Counterparty Credit Risk Management with ISDA® Master Agreement and CSA

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Increasing Importance of Robust Counterparty Risk Management

Financial Crisis

Increase in Market Volatility

Large Fluctuation in MTM

Increase in Probability of Default

Robust Counterparty Risk Management is Crucial

- Is your valuation correct?
- Is close-out netting with the counterparty enforceable?
- Does your collateral efficiently work as a credit support?
- Does your internal risk management structure function well?

- ISDA Master Agreement
- Credit Support Documents
- Legal enforceability
- Enhancement of operational infrastructures
- Collaboration and coordination between front office, risk management, legal and operations.
Importance of Correct Valuation in Counterparty Risk Management

- Correct valuation of transactions and collateral is a key to sound counterparty risk management.
- It is necessary to value transactions and collateral, as well as to calculate potential future movements of current valuations.
- Valuation should be daily and correct.
- Valuations are especially important when Events of Default occur under the ISDA Master Agreement
  - Non-defaulting party to calculate the net mark-to-market value (current exposure) of all outstanding transactions under the ISDA Master Agreement on Early Termination Date
  - If collateralized: In addition to the net mark-to-market value of the transactions, non-defaulting party to calculate the sum of the current market value of collateral assets held on Early Termination Date

<table>
<thead>
<tr>
<th>Valuation</th>
<th>Potential future movements</th>
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<tbody>
<tr>
<td>Exposure</td>
<td>Net mark-to-market value of all transactions under the ISDA Master Agreement</td>
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<td>Collateral</td>
<td>The sum of the market value of all collateral assets held inclusive of accrued interest and dividends</td>
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ISDA Master Agreement and CSA
(Components having an impact on credit risk)

- ISDA Master Agreement
  - Legal entity of the counterparty in the ISDA Master Agreement
  - Events of Default, Termination Event, valuation measures of Early Termination Amount, Letter of Guarantee, etc.
  - Transactions covered under the ISDA Master Agreement
  - Parties covered under the ISDA Master Agreement, e.g. Multibranche Party, etc.

- CSA
  - Threshold
  - Minimum Transfer Amount
  - Independent Amount
  - Valuation Percentage (Haircut applied to collateral assets)
  - Frequency of margin calls
  - Transfer Timing of the collateral assets
  - Dispute Resolution etc.
Recent Topics

- Valuation Measures under the ISDA Master Agreement
  - Market Quotation / Loss
  - Close-out Amount

- Amendment to the ISDA CSA
  - Reducing Threshold / Zero Threshold
  - Reducing Minimum Transfer Amount
  - More frequent margin calls
  - Ad-hoc calls
  - Cash Collateral

- Enhancement of collateral management process
  - One of Commitments to improve OTC Derivatives trading infrastructures
Trends in Documentations and Practices in Collateral Management in Japan

- Amendments to the ISDA CSA or changes made to collateral management practices by many firms after recent financial crisis
  - Reduction of Threshold
  - Reduction of Minimum Transfer Amount
  - Increased ad-hoc calls to counterparties
  - Increased frequency of valuations

- Not yet amended nor changes made by many firms
  - Shortening Transfer Timing
  - Increased use of electronic platforms
  - Portfolio reconciliation on regular basis

(Based on the results of “2009 Annual Survey of Collateral use in OTC derivatives in the Japanese Market”)

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Efforts to Enhance Bilateral Collateralization Arrangements for Robust Risk Management (2010 Roadmap for Collateral Management)

- Best Practices for Collateral Management
- Electronic Communication of Margin Calls
- Portfolio Reconciliation Implementation Plan
- Legal Review, Analysis, and Improvements on Current Documentation
- Reducing Barriers to Use of a Third Party in Independent Amount Holding Arrangements
- Promote Efficient Collateralization with CCPs
- Recommendation for Regulators and Legislators