Irving Fisher Committee on Central Bank Statistics

BANK FOR INTERNATIONAL SETTLEMENTS

Enhancing global financial statistics after the crisis: the BIS response

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International Statistical Institute Regional Statistics Conference (ISI RSC 2017) – Bali, 23 March 2017

Enhancing global financial statistics after the crisis: overview

1. Introduction
2. Post-crisis initiatives
3. Expansion in BIS's international financial statistics
4. Data to understand the global financial system
5. Data to understand systemic risk
6. Data for evidence-based policy

1. Introduction – The GFC, a wake-up call for statisticians

- Key data issues highlighted by the 2007/09 Crisis:
  - Excessive **leverage**... but debt measures were scarce
  - **New financial players**... but poor information on shadow banks
  - System-wide **connections**... but lack of information on cross-border & -sector exposures
  - Supervisory challenges... but insufficient monitoring of **key institutions** (eg "too-big-to-fail")

2. Post-crisis efforts to improve global financial statistics

- G20 Data Gaps Initiative (" **the DGI** ")
  - **Phase I** issued by FSB and IMF in 2009 with 20 recommendations
  - **Phase II** (2016): *"Implementing collection & dissemination of comparable, timely, integrated, high quality, and standardized statistics for policy use"*
- BIS and **central bank community** involved directly or indirectly in around 2 thirds of the recommendations
- Inter-Agency Group on Economic and Financial Statistics (**AIG**): coordinating & monitoring the implementation of the DGI

DGI recommendations: a bird's eye view

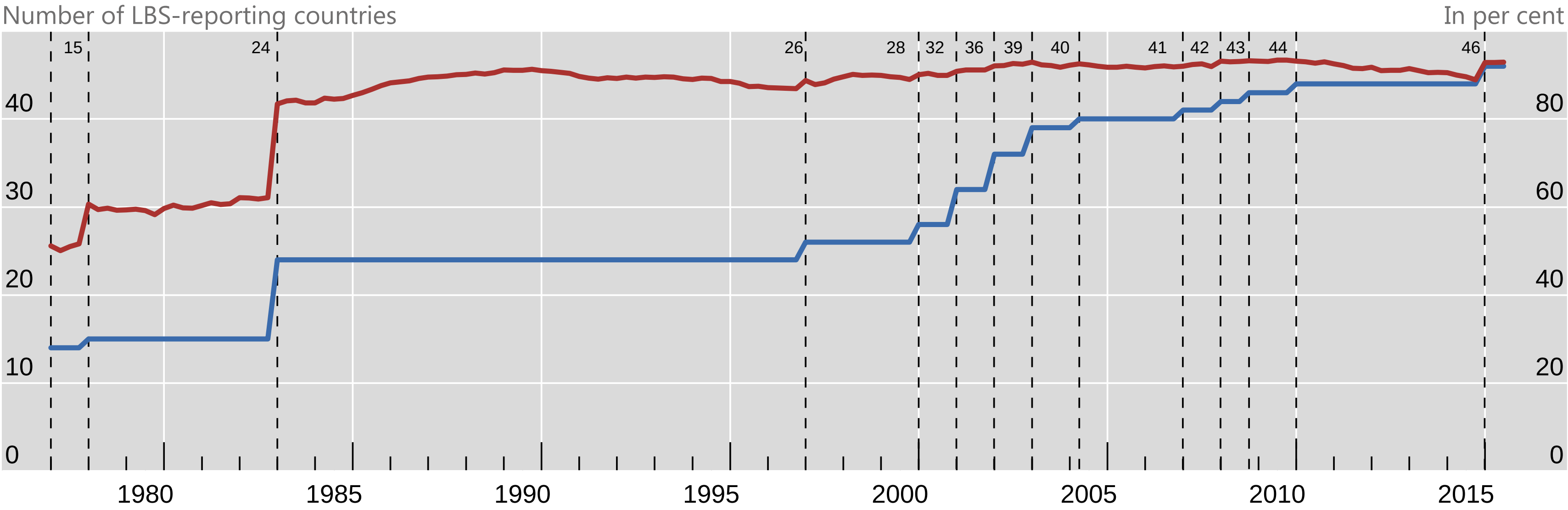
First Phase (2000-2005)	Second Phase (2016-20)
I.1: Mandate of the DGI	II.1: Mandate of the DGI
Build-up of risk in the financial sector	**Monitoring risks in the financial sector**
I.2: Financial Soundness Indicators (FSI)	II.2: FSI
I.3: Tail risk	
	II.3: FSI Concentration and Distribution Measures
I.4: Aggregate leverage and maturity mismatches	
	II.4: Global Systemically Important Financial Institutions (GSIFIs)
	II.5: Shadow Banking
I.5: Credit default Swaps (CDS)	II.6: Derivatives
I.6: Structured products	
I.7: Securities data	II.7: Securities Statistics
Cross-border financial linkages	**Vulnerabilities, Interconnections, and Spillovers**
I.8&9: Data for Global Systemically Important Financial Institutions (GSIFIs)	
I.12: International Investment Position (IIP)	II.10: IIP
I.10&11 Coordinated Portfolio Investment Survey (CPIS) & International Banking Statistics (IBS)	II.11: IBS II.12: CPIS
I.13&14: Corporations' cross border exposures	II.14: Cross border exposures of non-bank corporations
Vulnerability of domestic economies to shocks	II.13: Coordinated Direct Investment Survey (CDIS)
I.15: Sectoral accounts	II.8: Sectoral accounts
I.16: Distributional Information	II.9: Household Distributional Information
I.17: Government Finance Statistics (GFS)	II.15: GFS
I.18: Public Sector Debt Database (PSDS)	II.16: PSDS
I.19: Real estate prices	II.17: Residential Property Prices
	II.18: Commercial Property Prices
Communication of Official Statistics	**Communication of Official Statistics**
I.20: Principal Global indicators	
	II.19: International Data Cooperation and Communication
	II.20: Promotion of Data Sharing

3. Expansion in BIS's international financial statistics

- Internationally active **banks**
- **Debt securities**
- **Derivatives**

3(i) International banking: greater country coverage…

Global coverage of the locational banking statistics



# LBS[1]	14	15	24	26	28	32	36	39	40	41	42	43	44	46
Date[2]	**Q4 1977**	**Q4 1978**	**Q4 1983**	**Q4 1997**	**Q4 2000**	**Q4 2001**	**Q4 2002**	**Q4 2003**	**Q1 2005**	**Q4 2007**	**Q4 2008**	**Q3 2009**	**Q4 2010**	**Q4 2015**

[1] Number of LBS-reporting countries. [2] First period when data are available, ie date of change in the reporting population. The first period when data are published is usually two to three quarters later. [3] AN was succeeded by CW as of Q4 2010.

3(ii) Debt securities:

- **Conceptual framework**
  - BIS-ECB-IMF Handbook on Securities Statistics (2015)

- **BIS data collection** on securities' issuance
  - All G-20 economies report basic, consistent data
  - Focus on **standard breakdowns**: issuing sector, currency, original maturity, type of interest rate, market of issuance
    - Stocks & transactions
    - Nominal & market value
    - Residency and nationality basis (international market only)

3(iii) Derivatives: expanded data collection

- 50+ countries participate in the **BIS Triennial** Central Bank Survey of foreign exchange and derivatives market activity
- Expansion of the **BIS semiannual** survey of OTC derivatives to 13 economies (8 G20) with "significant" markets
- More information on **CDS markets and CCPs**
  - Analyse risk transfers across sectors (including within the financial sector)
  - Review derivatives data to enhance their analytical usefulness

4. Data to understand the global financial system

- Global financial stability issues: the crisis highlighted the lack of information on **entities operating globally**

- Looking at traditional **residency-based statistics** can be misleading

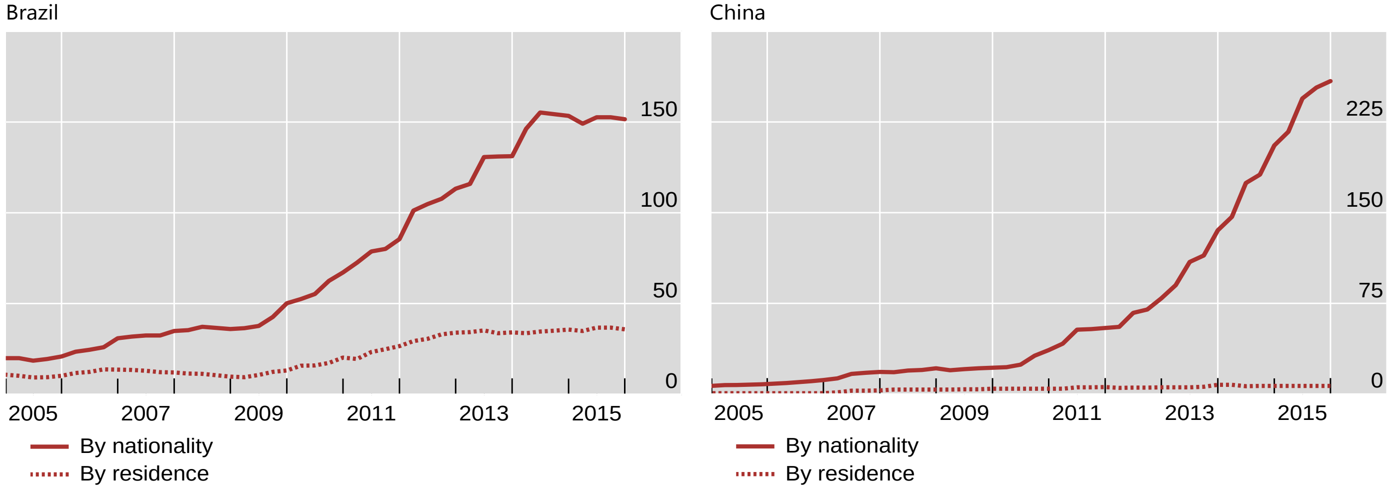
- Nationality-based **consolidated datasets** can facilitate our understanding, by addressing the following questions:
  - who takes the underlying economic decisions?
  - who supports the final risk and needs to hold buffers?
  - in which country resides the ultimately responsible unit?

4. Example: international debt issuance

- ***Sizeable gap between international foreign currency debt issuance on a residence and a nationality basis***
- ***The gap has widened in recent years in many EMEs***

International debt securities issued by non-financial companies outstanding in foreign currencies, by residence and by nationality

Outstanding amounts, in billions of US dollars

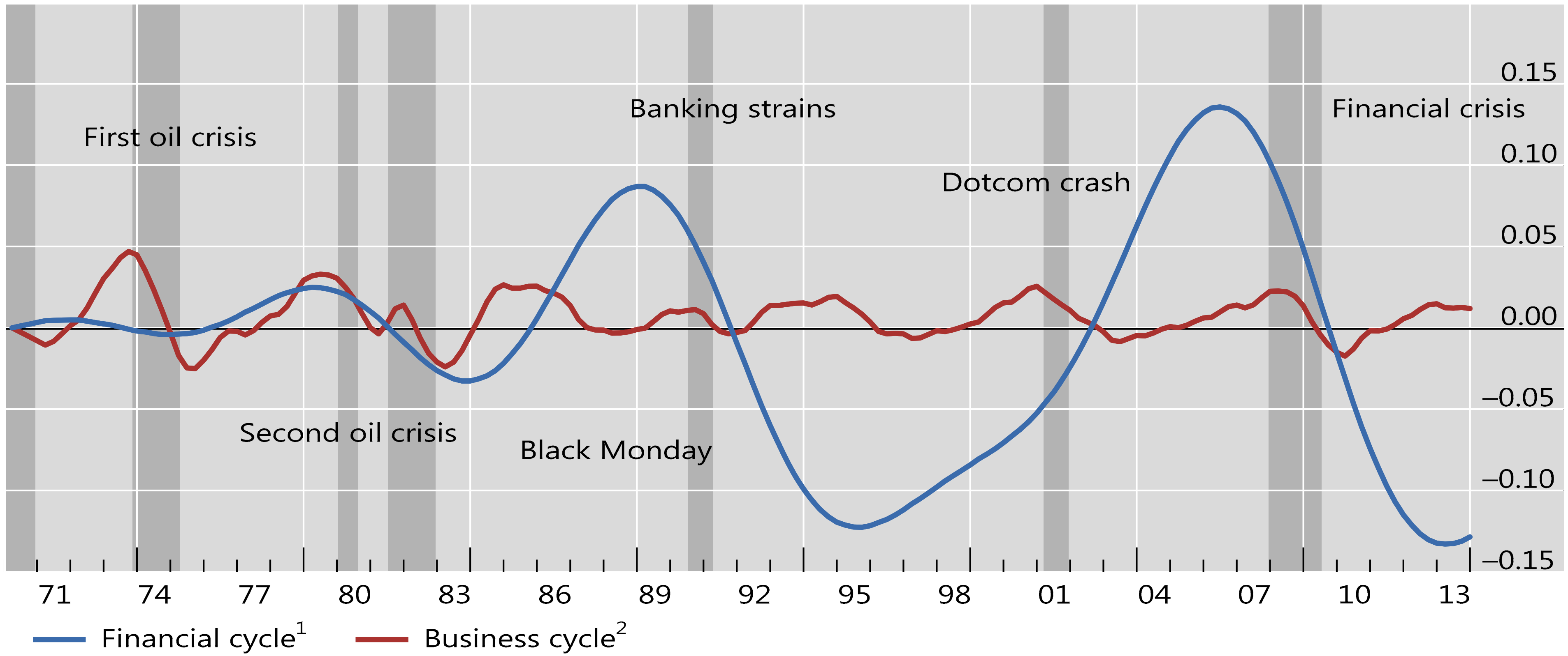


[1] Issuer sector is immediate borrower basis by residence and ultimate borrower basis by nationality. [2] Sum of Indonesia, Korea, Malaysia, the Philippines and Thailand.

Sources: BIS international debt securities statistics.

5. Data to understand systemic risk: capturing the financial cycle…

Important role of the financial cycle: US boom/bust credit episodes



[1] The financial cycle as measured by frequency-based (bandpass) filters capturing medium-term cycles in real credit, the credit-to-GDP ratio and real house prices. [2] The business cycle as measured by a frequency-based (bandpass) filter capturing fluctuations in real GDP over a period from one to eight years. Source: from Drehmann et al (2012), updated.

5. … through a variety of indicators

- Both a **global** and a **long-term** view
- Financial cycles: long-term fluctuations in
  - Asset prices (eg **property prices**)
  - Total **credit** to the non-financial sector
- Position in the cycle
  - **Credit-to-GDP gaps**
  - **Debt-service ratios**
- Global spillovers
  - **Global liquidity indicators**
  - Effective (real) **exchange rates**: trade- versus debt-weighted rates

6. Data for evidence-based policy: monitoring individual entities…

G-SIBs' Common Data Template

2010	2011	2012	2013	2014	2015	2016
Conceptual work	Project Definition	Development and consultation	**Phase 1**	Guidelines Ph. 2 + QIA Ph. 3	**Phase 2**	**Phase 3**

Phase 1:
- Top 50 bilateral exposures
- Individual aggregated CBS
- Access to home country supervisors

Phase 2:
- Top 20 + 20 funding sources
- Access to home macro-prudential authorities

Phase 3:
- Granular I-A balance sheets
- Access to international financial institutions with a financial stability mandate (aggregate data)

Data collection starting in 2017H2, 12 months after the guidelines were released

Source: FSB

6. … and the implementation of financial regulation

Various regular Quantitative Impact Studies (QIS) to design regulation and monitor implementation

	Phases (Basel III phase-in arrangements)	2013	2014	2015	2016	2017	2018	2019
Capital	Leverage Ratio		Parallel run 1 Jan 2013 – 1 Jan 2017 Disclosure starts 1 Jan 2015				Migration to Pillar 1	
Capital	Minimum Common Equity Capital Ratio	3.5%	4.0%	4.5%				**4.5%**
Capital	Capital Conservation Buffer				0.625%	1.25%	1.875%	**2.5%**
Capital	Minimum common equity plus capital conservation buffer	3.5%	4.0%	4.5%	5.125%	5.75%	6.375%	**7.0%**
Capital	Phase-in of deductions from CET1*		20%	40%	60%	80%	100%	**100%**
Capital	Minimum Tier 1 Capital	4.5%	5.5%	6.0%				**6.0%**
Capital	Minimum Total Capital	8.0%						**8.0%**
Capital	Minimum Total Capital plus conservation buffer		8.0%		8.625%	9.25%	9.875%	**10.5%**
Capital	Capital instruments that no longer qualify as non-core Tier 1 capital or Tier 2 capital		Phased out over 10 year horizon beginning 2013					
Liquidity	Liquidity coverage ratio – minimum requirement			60%	70%	80%	90%	**100%**
Liquidity	Net stable funding ratio						Introduce minimum standard	

* Including amounts exceeding the limit for deferred tax assets (DTAs), mortgage servicing rights (MSRs) and financials.

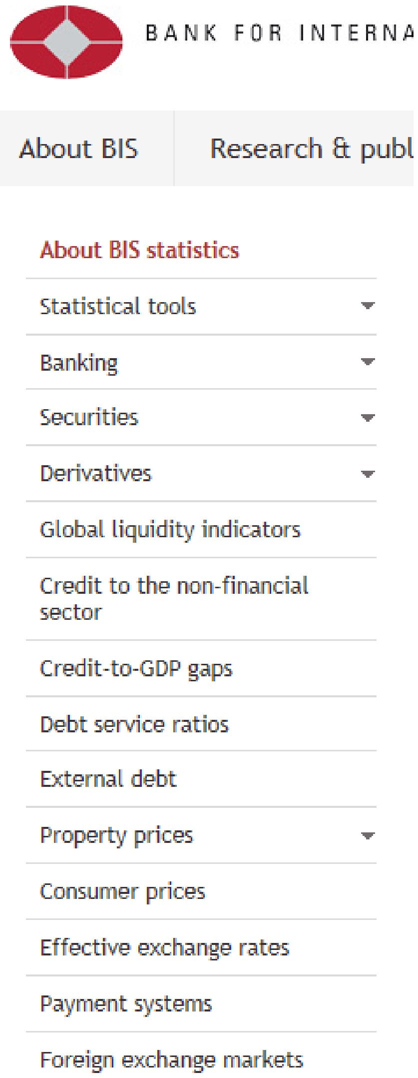
– – transition periods

Thank you!!

Look at BIS Statistics on:

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

access the full range of data produced by the BIS



Questions?

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