GENERAL ISSUE: UNDERSTANDING REGULATORY SYSTEMS REQUIRES UNDERSTANDING HOW PRIVATE AND PUBLIC CONTROLS INTERACT.

HOW HAVE PRIVATE AND PUBLIC CONTROLS INTERACTED IN THE DEVELOPMENT OF COMPLEX FINANCIAL TECHNOLOGY IN THE UNITED STATES?
CONCLUDING THEMES:

SINCE 1980 A HIGHLY DEVELOPED AND INFLUENTIAL SYSTEM OF PRIVATE ORGANIZATIONS, OFTEN IN CONCERT WITH REGULATORY ORGANIZATIONS, DEVELOPED AND REGULATED THE OTC DERIVATIVES MARKETS. UNTIL 2007 THE POLICY PRESUMPTION STRONGLY FAVORED PRIVATE CONTROLS.


IMPLEMENTING THE DODD-FRANK ACT WILL REQUIRE RULEMAKING AT LEAST THROUGH 2012 BY THE COMMODITY FUTURES TRADING COMMISSION (CFTC), SECURITIES AND EXCHANGE COMMISSION (SEC), AND BANKING REGULATORS.
THE DODD-FRANK ACT MANDATES STRONGLY FAVOR PUBLIC CONTROLS OF THE DERIVATIVES MARKET. HOWEVER, THE EXISTING STRONG REGULATORY INFRASTRUCTURE FAVORS CONTINUED PRIVATE CONTROLS. HOW THESE TWO FORCES PLAY OUT IS AN INTERESTING SETTING IN WHICH TO STUDY THE INTERACTION OF PRIVATE AND PUBLIC CONTROLS.

POLITICAL, ECONOMIC, OR TECHNICAL INCENTIVES DO NOT FAVOR A PARTICULARLY STRONG ASSERTION OF PUBLIC CONTROLS OVER OTC DERIVATIVES MARKETS BEYOND THE SHORT TERM. THE DODD-FRANK ACT DOES FAVOR SOME ACCELERATION OF TRENDS ALREADY ESTABLISHED BY PRIVATE REGULATORS.
A derivative is an agreement to transfer financial risk that is based on the value of an underlying asset. Derivatives include:

- Exchange-traded future and options contracts
- Swaps and forwards, which are negotiated between two parties and may or may not involve a third party that “clears,” or assures, the transaction
- Combinations and variations among the four categories
Until 1980s, most U.S. derivatives were traded on futures and securities exchanges regulated by the Securities & Exchange Commission (SEC) and/or the Commodity Futures Trading Commission (CFTC).

SEC, CFTC, and exchange regulations govern exchange trading because exchanges can be major public markets affecting the economy and wide groups of investors.

- Derivatives traded on exchanges are standardized futures and options products.
- Public and private regulations make exchange trading operationally stable and transparent.
- Product standardization and regulations reduce the flexibility of parties wanting to use derivative transactions.
Over-the-counter (OTC) derivatives are customized agreements to transfer risk that are negotiated between two parties.

- The OTC derivatives market developed in the 1980s as a way for parties to manage risk or to speculate in ways that were more flexible and less restricted that exchange-traded derivatives.

- The SEC and CFTC did not regulate OTC derivatives until passage of the Dodd-Frank Act in 2010.

- The justification for not regulating OTC derivatives was that they were private contracts among sophisticated parties without broader impacts on the financial markets and economy.
OTC derivatives counterparty relationships without a CCP

Cleared derivatives are negotiated between two parties, like OTC derivatives, but then booked with a clearinghouse.

- The clearinghouse assumes the exposure to both parties. The clearinghouse thus requires both parties to post margin (a type of financial assurance that they will comply with the terms of the transaction).

- Cleared derivatives must be somewhat standardized to facilitate processing and the required margin computations.

- Cleared derivatives do not provide the flexibility of OTC derivatives. The required margin also makes them more costly for the trading parties.

- Regulatory authorities can monitor centrally cleared derivatives more easily. The margin requirement also makes it less likely that parties will default on transactions.
Clearing trades through a Central Counterparty

1. Trades executed bilaterally or on an exchange

   A ----> B
   C ----> D

2. Both sides or the exchange will submit the trades to a central counterparty

   E ----> F

3. Result: central counterparty becomes party to each side of the trade

   B ----> Central Counterparty ----> C
   A ----> Central Counterparty ----> D
   F ----> Central Counterparty ----> E

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<thead>
<tr>
<th>OTC</th>
<th>Cleared</th>
<th>Exchange-traded</th>
</tr>
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<tbody>
<tr>
<td>Trades negotiated over-the-counter</td>
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<td>Trades executed on organized exchanges</td>
</tr>
<tr>
<td>Customized contracts are broken down by trading desk into tradable risks and hedged in liquid markets</td>
<td>Trades limited to standardized contracts</td>
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<tr>
<td>Traded between dealers as principals</td>
<td>All trades are booked with clearinghouse, which is counterparty to all trades</td>
<td>All trades are booked with exchange's clearinghouse, which is counterparty to all trades</td>
</tr>
<tr>
<td>Dealer is normally counterparty to all trades</td>
<td>Mandatory margin requirements</td>
<td>Mandatory margin requirements</td>
</tr>
<tr>
<td>Margin (collateral) often exchanged but subject to negotiation between counterparties</td>
<td>Initial margin</td>
<td>Initial margin</td>
</tr>
<tr>
<td></td>
<td>Variation margin</td>
<td>Variation margin</td>
</tr>
<tr>
<td></td>
<td>Daily settlement (mark to market) and margin calls</td>
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Source: [http://www.isda.org/educat/faqs.html#1](http://www.isda.org/educat/faqs.html#1)
Competing Narratives on Regulation of the Derivatives Market

NARRATIVE A: FAVORING STRONG PUBLIC REGULATORY CONTROLS

• Regulatory controls on new financial products protect investors and financial system stability.

• Requiring financial firms to provide agencies and investors with extensive information enhances market transparency.

NARRATIVE B: FAVORING PRIMARY RELIANCE ON PRIVATE CONTROLS

• Regulatory controls on product development can impede innovation and push business overseas.

• Mandating information disclosure often is costly, mainly gives competitors information, and rarely helps investors and regulatory agencies.
• Laws should direct firms to protect investors to assure market integrity, rather than primarily encouraging “arms length” transactions.

• High capital standards and margin requirements inhibit market disruptions from unexpected losses.

• Reducing investors’ legal obligations for their own financial due diligence damages market controls and distorts legal systems.

• Excessively high capital standards and margin requirements tie up funds unproductively.
• While firms understand their technology more than regulators, their single-minded focus on production harms investors and customers. Strong public regulation is necessary to remedy this condition. Rulemaking procedures can mitigate the public-private information disparity.

• Effective, flexible public oversight of well-functioning private controls is the best option to prevent industry excesses without inhibiting socially valuable financial development. Strong centralized regulatory control of rapidly changing financial markets consistently fails.
THE SHARE OF UNREGULATED ACTIVITIES IN FINANCIAL MARKETS HAS INCREASED IN RECENT DECADES

- THE RISE OF INSTITUTIONAL INVESTMENT, FAVORING RELIANCE ON MARKET VERSUS PUBLIC CONTROLS
- HIGH LEVELS OF INNOVATION PRODUCED NEW, UNREGULATED FINANCIAL INSTRUMENTS
- MARKET PARTICIPANTS GENERATED NEW FINANCIAL INSTRUMENTS, LIKE OTC DERIVATIVES, PARTLY TO AVOID REGULATORY CONTROLS
% Holdings of U.S. Corporate Equities 1945-2010. Institutional investors, who operate with fewer regulatory restrictions and protections, account for largest share of financial market activities. Institutions also trade more actively than individuals.

New, complex, lightly regulated areas of financial markets developed rapidly

Figure 2: Relative Job Complexity


Thomas Philippon and Ariel Reshef, *Wages and Human Capital In U.S. Financial Industry*, Figure 2, March 2011, p. 37).

Source: www.bis.org/statistics/index.htm; data since 1998 not strictly comparable to prior years.
Derivatives dealers regularly took initiatives, frequently in cooperation with regulators or under pressure from regulators, to develop controls for OTC derivatives.


1999: *Counterparty Risk Management Policy Group Report* following Long-Term Capital Management failure

2000: *Passage of Commodity Futures Modernization Act* stipulating that OTC derivatives were not subject to CFTC regulation and easing regulatory controls on derivatives trading on exchanges
2005: *Counterparty Risk Management Policy Group II Report* focusing on need to improve operational systems for processing OTC derivatives transactions

2005: New York Federal Reserve pushed derivatives dealers to reduce delays in operational processing of OTC derivatives transactions and improve systems for OTC derivatives processing.
June 2007

CREDIT DERIVATIVES

Confirmation Backlogs Increased Dealers’ Operational Risks, but Were Successfully Addressed after Joint Regulatory Action
Average Monthly Levels of All OTC Derivatives Confirmations Outstanding (in Business Days) for Large Firms, 2005-2011

Number of Failed Institutions and $ Billions of Failed Assets 1990-2007,
U.S. Corporate Debt and Equity Underwriting 1985-2007 in $ Billions
(Source: SIFMA 2009 Fact Book and Key US Statistics March 2011)
By 2007, ISDA, derivatives dealers, and related organizations constituted the main regulatory infrastructure in the OTC derivatives markets.

- Parties negotiated information sharing bilaterally.
- Courts generally said that derivatives transactions were between sophisticated investors with the responsibility to take care of their own interests.
- Margin requirements, if any, were negotiated bilaterally between parties.
- Operational improvements and stable growth of the derivatives market fit the theme that effective, flexible public oversight of well-functioning private controls is the best option to prevent industry excesses without inhibiting socially valuable financial development.
Number of Failed Institutions and $ Billions of Failed Assets 1990-2010,
U.S. Corporate Debt and Equity Underwriting 1985-2010 in $ Billions
(Source: SIFMA 2009 Fact Book and Key US Statistics August 2011)
THE FINANCIAL CRISIS BEGINNING IN 2007 LED TO THE 2010 WALL STREET REFORM AND CONSUMER PROTECTION ACT.

TWO PERSPECTIVES ON OTC DERIVATIVES IN 2011:

- **UNREGULATED OTC DERIVATIVES WERE AT THE HEART OF THE FINANCIAL CRISIS BECAUSE THEY LED MARKET PARTICIPANTS TO INVEST HEAVILY IN SHAKY FINANCIAL ASSETS THAT COLLAPSED IN VALUE. THIS CATASTROPHIC FAILURE OF CONTROL DEMONSTRATES THE NEED FOR STRONG PUBLIC REGULATION OF THE OTC DERIVATIVES MARKET.**

- **FAILURES IN THE OTC **credit** DERIVATIVES MARKETS WERE PART OF A COMPLEX SERIES OF FAILURES LEADING TO THE FINANCIAL CRISIS. HOWEVER, THE OTC DERIVATIVES MARKET AS A WHOLE FUNCTIONED QUITE WELL BEFORE AND DURING THE FINANCIAL CRISIS. THE INFRASTRUCTURE OF PRIVATE CONTROLS CONTINUES TO BE THE BEST WAY TO MAKE IMPROVEMENTS IN THE OTC DERIVATIVES MARKET.**
The Wall Street Reform and Consumer Protection Act of 2010 (Dodd-Frank) reverses Federal regulatory policy to favor strong public regulatory control of the derivatives markets. It directs the CFTC, SEC, and other regulators to require:

- Exchange-trading and central clearing of OTC derivatives to the fullest extent feasible.
- Posting of margin on all derivatives transactions, with some exemptions to be determined, set in ways to discourage OTC derivatives transactions.
- New business conduct standards designed to protect investors in derivatives, especially “Special Entities” including state and local governments and pension funds.
- Extensive, timely reporting of derivatives transactions to regulators and financial markets.
- The agencies will determine rules specifics through rulemaking procedures.
ONE INITIAL, TENTATIVE IMPRESSION: NO
POLITICAL, ECONOMIC, OR TECHNICAL INCENTIVES
FAVOR A PARTICULARLY STRONG ASSERTION OF
PUBLIC CONTROLS OVER OTC DERIVATIVES
MARKETS BEYOND THE SHORT TERM.
SEC and CFTC Total Employment (September of reference years; 2011 is June) Source: www.fedscope.opm.gov/index.asp
Number of Positions By Occupation, Securities and Exchange Commission, 1998-2011 (data based on September figures for each year; 2011 data from June)
Source: http://www.fedscope.opm.gov/index.asp

- Legal and Kindred
- Accounting and Auditing
- Examinations
- Economists
- Financial Analysis
- Information Technology
Number of Positions By Occupation, Commodity Futures Trading Commission, 2003-2010 (data based on September figures for each year) Source: http://www.fedscope.opm.gov/index.asp

Source: www.bis.org/statistics/index.htm; data since 1998 not strictly comparable to prior years.