



FEDERAL RESERVE BANK *of* NEW YORK

Shadow Banking. Principles for Global Monitoring and Regulation

Nicola Cetorelli

Federal Reserve Bank of New York

16th Annual International Banking Conference
Shadow Banking Within and Across National Borders
Federal Reserve Bank of Chicago and IMF – Chicago, November 7-8, 2013

The views expressed in this presentation are those of the author and do not necessarily represent those of the Federal Reserve Bank of New York or the Federal Reserve System

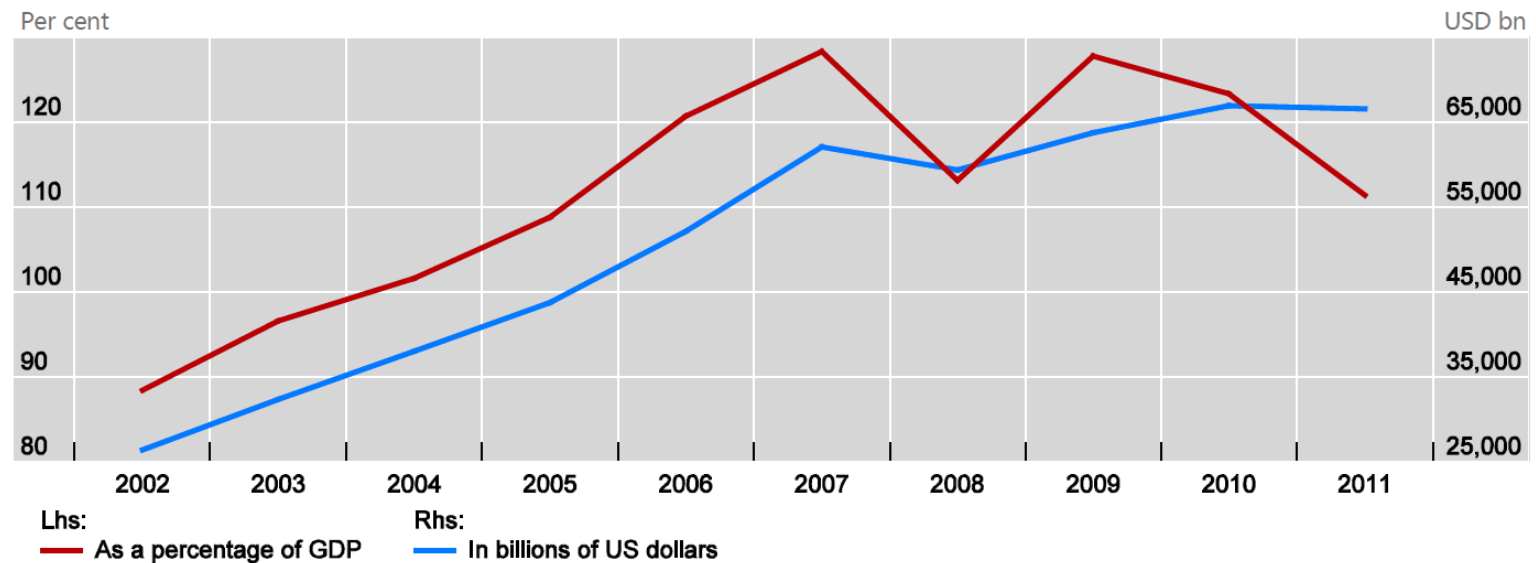
Global shadow banking at about 65-70 Trillion

Results from 2012 global monitoring exercise

Assets of non-bank financial intermediaries

20 jurisdictions and the euro area

Exhibit 2-3



Source: National Flow of Funds data.

US entities largest share, but shrinking

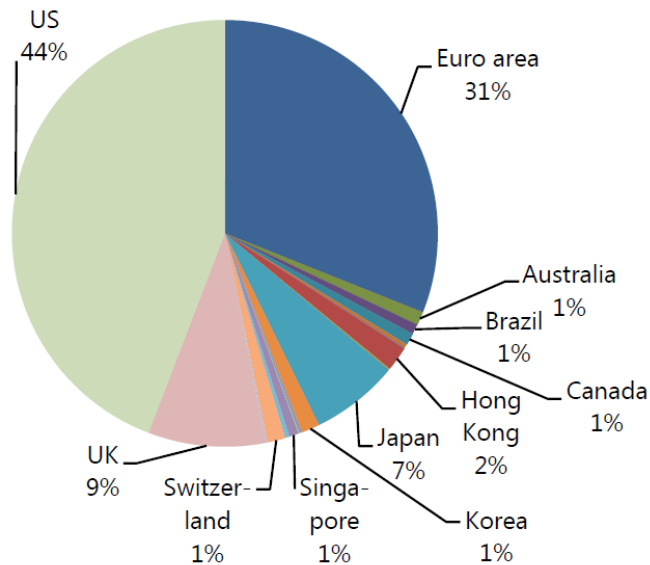
Results from 2012 global monitoring exercise

Share of assets of non-bank financial intermediaries

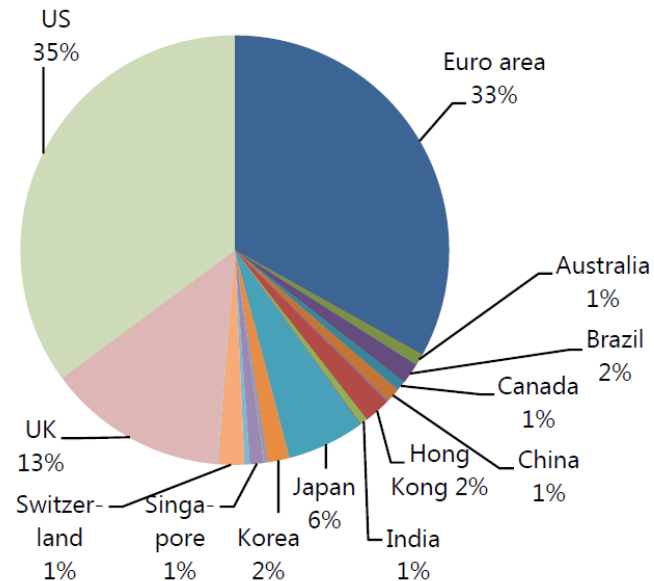
20 jurisdictions and euro area

Exhibit 2-4

At end-2005



At end-2011



Source: National flow of funds data.

Enhancing international monitoring and regulation

- Global data monitoring one specific outcome of ongoing international policy initiative
- Financial Stability Board Task Force on Shadow Banking
 - G20 Mandate in Fall 2010
 - Define scope
 - Implement global data monitoring
 - Regulatory proposals

Sources

- **Shadow Banking: Scoping the Issues (2012)**
http://www.financialstabilityboard.org/publications/r_110412a.pdf
- **Policy Framework for Strengthening Oversight and Regulation of Shadow Banking Entities (2013)**
http://www.financialstabilityboard.org/publications/r_130829c.htm
- **An Overview of Policy Recommendations for Shadow Banking (2013)** http://www.financialstabilityboard.org/publications/r_130829a.htm
- **Cetorelli and Peristiani (2012) “The Role of Banks in Asset Securitization”** <http://www.newyorkfed.org/research/epr/12v18n2/1207peri.pdf>
- **Cetorelli, Mandel and Mollineaux (2012) “The Evolution of Banks and Financial Intermediation: Framing the Analysis”**
<http://www.newyorkfed.org/research/epr/12v18n2/1207cet1.pdf>
- **Adrian, Ashcraft and Cetorelli (2013) “Shadow Bank Monitoring”**
http://www.newyorkfed.org/research/staff_reports/sr638.pdf

What do 70 trillion dollars mean?

- Data exercise summarizes monitoring and regulatory challenges
 - What to include?
 - How to assess risks?
 - How to update over time?

Defining shadow banking

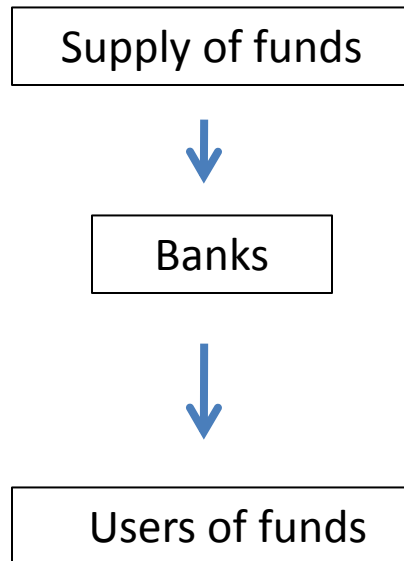
- “Credit intermediation involving entities and activities outside the regular banking system”
 - Broad scope
 - Focus on both specific entities but also activities. Explicit recognition of modern “credit intermediation chains”
 - Lacking (or relaxed) prudential regulatory standards

A practical approach

- Broad definition creates commonality across national regulators
- Narrowing the scope
 - Maturity transformation
 - Liquidity transformation
 - Credit risk transfer
 - Leverage
- Recognize this is the definition of banking

From a traditional model of intermediation

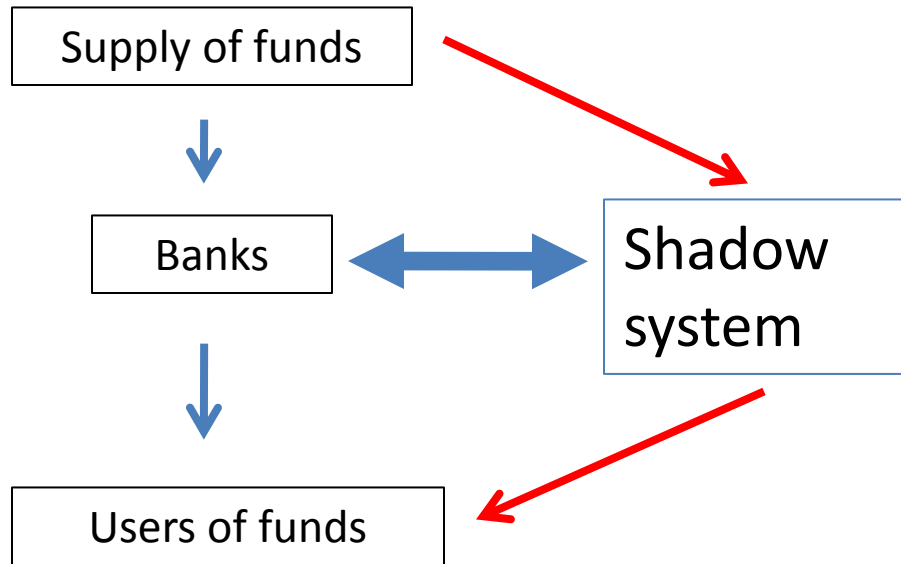
Traditional model. Banks are the main brokers in the process of credit intermediation



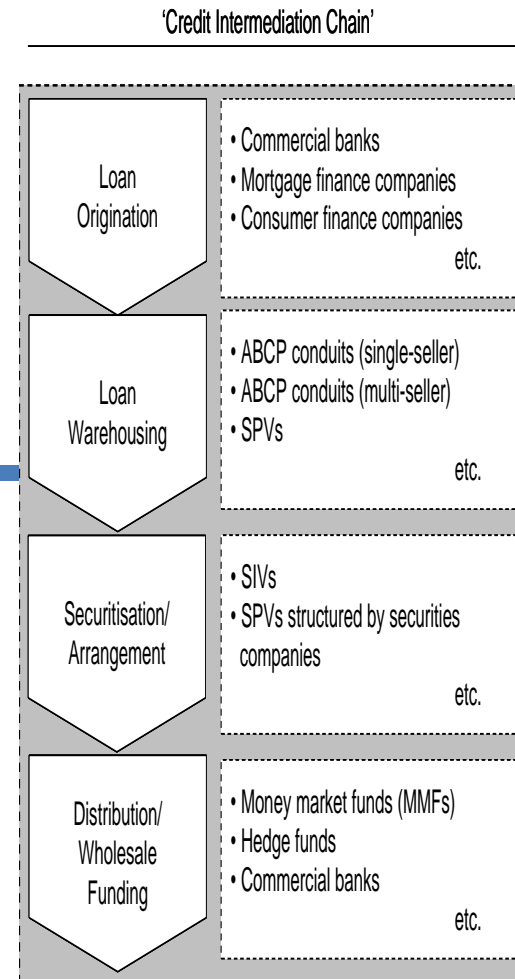
Intermediation activity on banks' balance sheet

...To modern intermediation

Intermediation of funds through elongated “credit intermediation chain”



Banks remain an integral part in the new model of intermediation



Three fundamental principles

- Strengthening existing weaknesses
- Recognize connection between banks and shadow banking
- Monitoring and regulation needs to be forward looking

Existing weaknesses

- Instituted dedicated workstreams on:
 - MMMFs regulation
 - Securitization
 - Repos and securities lending
 - Bank/shadow banking interconnection

Role of banks in shadow banking

- Direct participants on the “chain”
- Guarantors to shadow banks. “Private” central bankers to shadow banking system
- Organizational channel. Acquisition of shadow bank entities. Expansion of “boundaries” of the banking firm.

Impact on monitoring

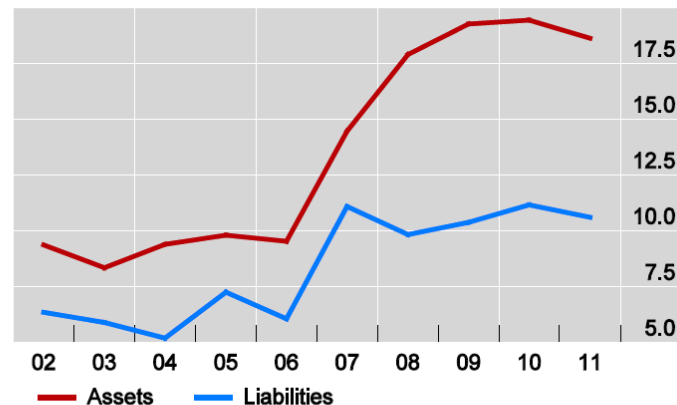
- FSB annual monitoring exercises explicitly acknowledge banks' role in shadow banking

Banks' assets and liabilities to non-bank financial intermediaries

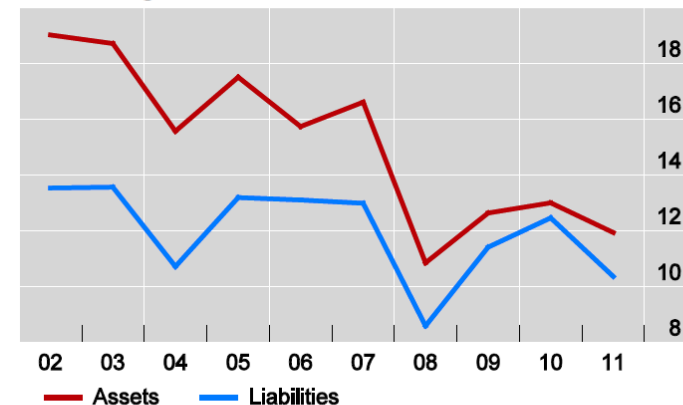
As a percentage of banks' total assets

Exhibit 5-3

Netherlands



United Kingdom



Source: National Flow of Funds data.

Key monitoring tool

- Banks offer window into intermediation frontier
- Supervision of banks functional to follow future evolutions in shadow banking

Forward looking approach

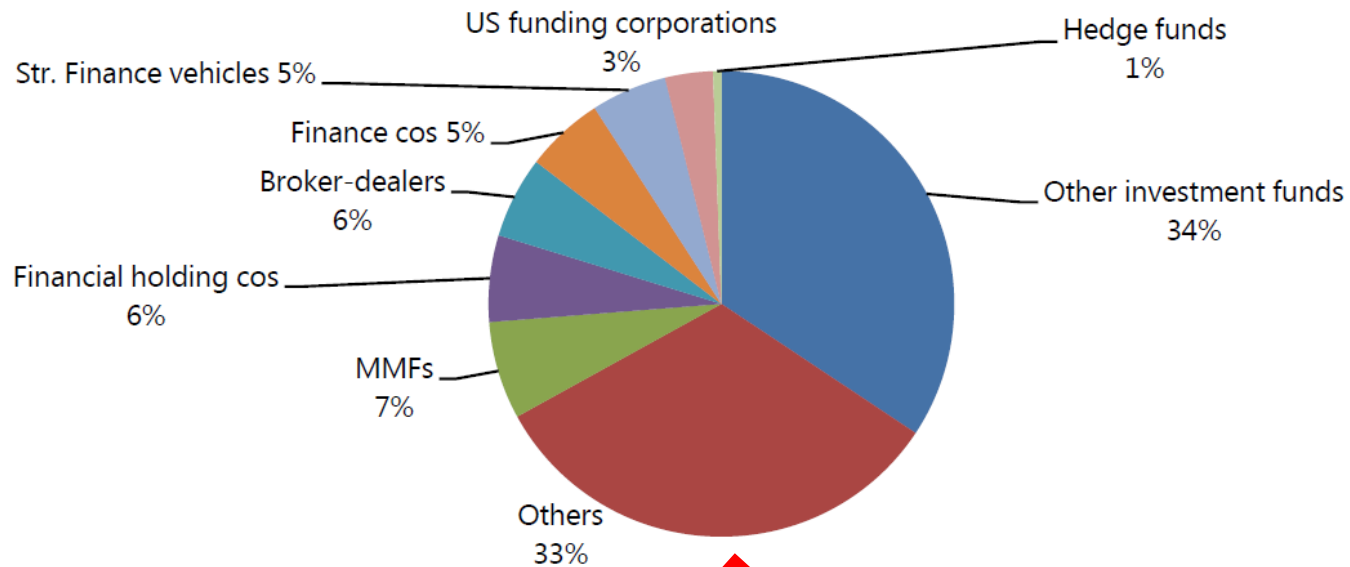
- Instituted dedicated workstreams on:
 - MMMFs regulation
 - Securitization
 - Repos and securities lending
 - Bank/shadow banking interconnection
- Fifth workstream:
 - *Other shadow banks*

Large fraction of unspecified OFIs

Sub-sectors of non-bank financial intermediaries (OFIs)

20 jurisdictions and the euro area, data at end-2011

Exhibit 4-3



Source: National Flow of Funds data.

“Other” OFIs

- High degree of cross country heterogeneity and diversity in business models and risk profiles, across sectors, but also within the same sector (or entity-type).
- Heterogeneity in legal and regulatory frameworks across jurisdictions
- Moving target

- Development of a *function-based* approach.
- Allows assessment of non-bank financial entities' involvement in shadow banking to be judged through their underlying *economic functions* rather than *legal names or forms*.
- More than that: defines an intrinsically dynamic, forward-looking framework to monitor modern financial intermediation activities.

5 economic functions. Modifiable

- Management of collective investment vehicles with features that make them susceptible to runs
- Loan provision that is dependent on short-term funding
- Intermediation of market activities that is dependent on short-term funding or on secured funding of client assets
- Facilitation of credit creation
- Securitization-based credit intermediation and funding of financial entities

Conclusions

- Work done over relatively short amount of time is substantial
- Global monitoring was a ... foreign concept until just 3 years ago.
- Regulatory proposals will percolate to national jurisdictions
- Approach taken hopefully brings regulators closer to the industry frontier

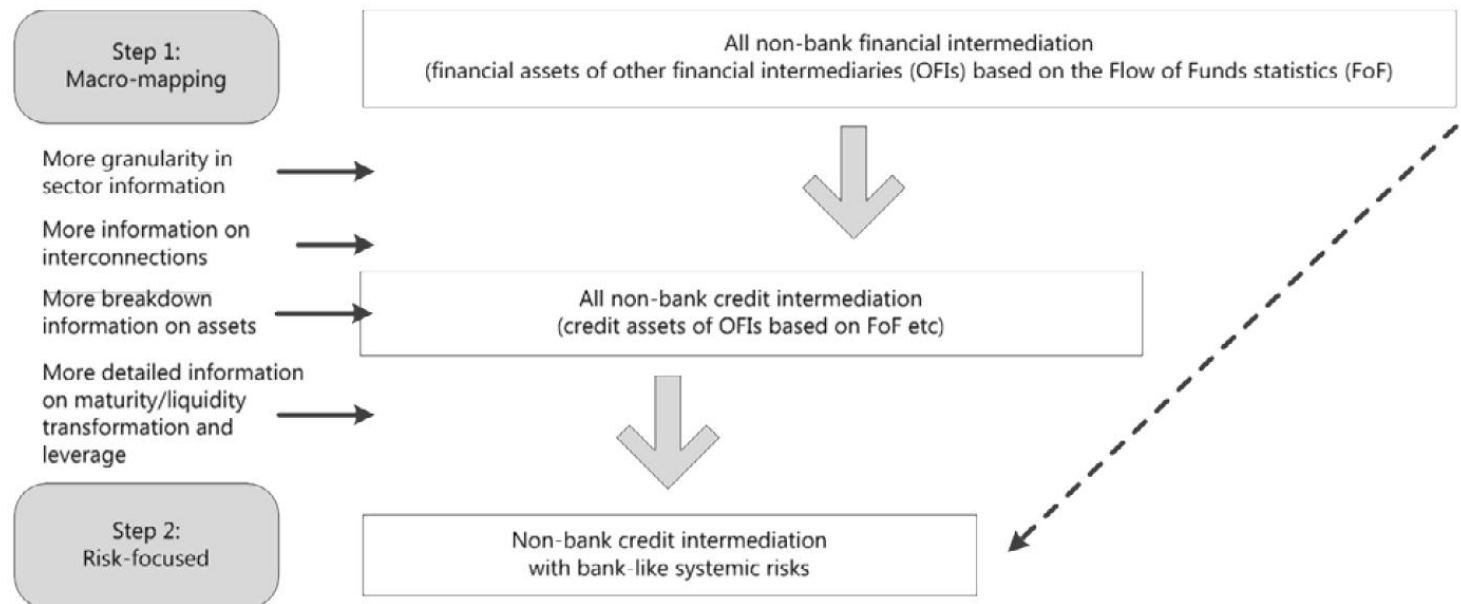
Conclusions

- How to test effectiveness?
- Occurrence or not of another financial crisis not the appropriate litmus test
- By that standard traditional bank regulation has failed repeatedly in modern history
- Measuring the extent of enhanced international coordination of policy may be appropriate metric

Measuring the shadow banking system

Simplified conceptual image

Exhibit 1-1



Included in OFI definition

- MMMFs
- Hedge Funds
- Other Investment Funds
- Finance Companies
- Structured Finance Vehicles
- Broker Dealers
- REITs, Issuers of ABSs, ...