

Shadow Banking: Global and Emerging Market Trends and Policy Developments

Gaston Gelos

Division Chief

International Monetary Fund

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Outline

1. What is shadow banking, how has it evolved and what are common drivers?
2. When does shadow banking activity become a risk to financial stability?
3. How has regulation and supervision changed and what further measures are likely or necessary?

1. Shadow banking trends and drivers

3

Shadow Banking: Benefits, Risks

Definitions

Broad:

Nonbank entities that provide credit intermediation [but less regulated than banks and lacking formal safety net]

Narrow:

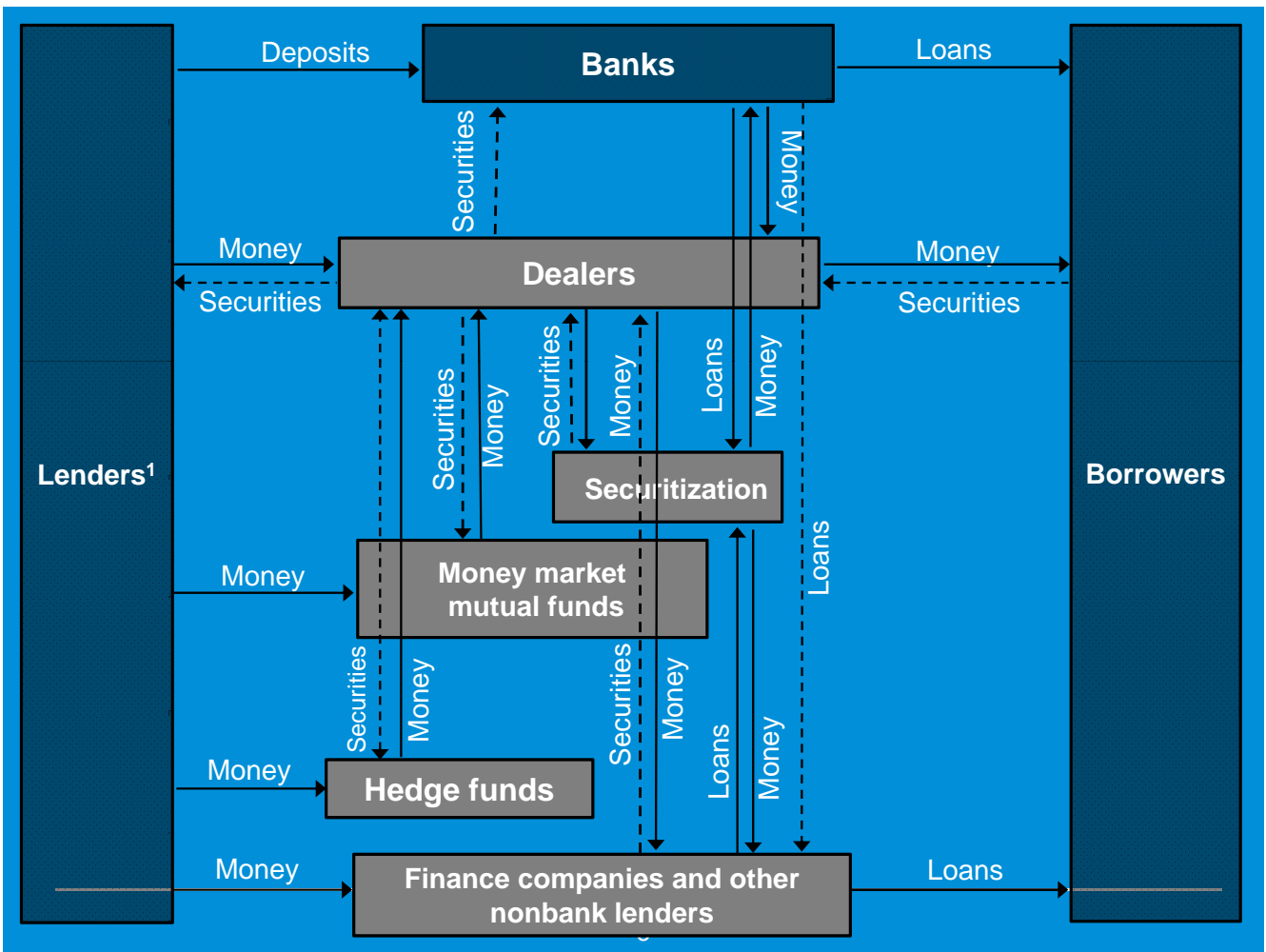
Greater focus on more risky entities/activities or that involve regulatory arbitrage

Benefits

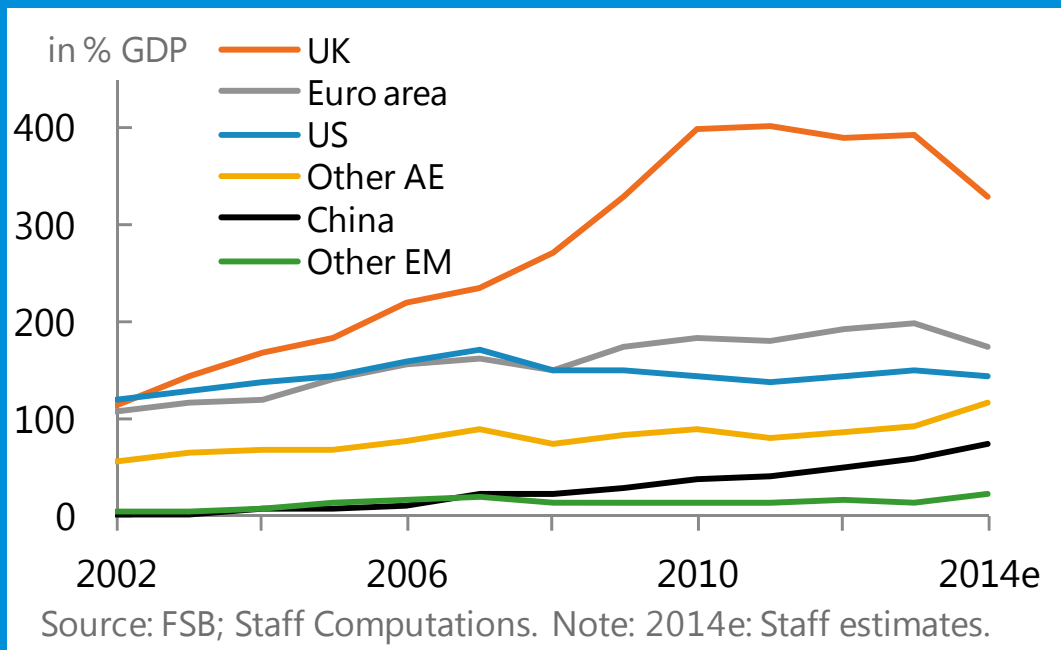
- (+) access to credit
- (+) risk sharing
- (+) market liquidity

Risks

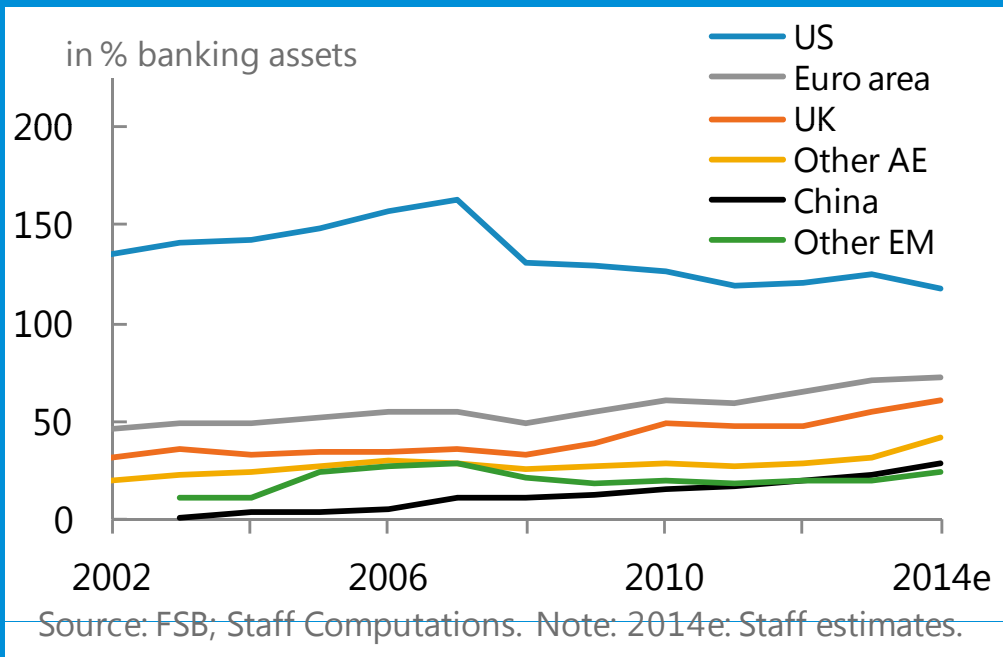
- (-) bank-like risks
- (-) run risk & contagion



Growth of Shadow Banking Broad measure, relative to GDP

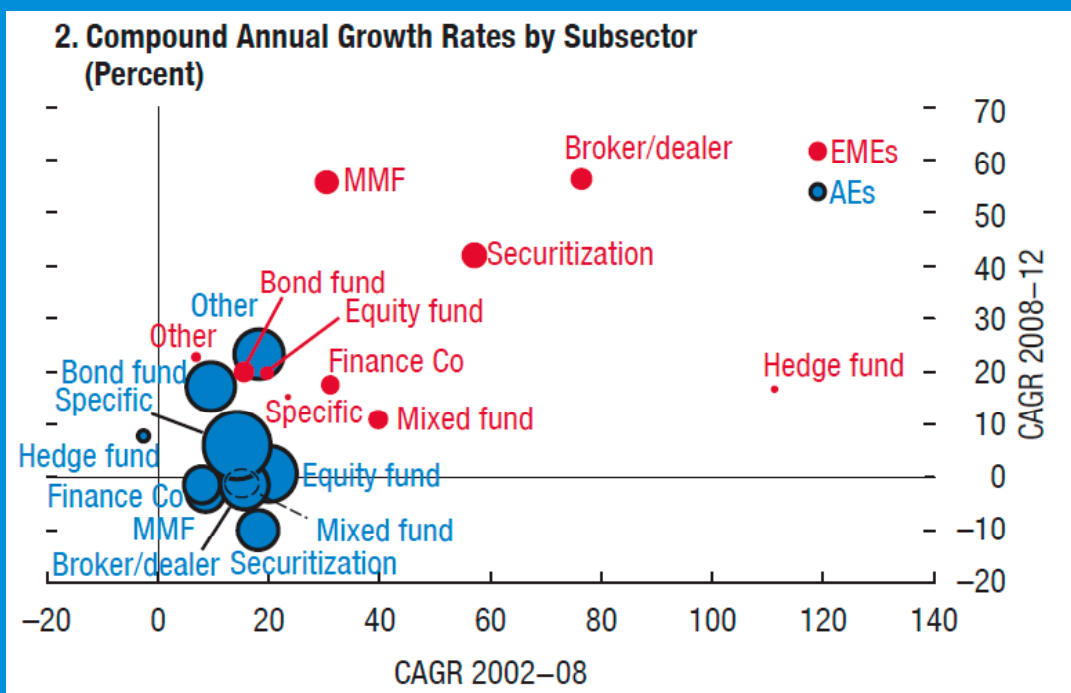


Growth of Shadow Banking Relative to banking sector



7

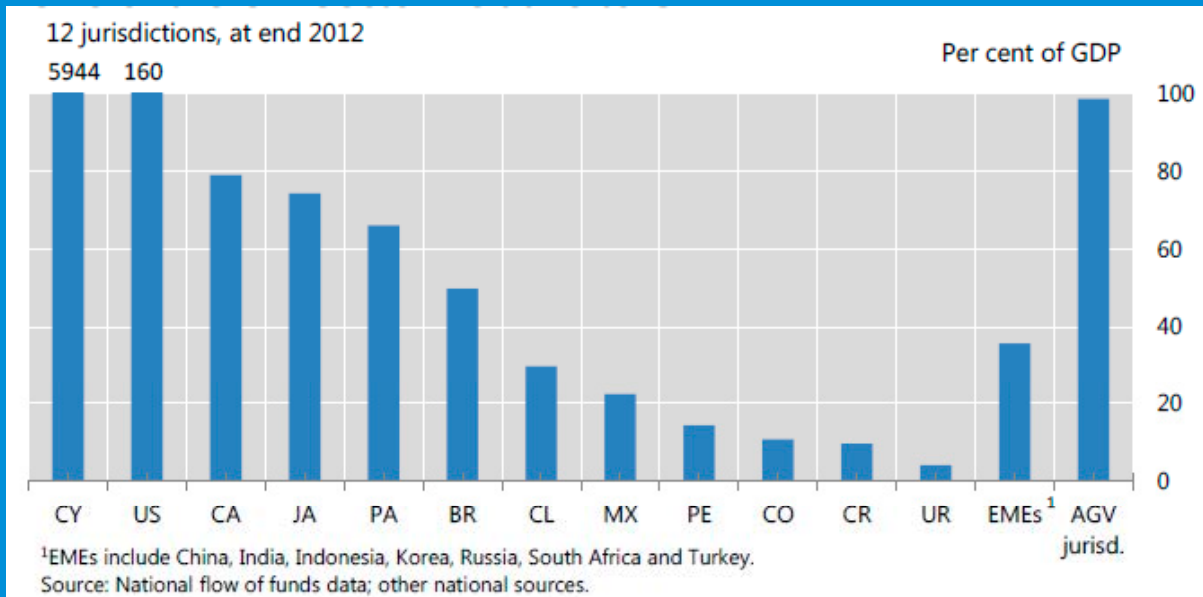
Size and Growth of Subsectors



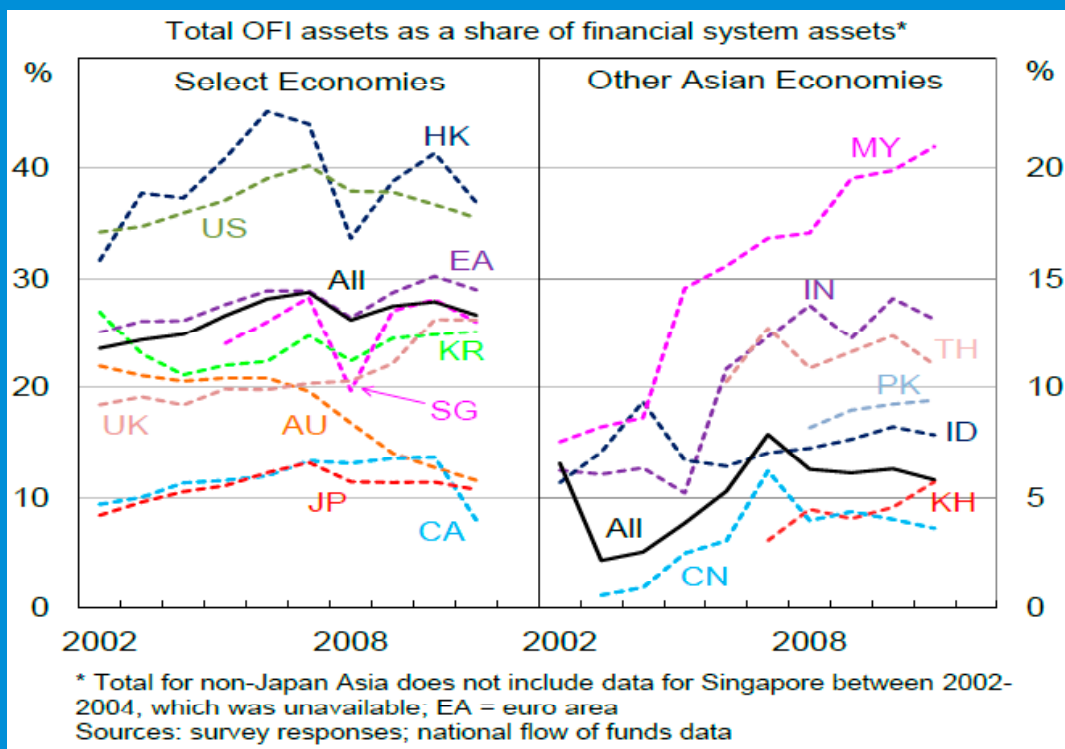
CAGR: compound annual growth rate 8

Shadow Banking in the Americas

Size of the Shadow Banking Sector (% GDP)

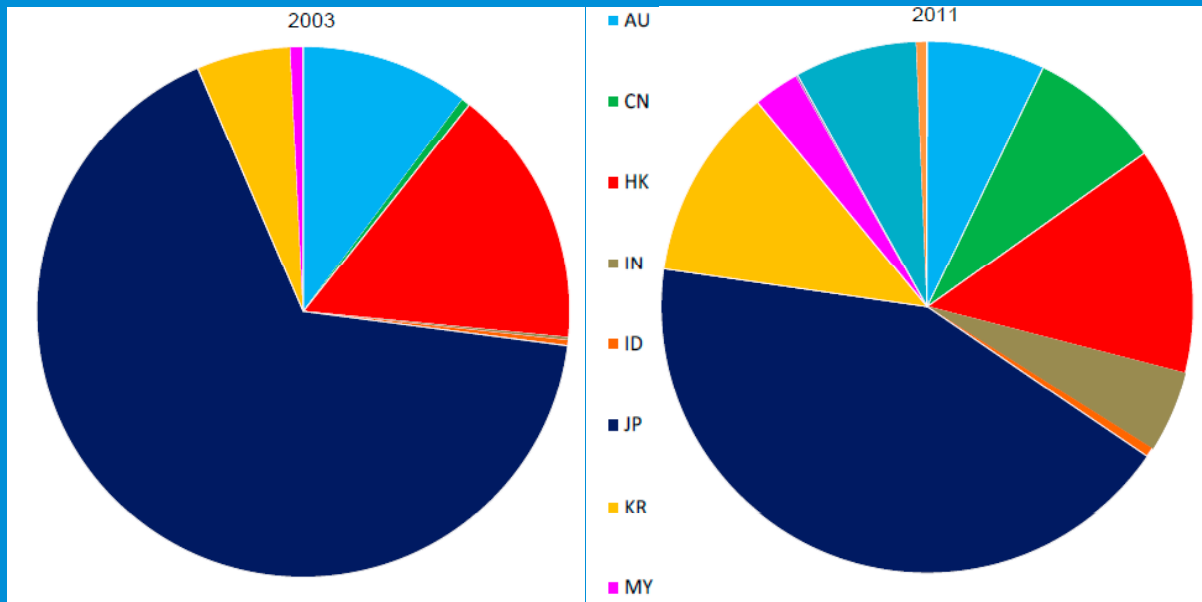


Shadow Banking in Asia



Shadow Banking in Asia

Share of total OFI assets

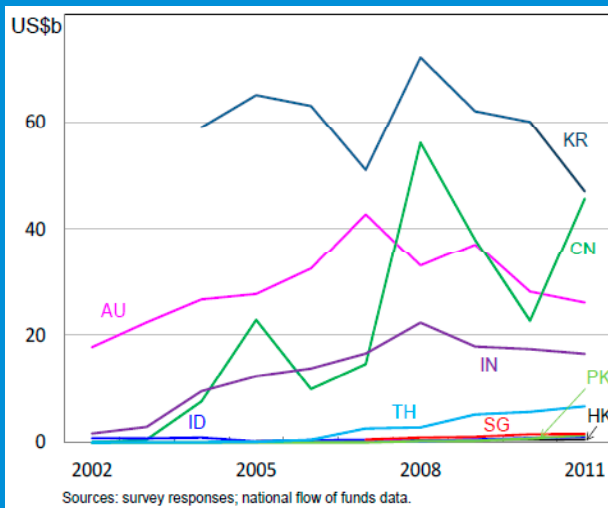


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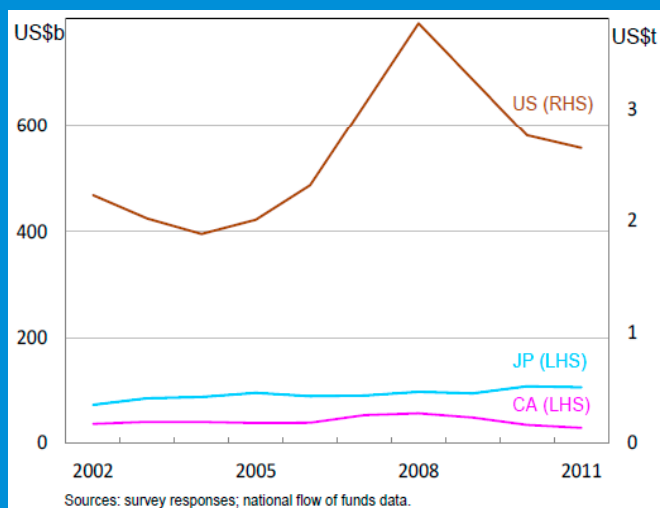
Shadow banking in Asia

Subsectors

Money Market Funds (ex Japan)



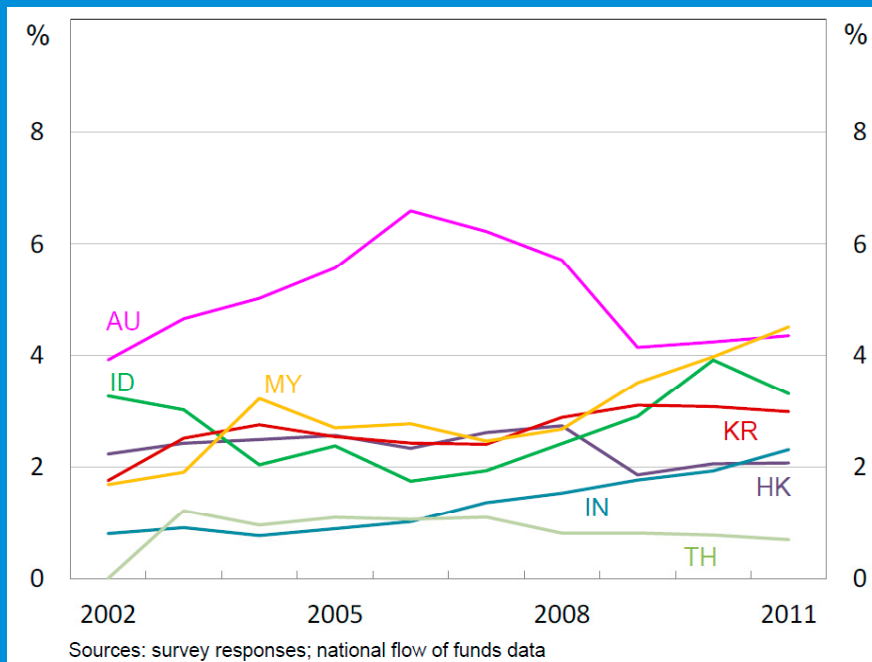
MMFs in Japan, US, Canada



12

Links to the Banking System

Asian Banking Sector Assets with Shadow Banks

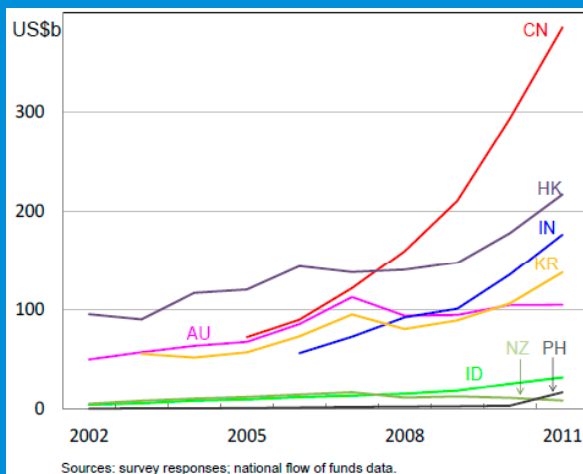


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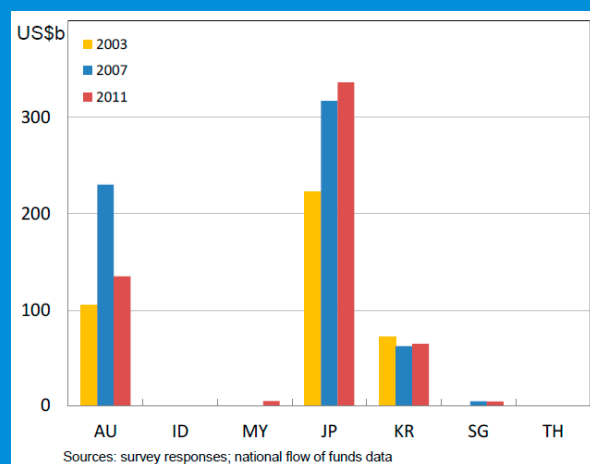
Shadow banking in Asia

Subsectors

Finance Companies



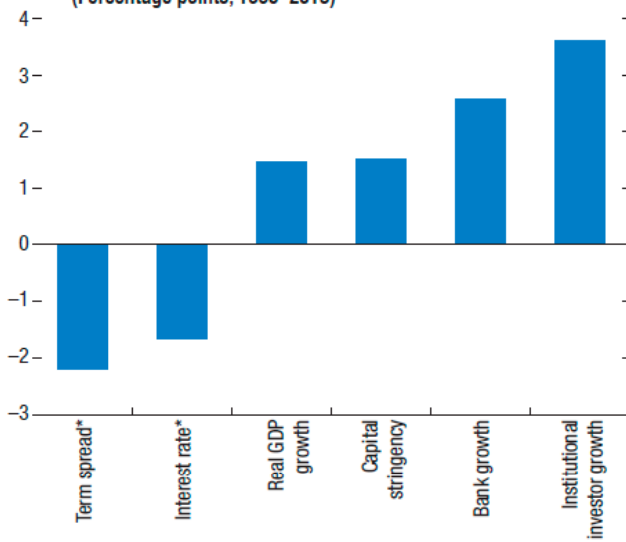
Structured Finance



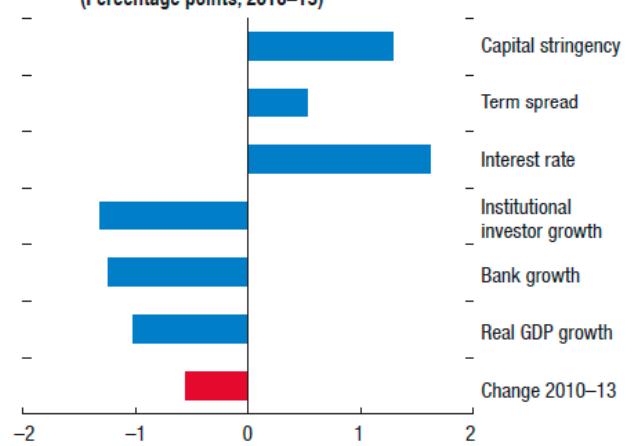
14

What drives global shadow banking?

1. Sensitivity Analysis
(Percentage points, 1990–2013)



2. Contributions to Flow of Funds Growth
(Percentage points, 2010–13)



Advanced Economies

Regulatory arbitrage

- Securitization in US, Europe

Bank restrictions, low rates, cash pools

- MMFs in US

Search for yield

- Investment funds, hedge funds, PE

Emerging Economies

Restrictions on banks

- China shadow banking

Regulatory arbitrage

- Mexico Sofoles (mortgages)

Complementarity with banks

- India NBFIs

2. When does shadow banking activity become a risk to financial stability?

17

Benefits

Enhancing access to credit

- provide credit while banks repair balance sheets and deleverage

Better risk sharing

- tailor risk-return distributions that fit ultimate investors

Improving market liquidity

- help fixed-income market liquidity as banks reduce presence

18

Risks

Run risk

- Redemptions/fire sales. No backstops (not banks).

Agency problems

- Intermediation chains are separated

Opacity and complexity

- Monitoring more difficult than for banks.

Leverage and procyclicality

- Shadow banking facilitates leverage when asset prices high. Abrupt changes in stress periods.

Spillovers

- Shocks transmitted to rest of the system through ownership links, flight to quality and fire sales

19

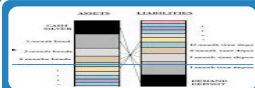
Risk Indicators for Shadow Banking



High leverage



Liquidity mismatches



Asset/liability maturity mismatches



High interconnectedness with banks



(very) rapid growth



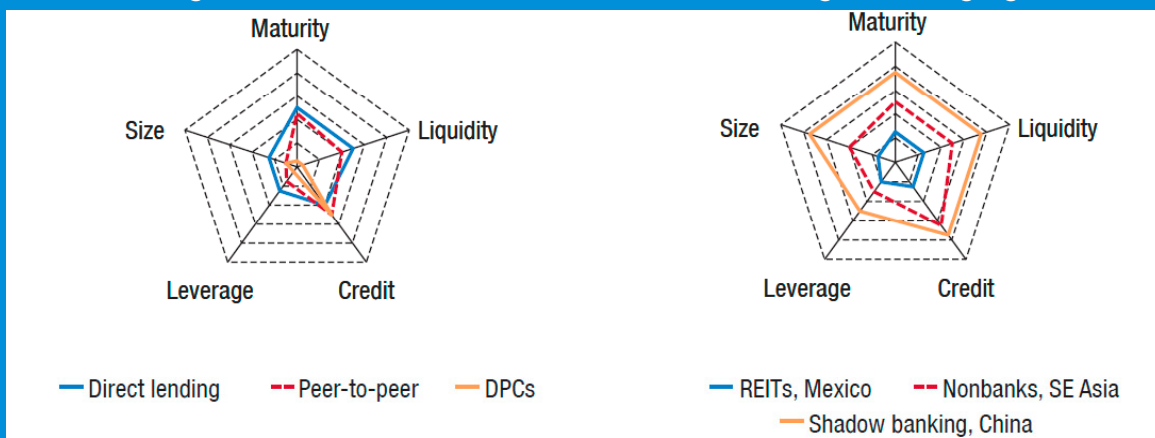
(very) large entities/sectors

20

Evaluation of risks: Quantitative or Qualitative Analysis

Risk Scoring in Advanced Economies

Risk Scoring in Emerging Markets



Sources: CEIC Data; China Banking Regulatory Commission; Haver Analytics; local media; and IMF staff calculations.

¹In Europe, mutual funds are typically limited to participations.

Note: DPC = derivative product company; MFI = monetary financial institution; REIT = real estate investment trust; SE = southeast; WMP = wealth management product. Panels 3 and 4 depict qualitative risk scoring of new shadow banking activities from low (toward the center) to high (on the edges of the figures), based on discussions with market participants, policymakers, and IMF staff, and on various research reports.

Risks in Asia (within countries)

Based on RCGA survey (2014)

Leverage risk

- Japan, Korea, Thailand

Maturity and liquidity mismatch

- China, India, Japan, Malaysia, Pakistan, Philippines, Thailand

Interaction banks/shadow banks

- Spillover to banks: Australia, India, Korea, Malaysia, Philippines
- Dependence on bank funding: Pakistan

Regulatory arbitrage

- India, Malaysia, Philippines, New Zealand

Cross-border Impact?

Based on RCGA survey (2014)

Impact on rest of Asia: mostly insignificant

- Small size of shadow banking sector
- Markets at early stage of development. Products are simple.
- Limited cross-border exposures

Some impact beyond Asia from cross-border exposures

- Australia: money market corporations
- Malaysia: some large NBFIs
- Singapore investment funds

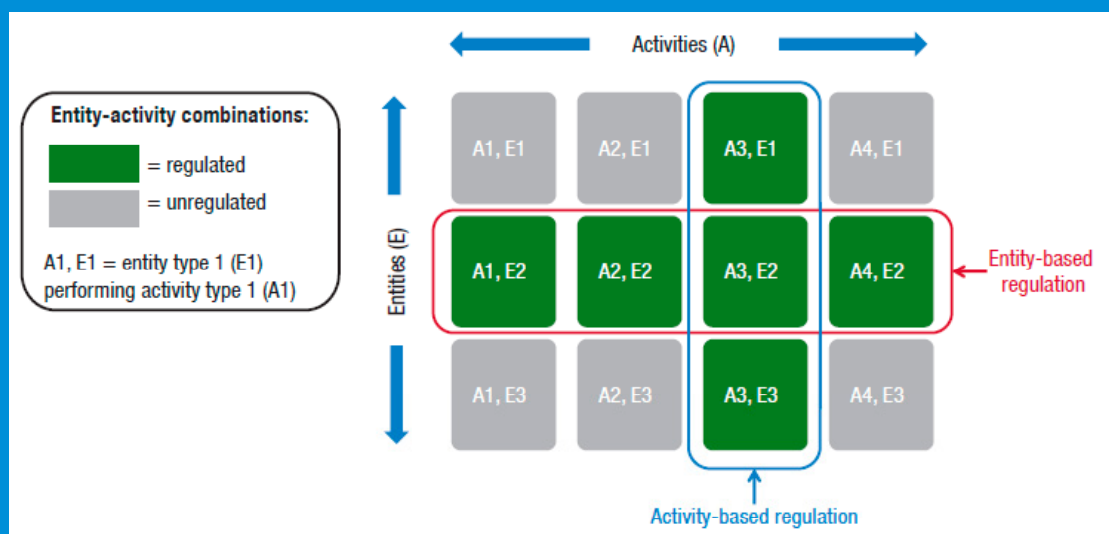
3. How has regulation and supervision changed and what further measures are likely or necessary?

Main Principles of Shadow Banking Regulation (FSB)

- Define, and keep up to date, the regulatory perimeter
- Collect information to assess risks
- Enhance disclosure to help market participants understand risks
- Take action based on policy toolkit and functions performed by shadow banks

25

Effective Regulation Must Cover Both Activities and Entities



The figure shows four activity types (A1–A4) and three entity types (E1–E3). Entity-based regulation that covers only entity type E2 would miss the migration of, say, activity type A3 from E2 to E1; but that migration would be picked up by activity-based regulation covering A3. Similarly, activity-based regulation that covers activity type A3 would miss situations in which covered entities (E1–E3) migrate to activities, say A2, that are not covered but have similar economic outcomes.

26

Regulatory Reforms so far: Financial Stability Board Workstreams

Bank-nonbank interactions

- consolidation, investments in funds,
- large exposure rules

MMF susceptibility to runs

- common standards agreed
- changes in valuation

Securitization

- transparency, standardization, retention

Sec lending and repo markets

- dampen procyclicality of margining

Other shadow entities

- supervisory cooperation, prudential tools, designation of systemic entities, risk factors

27

Regulatory Reforms underway: Financial Stability Board

Designation of systemic importance

- aimed at finance companies, market intermediaries, asset management and funds

Address risks from market-based finance

- towards more activity-based policy measures

Sec lending and repo

- further work on haircuts, risk data collection & aggregation

Data gaps

- further identify known unknowns across the whole shadow banking universe

Implementation monitoring

- Peer reviews in 2015 of frameworks, policies and tools for shadow banking

Making derivatives markets safer

- CCPs: decisions on ELA, recovery & resolution, information sharing-trade reporting

28

Relevance of FSB policies for Asia

- FSB policies are adequate/applicable to address shadow banking risks in Asia
- Also take into account existing measures and extent of risks posed
- Should not inhibit economic development
- New risks may emerge over time and require new policy responses

29

FSB Workstreams Applicability in Asia

MMF
susceptibility to
runs

- Recommendations generally applicable
- MMFs do not exist/differ in scale across Asia

Securitization

- Applicable, subject to some calibration
- Market is small and not complex

Sec lending and
repo markets

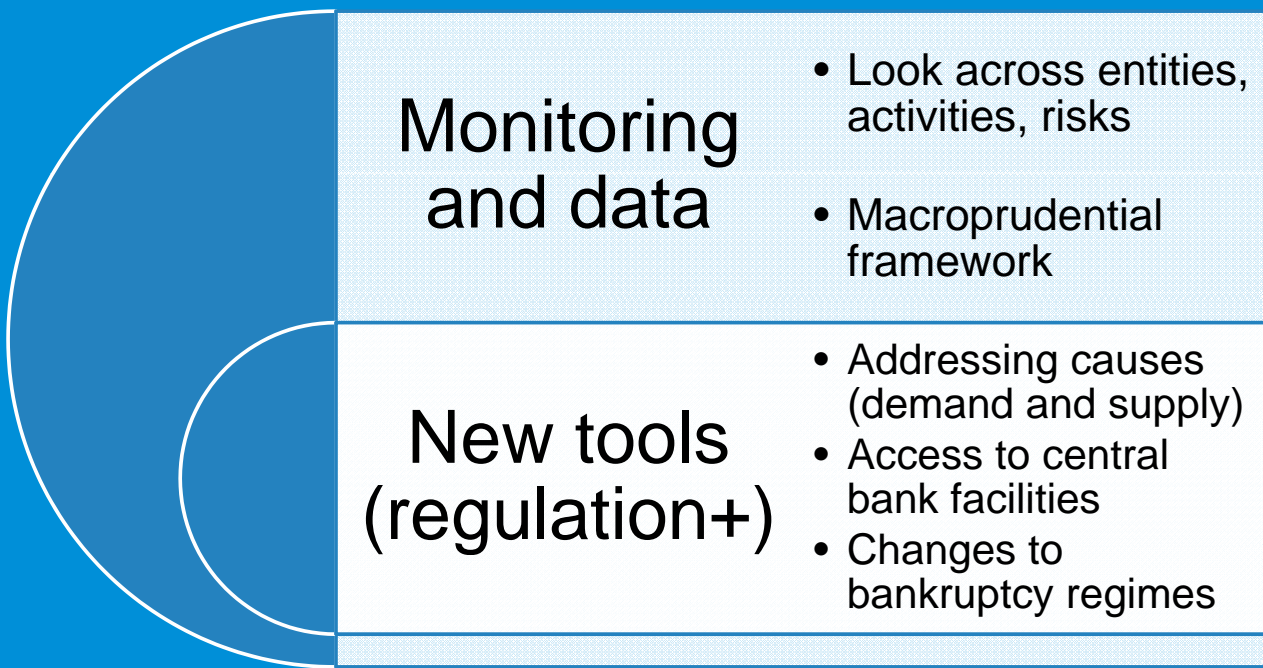
- Not fully relevant given size, composition market
- Unintended consequences for market development

Other shadow
entities

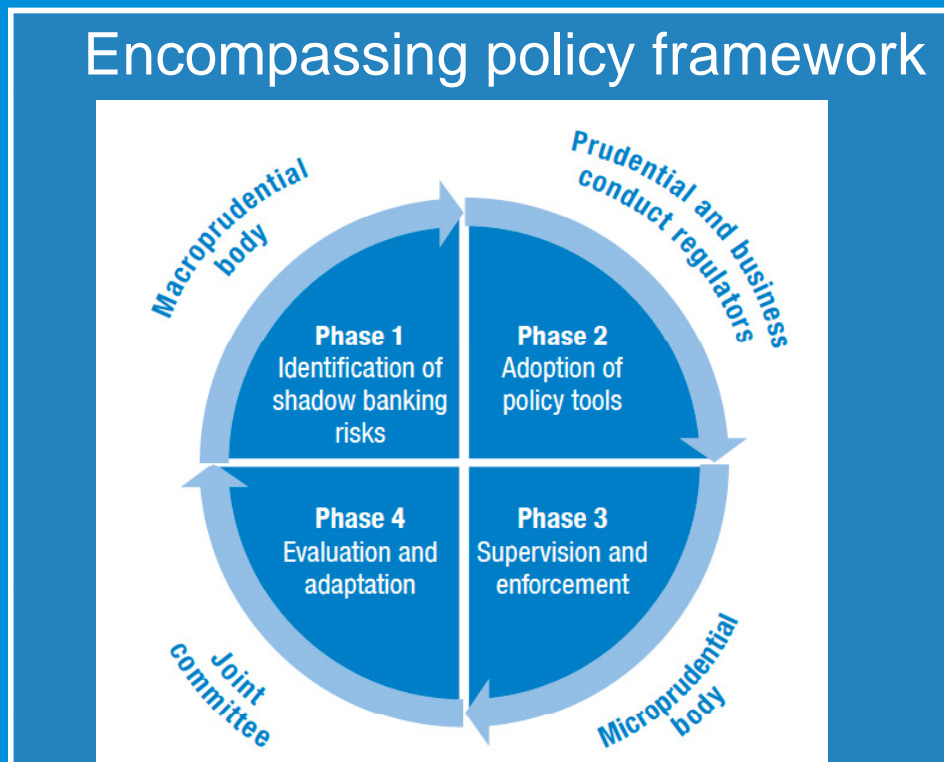
- Some policy tools less relevant/effective
- Need to balance stability and development goals

30

Regulatory reforms: What is missing?



Regulatory reforms: What is missing?



Macroprudential Framework

Address systemic stability risks

- Set up macroprudential oversight agency
- A policy framework: systemic risk focus, tools

No one-size-fits-all

- Risks differ across countries: maturity/liquidity transformation, risk transfer, leverage
- Bank in one country may be shadow bank in another
- Regulate and supervise risky activities/entities more strongly

33

Example: Addressing liquidity risk and run risk for funds

- Conduct liquidity stress tests
- Liquidity buffer requirements;
- Limits on investments in illiquid assets as a proportion of assets;
- Limits on asset concentration in particular market segments;
- Limits on leverage
- Redemption fee structures
- Redemption gates
- Adequate pricing rules of fund shares

34

Country examples for discussion

35

Bangladesh

FSAP 2010:

- *“The rapid growth in nontraditional banking activities in recent years is generating new risks, underlining the importance of strengthening the regulatory framework.”*
- *“Although some of these changes reflect desirable innovation and growth of the financial sector, they partly reflect differences in the regulatory and tax environment.”*
- *“As MFIs are small, this in itself does not pose risks to the financial system. However, banks are opening microfinance units. Hence, the border between the regulated banking sector and the largely unregulated microfinance sector is increasingly porous.”*

36

Bangladesh

	2002				2008			
	Number	Billion taka	Percent of Banking System Assets	Percent of GDP ¹	Number	Billion taka	Percent of Banking System Assets	Percent of GDP ¹
All banks	51	1,276.5	100.0	46.8	48	3,378.2	100.0	62.0
State-owned	9	742.2	58.1	27.2	9	1,253.2	37.1	23.0
Commercial	42	534.3	41.9	19.6	39	2,124.9	62.9	39.0
Finance companies	26	18.8		0.7	29 ⁵	90.2		1.7
Microfinance Inst.2/ 3/	624	37.9		1.4	4,200	162.0		3.0
Securities markets 4/	230	65.5		2.4	294	789.4		14.4

Sources: Bangladesh Bank, Ministry of Commerce, SEC, Development Credit Forum, and MRA.

1/ Based on 2001/02 GDP of Tk. 2,727 billion, 2008 estimated GDP of Tk. 5458 billion.

2/ Microfinance NGOs plus Grameen Bank.

3/ Total loans outstanding used as total assets.

4/ Dhaka Stock Exchange market capitalization in assets column. Listed firms shown under number of firms, excludes mutual funds.

5/Nonbank financial intermediaries.

Bhutan

AIV 2014:

- *“Financial service providers in Bhutan can be broadly categorized as formal financial institutions (banks and nonbank financial institutions), informal moneylenders, and semiformal providers such as NGOs and cooperatives.”*
- *“NBFIs -insurance companies and pension boards- have been allowed to engage in retail lending activities.[...] authorities are now developing investment guidelines for non-banks to encourage them to gradually lend less.”*
- *“There is no formal microfinance sector in Bhutan, although several civil society organizations or intermediaries provide financial services. Informal creditors dominate the market in communities where financial institutions have little presence.”*

Bhutan

Table 1. Structure of the Financial System

	Number	Total Assets in Billions Nu.	Percent of total assets
Total Financial System	8	88.8	100.0
Commercial Banks	5	73.2	82.5
Nonbank Financial Institutions			
Insurance Companies ¹	2	8.8	9.9
Pension Fund	1	6.7	7.5
GDP (current US\$)		1.8 billion	
GDP (current Nu)		94.9 billion	
Total financial sector assets/GDP		94 percent	

Source: Royal Monetary Authority - Bhutan Financial Sector Performance Overview (March 2012-13)

¹ Excludes a reinsurance company licensed in 2013.

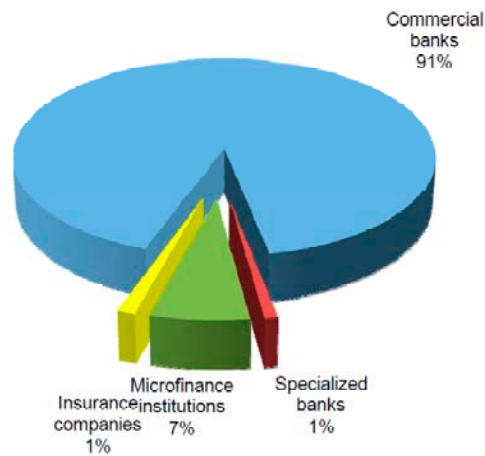
Cambodia

AIV 2013:

- *“Proliferation of real estate financing from the shadow banking system adds to overall risks.”*
- *“Some real estate developers are reportedly offering real estate loans at competitive interest rates, effectively competing with banks.”*
- *“However, their funding sources remain largely obscure and beyond regulatory and supervisory oversight.”*

Cambodia

Figure 4. Cambodia: Structure of the Financial Sector, End-2009



Source: National Bank of Cambodia.

Myanmar

Art IV 2014:

- *“By most international standards, Myanmar’s financial sector is still small. And the current structure of the financial system consists of four state owned banks, 23 private banks, 42 foreign bank representative offices, about 800 branches of banks, one state-owned insurance company, 12 private insurance companies, 189 microfinance institutions licensed, and 3 upcoming policy-based banks, impending entry of foreign banks and a nascent capital market.”*
- *“Other priorities include developing a plan to reform the state-owned banks and establishing appropriate regulation of nonbank financial institutions”*

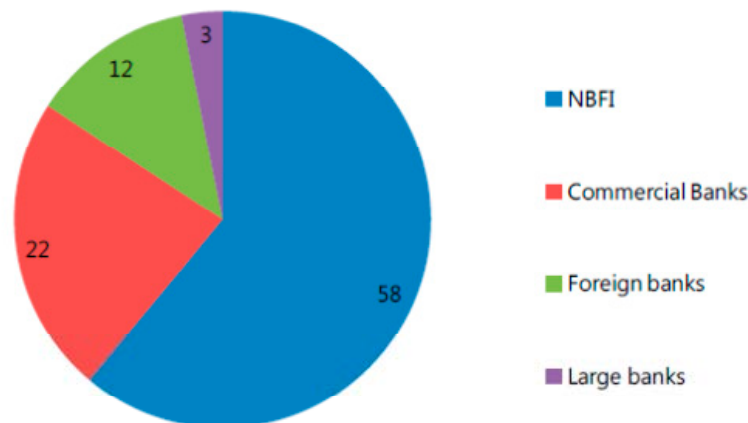
Nepal

AIV 2014:

- *“As of April 2014, the NRB regulated 30 Class A commercial banks, 86 Class B development banks, 56 Class C finance companies, and 35 Class D microfinance banks.”*
- *“In addition, a very large number (about 17,000) of credit cooperatives exist outside the NRB’s supervisory perimeter.”*
- *“The largely unsupervised cooperatives sector is growing rapidly, partly fueled by directed lending policies, and poses a significant risk to the stability of the financial system. ”*

Sri Lanka

Sri Lanka: Financial System: Pre-consolidation, 2013



Sri Lanka

AIV 2014:

- *“There are 24 commercial banks in Sri Lanka and nine specialized banks. In the NBFIs sector, there are 58 firms—47 finance companies and 11 specialized leasing companies.”*
 - *“While not large, the NBFIs sector has been more prone to weakness.”*
 - *“The CBSL announced in January 2014 a financial sector consolidation plan to reduce the number of NBFIs and create larger banks.”*
 - *Consolidating NBFIs with a view to building a stronger capital base may add some resilience to shocks, potentially generate cost efficiencies, and should also allow for closer oversight.*
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45

Wrapping up

46

Main findings-EMDE specific

- Shadow banking differs between countries, in size and composition. It is growing fast in EMDEs but from low levels.
- .
- Shadow banking in emerging economies generally beneficial for financial sector deepening.
- However, regulatory reforms are underway, to avoid that risks simply migrate from one part of the financial system to another. Regulators should work to avoid this through cooperation, exchange of information, and better data for risk monitoring.

THANK YOU
