

# Prudential Regulation and Supervision

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The views expressed in this presentation do not necessarily reflect those of the Federal Reserve Bank of New York or the Federal Reserve System.

# Introduction

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- Long history of regulation and supervision of individual financial institutions and bank holding companies (BHCs)
  - “Microprudential supervision”
- Policymakers also care about financial stability and the financial system as a whole
  - “Macroprudential supervision”
- Recent financial crisis has led to historic changes in the regulatory and supervisory infrastructure for BHCs
  - Capital plans rule
  - Basel III
  - “Wall St. Reform and Consumer Protection Act” (Dodd-Frank Act)
- Outline for discussion
  - Microprudential and macroprudential supervision
  - Recent policy initiatives



# Lessons from the financial crisis

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- Some working assumptions failed
  - BHCs didn't always have rigorous risk controls
  - Market forces didn't always limit risk-taking
  - Measures of current financial health were not always sufficient
  - Evaluation of individual firms was not sufficient
- Regulatory and supervisory approach responded
  - Focus on BHCs' strategic objectives
  - Employ more cross-firm analysis and independent assessments
  - Evaluate forward-looking measures of BHC health
  - Adopt a broader, macroprudential perspective



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## Microprudential and Macroprudential Supervision



# Microprudential supervision

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- Why are BHCs so heavily regulated and supervised?
- Market failures
  - Structural fragility – long, opaque assets funded by short, liquid liabilities
    - Makes banks susceptible to “runs” and panics
  - Informational asymmetry – banks provide useful function as “delegated monitor” to protect depositors
    - Need to monitor the monitors
  - Agency problems – incentives to take excessive risk
    - Subprime lending or trading and “tail risk”
- Creates microprudential focus on safety and soundness of individual BHCs
  - Broadly defined “safety net” to protect depositors
    - Deposit insurance, discount window, liquidity facilities
  - Disclosure to protect borrowers
  - Examination process to ensure appropriate risk controls and governance



# Microprudential supervision

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- Safety net creates new distortions
  - Mis-priced insurance may lead to excessive risk-taking
  - “Moral hazard” reduces market discipline and leads to excessive risk-taking

Safety net  $\Rightarrow$  moral hazard  $\Rightarrow$  increased risk-taking

- Supervision and regulation also need to offset additional risk-taking incentives
  - Capital requirements
  - Limits on risk concentration



# Supervisory process for large BHCs

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- Risk-focused supervision is central to a microprudential perspective
  - Evaluate BHCs' financial condition and resilience
  - Understand vulnerabilities through assessment of inherent risks and the effectiveness of internal systems and controls
- Many tools
  - Continuous monitoring of financial condition
    - Regulatory data, market signals, internal data and reports
  - Targeted exams
    - Specific concern over emerging risk or business practice; discovery reviews
  - Assessment of BHCs' processes
    - Risk controls and governance; senior management oversight; internal audit
- Feedback to BHCs
  - Examination letters; annual "roll-up" assessment
  - Expectations for changes or specific activity restrictions



# Supervisory assessment

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Assess the condition of large BHCs at least annually

R
F
I
C
(D)

- *Risk Management* - Do the board of directors and senior management appropriately identify, measure, monitor and control risk across the BHC as appropriate for their respective positions?
- *Financial Condition* - Is the BHC's capital, asset quality, earnings, and liquidity adequate to protect against reasonable external shocks?
- *Impact* - What is the likely impact on the subsidiary depository institution (DI) of the parent company and non-bank subsidiaries?
- *Composite* - rating based on the assessments of risk management (R), financial condition (F) and potential impact on depository institutions (DIs).
- *Depository Institutions* - What is the condition of each DI as assessed by the primary supervisor?



# A broader, macroprudential perspective

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- Financial crisis led to greater focus on systemic events

*“shocks to one part of the financial system lead to shocks elsewhere, in turn impinging on the stability of the real economy”*

Bordo, Mizrach, and Schwartz, 1998

- Systemic risk as a “negative externality” like pollution
  - Negative byproduct of productive financial intermediation
  - Linked to leverage, maturity transformation, common exposures, interconnectedness
- Implications
  - *Laissez faire* level of systemic risk not socially efficient
    - Need more intrusive policy to “internalize the externality”
    - Justifies safety net and may create too-big-to-fail perception (TBTF)
  - Optimal level of systemic risk is not zero
- Macroprudential policy guards against the risk of a systemic event



# Externalities

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Externalities are “by far the most important reason why banks, and other key financial intermediaries and markets, need regulation”

“Geneva Report”, Brunnermeier et al., 2009

- Negative externalities in financial markets
  - Information contagion
  - Lending relationships
  - Linkages and counterparty exposures
  - Fire-sale effects
  - Credit provision

Negative Externalities  $\Rightarrow$  TBTF  $\Rightarrow$  broader safety net  $\Rightarrow$  moral hazard  $\Rightarrow$  increased risk-taking

- Feedback effects
  - Amplifies initial impact of externality, so requires even greater intervention



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## Conceptual Solutions to Externalities

Policy	Pollution	Systemic Risk
Pigouvian Tax	Tax on carbon emissions	Tax on bank leverage
Activity Restrictions	Ban dumping pollution	Restrict proprietary trading, e.g., Volcker Rule
Reduce Externality	Smokestack scrubbers	Move CDS to exchanges
Subsidize Actions	Tax credits for insulation	Subsidize bank capital
Tradable Permits	Cap-and-trade	Trade right to breach capital requirement
Clean up Ex Post	Pollution superfunds	Asset guarantees

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# Microprudential vs. macroprudential supervision

- Macroprudential supervision is not the sum of microprudential supervision

Comparison of Macroprudential and Microprudential Supervision		
	Macroprudential	Microprudential
<b>Ultimate Objectives</b>	Avoid GDP loss	Protect consumers (investor / depositor)
<b>Proximate Objectives</b>	Stable provision of productive financial services Countercyclical pressures for credit and asset prices	Safety and soundness of specific FIs
<b>View of macroeconomy</b>	Endogenous	Exogenous
<b>Direction of Effects</b>	Impact <u>on</u> macroeconomy and financial system "Protect the cycle from the banks"	Impact <u>from</u> macroeconomy and financial system "Protect the banks from the cycle"
<b>Time Horizon</b>	Forward-looking	Forward-looking
<b>Analysis</b>	Aggregates Correlations and linkages	Firm-specific and peer comparison Idiosyncratic
<b>Disclosure</b>	Active tool to change behavior and affect outcomes	"Confidential Supervisory Information" vs. Pillar 3 disclosure

Notes: Bank of England (2009); Borio (2003, 2009); Hirtle, Schuermann and Stiroh (2009); CGFS (2010).

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## Recent Policy Initiatives

# Policy initiatives

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- Financial crisis required fundamental changes to the regulatory and supervisory process and infrastructure
- Three key initiatives
  - Capital plans rule
  - Basel III
  - Dodd-Frank Act (DFA)
- Each has microprudential and macroprudential aspects

# Capital plans rule

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- Requires forward-looking capital plans as part of an assessment of proposed capital distributions
  - Amendment to Regulation Y, adopted November, 2011
- Broad assessment of the capital planning process and capital adequacy of large BHCs
  - Critical enhancement to microprudential and macroprudential supervision
- Closely linked with “Comprehensive Capital Analysis and Review” (CCAR)
- Evaluate many aspects of BHCs’ processes related to capital
  - Capital planning
  - Capital policies for distributions
  - Risk measurement and management
  - Transition toward Basel III, as comes into effect in the U.S.
  - Stress testing capabilities



# Basel III

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- International response to global financial crisis
  - Capital and liquidity standards for internationally active banks
  - Agreed to in December, 2010
- Capital
  - New minimum common equity standard of 4.5% of risk-weighted assets (RWA)
  - Capital conservation buffer of 2.5%
  - Countercyclical buffer of 2.5% based on national circumstances
  - Change to risk weights to better reflect risks, stress estimates, interconnectedness
  - Additional loss absorbing capacity for systemically important banks
    - SIFI surcharge up to 2.5% of RWA
  - Phase-in through 2019
- Both microprudential and macroprudential aspects
  - Stronger capital and liquidity standards
  - Change risk-weights to better reflect interconnectedness
  - Countercyclical buffer to restrain booms
  - Greater focus on SIFIs that generate externalities

# Dodd-Frank Act (DFA)

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- DFA was central U.S. response to the global financial crisis
  - Passed into law July, 2010
- Broad range of new initiatives
  - Financial stability
  - Orderly liquidation authority
  - Lending standards
  - OTC derivatives
  - Capital and liquidity standards
- Focus on financial stability and capital standards for BHCs



## DFA: Financial stability

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*“In order to prevent or mitigate risks to the financial stability of the United States that could arise from the material financial distress or failure, or ongoing activities of large, interconnected financial institutions, the Board of Governors ... shall establish prudential standards”*

Dodd-Frank Act, Sections 165

- Dodd-Frank supports macroprudential perspective and policies
  - Large BHCs (>\$50B) and nonbank financials designated as systemically important shall face “more stringent” prudential standards that “increase in stringency”
  - Fed may differentiate among companies on an individual basis based on capital, risk, interconnectedness, complexity, activities, size and “any other risk-related factors”
- Dodd-Frank broadens focus of traditional, microprudential supervisory assessments to include financial stability concerns
  - Enhanced supervision and prudential standards
  - Expanded exam authority
  - Merger applications



# DFA: Financial stability and capital

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- Sections 113 and 115
  - Financial Stability Oversight Council (FSOC) identifies nonbank SIFIs
    - Based on leverage, OBS, source of credit, scope, size, scale, “any other risk factor”
  - FSOC may recommend enhanced supervision and prudential standards for SIFIs (BHCs > \$50B and designated nonbanks)
- Section 121
  - If FRB determines a “grave threat to financial stability”, then shall limit mergers, restrict products, terminate activities, impose conditions on conduct, etc.
- Section 165
  - FRB shall impose enhanced prudential standards for risk-based capital, leverage, liquidity, risk mgmt, resolution plans, and concentration limits; stress tests for SIFIs
  - FRB may impose contingent capital, enhanced disclosure, short-term debt limits, etc.
- Section 604
  - Broadens 1956 BHC Act so exams may include financial stability concerns and merger decisions shall reflect financial stability issues



# Conclusions

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- Financial crisis highlighted the need for more effective microprudential and macroprudential supervision
  - BHCs need to be more resilient, better managed, and less complex
- Fundamental changes to regulatory and supervisory infrastructure are a strong start, but much work remains to be done
- Regulatory and supervisory framework will continue to evolve as financial markets and BHCs evolve
  - Potential unintended consequences from regulatory reform
  - Role of non-bank financial institutions and the shadow banking sector



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## Appendix

# Range of macroprudential tools

## Macroprudential Instruments Cited in CGFS Survey Survey of 33 Central Banks

### Measures imposed on particular credit markets

- Direct controls on lending in specific sectors
- State-promoted lending
- Regulation of foreign currency lending
- LTV-based capital charge
- Risk weights on rapidly growing exposures
- Margin requirements on exposures to commodities/equities
- LTV ratio caps
- DTI caps
- Credit card lending limits
- Loan growth targets
- Adjustment of residential mortgage amortization periods
- DSR caps
- Tax-like charges on loan

### Measures to address capital flow volatility

- Management of the volume of FX reserves
- Reserve requirements

### Communications

- Financial Stability Reviews
- Macro stress tests
- Supervisory guidance
- Horizontal reviews

### Measures targeting balance sheet size and composition to reduce interconnectedness

- Leverage ratio
- Capital surcharge for SIFI
- More intensive supervision for SIFIs
- Risk-based deposit insurance premiums
- Interbank concentration limits
- Liquidity ratios
- Subsidiarisation

### Measures targeting balance sheet size and composition to limit build-up of risk and increase buffers

- Capital charges
- Provisioning policies
- Restrictions on distributions on bank profits
- Loan-to-deposit/core funding requirements
- Liquidity requirements
- Currency mismatch limits
- Central bank asset purchases
- Central bank capital support

### Inputs to macroprudential assessments

- Bank lending surveys
- Credit risk surveys
- Mortgage lending survey
- Public credit register
- Credit information bureau

Notes: List from "The Use of Macroprudential Policy Instruments: Results of a Survey of Central Banks," CGFS, March 2 2010.

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