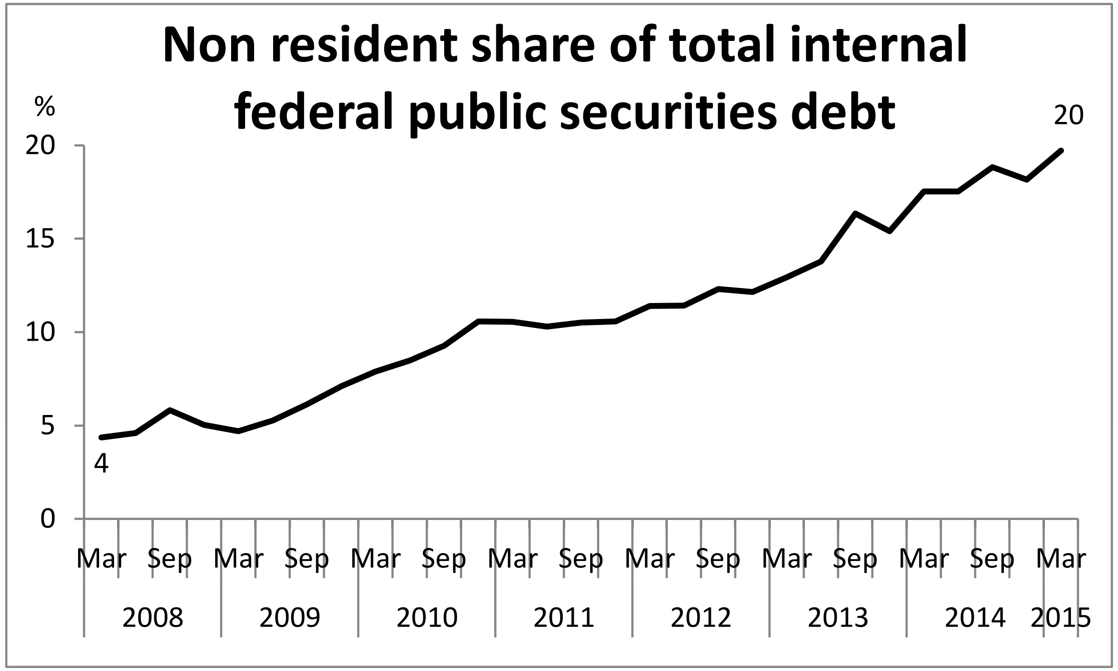




4. The Brazilian case (cont.)

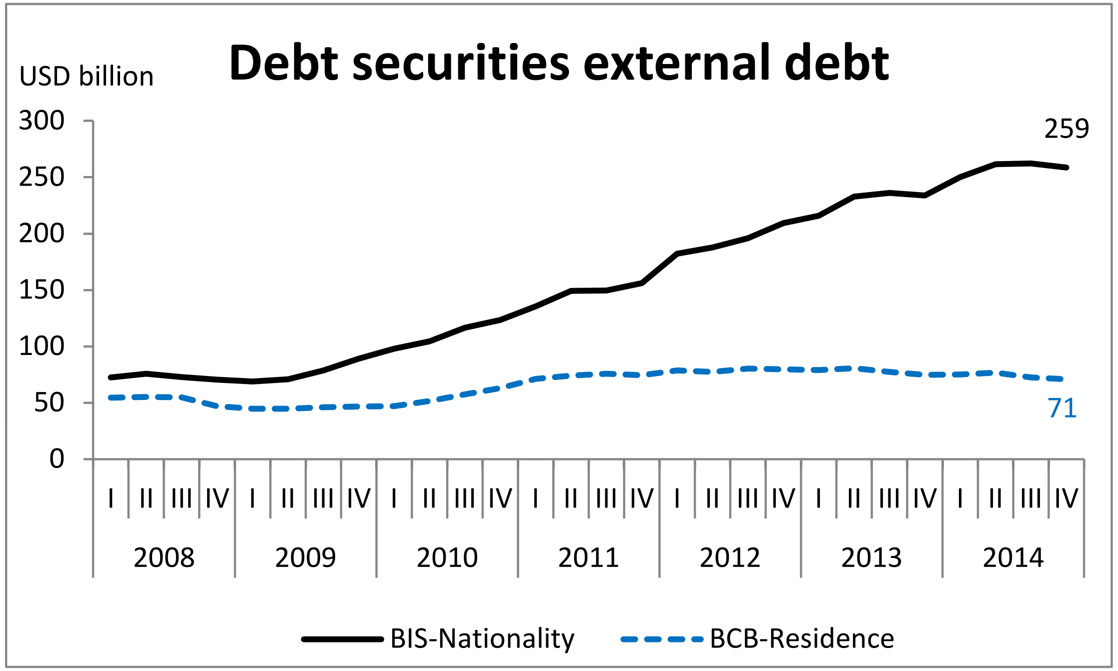
Non-resident investments in domestic markets securities increased due to the mentioned external factors, but also by domestic ones, such as income tax exemption and IOF taxation. Such securities are denominated/settled in BRL (FX risk of the investor).

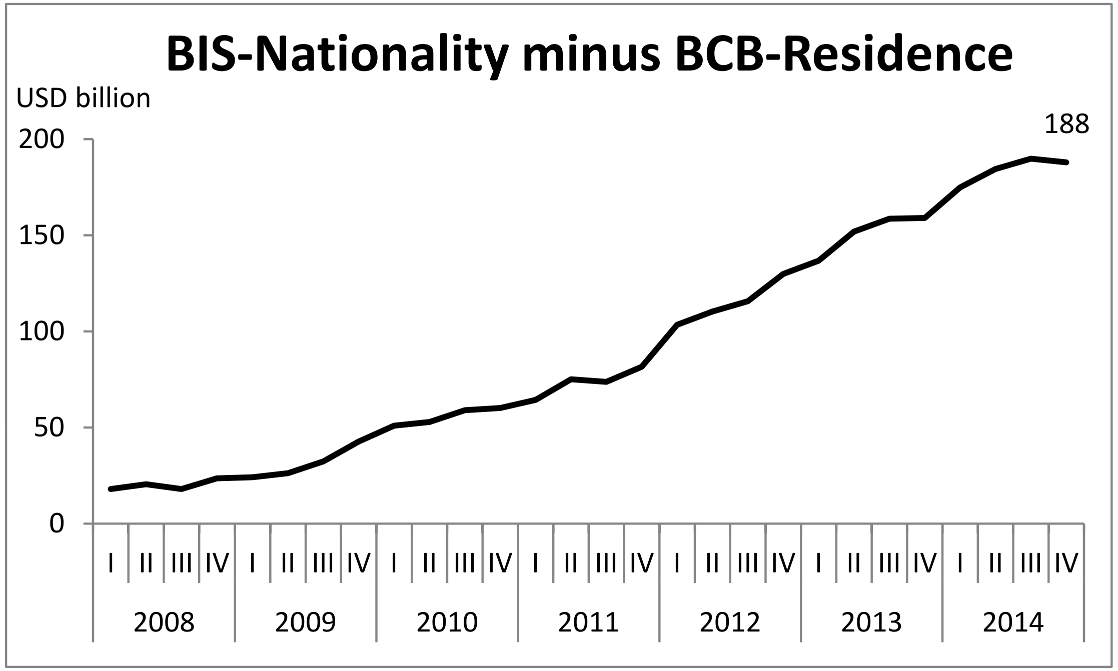




4. The Brazilian case (cont.)

For debt securities issued abroad by non-resident affiliates of Brazilian corporations, a way of estimating this amount is to subtract residence (BCB debt securities EXD statistics) from nationality data (BIS IDS database). The gap was **USD188 billion** as of December 2014.





5. Using BCB databases: issuances by subsidiaries abroad

In order to fill this data gap and provide information for financial stability analysis it was necessary i) to replicate the BIS database using micro data and then ii) try to "follow the money".

First we compared both debt securities databases using residence concept: the BIS series increased overtime more than BCB's (improving coverage?) and was USD28 billion higher in December 2014, among other possible reasons, for different valuation methods.

It means that of the USD188 billion difference among BIS-nationality and BCB-residence, USD28 billion were differences among the two residence-based datasets.

5. Using BCB databases: issuances by subsidiaries abroad (cont.)

Then, we tried to replicate BIS IDS database by nationality (commercial sources) with information providers' data. Of the USD188 billion dollar difference, we got security-by-security information of **USD165 billion** issued abroad by non-resident affiliates.

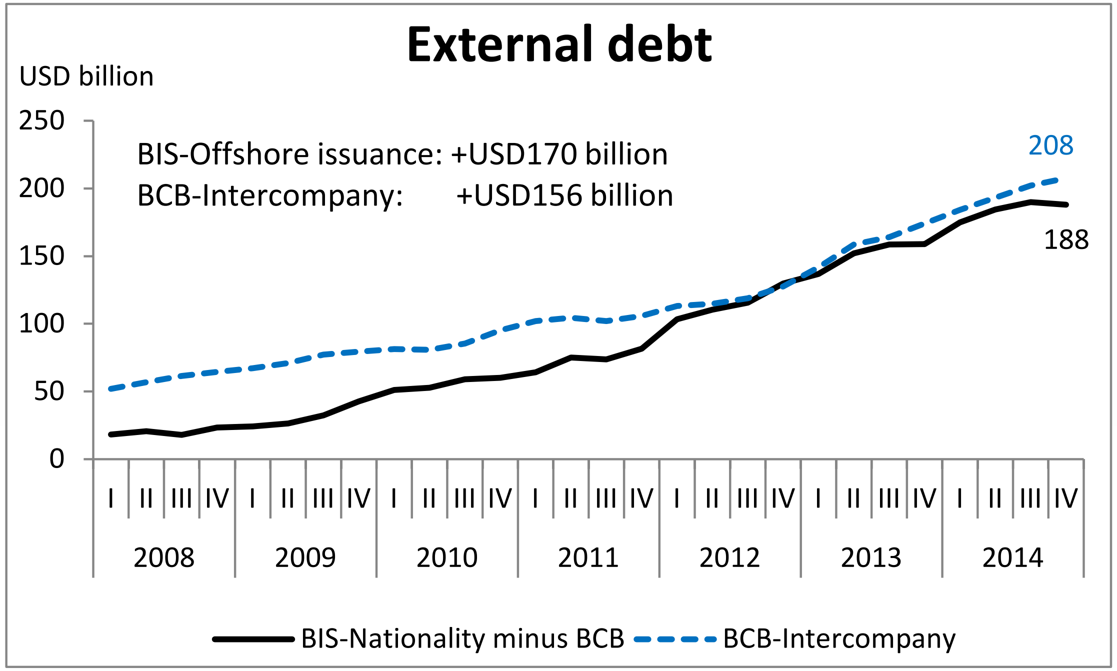
USD49 billion (30%) were issuances of financial institutions' affiliates abroad. For financial stability this is not a information gap, as BCB supervision already get consolidated information from its supervised financial institutions.

For the **USD116 billion of non-financial sector** issuances, we built a sample of the top 10 issuers (86%) and compare with BCB databases. The increase of the **outstanding intercompany loans of the sample equals 79% of the sample issuances**. Besides, 49% of all intercompany loans are export-related to be paid in goods (exports advance payments) and around 90% are long term.

5. Using BCB databases: issuances by subsidiaries abroad (cont.)

The results (extrapolating the sample) are in the table below.

They seem to indicate Brazilian companies (mainly commodity exporters) searching for better funding conditions, as the vast majority of the resources were internalized.



Outstanding debt securities issued abroad -
Residence and nationality concepts

US$ billion

Itemization	2014
Outstanding (BIS-nationality minus BCB-residence)	187,9
(-) Financial institutions issuances abroad	55,3
(=) Non-financial corporations issuances abroad	132,6
(-) Internalization through intercompany lending net inflows [1/, 2/]	104,2
(-) Constitution of assets abroad [1/, 3/]	5,1
Residual amount	23,3

Source: Banco Central do Brasil and international data providers.
1/ Sample of ten leading non-financial corporations that issue abroad, representing 86.1% of the total issuances of foreign affiliates of non-financial corporations.
2/ Balance of payments and external debt statistics.
3/ Brazilian Capitals Abroad survey (CBE), September 2014.

6. Using BCB databases: supervision data for financial stability

For financial stability, it was important to get accurate, consolidated,comprehensive and timely information on the evolution of financial and non-financial institutions debt, both domestic and abroad, in domestic and foreign currencies, post-crisis:

Domestic FX debt: BCB's Credit Bureau and Capital Markets Database;

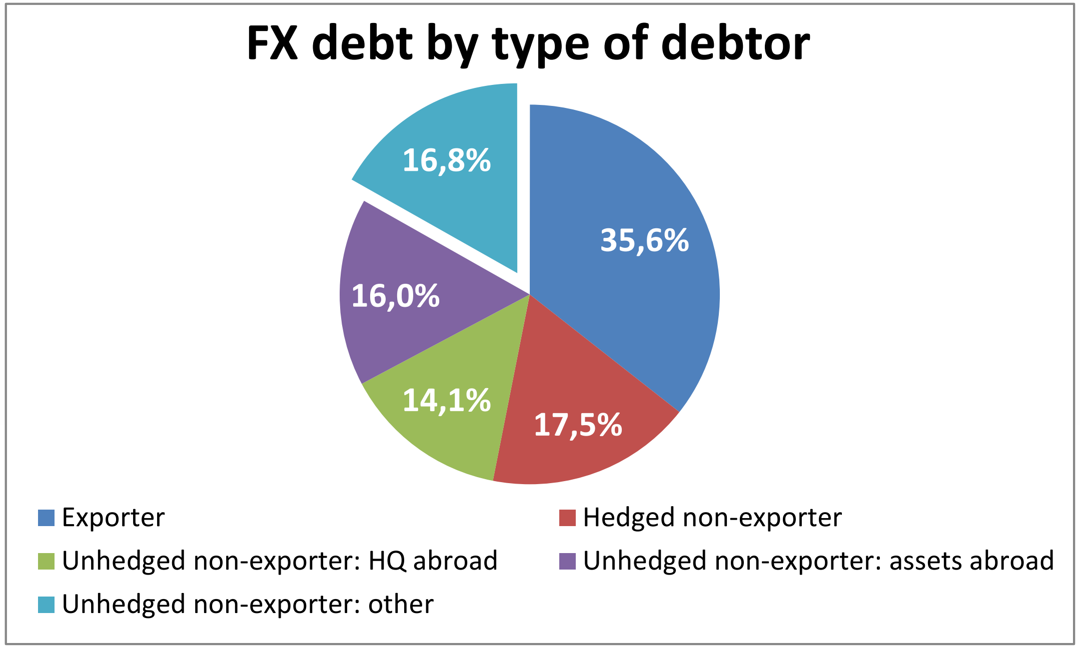
Foreign debt: external debt data (residence) and the above methodology (nationality), which significantly overlap.

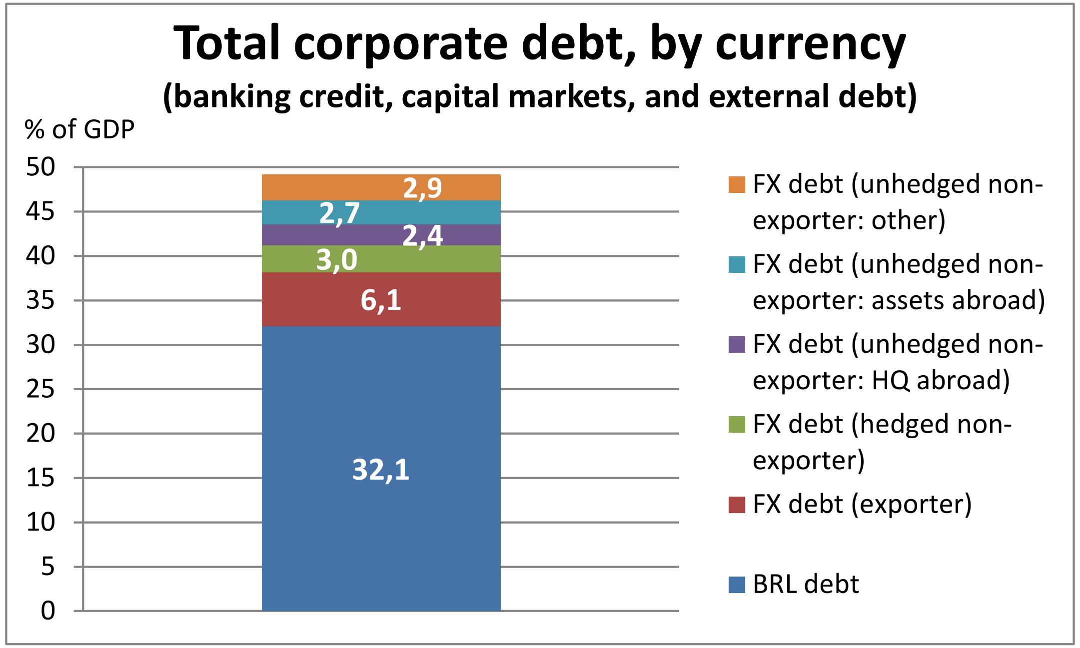
Derivatives: mandatory registration for all domestic contracts as well as abroad (financial institutions), with detailed daily information. Fully revised after 2008-09.

As of June 2014, **external markets represented 29% of Brazilian companies total debt** (domestic bank credit, 61%, and capital markets, 10%), one of the smallests in EMEs (GFSR, 2014). Around **1%** of Brazilian companies had foreign currency debt.

6. Using BCB databases: supervision data for FS (cont.)

17% of total foreign currency debt of the Brazilian non financial sector does not have any identified hedge. This amount is equal to **3% of GDP**.





7. Summary and conclusions

"*Data gaps are an inevitable consequence of the ongoing development of markets and institutions*" (DGI, 2009). Thus, statisticians and analysts will, in a sense, always be "behind the curve". Constant monitoring of market practices and innovation is a necessity.

In the absence of fully developed global conceptual framework and datasets, this exercise, its methodology and results are specific to the Brazilian case.

Although there is a huge increase in overseas affiliates of Brazilian corporations issuance in the last years, it seems that i) the vast majority of these resources are being internalized as intercompany loans and ii) albeit gross FX exposures are increasing, only a minor part of this amount does not have some kind of hedge. Due to various data imperfections and estimations, these conclusions should be consider with caution.