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The Study Group
for Internationalization of Capital and Financial Markets in Japan

Recent Developments in Credit Derivatives market and the Challenges for Japan

Robert Pickel
Executive Director and CEO

Tomoko Morita
Policy Director and Head of Tokyo Office

ISDA®
International Swaps and Derivatives Association, Inc.

Agenda

- Overview of Credit Derivatives
- Motivations for using credit default swaps (CDS) and the Recent Developments
- Challenges for Credit Derivatives Market in Japan

Facts about ISDA

- Incorporated in 1985 with 10 dealer member firms.
- April 2007 membership: Total 789
- Offices
  - New York: Headquarters
  - London: 1996
  - Tokyo & Singapore: 2000
  - Also, Brussels & Washington DC

ISDA's Mission

Primary purpose is to encourage the prudent and efficient development of the privately negotiated derivatives business by:

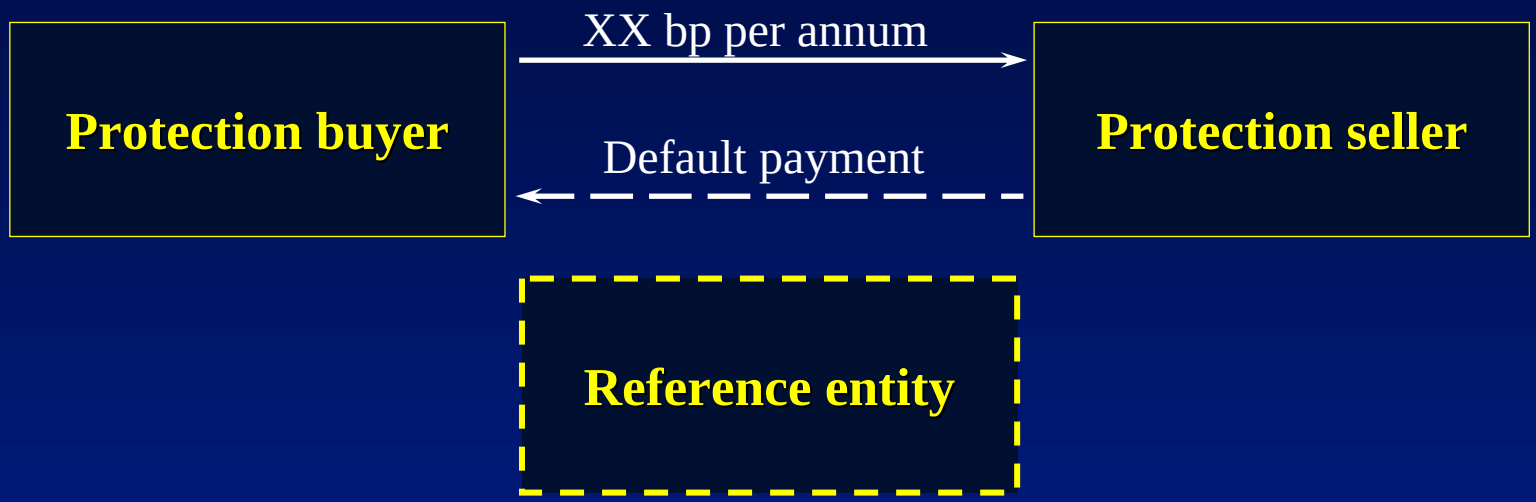
- Documentation: to promote efficient conduct of the business. Promoting the development of sound risk management practices.
- Fostering high standards of commercial conduct
- Advancing international public understanding of the business
- Educating members and others on key issues affecting them.
- Creating a forum for the analysis and discussion of, and representing the common interest of its members on, these issues and developments.

Overview of Credit Derivatives

What are credit derivatives?

- A credit derivative is a privately negotiated, off balance sheet agreement that explicitly transfers credit risk from one party to another.
  - The buyer of credit derivative protection need not own the defaulted asset in order to receive compensation on a credit derivative.
  - The buyer of protection need not suffer an actual loss to receive compensation
- Types of contract
  - Credit default swap
    - Single name
    - Portfolio and index
    - Synthetic securitization
  - Total return swap
  - Credit spread option

Credit default swaps



- Buyer pays premium for protection against default by Reference Entity on specified (notional) amount of exposure
  - Trade confirmation specifies the Reference Entity, the relevant credit events, the underlying notional amount, and the premium paid by the buyer
  - If reference entity defaults or other credit event occurs, seller compensates buyer with default payment equal to net loss
- Notionals are typically USD 10–20 million for investment grade credits

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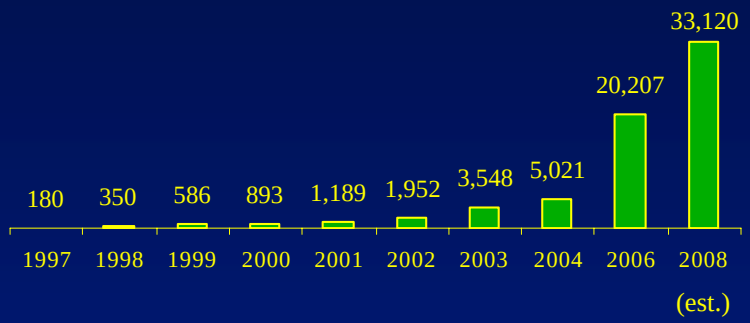
Results of hedging with credit default swap

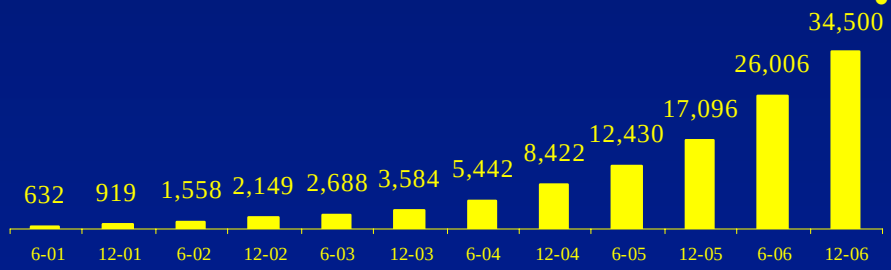
- Protection buyer (Short credit)
  - Gives up exposure to default of Reference Entity without removing reference asset from balance sheet
    - Also reduces concentration risk
    - Gives up opportunity to profit from taking on credit risk
  - Takes on counterparty credit exposure to protection seller
    - Simultaneous default by Reference Entity and protection seller
    - Default by protection seller only, necessitating replacement of protection
- Protection seller (Long credit)
  - Takes on exposure to Reference Entity without need for funding underlying position
  - Possible counterparty exposure to default by protection buyer if CDS subject to close-out (i.e., loss of remaining premium income)

Credit derivatives market statistics

All credit derivatives (BBA)



Credit default swaps (ISDA)



- British Bankers' Association (BBA) Credit Derivatives Report 2006
  - Notional principal outstanding for ***all credit derivatives*** was over $20 trillion at end of 2005
  - Single name CDS are 33% of market, index/tranche trades are 38%, and basket CDS are 2%
  - Most common term is 5 years, with increasing liquidity in 7 years
- ISDA Market Survey Year 2006
  - Notional principal outstanding of credit default swaps was $34.5 trillion as of December 31, 2006
  - Sample is 90 ISDA primary members (including all major dealers)

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Motivations for using credit default swaps (CDS) and the Recent Developments

Motivations for using credit default swaps

- Protection buyer (Short position)
  - Hedging credit exposure through short position (previously not feasible)
    - Reducing credit concentration
    - Free up credit lines
  - Acting on a negative credit view
    - Short a credit (not feasible prior to credit derivatives)
    - Buy protection in anticipation of appreciation in price of protection (or deterioration in reference credit)
- Protection seller (Long position)
  - Diversify portfolio by adding desired credits
  - Act on a positive view of a credit (opposite of above)
  - Reduce funding costs (synthetic lending)
- Additional benefits of credit default swaps
  - Transparency: CDS provide a source of credit pricing information
  - Flexibility: CDS make it possible to unbundle credit risks from other risks

Increased Flexibility for Banks from CDS

- Traditionally, banks could only lend and hold.
- With securitization and, in some markets, an increasingly liquid secondary loan market, banks can lend and sell, but this can create relationship issues with the borrower.
- With the development of credit derivatives, banks can now:

LEND AND HEDGE

Lending and Hedging Interaction

- Two hypotheses about effect of hedging tools on bank's lending decisions:
  - Banks will, in the aggregate, lend more money
  - Banks will, on balance, lower their credit standards because they know they can lay off the risk through CDS

- Experience has shown that banks will typically lend more by virtue of the ability to hedge credit risk:
  - Frees up lines of credit with valued customers
  - More loans will, most likely, mean more defaults, but not necessarily a higher rate of default.

Do Banks Lower Lending Standards Because They Can Hedge?

- Suggestion is that banks are less rigorous in their credit review because they know they can lay off the credit risk they have taken on.
- Reality is that credit decisions are far more complex now.
  - Lending decision: all the same considerations apply
  - Hedging decision adds layers of analysis
    - Counterparty risk
    - Price of the hedge--hedge is not without cost
    - Give up any gain from an improving credit
- One credit decision becomes many, making it even more important to get it right.

Recent Developments in CDS

- Operational Issues
  - Confirmation Backlogs
  - Novations
- Settlement Process
  - Movement from physical to cash
- Diversity of Market Participants
  - Hedge funds
  - Asset managers
  - Corporates and individuals?
- Exchange-traded Credit Derivatives

Challenges for Credit Derivatives Market in Japan

Challenges for credit derivatives market in Japan

- Market factors
  - Lack of market volatility and liquidity
    - Corporate bonds/loans secondary markets are still at the early stage of development
      - buy and hold investors --- Strategies taken by end-users are biased
      - absence of hedge funds who do short-term trading
  - Credit Spread is too tight
    - No incentive to hedge with credit derivatives

Challenges for credit derivatives market in Japan

- Regulatory factors
  - Accounting mismatch
    - Loans and lending-related commitments – accrual accounting, with credit loss provisioning
    - Derivative hedging instruments – Mark-to-market accounting
    - Result is interim earnings volatility that is not reflective of a firm's economic position
  - Regulation to limit big loans to a borrower – banks cannot enjoy benefits if hedging with CDS

Challenges for credit derivatives market in Japan

- Banking Practices
  - "Overbanking" – traditional loan competitions deteriorate the credit spread (→market factor)
  - Relationship banking is still dominant in Japanese banks, which tend to tighten the credit spread (→market factor)
  - In a traditional banking culture, laying off credit risk that a bank decided to take on tend to be considered "not appropriate"
  - Lack of business recognition in trading credit risk

Challenges for credit derivatives market in Japan

- Human resources
  - Lack of (or limited number of) specialists in credit market (i.e. **Quants, Analysts, Risk Managers)**
    - Too quick personnel reshuffle
- Others
  - Systems/infrastructure
  - Lack of client knowledge of the product
  - Complexity of documentation (owing partly to the fact that it is in English)