Pursuing the Development of a Central Clearing Infrastructure for CDSs

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Outline

1. Current OTC Derivatives Markets
2. Recent Conditions Surrounding OTC Derivatives Markets
3. Efforts in the U.S. and Europe
4. Initiatives by Tokyo Stock Exchange
1. Current OTC Derivatives Markets

- OTC Derivatives market has expanded globally.
- Specifically, Interest Rate Swaps (IRSs) and Credit Default Swaps (CDSs) have shown organic growth.

Global Notional Amount of OTC Derivatives

(USD Bil.)

Source: BIS
1. Current OTC Derivatives Markets

- In Japan, single-name CDSs began trading in 1999.
  In response to increased liquidity, index trades began in 2003.
- Notional amount has increased dramatically since 1999.

**Notional Amount of CDS Trades in Japan**

(USD Bil.)

- Increased approximately 29 times compared to ’99

Source: Bank of Japan
2. Recent Conditions Surrounding OTC Derivatives Markets

- In response to the subprime shock and the bankruptcies of big financial institutions around the world, regulators and relevant organizations began to pay special attention to regulations of unregulated financial markets and products, such as CDSs.

- At the G20 Meeting in Nov. 2008 held in Washington D.C., the participating countries confirmed the following points in a document titled, “Declaration Summit on Financial Markets and the World Economy.”
  ✓ Tasking of Ministers and Experts (excerpt)
    - Strengthening the resilience and transparency of credit derivatives markets and reducing their systemic risks, including by improving the infrastructures of over-the-counter markets;

- G20 also created an “Action Plan to Implement Principles for Reform.”
  ✓ Action Plan for Prudential Oversight (Immediate Actions by Mar. 31, 2009) (excerpt)
    - Supervisors and regulators, building on the imminent launch of central counterparty services for credit default swaps (CDS) in some countries, should: speed efforts to reduce the systemic risks of CDS and over-the-counter (OTC) derivatives transactions; insist that market participants support exchange traded or electronic trading platforms for CDS contracts; expand OTC derivatives market transparency; and ensure that the infrastructure for OTC derivatives can support growing volumes.

- The next G20 meeting will be held in Apr. 2009 and will confirm the progress on the above mentioned issues.
3. Efforts in the U.S. and Europe

- In the U.S.: ICE Trust and CME-Citadel
- In Europe: LIFFE and Eurex are trying to set-up clearing houses for CDS respectively.

<table>
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<tr>
<th>ICE Trust (U.S.)</th>
<th>CME-Citadel (U.S.)</th>
<th>LIFFE (Bclear) (Europe)</th>
<th>Eurex Clearing (Europe)</th>
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<td>InterContinental Exchange (ICE) set up ICE Trust based on “The Clearing Corporation” for the clearing house for CDSs.</td>
<td>Chicago Mercantile Exchange (CME), in cooperation with Citadel, to launch a clearing facility for CDS, named CMDX.</td>
<td>LIFFE started clearing for CDSs on December 22, ’08.</td>
<td>Eurex Clearing intended to start clearing for CDS originally by the end of ’08.</td>
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<td>ICE Trust will initially provide clearing services for index products.</td>
<td>CME acquired regulatory approvals from CFTC and FRB, New York.</td>
<td>LIFFE clears three CDS index products: iTraxx Europe Index, iTraxx Europe Crossover Index, and iTraxx Europe Hi-Vol Index</td>
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<td>ICE Trust was originally scheduled to start operations by the end of ’08 (postponed to early ’09).</td>
<td>CMDX will clear index products (CDX and iTraxx) and single-name products.</td>
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4. Initiatives by Tokyo Stock Exchange

- TSE, in cooperation with Japan Securities Clearing Corp. (JSCC) and Japan Securities Depository Center (JASDEC), launched “the Study Group on Post-trade Processing of OTC Derivatives Trades” in September 2008.
- The Study Group examines the feasibility of centralized post-trade services to promote efficiency, improve risk management and contribute to the further development of OTC derivatives market in Japan.
- The group’s initial product focus is on Interest Rate Swaps and Credit Default Swaps.

Study Group Members (as of March 2009)
- Goldman Sachs Japan Co., Ltd.
- JP Morgan Securities Co., Ltd.
- Daiwa Securities SMBC Co., Ltd.
- Chuo Mitsui Asset Trust and Banking Company, Limited
- Deutsche Securities Inc.
- Nikko Citigroup Limited
- NOMURA SECURITIES CO., LTD.
- Mizuho Corporate Bank Ltd.
- Mizuho Securities Co., Ltd.
- SUMITOMO MITSUI BANKING CORPORATION
- The Bank of Tokyo-Mitsubishi UFJ, Ltd.
- Merrill Lynch Japan Securities Co., Ltd.
- Morgan Stanley Japan Securities Co., Ltd.
- UBS AG, Tokyo Branch

Observers (as of March 2009)
- International Swaps and Derivatives Association, Inc.
- Financial Services Agency, Japan
- Nishimura & Asahi (law firm)
- Bank of Japan
- Japan Securities Dealers Association
- Markit Group Japan K.K.
- Mizuho Bank, Ltd. (representing Japanese Bankers Association)
4. Initiatives by Tokyo Stock Exchange

In the SG’s analysis, post processing for the OTC derivatives market in Japan has the following problems:

(Current Situations)

- Insufficient Coverage of Matching Infrastructures
- Lack of CCP Functionality

(Issues)

(1) Matching Process
- Operational Risk
- Impediment to Expand the Market

(2) Fund Settlement Process
- Operational Risk
- Inefficient Usage of Capital

(3) Counterparty Risk Management
- Cost
- Lack of Liquidity

(4) Transparency of the Market
- Systemic Risk

(Possible Countermeasures)

- Promoting STP for matching processes and contract managements.
- Reducing counterparty risks, promoting fund efficiencies and integrating risk managements by introducing a CCP.
4. Initiatives by Tokyo Stock Exchange

Implication from Equity Market

- After the collapse of Lehman, cash equity trading in OTC markets has been overtaken by TSE’s off-auction block trading market (ToST-NeT).
- Out of a concern for counterparty risk, market participants prefer the exchange market since it has a CCP rather than OTC markets.

Source: Tokyo Stock Exchange, Inc. and Japan Securities Dealers Association
4. Initiatives by Tokyo Stock Exchange

Implications of Lehman Brothers case

- After Lehman’s collapse (Sep. 2008), liquidity in the CDS Markets has declined.
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Next Step

- The Study Group will collate its discussions and publish them in a “Framework Paper for OTC Derivatives Clearing System in Japan (tentative)” by the end of March 2009.

- Following the SG’s discussions and the framework paper, an in-depth analysis for operations, business cases, and possible collaboration with other CCPs overseas is scheduled to start in April 2009.
4. Initiatives by Tokyo Stock Exchange

Issues to consider – CCP Link –

- Each region, such as the U.S., Europe, and Asia, may take responsibility for establishing its own CCP for OTC derivatives.
- We could consider creating links between the CCPs in order to maximize their efficiency.