Credit Derivatives: A Concept Note

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< EXECUTIVE SUMMARY >

This note on Credit Derivatives attempts to explain this genre of instruments, their growth potential in India, the benefits they offer, and the risks associated with them. The focus is on banks and financial institutions, which have had no exposure to Credit Derivatives in the past. The note also touches upon key features of the Draft Guidelines of the Reserve Bank of India (RBI) on Credit Derivatives. The note concludes with a small list of “necessary steps” that the author has tried to identify for players seeking to venture into the Credit Derivatives business.

CREDIT DERIVATIVES: CONTRACTS TO TRANSFER CREDIT RISK

Credit Derivatives have evolved from conventional banking products such as Guarantees and Letters of Credit, for the transfer of credit risk. Credit Derivatives are over-the-counter (OTC) financial contracts, whereby the credit risk of an asset (loan, bond, debenture, receivable) is transferred from one party (Protection Buyer) to another (Protection Seller) against a fee. A transfer of credit risk would mean that in the event of bankruptcy, insolvency, payment default, delinquency, price decline, or rating downgrade of the underlying asset/issuer, the Protection Seller would bear the credit loss. The settlement of the credit loss could be in the form of pre defined fixed payment, cash settlement of the credit loss, or exchange of full payment against the reference asset.

Illustration: Bank A has credit exposure to Company XYZ. Bank A wants to disown the credit risk of Company XYZ. Bank B wants to enhance its fee-based income. Bank B is interested in owning the credit risk arising from Company XYZ. This provides an opportunity for the creation of a Credit Derivative instrument, whereby Bank A transfers the credit risk arising from Company XYZ to Bank B by paying a fee. In the event of default by Company XYZ, Bank B compensates the credit loss to Bank A.

TYPES OF CREDIT DERIVATIVES

Credit derivatives can be divided into two broad categories:
1. Transactions where credit protection is bought and sold:
   (a) Credit default swap (CDS)
   (b) Credit default option
   (c) Credit linked note (CLN)
   (d) Credit linked deposit/Credit/linked certificates of deposit (CLD)
   (e) Repackaged note
   (f) Collaterised debt obligations (CDOs)

2. Total return swaps
   There are other complex structures as well, like Hybrid Credit Derivative. However, a market study in 2002 showed that 67% of the aggregate notional Credit Derivative outstanding belongs to the CDS category, indicating clearly that CDS is the most commonly used Credit Derivative.

CREDIT DERIVATIVES: BENEFITS AND ASSOCIATED RISKS

Credit Derivative instruments offer significant benefits, but have associated risks as well. While these instruments benefit the market in terms of sharing of risks, efficient allocation of capital, provision of flexibility in developing a target risk portfolio, and price discovery, they also carry associated risks like credit risk, liquidity risk, estimation risk, accounting & disclosure risk, and systemic risk.

Credit Derivatives: The Edge over Other Instruments

While credit insurance, guarantees and securitisation offer almost similar benefits like Credit Derivative instruments, they have some limitations too:

- Credit insurance can be offered only by insurance companies
- Guarantees are limited by the current regulation prohibiting banks from offering guarantees in favour of other banks or financial institutions
- Classical securitisation transactions involve substantial transaction costs

MARKET PLAYERS: BANKS ARE THE LEADING PLAYERS

Credit Derivative instruments could benefit a variety of players in the Indian financial market. The likely players are banks, financial institutions, non-banking financial companies (NBFCs), mutual funds, insurance companies, and corporate entities. According to one 2002 survey, the biggest end-users of Credit Derivatives globally, have been banks with a share of almost 55%. The other end-users include insurance entities, reinsurance entities, hedge funds, special purpose vehicles (SPVs), asset managers, and corporate entities.

GROWTH POTENTIAL: ENORMOUS BY INTERNATIONAL TRENDS

In 2002, Credit Derivatives outstanding in the global market were valued at an estimated US$2.6 trillion vis-a-vis the total credit market size of US$18.8 trillion. The growth in Credit Derivatives has been phenomenal during the past few years. The Credit Derivatives outstanding in the global market increased from US$270 billion in 1997 to US$2,554 billion in 2002, reflecting a compounded annual growth rate of 57%.

According to one study in 2002, almost 84% of outstanding default swaps by origin of underlying credit have originated in the US and Europe, with the balance 16% transactions originating from Asia and the Emerging Markets.

Currently, the Credit Derivatives market in India is almost non-existent, but with a significant development potential.

PRICING OF CREDIT DERIVATIVES: VARIOUS APPROACHES

There are basically four approaches used to price credit derivatives:

1. Default Models Based on Ratings;
2. Default Models Based on Credit Spreads;
3. By Reference to Guarantee Product Markets;
4. Replication / Cost of Funds analysis.

Each approach has its own strengths and weaknesses. “Rating-Based approach” is based on probability of default or downgrade as per rating transition matrices and recovery rates. “Credit Spread-Based approach” is based on term structure of an issuer’s credit spread over default free instruments of similar maturity to estimate the probability of default or recovery rate. “Reference to Guarantee-Based approach” is based on prevailing rates of other forms of credit enhancement. Under “Replication / Cost of Funds Analysis approach”, the dealer determines the positions necessary to fund the derivative contract, and how much it costs the dealer to...
enter into each position. The net funding cost (plus reserves and dealer’s profit and loss) is the price of the credit derivative.

**RBI DRAFT GUIDELINES ON CREDIT DERIVATIVES: KEY FEATURES**

The RBI issued draft guidelines for the introduction of Credit Derivatives in India on March 26, 2003. Some of the key features of the guidelines are as follows:

- Banks will be initially permitted to use Credit Derivatives only for the purpose of managing their credit risk. Market making activities by banks in Credit Derivatives are not envisaged for the present. For the present, banks will not be permitted to take long or short Credit Derivative positions with a trading intent.
- Banks will be permitted to use simple Credit Derivative structures like CDS and CLN involving single reference entities.
- Credit Derivatives transactions between related parties will not be allowed till the players gain experience and maturity.
- Non-resident entities cannot be parties to Credit Derivatives in the domestic market for the present.
- Each bank will have to have adequate risk management policies, procedures, and systems and controls in place.
- The Credit Derivative should conform to the minimum criteria, that is, it should be direct explicit, irrevocable and unconditional.
- Transactions may be covered by the 1992 ISDA Master Agreement and the 1999 ISDA Credit Derivatives Definitions [ISDA: International Swaps and Derivatives Association].
- Banks will be required to make adequate disclosures in respect of the credit derivative.

**CREDIT DERIVATIVES: NECESSARY STEPS FOR INTERESTED PLAYERS**

The author believes that likely players could make a small beginning with Credit Derivatives so as to get an exposure and eventually help widen the market for such instruments. The steps to follow for such players would be:

1. Create a small desk for dealing in Credit Derivatives
2. Provide training on concepts
3. Think through the organisational and operating issues
4. Identify potential assets against which protection may be bought
5. Evaluate own strengths and weaknesses before selling protection
6. Enter into one or two small deals to gain more conceptual and transactional clarity and then enter into bigger deals.

**ANNOUNCEMENT**

**Deferment of revised empanelment/categorisation norms for the audit firms to be considered as statutory central/branch auditors for 27 public sector banks, etc.**

Based on the communication received from Reserve Bank of India, the following is brought to the notice of the Members:

“It has been decided that the revised empanelment norms and criteria for the audit firms to be empanelled for considering their names as statutory central/branch auditors of the 27 public sector banks will now to be made applicable with effect from the year 2005-06 instead of from the year 2004-05 as advised earlier vide RBI letter DBS.ARS. No.393/08.91.008/2003-04 dated December 8, 2003 (published in February, 2004 issue of the Institute’s Journal). Further, the panel of statutory branch auditors for 27 public sector banks that will be prepared for the year 2004-05 will remain in force only for that year. However, from 2005-06 and onwards the statutory branch auditors’ panel will be prepared once in two years.”