



UNITED STATES  
DEPARTMENT OF  
THE TREASURY



Federal Economic Statistics Advisory Committee

Statistical Response to the  
Financial Crisis:  
Office of Financial Research

Adam LaVier  
U.S. Department of the Treasury

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# What is the Office of Financial Research?

The Office of Financial Research (OFR) is a new entity established by the Dodd-Frank Act.

Mission: to support the Financial Stability Oversight Council (FSOC) in promoting financial stability by:

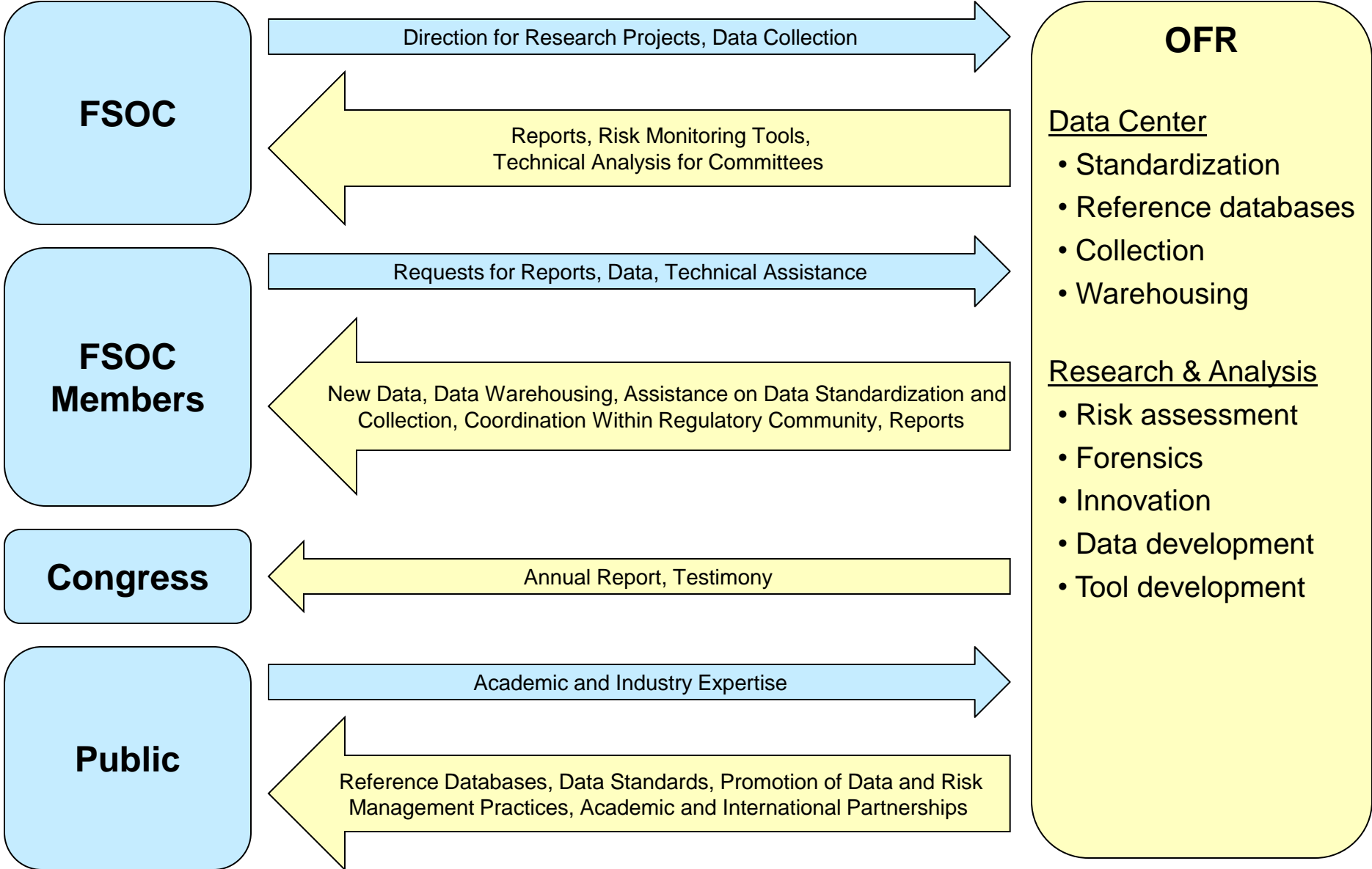
- Measuring and analyzing factors affecting financial stability and helping to develop policies to promote it;
- Increasing the integrity, accuracy and transparency of information shared by financial market participants, reported to regulators, and used by research communities;
- Reporting to the Congress and the public on the OFR's analysis of significant financial market developments, potential threats to financial stability, and policy responses;
- Collaborating with foreign policymakers and regulators, as well as multilateral organizations, to establish global standards and policies that promote financial stability, efficiencies, and a level playing field.

# How is the OFR different from other Federal financial agencies?

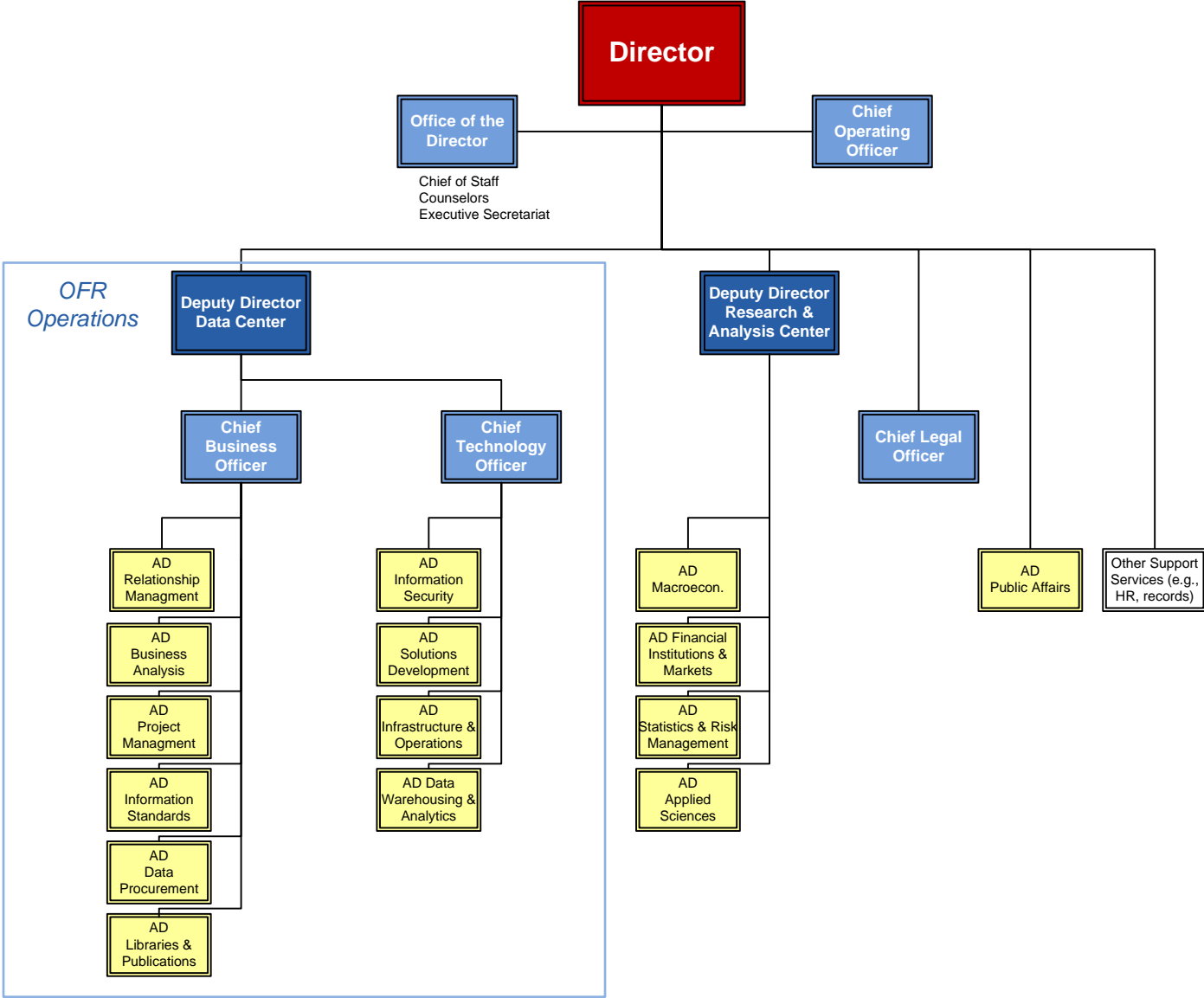
The OFR has a number of unique characteristics among Federal financial agencies.

- Sole focus on risks to the financial system
- Authority to collect data from anywhere in that system
- Mandate to improve the quality of financial reporting by
  - Establishing standards for types and formats of data, including transactions and positions
  - Preparing and publishing reference data on financial companies and instruments
- Commitment to bring science to bear
- Independence
  - Funding
  - Reporting
  - Regulatory authority
  - Director's term of appointment

# Who does the OFR serve?



# How is the OFR organized?



# What should research communities expect from the OFR?

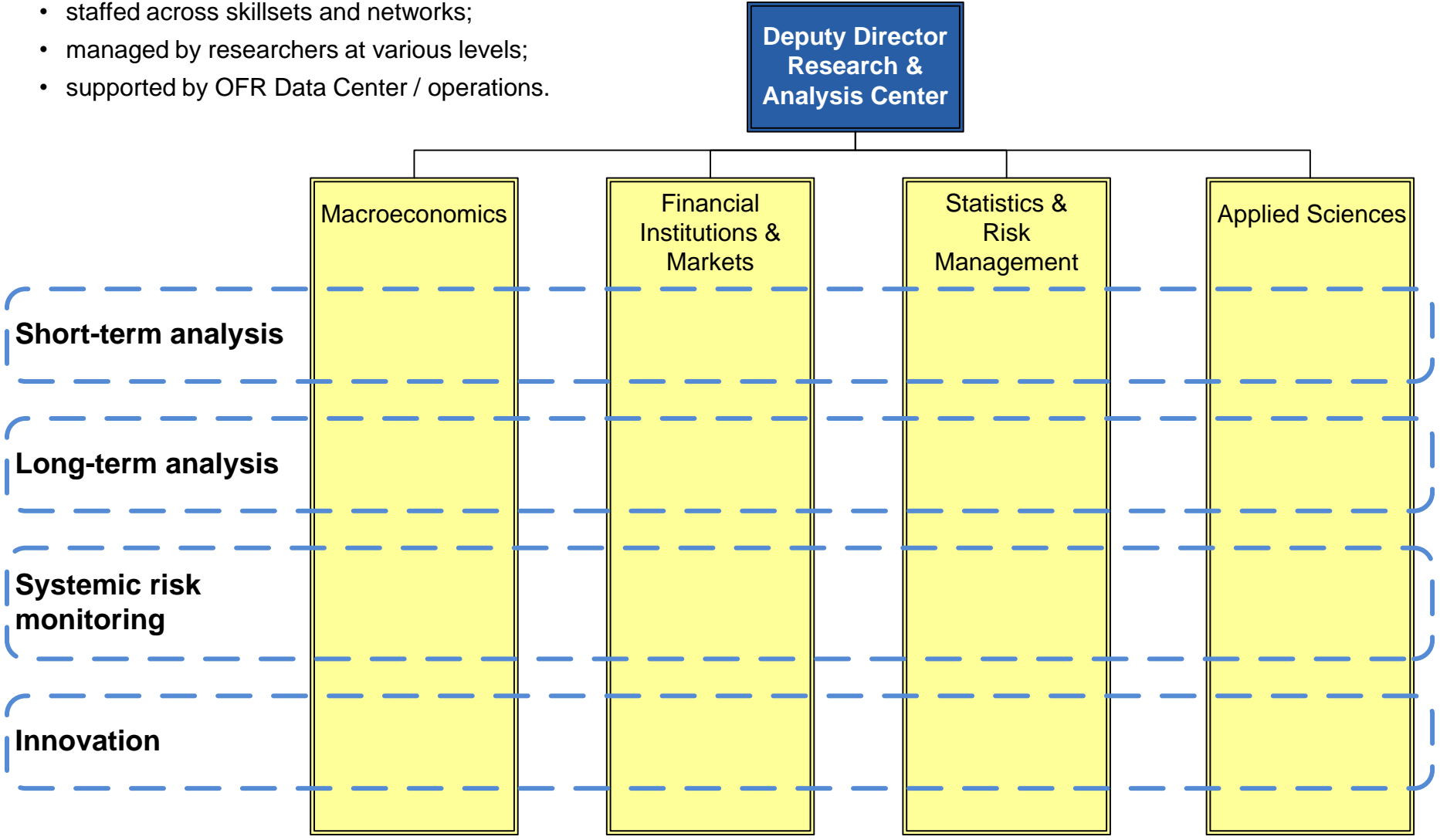
## The OFR will:

- Produce, promote and sponsor financial research;
- Publish non-confidential financial data, reference data, and analytical tools;
- Establish fellowship and visiting scholar programs;
- Collaborate with and provide data services for Federal financial regulators and statistical agencies;
- Promote best practices in risk management.

# How is the OFR Research and Analysis Center organized?

Projects are

- defined by policy *and* by individual researchers;
- staffed across skillsets and networks;
- managed by researchers at various levels;
- supported by OFR Data Center / operations.



# Examples of near and long-term OFR research projects

- Systemic risk measurement and monitoring
  - Survey paper
  - Analytical tools
  - Metadata for inputs
  - Dashboard for FSOC
- Developing measures of leverage in asset markets
  - Will require aggregating transaction level data from market utilities
- Evaluating stress tests, including translation of scenarios and aggregation of results for macroprudential supervision
- Analyzing the benefits and costs of various macroprudential tools
- Assessing the impact of changes in financial regulation on the supply of credit and economic activity
  - Will require both macro and micro analysis and data

} Will be published



# Measuring Risk in the Financial System

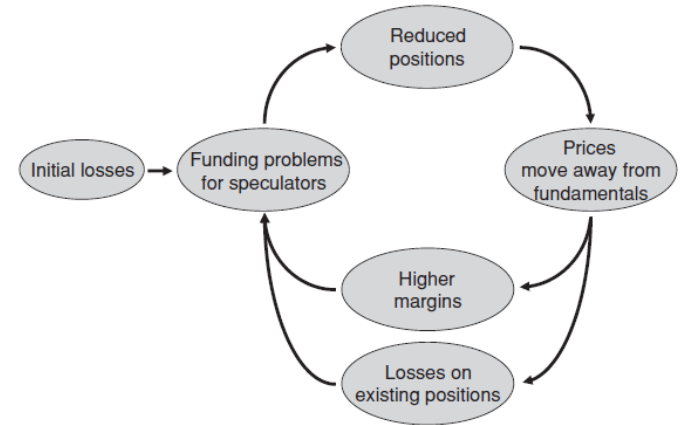
- Many models and approaches
  - Leverage models
  - Macroeconomic indicators
  - Probability distributions
  - Contingent claims analysis
  - Network models
  - Stress testing
  - Risk accounting
  - Illiquidity and crowded trades
  - Principal components
  - ...
- Each approach attempts to answer a particular set of questions
- No one approach can answer all questions
- Vital to approach the problem from multiple perspectives
- Improving the quality of information in the system and identifying new developments are critical

# Measuring Risk in the Financial System – Market Liquidity

- Portfolio reaction function
  - Funding sources
    - Exposure to “runnable” funding
    - Access to lifelines
  - Marketable assets
    - Fire-sale pricing
    - Collateral pledges and margin requirements
- Herd behavior

- Role of speculators as liquidity providers

Example: Liquidity Spiral\*

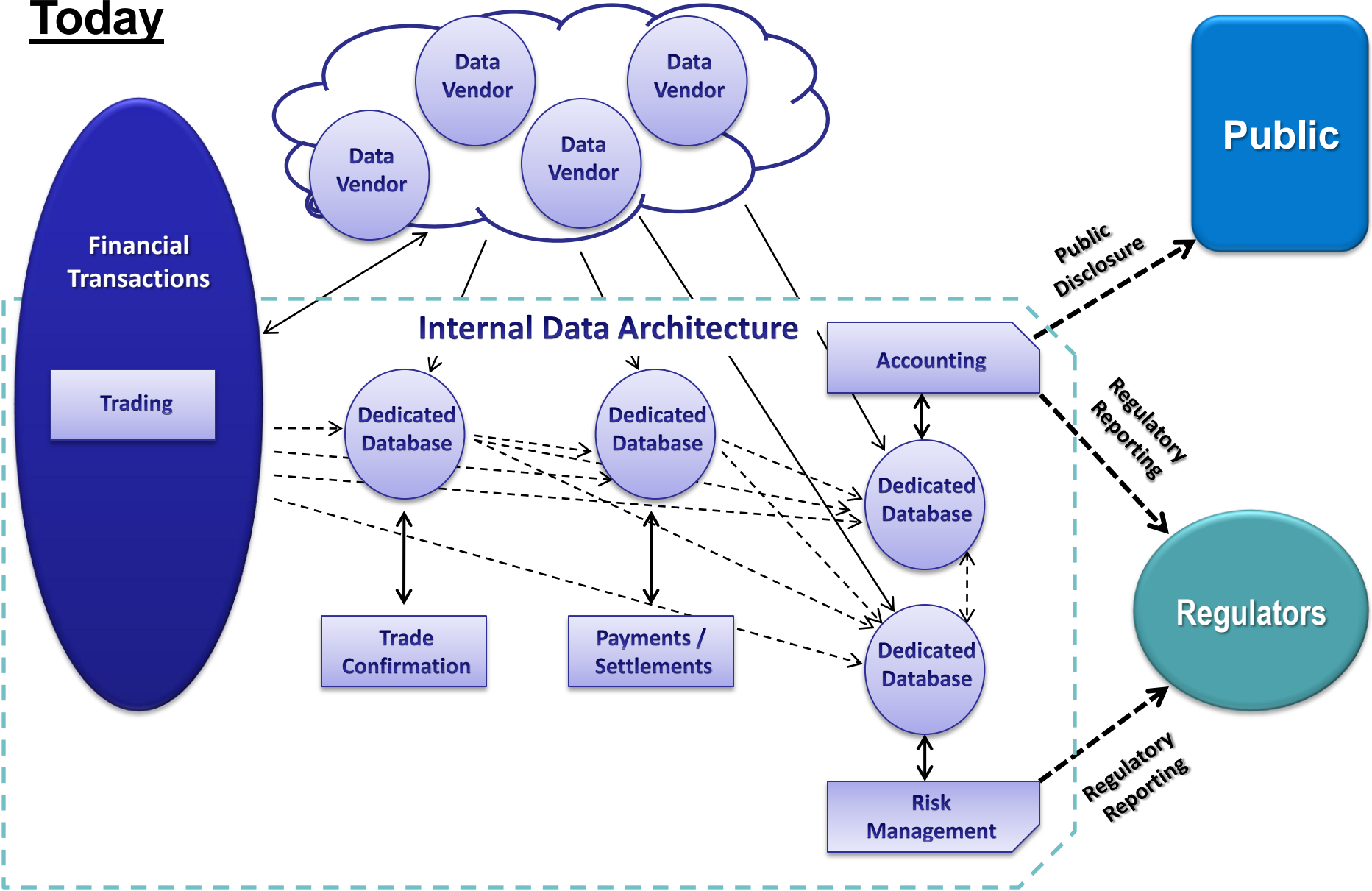


\* See Brunnermeier and Pederson, Market Liquidity and Funding Liquidity, *The Review of Financial Studies*, 2009, Vol. 22, No. 66, pp. 2201-2238.

- Inputs for analysis
  - Balance sheet details
  - Trading volume
  - Volatility (e.g., VIX)
  - Bid-ask spreads
  - Collateral and margins

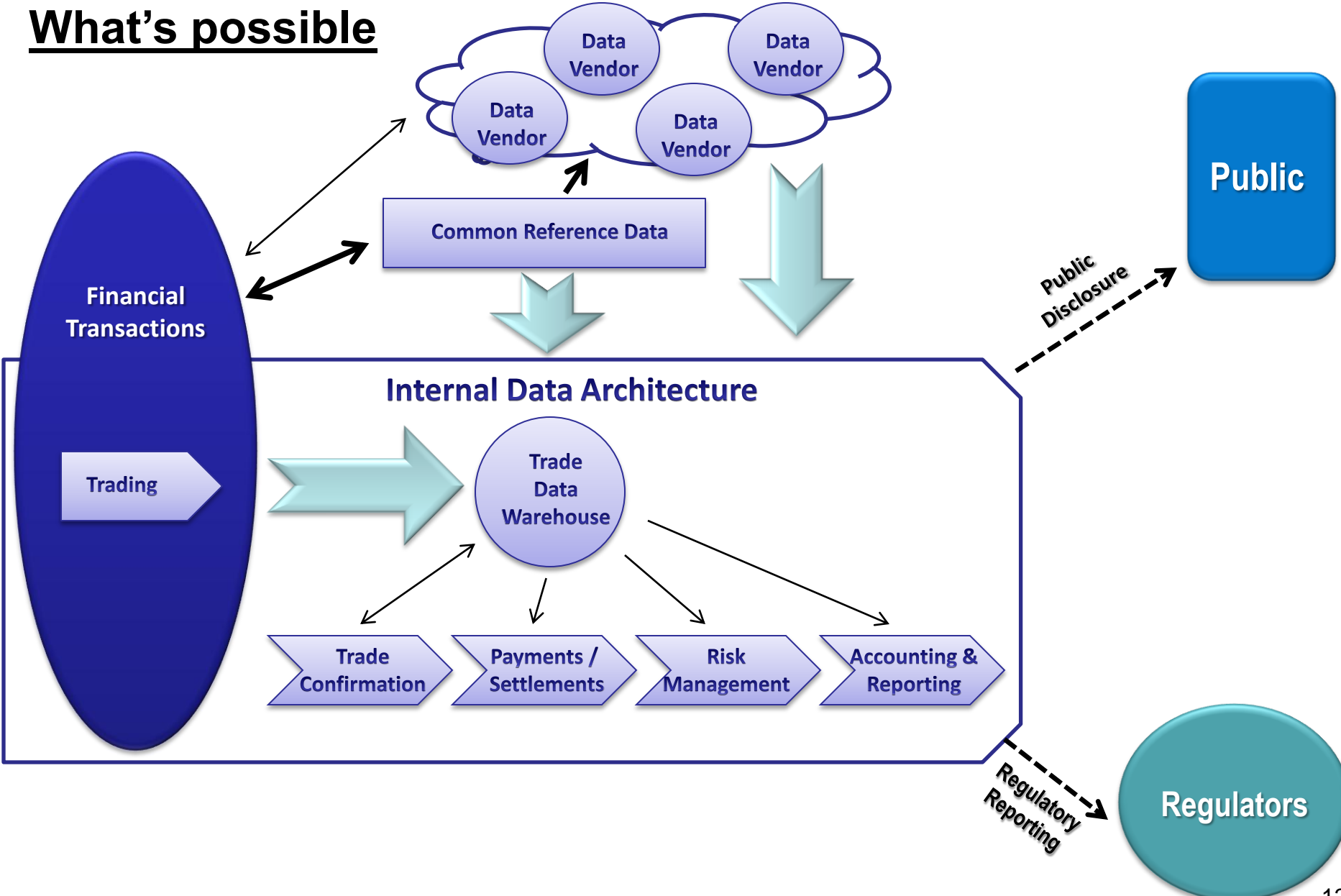
# How can the OFR improve reporting, processing, and risk management?

## Today



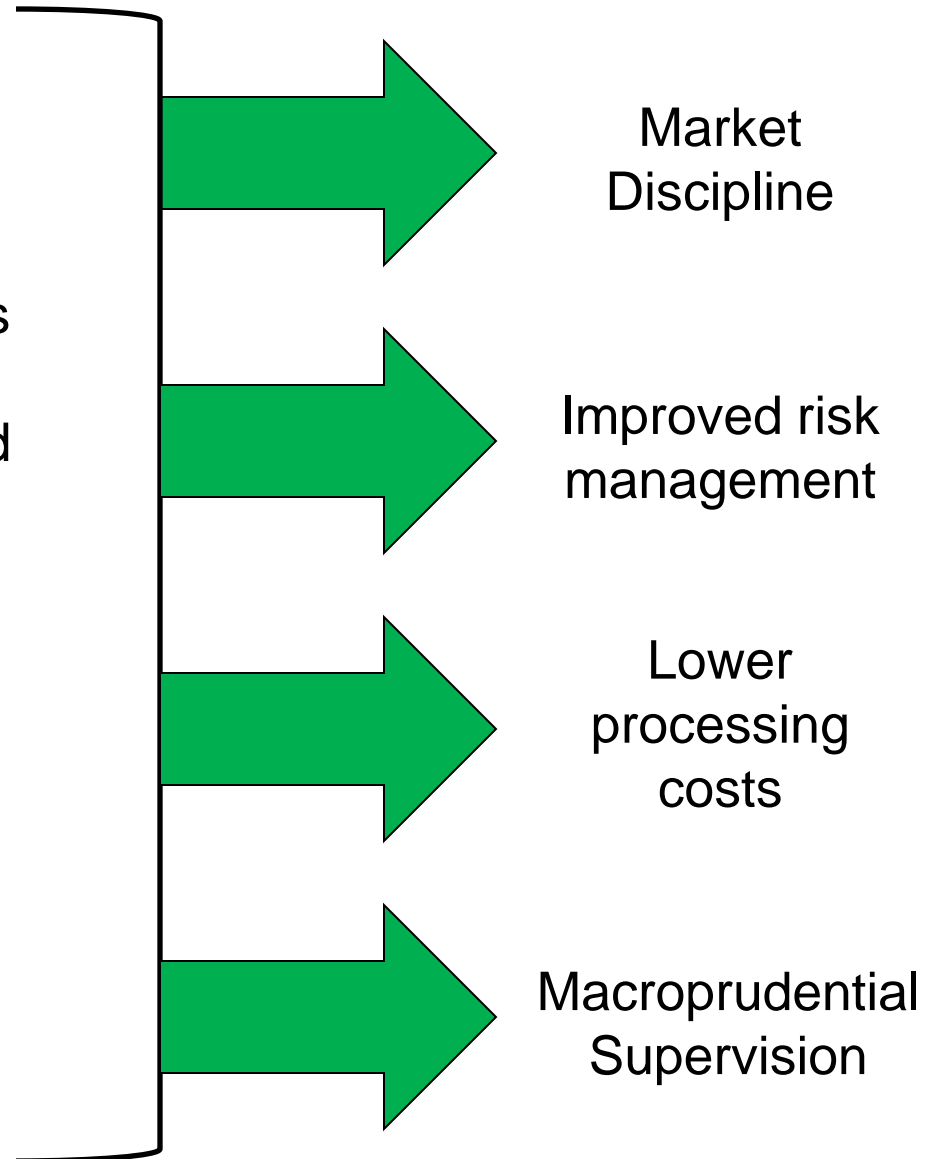
# How can the OFR improve reporting, processing, and risk management?

## What's possible



# How can the OFR improve market discipline and lower costs?

- Standardized reporting
  - OFR reporting (LEI initiative)
  - Coordinating across agencies
  - Accounting-based, risk-based
- Reference data
  - Financial companies
  - Financial instruments
- Research
- Non-confidential data



# Entity Identifiers are Needed for a Variety of Functions

## Counterparty identification on Transactions

- Orders
- Trades
- Settlements
- Payments

## Counterparty and Issuer Risk Management

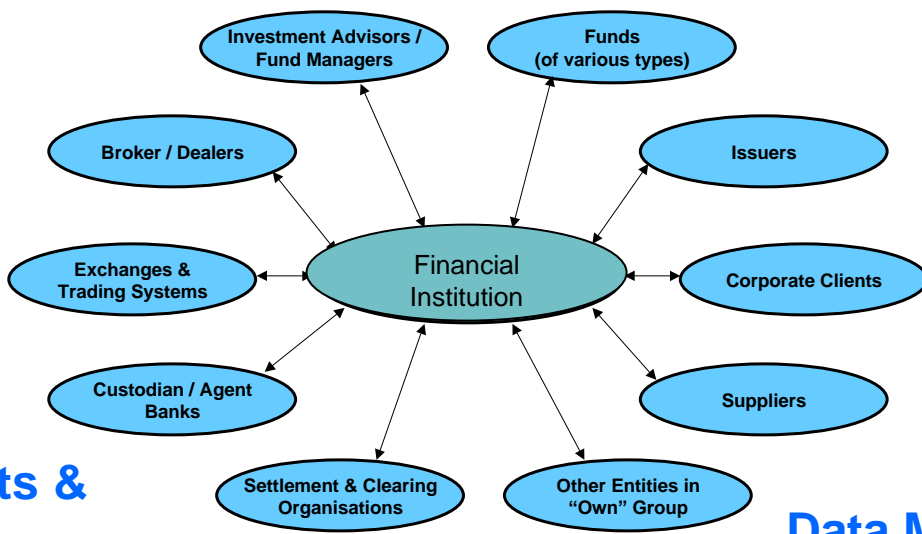
- Basel III
- Internal risk mgt.

## Collateral Management

Liquidity and Capital Management

## Regulatory Reporting

- KYC and AML
- Financial Services Act
- Patriot Act
- Dodd Frank



## Legal Agreements & Documentation

- Account set-up
- Customer relationship

## Corporate Research

- Analyst Reports

## Data Management

- Capture / Sourcing
- Look-up & Cross-referencing
- Maintenance

Estimates of annual industry savings from LEI implementation range from hundreds of millions to billions of US dollars.