

# Shadow Banking: Challenges and Approaches

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# Overview

- Issues: Balancing risk and function
- Assessing the market
- G20/FSB approach
- Asian context
- References
  - R. Weber, D. Arner, E. Gibson & S. Baumann, “Addressing Systemic Risk: Financial Regulatory Design”, 49 Texas International Law Journal (forthcoming 2014).
  - R. Buckley, D. Arner & M. Panton, “Financial Innovation in East Asia”, 37 Seattle Law Review (forthcoming 2014).

# Shadow Banking

- 2011 report
- “credit intermediation involving entities and activities outside the regular banking system” (FSB, 1)
- G20/FSB mandate:
  - to clarify what is meant by the “shadow banking system”, and its role and risks in the wider financial system
  - to set out approaches for effective monitoring of the shadow banking system;
  - to prepare, where necessary, additional regulatory measures to address the systemic risk and regulatory arbitrage concerns posed by the shadow banking system

# G20 Financial Regulatory Reform Agenda

- Capital, leverage, liquidity and procyclicality
- OTC derivatives markets
- SIFIs and resolution regimes
- Accounting standards
- Compensation arrangements
- Macroprudential frameworks
- Shadow banking
  - Credit ratings and credit rating agencies
  - Hedge funds
  - Securitisation
- Adherence to international standards

# Defining

- authorities should cast the net wide, looking at all non-bank credit intermediation to ensure that data gathering and surveillance cover all areas where shadow banking-related risks to the financial system might potentially arise.
- authorities should narrow the focus for policy purposes to the subset of nonbank credit intermediation where there are (i) developments that increase systemic risk (in particular maturity/liquidity transformation, imperfect credit risk transfer and/or leverage), and/or (ii) indications of regulatory arbitrage that is undermining the benefits of financial regulation.

# Principles

- *Scope: Authorities should have an appropriate system-wide oversight framework in place to gain a comprehensive picture of the shadow banking system and of the risks that it poses to the entire financial system.*
- *Process: A monitoring framework for the shadow banking system should identify and assess the risks on a regular and continuous basis.*

## (2)

- *Data/Information: In establishing a monitoring framework for the shadow banking system, the relevant authorities should have powers to collect all necessary data and information, as well as the ability to define the regulatory perimeter for reporting.*
- *Innovation/Mutation: Monitoring of the shadow banking system should be flexible and adaptable to capture innovations and mutations in the financial system which could lead to emerging risks.*

# (3)

- *Regulatory arbitrage: In monitoring the shadow banking system, authorities need to be mindful of the incentives to expand shadow banking created by changes in regulations.*
- *Jurisdiction-specific features: In developing a monitoring framework, authorities should take into account the structure of financial markets and regulatory frameworks within their jurisdiction as well as their international connections.*



(4)

- *Information exchange: Authorities should exchange appropriate information both within and across the relevant jurisdictions on a regular basis to be able to assess the risks posed by the shadow banking system.*

# Steps

- Scanning and mapping of the overall shadow banking system
- Identification of the aspects of the shadow banking system posing systemic risk or regulatory arbitrage concerns
  - (i) maturity transformation
  - (ii) liquidity transformation
  - (iii) credit risk transfer
  - (iv) leverage
- Detailed assessment of systemic risk and/or regulatory arbitrage concerns

# FSB

- Overview
- Shadow banking entities
- Securities lending and repos
- Global Shadow Banking Monitoring Report

# 2013 Global Shadow Banking Monitoring Report

- 25 jurisdictions (FSB + Chile + Eurozone= 80% GDP / 90% financial assets)
- US\$ 71 trillion (2012) (117% of GDP), \$5 trillion / 8.1% increase from 2011 (HK: 190%) (-11% Spain - +42% China)
- 25% of total financial system, 50% size of banking system

# Cont'd

- Other investment funds: equity, debt, other = \$21 trillion (35%)
- Broker-dealers = \$7 trillion (12%)
- Structured finance vehicles = \$5 trillion (8%)
- Finance companies = \$4.5 trillion (8%)
- Money market funds = \$3.8 trillion (6%)
- Hedge funds = \$2 trillion

# 5 focus areas

- WS1: Banks' interactions with shadow banking entities
- WS2: Money market funds
- WS3: Other shadow banking entities
- WS4: Securitisation
- WS5: Securities lending and repos

# Banks and shadow banking

- Scope of consolidation
- Large exposures
- Investments in funds
- Mid-2013

# MMFs (IOSCO)

- General regulatory framework: collective investment schemes (CIS)
- Valuation
- Liquidity management
- MMFs offering stable net asset value (NAV)
- Use of credit ratings
- Disclosure to investors
- MMFs and repos



# Other shadow banking entities

- Economic function approach
- Policy tools
- Information sharing

# Economic functions

- Management of client cash pools with features that make them susceptible to runs
- Loan provision dependent on short-term funding
- Intermediation of market activities dependent on short-term funding or on secured funding of client assets
- Facilitation of credit creation
- Securitisation and funding of financial entities

# Policy tools

- Principle 1: ability to define the regulatory perimeter.
- Principle 2: collect information needed to assess the extent of risks posed by shadow banking
- Principle 3: enhance disclosure of other shadow banking entities as necessary so as to help market participants understand the extent of shadow banking risks posed by such entities
- Principle 4: assess non-bank financial entities based on economic functions and take necessary actions from the toolkit

# FSB: Securities lending and repos

- April 2012 review
- November 2013 consultation

# FSB (2012): Market overview

- Securities lending
- Leveraged investment fund financing and securities borrowing
- Inter-dealer repo
- Repo financing

# Securities lending (1)

- Lending of securities by institutional investors to banks and broker-dealers against collateral of cash or securities
- Apr. 2012: US\$ 1.8 trillion

# Leveraged investment fund financing

- Financing of leveraged investment funds' long-positions by banks and broker-dealers using both reverse repo and margin lending secured against assets held with prime brokers as well as securities lending to hedge funds by prime brokers to cover short positions
- Closely linked to securities lending.

# Interdealer repo market

- Primarily government bond repo transactions amongst banks and broker-dealers.
- Finance long positions via general collateral repos or to borrow specific securities via special repos
- Primarily overnight
- US: US\$2.1-2.6 tr, EU: US\$8.3 tr, Japan: US\$ 2.4 tr



# Repo financing market

- Repo transactions primarily by banks and broker-dealers to borrow cash from cash-rich entities, including central banks, retail banks, money market funds, securities lenders, and increasingly non-financial corporations
- Often tri-party
- Collateral includes bonds, structured products, money market instruments and equities

# Market drivers

- Demand for repo as a near-substitute for central bank and insured bank deposit money (eg because unable to access directly)
- Securities-based financing needs (eg replacing unsecured money markets)
- Leveraged investment fund financing and short-covering
- Demand for assisted “collateral mining” from banks and broker-dealers
- Demand for return enhancement by securities lenders and agent lenders

# FSB risks (2013) (1)

- Pure shadow banking
  - Using repo to create short-term money-like liabilities, facilitating credit growth and maturity/liquidity transformation outside the banking system
  - Securities lending cash collateral reinvestment
- Spanning banking and shadow banking

## (2)

- Tendency of secured financing to increase procyclicality of system leverage
- Risk of fire sale of collateral securities
- Re-hypothecation of unencumbered assets
- Interconnectedness arising from chains of transactions involving re-use of collateral
- Inadequate collateral valuation practices

# FSB recommendations

- Improvement in transparency
- Regulation of securities financing
- Structural aspects of securities financing markets

# Securities lending and repos

- Improving regulatory reporting
- Improving market transparency
- Improving corporate disclosures
- Improving reporting by fund managers to end-investors
- Introducing minimum standards for haircut practices
- Limiting risks associated with collateral reinvestment

## (2)

- Addressing risks associated with re-hypothecation of client assets
- Strengthening collateral valuation and management practices
- Evaluating the establishment or wider use of central clearing where appropriate
- Changing bankruptcy law treatment of repo and securities lending transactions

# Transparency

- 1: authorities to collect more data with high urgency
- 2: trade repositories for repo and securities lending markets
- 3: regular surveys
- 4: improve public disclosure of financial institutions' securities lending, repo and wider collateral management activities
- 5: review reporting requirements for fund managers to end-investors



# Regulation (1)

- 6: minimum standards for firm haircut methodologies, focusing on minimising procyclicality
- 7: consultation on possible introduction of system of floors on haircuts for securities lending where there is material procyclicality risk.
- 8: Non-bank regulators to implement minimum standards

## (2)

- 9: Regulation of re-hypothecation
  - Sufficient disclosure to clients
  - Not used to finance own-account activities of the intermediary
  - Only entities subject to adequate regulation of liquidity risk
- 10: Possible harmonisation of client asset rule addressing re-hypothecation
- 11: Minimum standards for collateral valuation and management for all market participants

# Structural aspects

- 12: Central clearing to be evaluated.
- 13: Changes to bankruptcy laws and development of Repo Resolution Authorities not to be prioritised.

# Asia: FSB (2013)

- HK (190% of GDP), SG (50+%)
- Korea, Japan, Singapore, Australia (approx. 50-100%)
- India, China, Indonesia (less than 50% but growing very rapidly particularly in China [+42%])

# Shadow banking / Non-bank finance

- Money lenders / pawnbrokers
- P2P / B2B
- Microfinance / small lenders
- Traditional and other “syndicates”
- Finance companies
- Islamic finance
- Structured finance
- Money markets / commercial paper
- Securities lending / repos

# China

- Main concerns
  - Structured finance: trust / wealth management products (quasi-securitisation)
  - P2P / B2B (brokerage)
  - Commercial paper (bills)
  - Syndicates (Wenzhou)
- Issues
  - Interest rate controls
  - Size: 25-40% + of total financing?
  - Deposit diversion
  - Lack of deposit insurance / resolution framework for banks
  - Government debt: national + provincial / local

# Regulatory Structure: Options

- Sectoral (Mainland China, US)
- Institutional (HK and majority of jurisdictions worldwide – sectoral + institutional for banks)
- Functional (Australia)
- Consolidated (South Korea, Japan, Singapore)
- Twin Peaks (UK, Netherlands, France)