



**OFFICE OF  
FINANCIAL RESEARCH**  
U.S. DEPARTMENT OF THE TREASURY



# **The Office of Financial Research:** **What is it and what does it do?**

New York University – Stern School of Business  
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# What is Financial Stability? How to Achieve It?

Financial stability reflects the ability of the financial system to consistently supply the credit intermediation and payment services that are needed in the real economy in order for it to continue on its growth path.

Financial instability occurs when problems (or concerns about potential problems) within institutions, markets, payments systems, or the financial system in general significantly impair the supply of credit intermediation services – so as to substantially impact the expected path of real economic activity.

Eric S. Rosengren, Keynote Remarks at the Stanford Finance Forum, June 3, 2011, p. 2..

How to achieve it? And how does it complement – or conflict with – other goals?

# The Macroprudential Toolkit...and others

- Monetary policy aims at price (and economic) stability
- Macroprudential tools aim at financial stability
- Fiscal and budget tools should aim at fiscal sustainability

	Price Stability	Financial Stability	Fiscal Stability/ Sustainability
Monetary Policy tools			
Macroprudential tools			
Budgetary Tools			

# Objectives of Regulation

Capital regulation: Control the social costs associated with excessive balance sheet shrinkage by many institutions hit with a common shock<sup>1</sup>

Liquidity regulation: Limit the dysfunction in markets resulting from unwinding maturity and liquidity transformation

Costs: Credit crunch, runs and fire sales

Regulation should counter the tendency to a) *ex ante*, operate with too-thin capital and liquidity buffers, and b) *ex post*, shrink rather than recapitalize<sup>2</sup>

(1) For details see Samuel Hanson, Anil Kashyap and Jeremy Stein, [“A Macroprudential Approach to Financial Regulation,”](#) *Journal of Economic Perspectives*—Volume 25, Number 1—Winter 2011—pp 3–28, and (2) Anil Kashyap, Richard Berner and Charles Goodhart, [“The Macroprudential Toolkit,”](#) *IMF Economic Review*, Vol. 59, No. 2, 2011, pp.145–161.

# Threats to Financial Stability and Tools to Mitigate Them

## Three Channels of Threats:

- Leverage/Default
- Liquidity/Credit crunches
- Procyclicality/Fire Sales

## Three Tools:

- **Capital:** Time-varying, higher-quality, contingent, and consistent with prompt corrective action (target dollars of capital, not capital ratios)
- **Liquidity:** Tenor and terms
- **Procyclicality:** Haircuts and Margins

# What is the Financial Stability Oversight Council?

A collaborative body established by the Dodd-Frank Act to identify risks to financial stability, respond to emerging threats, and promote market discipline.

- Chaired by the Secretary of the Treasury, the Council contains eight federal financial regulators, an insurance expert appointed by the President, and state regulators and other nonvoting members.
- The Council has new authority to designate nonbank financial companies, Financial Market Utilities (FMU), and payment, clearing, or settlement activities for heightened prudential supervision.
- The Council facilitates regulatory coordination, information sharing, and information collection.
- The Council reports annually to Congress.
- Council Committee structure: Deputies; Systemic Risk (subcommittees on Markets and Institutions); Nonbank Designation; FMU Designation; Heightened Prudential Standards; Orderly Liquidation Authority and Resolution Plans; and Data.

# What is the Office of Financial Research?

The OFR supports the Council and complements Council member agencies' traditional safety-and-soundness focus by:

- Looking across the financial system to measure and analyze factors affecting financial stability, including both market and institutional developments, and helping Council member agencies to develop policies to promote it;
- Assessing the gaps in financial data and helping to fill them, and promoting data integrity, accuracy, and transparency for the benefit of market participants, regulators, and research communities;
- Reporting to the Congress and the public on the OFR's analysis of significant financial market developments, of potential threats to financial stability, and of policy tools and responses;
- Collaborating with policymakers and regulators at home and abroad, multilateral organizations and industry to establish global standards for data and analysis of policies that promote financial stability.

## How can the OFR improve financial stability research?

- Create a virtual research community: From D.C. hub, build network of collaborators, visiting scholars, fellows and interns; opened satellite office in New York City.
- Help fill the gaps in research on interactions across and among financial markets and institutions, on financial system functioning under stress, and on best practices in financial risk management.
- Collaborate with Council member agencies and others on such research, and on evaluation of stress tests.
- Partnerships critical for success: Researchers in Council member agencies; those in academia, in multilateral institutions, in the global regulatory community, and in financial institutions
- Receive advice from Financial Research Advisory Committee on priorities regarding research and data.
- Explore research topics through conferences, seminars, and workshops.



# OFR Research Implementation and Products

## **Implementation**

The OFR takes the following approaches to implementing its research strategies:

- ◆ Working through cross-functional teams
- ◆ Bringing researchers into the OFR
  - IPAs and consultants
  - Fellowship program
- ◆ Facilitating researchers
  - Joint research initiatives
  - Grants
- ◆ Providing thought leadership and opportunities for dialogue
  - Publishing staff work products
  - Workshops and conferences

## **Products**

- ◆ OFR Annual Report
- ◆ Current analysis and policy research
- ◆ Support the Council on its Annual Report and other research projects
- ◆ Working Paper Series and other research
  - “A Survey of Systemic Risk Analytics” (Bisias and others)
  - “Forging Best Practices in Risk Management” (Flannery and others)
  - “Using Agent-Based Models for Analyzing Threats to Financial Stability” (Bookstaber)
  - “CoCos, Bail-in and Tail Risk” (Chen and others)
  - “Systematic Scenario Selection” (Flood and Korenko)
  - “Hedge Fund Contagion and Risk-adjusted Returns: A Market-switching Dynamic Factor Approach” (Akay and others)

# Research Gaps: Parallel/Shadow Banking

What do we know?

- Securitization and liquid funding markets converted opaque, risky long-term assets into money-like, low risk, short-term liabilities
- The key support: Credit and liquidity puts from private insurers that provided ultra-cheap, equally opaque funding
- Funding markets are critical: Maturity, credit and liquidity transformation
- Dry kindling: Investors overestimated the value of collateral and the support from private credit and liquidity enhancement

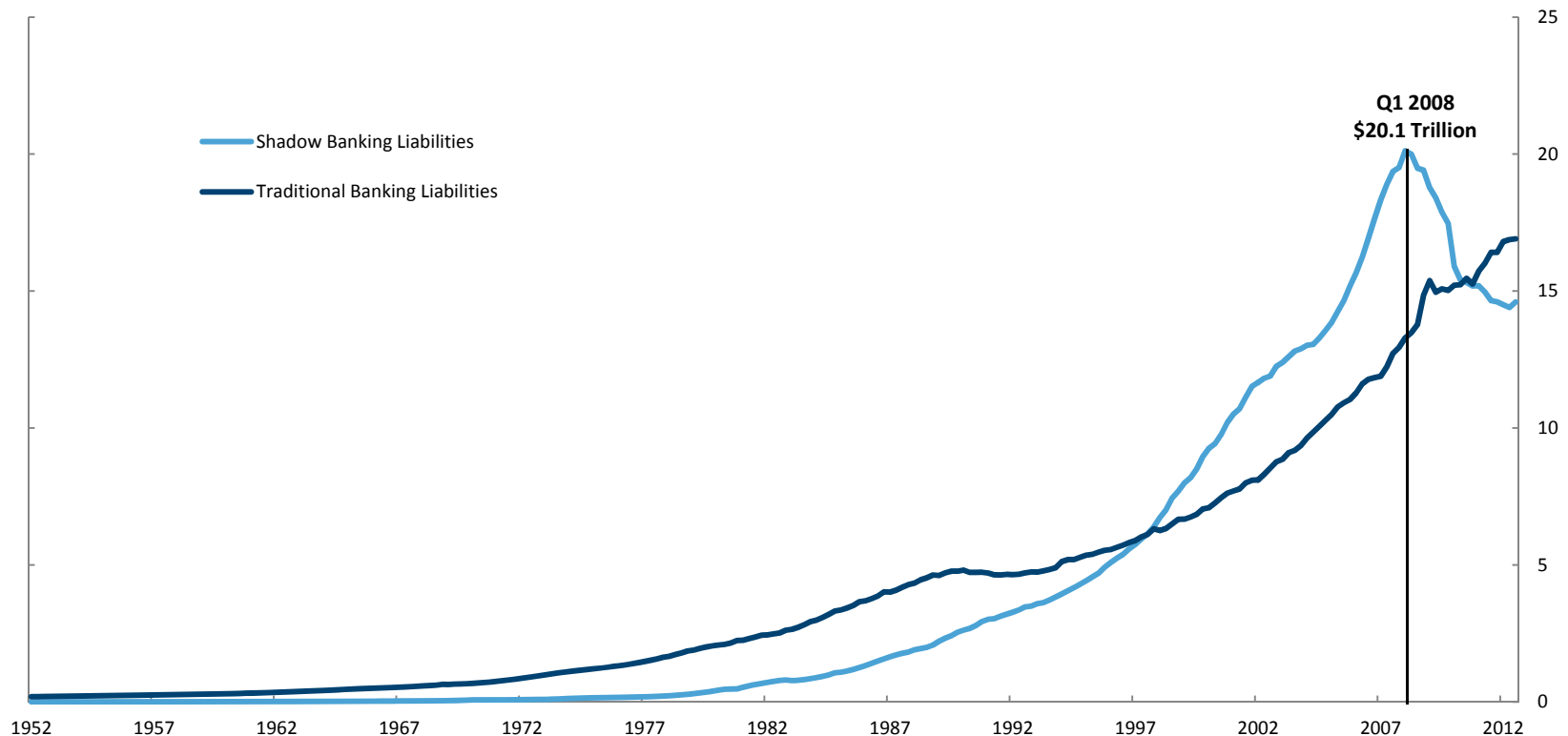
Agenda for analysis:

- Roles and functioning of secured and unsecured funding markets
- How will regulatory arbitrage, reform affect them and securitization?
- What triggers runs and fire sales and what will mitigate them?

# Shadow banking system grew to be half again as large as traditional bank liabilities

In the 10 years preceding the 2007 crisis, shadow banking (SB) liabilities quadrupled, growing out of proportion to traditional bank (TB) liabilities.

Shadow Banking vs. Traditional Banking Liabilities  
(\$ Tn)

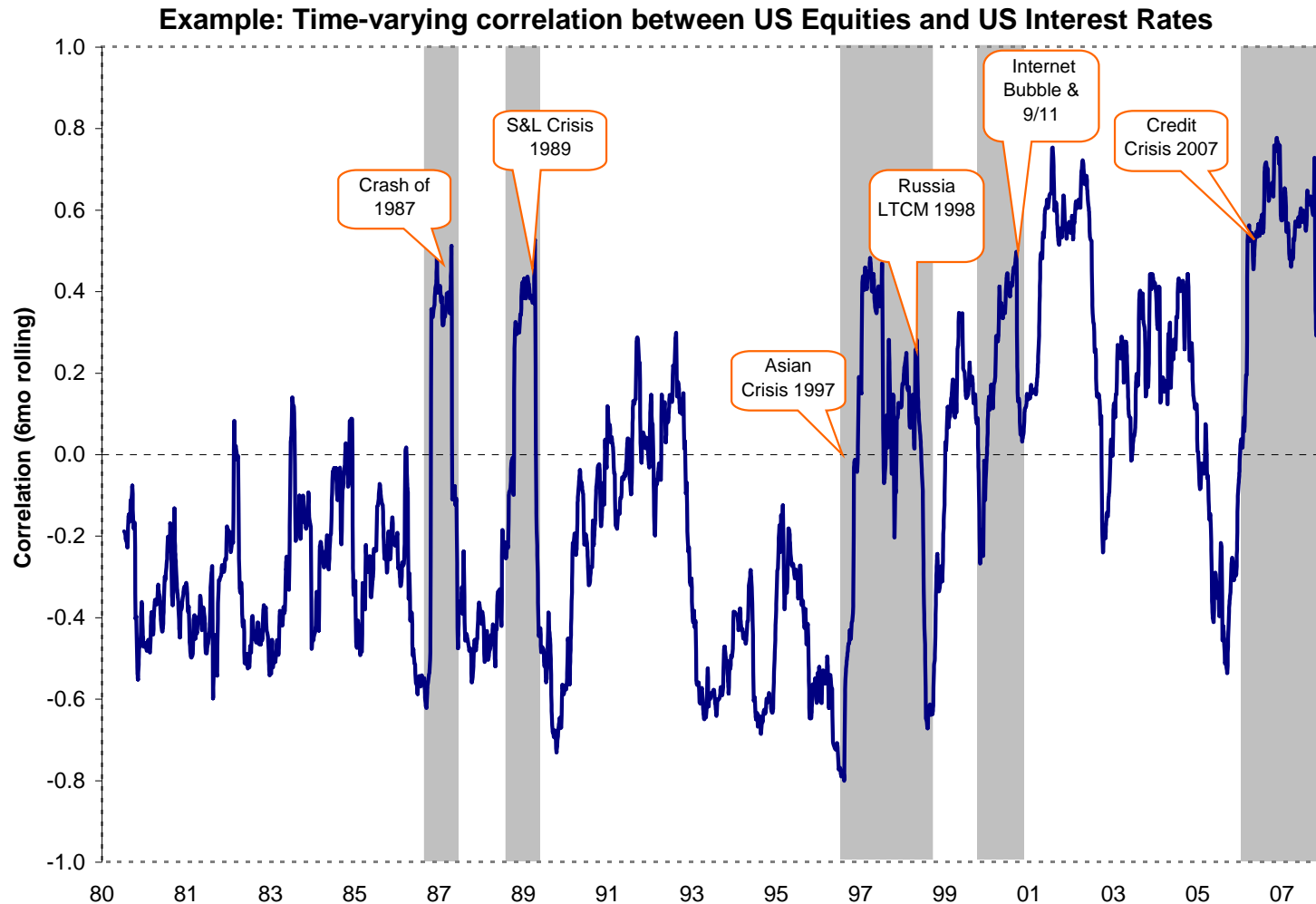


**Note:** Traditional banking liabilities refer to total liabilities of depository institutions (line 29 of Table L.110). Shadow banking liabilities (netted from overlaps with Table L.110) refer to the sum of total outstanding open market paper (line 1 of Table L.208), total repo liabilities (line 1 of Table L.207), net securities loaned (line 20 of Table L.130), total GSE liabilities and pool securities (lines 21 and 6 of Tables L.124 and L.125, respectively), total liabilities of ABS issuers (line 11 of Table L.126), and total shares outstanding of money market mutual funds (line 14 of Table L.121).

**Source:** Haver Analytics; FRB Flow of Funds; FRBNY; Pozsar, Adrian, Ashcraft, Boesky (2010)

# Correlation Patterns in Crisis

- During crisis periods, correlation between Equity and Interest Rates tends to increase.



## How can the OFR improve data quality and scope?

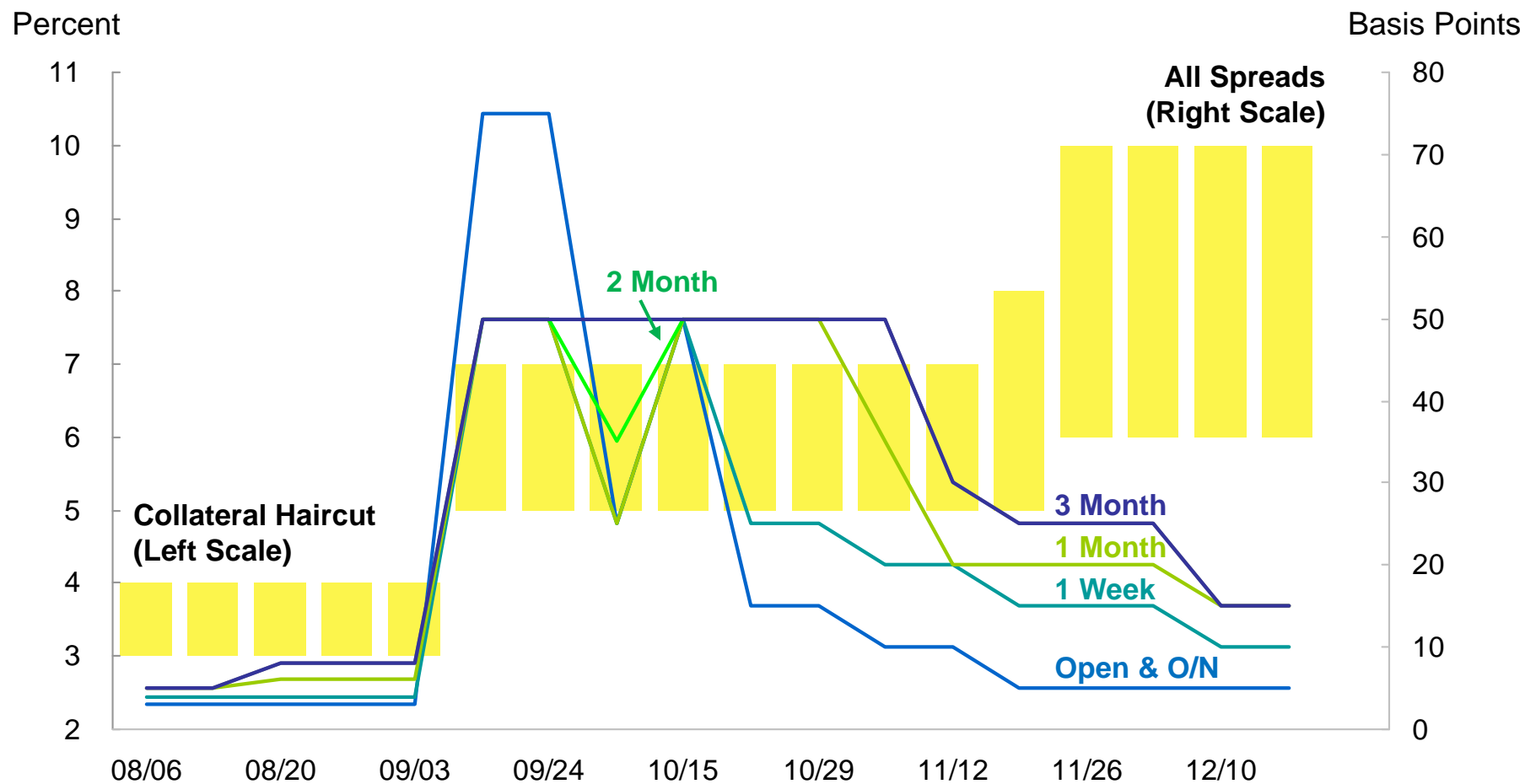
- Promote data standards; e.g., the global Legal Entity Identifier (LEI), necessary for system-wide aggregation, linking different data sets and analytical comparisons; helps collect more and better data while reducing the reporting burden.
- Collaborate with Council member organizations to collect data and fill data gaps, e.g., for DvP repo, securities lending, etc.
- Target low-cost, high-quality data collection points (SDRs, CCPs) for certain types of data, e.g., OTC derivatives, swaps, GC repo.
- Four partnerships critical for success: (1) The global policy/regulatory community; (2) financial institutions; (3) market data vendors and solutions providers; and (4) exchanges, CCPs and other data repositories.

# Data Gaps: Repo Markets

What is needed?

- Some data available on flows of funds, securitization chains, and securities lending.
- Data needed for tri-party, DvP, and GCF repo markets.
- Need data on six characteristics of repo and securities lending trades at the firm level: (1) principal amount, (2) interest rate, (3) collateral type, (4) haircut, (5) tenor, and (6) counterparty.
- Need data on private credit and liquidity enhancement to identify sellers of tail-risk insurance/protection.

# Even as bid-ask spreads narrowed, bilateral (DvP) repo haircuts on GSE MBS collateral widened



Source: Bloomberg

# Data Gaps: OTC Derivatives

What is needed?

- Data available on credit, equity, and rates derivatives.
- Access to the Depository Trust Company's trade warehouse data limited to U.S. regulators by OTC Derivatives Regulators' Forum (ODRF) guidelines.
- OFR joined ODRF to improve data dialogue and access.
- Obtained access to firm trade data with a U.S. counterparty or reference entity.
- Data sharing needed with global regulators to complete the picture.



## OFR Challenges

- Demonstrate value to a broad range of constituents, e.g., Council member organizations, to help them do their jobs.
- Specialize in developing insights, e.g., about how markets influence regulated institutions and how they interact.
- Compete successfully to attract world-class research staff.
- Get agreement on research-and-data gaps.
- Demonstrate that there are – or will be – gains from trade with would-be collaborators who possess analytical talent.
- Balance need to share data appropriately with need for confidentiality and privacy.