

Banks, Central Banks and Financial Market Infrastructure

“Turbulent Markets: Clearing, Settlement, and Counterparty Risk”

**Loyola University Chicago, Center for Integrated Risk
Management and Corporate Governance**

October 30, 2008

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The opinions expressed herein are solely those of the author and not necessarily those of the Federal Reserve Bank of Chicago or the Board of Governors of the Federal Reserve System.

Financial Market Infrastructure

- **FINANCIAL CONTRACT SETTLEMENT**

Financial Market Infrastructure

- **FINANCIAL CONTRACT SETTLEMENT**
- **ACCESS TO CENTRAL BANK ACCOUNT SERVICES**

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- **POLICY TRADE-OFFS**

Financial Market Infrastructure

- **FINANCIAL CONTRACT SETTLEMENT**

- The “value chain” of trade execution and post-trade processes

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- The “value chain” of trade execution and post-trade processes



Trade
Execution

Financial Market Infrastructure

- **FINANCIAL CONTRACT SETTLEMENT**

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- Settlement

Financial Market Infrastructure

- **FINANCIAL CONTRACT SETTLEMENT**

- The “value chain” of trade execution and post-trade processes

- Settlement = Discharge

Financial Market Infrastructure

- **FINANCIAL CONTRACT SETTLEMENT**

- The “value chain” of trade execution and post-trade processes

- Settlement = Discharge = Payment

Financial Market Infrastructure

- **FINANCIAL CONTRACT SETTLEMENT**

- The “value chain” of trade execution and post-trade processes

- Settlement = Discharge = Payment = Transfer of a “Settlement Asset”

Financial Market Infrastructure

▪ FINANCIAL CONTRACT SETTLEMENT

- The “value chain” of trade execution and post-trade processes

- What is a “Settlement Asset?”

“[A]n asset used for the discharge of settlement obligations as specified by the rules, regulations or customary practice for a payment system.”

Committee on Payment and Settlement Systems (CPSS),
Glossary of terms (2003)

Financial Market Infrastructure

- **FINANCIAL CONTRACT SETTLEMENT**

- The “value chain” of trade execution and post-trade processes

- Bank credit as a settlement asset

Financial Market Infrastructure

▪ FINANCIAL CONTRACT SETTLEMENT

- The “value chain” of trade execution and post-trade processes

- Bank credit as a settlement asset

“Contemporary monetary systems are based on the mutually reinforcing roles of *central bank money* and *commercial bank monies*.”

CPSS, *The role of central bank money in payment systems* (2003)

Financial Market Infrastructure

▪ FINANCIAL CONTRACT SETTLEMENT

- The “value chain” of trade execution and post-trade processes

- Bank credit as a settlement asset

“The widespread use of central bank money as a settlement asset reflects its overall qualities of safety, availability, efficiency, neutrality and finality.”

CPSS, The role of central bank money in payment systems (2003)

Financial Market Infrastructure

- **FINANCIAL CONTRACT SETTLEMENT**

- The “value chain” of trade execution and post-trade processes

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- Core Principle VI

Financial Market Infrastructure

▪ FINANCIAL CONTRACT SETTLEMENT

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“Assets used for settlement should preferably be a claim on a central bank; where other assets are used, they should carry little or no credit risk and little or no liquidity risk.”

CPSS, Core principles for systemically important payment systems (2001)

Financial Market Infrastructure

▪ FINANCIAL CONTRACT SETTLEMENT

- The “value chain” of trade execution and post-trade processes

- Bank credit as a settlement asset

- Alternative standards

CPSS/IOSCO, Recommendations for securities settlement systems (2001)

CPSS/IOSCO, Recommendations for central counterparties (2004)

Financial Market Infrastructure

- **FINANCIAL CONTRACT SETTLEMENT**

- The “value chain” of trade execution and post-trade processes

- Bank credit as a settlement asset

- Relationship to account access policies

Financial Market Infrastructure

- ACCESS TO CENTRAL BANK ACCOUNT SERVICES

Financial Market Infrastructure

▪ ACCESS TO CENTRAL BANK ACCOUNT SERVICES

LIMITED ACCESS

Hong Kong,
United Kingdom,
United States

EXPANDED ACCESS

Eurozone Countries
(Belgium, Germany,
and Luxembourg),
and Switzerland

BROAD ACCESS

Canada
Japan

Financial Market Infrastructure

- **ACCESS TO CENTRAL BANK ACCOUNT SERVICES**

- Limited access (U.S.)

- “Depository institutions” (Federal Reserve Act)

“Individuals and institutions that do not take deposits are not generally permitted direct access to Federal Reserve payment services. . . .”

CPSS, Payment and settlement systems in selected countries (the “BIS Red Book”) (2003)

Financial Market Infrastructure

- **ACCESS TO CENTRAL BANK ACCOUNT SERVICES**
 - Limited access (U.S.)
 - “Depository institutions” (Federal Reserve Act)
 - Securities market clearing and settlement institutions
 - Depository Trust Company and affiliates

Financial Market Infrastructure

- **ACCESS TO CENTRAL BANK ACCOUNT SERVICES**

- Limited access (U.S.)
 - “Depository institutions” (Federal Reserve Act)
 - Special-purpose clearing and settlement institutions
 - CLS Bank International (FX settlements)

Financial Market Infrastructure

- **ACCESS TO CENTRAL BANK ACCOUNT SERVICES**

- Limited access (U.S.)

- “Depository institutions” (Federal Reserve Act)

- Derivatives market clearing and settlement institutions

- CME Clearing House Division

- The Options Clearing Corporation

Financial Market Infrastructure

- **ACCESS TO CENTRAL BANK ACCOUNT SERVICES**
 - The growing importance of non-bank financial institutions and clearing and settlement institutions

Financial Market Infrastructure

▪ ACCESS TO CENTRAL BANK ACCOUNT SERVICES

- The growing importance of non-bank financial institutions and clearing and settlement institutions

“ . . . it is widely accepted that exchanges, CCPs [central counterparties], and CSDs [central securities depositories], do form the infrastructure underlying the operation of financial markets throughout the world, not least because of their importance to the functioning of the markets.”

Ruben Lee, Managing Director, Oxford Finance Group, *Market infrastructure institutions: Definitions and governance matters*

Financial Market Infrastructure

- **ACCESS TO CENTRAL BANK ACCOUNT SERVICES**

- The growing importance of non-bank financial institutions and clearing and settlement institutions

- 1987 Market Break

Financial Market Infrastructure

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- The growing importance of non-bank financial institutions and clearing and settlement institutions

- 1987 Market Break

- 1989 Drexel Burnham Lambert

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- 2008 Bear Stearns, Lehman Brothers, AIG

Financial Market Infrastructure

- POLICY TRADE-OFFS

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- **POLICY TRADE-OFFS**
 - Financial stability

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- **POLICY TRADE-OFFS**

- Financial stability
- Moral hazard and related policy considerations

Financial Market Infrastructure

- **POLICY TRADE-OFFS**
 - Financial stability
 - Moral hazard and related policy considerations
 - Competitive implications

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- **POLICY TRADE-OFFS**

- Financial stability
- Moral hazard and related policy considerations
- Competitive implications
- Efficiency

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- **POLICY TRADE-OFFS**

- Financial stability
- Moral hazard and related policy considerations
- Competitive implications
- Efficiency
- Practicality, cost

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