

Draft guidelines for introduction of Credit Derivatives in India

DBOD.BP. 1057 /21.04.103/2002-03

March 26, 2003

**All Scheduled Commercial Banks
(Excluding RRBs & LABs)**

Dear Sir,

Draft guidelines for introduction of Credit Derivatives in India

Please refer to our circular DBOD.No.BP.520/21.04.103/2002-03 dated October 12, 2002 enclosing 'Guidance Notes on Management of Credit Risk and Market Risk'.

2. Effective management of credit risk is a critical factor in comprehensive risk management and is essential for the long-term financial health of business organizations, especially banks. As a step towards enhancing and fine-tuning the existing risk management practices in banks, a Working Group on Credit Derivatives was constituted in Reserve Bank of India drawing experts from select banks and Financial Institutions and Reserve Bank. The Working Group studied the need and scope for allowing banks to use credit derivatives, the regulatory issues involved and has since submitted its report, which is available on the Reserve Bank of India web-site, rbi.org.in.

3. On the basis of the recommendations of the Working Group, draft guidelines have been prepared keeping in view the present regulatory environment, the state of development of the market for introduction of credit derivatives and the preparedness of the banks for using credit derivative products. Draft guidelines are furnished in the Annexure.

4. Banks are advised to download and study the above guidelines from the RBI web-site and forward us their comments, latest by April 30, 2003 positively.

Yours faithfully,

(M.R.Srinivasan)

Chief General Manager-in-Charge

Encls : As above (25 sheets)

Credit Derivatives- Draft Exposure Guidelines for use of Commercial Banks

Annexure

Credit Derivatives- Draft Exposure Guidelines for use of Commercial Banks

1. Background

1.1 Effective management of credit risk is a critical factor in comprehensive risk management and is essential for the long-term financial health of business organizations, especially banks. Credit risk management encompasses identification, measurement, monitoring and control of the credit risk exposures. Reserve Bank of India had issued Guidelines for Asset Liability Management in February 1999 followed by guidelines on management of other risks such as credit risk, market risk, liquidity risk, interest rate risk, foreign exchange risk and operational risks in October 1999. Detailed guidelines for management of credit risk have recently been issued in October 2002.

1.2 For enabling the banks and the financial institutions, in India, to manage their credit risk effectively it was being felt appropriate to permit them the use of credit risk hedging techniques like the credit derivatives, which are over the counter (OTC) financial contracts and can help banks and financial institutions in managing the risk arising from adverse movements in the credit quality of their loans and advances, and their investments. Banks can derive many benefits from the credit derivatives such as,

- Transfer credit risk and hence free up capital, which can be used in other opportunities,
- Diversify credit risk,
- Maintain client relationships, and
- Construct and manage a credit risk portfolio as per their risk preference and appetite unconstrained by funds, distribution and sales effort.

1.3 A Working Group on introduction of Credit Derivatives in India, comprising officers from the Reserve Bank of India and industry was set up to study the need and scope for allowing banks and financial institutions to use credit derivatives, the regulatory issues involved and make

suitable recommendations in this regard. The Group has since submitted its report, which is available on the Reserve Bank of India Website, rbi.org.in. The draft guidelines detailed herein are based on the recommendations of the Working Group and have been customized keeping in view the present regulatory environment, the state of development of the market for credit derivatives and the preparedness of the banks for using the credit derivative products.

2. Conceptual Aspects

2.1 Definitions

2.1.1 For the purpose of clarity, the various terms used in this exposure Guidance Note are explained hereunder. The definitions are largely based on the ISDA (International Swaps and Derivatives Association) Credit Derivatives Definitions 1999 as modified from time to time. The Working Group has suggested the use of the ISDA Credit Derivatives Definitions 1999 by the participants in the transactions. However, the participants may also use any other definitions as mutually agreed between them.

(i) **Credit derivatives** are **over the counter** financial contracts. They are usually defined as “off-balance sheet financial instruments that permit one party to transfer credit risk of a reference asset, which it owns, to another party **without actually selling** the asset”. It, therefore, “**unbundles**” credit risk from the credit instrument and trades it separately. Credit Linked Notes (CLNs), another form of credit derivative product, also achieves the same purpose, though CLNs are on-balance sheet products. Another way of describing credit derivative is that it is a financial contract outlining potential exchange of payments in which at least one leg of the cash flow is linked to the “performance” of a specified underlying credit sensitive asset.

(ii) **Protection Seller** refers to the party that contracts to receive premiums or interest-related payments in return for assuming the credit risk on an asset or group of assets from the Protection Buyer. The Protection Seller is also known in the market as the Credit Risk Buyer or Guarantor.

(iii) Protection Buyer refers to the party that contracts to transfer the credit risk on an asset or group of assets to the Protection Seller. The Protection Buyer is also known in the market as the Credit Risk Seller or Beneficiary.

(iv) Premium, is the fee the protection buyer pays to the protection seller as in case of insurance business.

(v) Credit event is defined as a scenario or condition agreed between the contracting parties that will trigger the credit event payment from the Protection Seller to the Protection Buyer. Credit events usually include bankruptcy, insolvency, merger, cross acceleration, cross default, failure to pay, repudiation, and restructuring, delinquency, price decline or rating downgrade of the underlying asset / issuer.

(vi) Credit event payment or settlement is the amount that is paid following a credit event. This is defined in the contract, and is normally one of three types:

(a) **Physical delivery:** payment of par or other specified value in exchange for physical delivery of the Reference Asset (or a variety of assets) of the Reference Entity as allowed under some contracts.

(b) **Cash settlement:** payment of par less recovery value. The Reference Asset will normally retain some value after a credit event has triggered settlement of the contract. The recovery value is normally determined at a date up to three months after the credit event, by a dealer poll or auction.

(c) **Fixed Amount:** Payment of a fixed amount.

(vii) Reference Asset refers to the asset to which payments under the credit derivative contract are referenced or linked. It is also called reference obligation.

(viii) Underlying Asset refers to the asset on which credit risk protection is bought by the Protection Buyer. It could be a bank loan, corporate bond / debenture, trade receivable, emerging market debt, municipal debt, etc. It could also be a portfolio of credit products. This is usually also the Reference Asset.

(ix) Reference Entity is the entity upon whose credit the contract is based.

(x) Deliverable Obligation defines what assets are eligible for delivery as settlement in a physical delivery contract. It usually includes Reference Obligation but will often be broader to include other obligations.

(xi) Obligations defines what assets may trigger a Credit Event. These are usually same as the underlying asset.

(xii) Sponsor denotes the entity that places the portfolio in a Special Purpose Vehicle for issue of notes.

(xiii) Senior Debt means that portion of funding in case of structuring of a Collateralized Debt Issue (CDO), which has the lowest risk weight, or the highest rated debt.

(xiv) Mezzanine Debt refers to that portion of funding in case of structuring of a Collateralized Debt Issue (CDO), which has debt in ascending order of risk weights, or in descending order of ratings.

(xv) Equity refers to the balance funding in case of structuring of a Collateralized Debt Issue (CDO), which has the highest risk weight, or the lowest rated debt.

2.2 Types of Credit Derivatives and basic structures:

Credit derivatives can be divided into two broad categories:

(a) Transactions where credit protection is bought and sold; and

(b) Total return swaps.

(a) Transactions Where Credit Protection Is Bought and Sold

(i) Credit Default Swap (CDS)

It is a bilateral derivative contract on one or more *reference assets* in which the protection buyer pays a fee through the life of the contract in return for a *credit event payment* by the protection seller following a *credit event* of the reference entities. In most instances, the Protection Buyer makes quarterly payments to the Protection Seller. The periodic payment is typically expressed in annualized basis points of a transaction's notional amount. In the instance that no pre-specified credit event occurs during the life of the transaction, the Protection Seller receives the periodic payment in compensation for assuming the credit risk on the Reference Entity/Obligation. Conversely, in the instance that any one of the credit events occurs during the life of the transaction, the Protection Buyer will receive a credit event payment, which will depend upon whether the terms of a particular CDS call for a physical or cash settlement. With few exceptions, the legal framework of a CDS – that is, the documentation evidencing the transaction – is based on a confirmation document and legal definitions set forth by the International Swaps and Derivatives Association, Inc. (ISDA). If a Credit Event occurs and physical settlement applies, the transaction shall accelerate and Protection Buyer shall deliver the Deliverable Obligations to Protection Seller against payment of a pre-agreed amount. If a Credit Event occurs and cash settlement applies, the transaction shall accelerate and Protection Seller shall pay to Protection Buyer the excess of the par value of the Deliverable Obligations on start date over the prevailing market value of the Deliverable Obligations upon occurrence of the Credit Event. The procedure for determining market value of Deliverable Obligations is based on ISDA definitions or may be defined in the related confirmation and some cases a pre-determined amount agreed by both parties on inception of the transaction is paid.

The structures of physically settled CDS and cash settled CSD are shown in Figure 1 and Figure 2 respectively.

Figure 1

Physically Settled Credit Default Swap

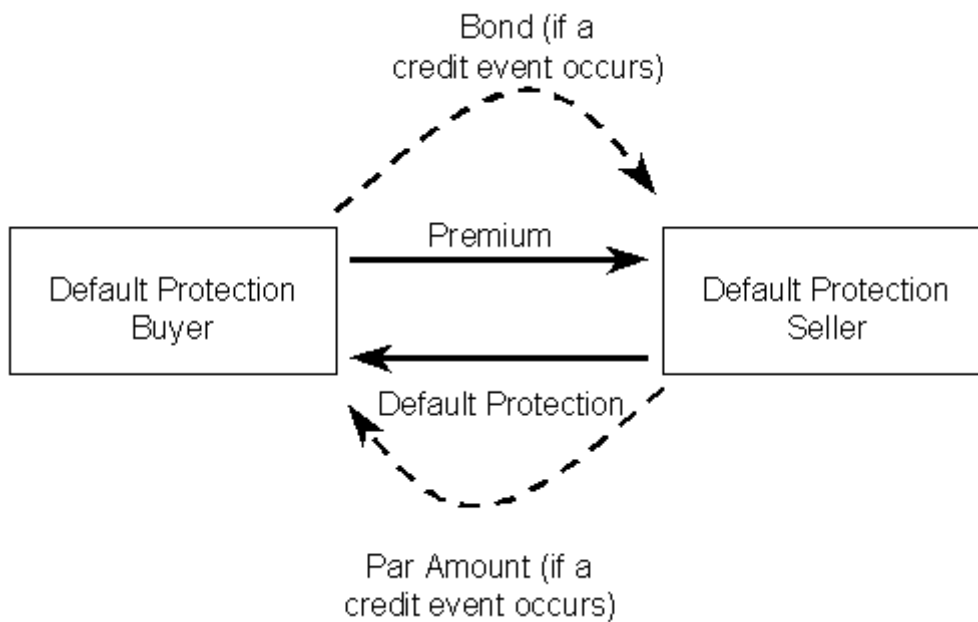
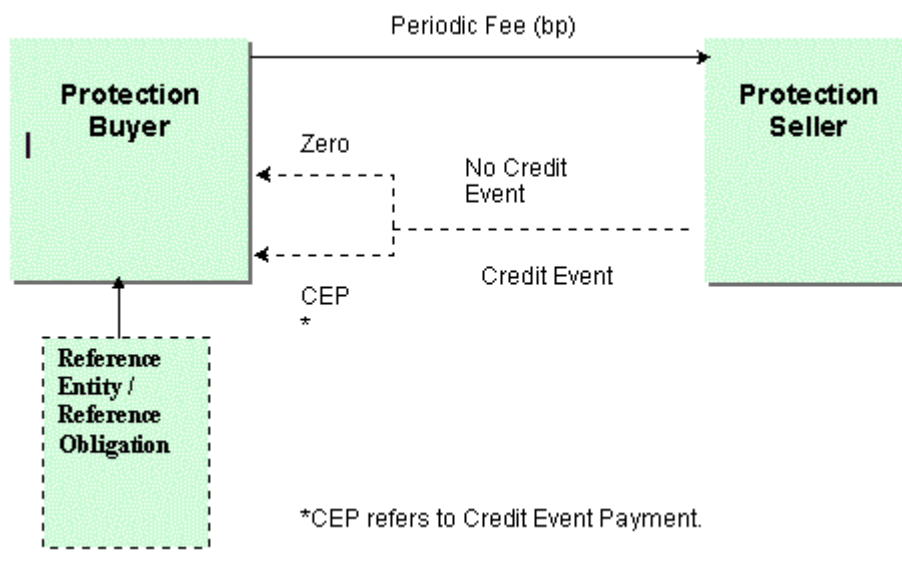


Figure 2

Cash Settled Credit Default Swaps



(ii) Credit Default Option

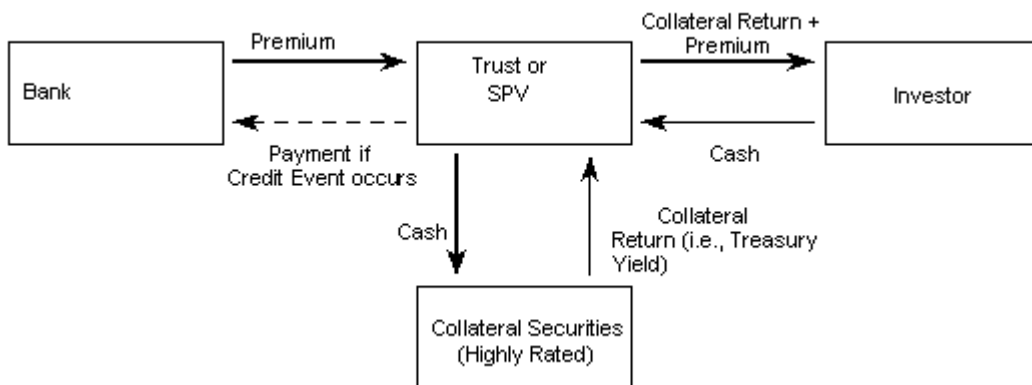
It is a kind of CDS where the fee is paid fully in advance.

(iii) Credit Linked Note (CLN)

It is a combination of a regular note and a credit-option. Since it is a regular note with coupon, maturity and redemption, it is an on-balance sheet equivalent of a credit default swap. Under this structure, the coupon or price of the note is linked to the performance of a reference asset. It offers lenders a hedge against credit risk and investors a higher yield for buying a credit exposure synthetically rather than buying it in the publicly traded debt. CLNs are generally created through a Special Purpose Vehicle (SPV), or trust, which is collateralized with highly rated securities. CLNs can also be issued directly by a bank or financial institution. Investors buy the securities from the trust (or issuing bank) that pays a fixed or floating coupon during the life of the note. At maturity, the investors receive par unless the referenced credit defaults or declares bankruptcy, in which case they receive an amount equal to the recovery rate. Here the investor is, in fact, selling credit protection in exchange for higher yield on the note. The Credit-Linked Note allows a bank to lay off its credit exposure to a range of credits to other parties. Figure 3 shows a simple CLN structure.

Figure 3

Credit Linked Note Structure

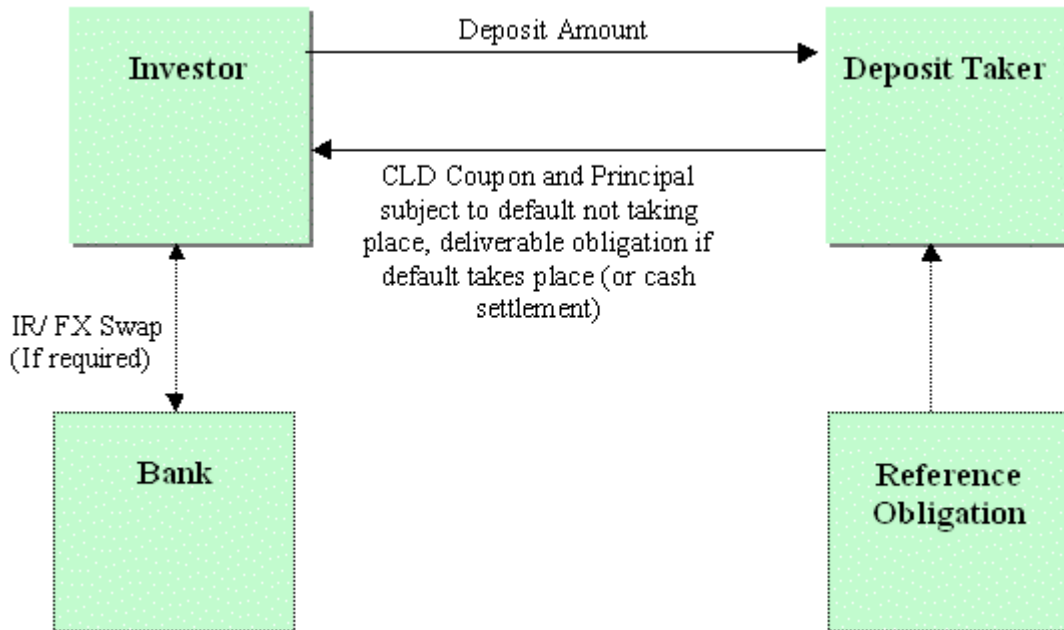


(iv) Credit Linked Deposits/ Credit Linked Certificates of Deposit

Credit Linked Deposits (CLDs) are structured deposits with embedded default swaps. Conceptually they can be thought of as deposits along with a default swap that the investor sells to the deposit taker. The default contingency can be based on a variety of underlying assets, including a specific corporate loan or security, a portfolio of loans or securities or sovereign debt instruments, or even a portfolio of contracts which give rise to credit exposure. If necessary, the

structure can include an interest rate or foreign exchange swap to create cash flows required by investor. In effect, the depositor is selling protection on the reference obligation and earning a premium in the form of a yield spread over plain deposits. If a credit event occurs during the tenure of the CLD, the deposit is paid and the investor would get the Deliverable Obligation instead of the Deposit Amount. Figure 4 shows the structure of a simple CLD.

Figure 4

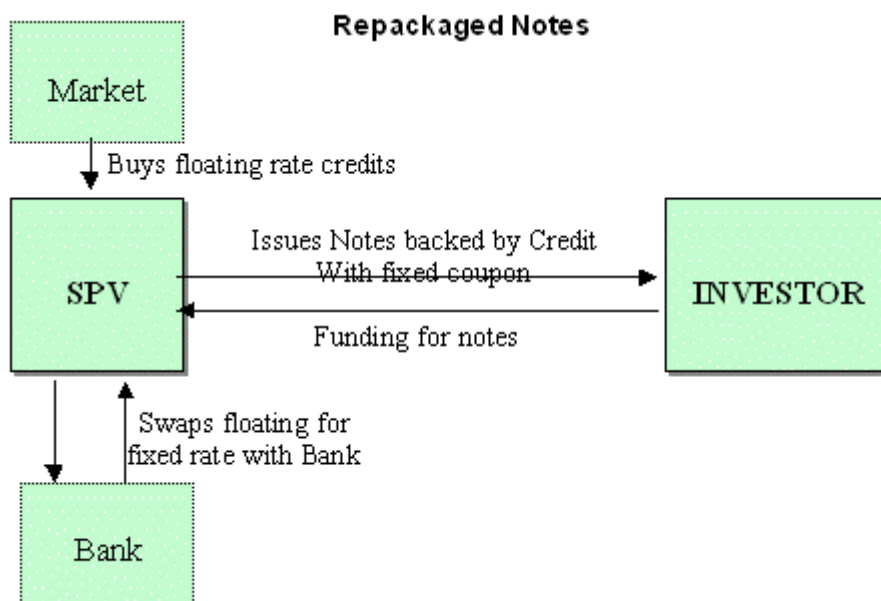


(v) Repackaged Notes

Repackaging involves placing securities and derivatives in a Special Purpose Vehicle (SPV) which then issues customized notes that are backed by the instruments placed. The difference between repackaged notes and CLDs (Credit Linked Deposits) is that while CLDs are default swaps embedded in deposits/notes, repackaged notes are issued against collateral - which typically would include cash collateral (bonds / loans / cash) and derivative contracts. Another feature of Repackaged Notes is that any issue by the SPV has recourse only to the collateral of that issue.

Figure 5 below pictorially depicts the transactions under a Repackaged Note.

Figure 5

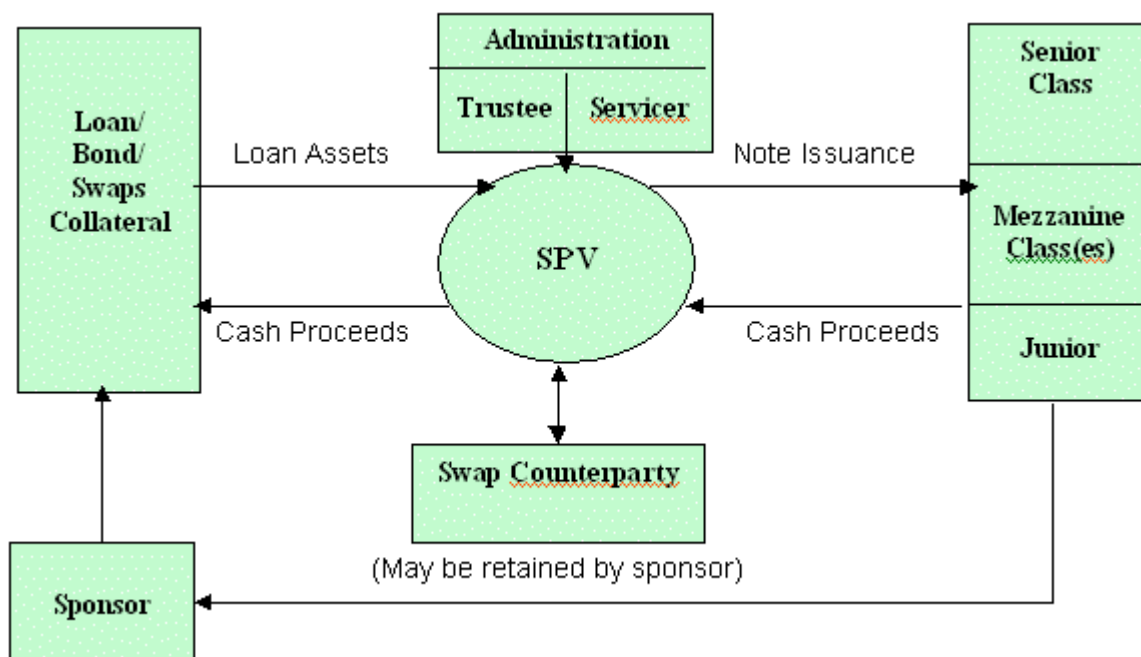


(vi) Collateralised Debt Obligations (CDOs)

CDOs are specialized repackaged offerings that typically involve a large portfolio of credits. Both involve issuance of debt by a SPV based on collateral of underlying credit(s). The essential difference between a repackaging programme and a CDO is that while a simple repackaging usually delivers the entire risk inherent in the underlying collateral (securities and derivatives) to the investor, a CDO involves a horizontal splitting of that risk and categorizing investors into senior class debt, mezzanine class and a junior debt. CDOs may be further categorized, based on the structure with which funding is raised. The funding could be raised by issuing bonds, which are called Collateralised Bond Obligations (CBOs) or by raising loans, which are called Collateralised Loan Obligations (CLOs). The transactions under a CDO are shown in figure 6.

Figure 6

Collateralised Debt Obligations.



(b) Total Return Swaps

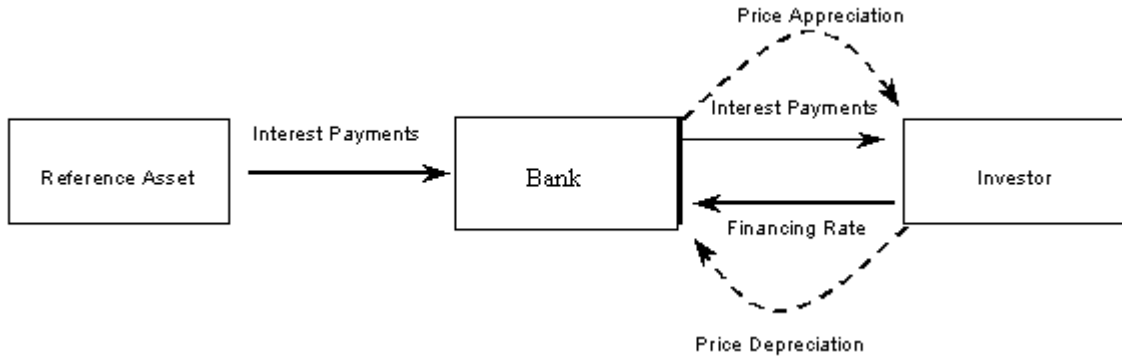
Total Return Swaps (TRS), also called Total Rate of Return Swaps (TROR) are bilateral financial contracts designed to synthetically replicate the economic returns of an underlying asset or a portfolio of assets for a pre-specified time. One counterparty (the TR payer) pays the other counterparty (the TR receiver) the total return of a specified asset, the reference obligation. In return, the TR receiver typically makes regular floating payments. These floating payments represent a funding cost. In effect, a TRS contract allows the TRS receiver to obtain the economic returns of an asset without having to fund the assets on its balance sheet. Should the underlying asset decline in value by more than the coupon payment, the TRS receiver must pay the negative total return, in addition to the funding cost, to the TRS payer. At the extreme, a TRS receiver can be liable for the extreme loss that a reference asset may suffer following, for instance, the issuing company’s default.

As such, a TRS is a primarily off-balance sheet financing vehicle. In contrast to credit default swaps, which only transfer credit risk, a TRS transfers not only to credit risk (i.e. the improvement or deterioration in credit profile of an issuer), but also market risk (i.e. any increase or decrease in general market prices). In TRS payments are exchanged among counterparties upon changes in market valuation of the underlying, in addition to the occurrence of a credit event as is the case with CDS contracts.

Figure 7 shows the structure of a simple TRS.

Figure 7

Total Return Swap



3. Scope of Application

Institutions covered

(i) These guidelines will apply to all commercial banks.

Extant RBI instructions on guarantees

(ii) In terms of extant RBI instructions banks are precluded from issuing direct financial guarantees favouring other banks / financial institutions for loans extended except in case of infrastructure projects, provided the bank issuing guarantee takes a funded share in the project at least to the extent of 5% of the project cost and undertakes normal credit appraisal, monitoring and follow up of the project. These instructions relating to bank guarantees will not be applicable to transactions pertaining to use of credit derivatives as derivatives are normally concluded under standardized master agreements, are structurally different from plain bank guarantees, and subject to ongoing risk controlling, risk management and valuation procedures.

Type of activities

(iii) Banks will be initially permitted to use credit derivatives only for the purpose of managing their credit risk, which includes

- Buying protection on loans and investments for reduction of credit risk,
- Selling protection for the purpose of diversifying their credit risk and reducing credit concentrations and taking exposure in high quality assets,

Market making activities by banks in credit derivatives are not envisaged for the present.

(iv) For the present banks will not be permitted to take long or short credit derivative positions with a trading intent. It means that banks may hold the derivatives in their banking books and not in the trading books except in case of Credit Linked Notes, which can be held as investments in the trading book if the bank so desires.

Types of derivative products

(v) The credit derivatives range from plain vanilla products to complex structures. The valuation standards, accounting norms, capital adequacy issues, methodologies for identifying risk components and concentrations of risks, especially in case of complex credit derivative structures are in the evolutionary stage. Therefore, currently RBI proposes to restrict banks to use simple credit derivative structures like credit default swaps and credit linked notes described in paragraph 2.2 (a) (i), (ii) and (iii) only, involving single reference entities, in the initial phase. The credit default options will be treated as credit default swaps for regulatory purposes.

Parties to the transactions

(vi) RBI has been allowing transactions between the banks and their financial services subsidiaries on the principle of arms' length relationship i.e., the transactions should be on the basis of market related rates and based on free availability of information to both the parties. As the derivatives market will take time to develop, it would be difficult to have objective price discovery mechanism in the beginning and determine whether an arms' length relationship exists or not. Therefore, RBI proposes not to allow credit derivatives transactions between related parties till the players gain experience and maturity. Except for the above there will be no restrictions on the parties to the transactions.

Exchange Control Issues

(vii) It is the intention of RBI to develop the credit derivatives as a domestic product for the domestic loan and investments market, initially. As under the present exchange control regulations, there are certain restrictions on non-residents to acquire, hold and dispose of immovable property in India, non-resident entities cannot be parties to credit derivative transactions in the domestic market for the present.

(viii) The underlying assets on which credit derivatives can be written could be either the rupee denominated assets or foreign currency denominated assets originated by domestic entities and having resident entities as the obligors. In case of foreign currency assets, the premiums and the credit event payments can be denominated in foreign currency. In such cases, the participants in the transactions can only be such banks and financial institutions who are authorized to deal in foreign exchange.

4. Capital Adequacy and Provisioning

4.1 Recognition of protection of credit risk- Minimum Conditions

Bank fulfills the following criteria of recognition of protection of credit risk:

4.1.1 Existence of adequate Risk Management Policies, Procedures, and Systems and Controls

The credit derivatives activity to be undertaken by bank should be under the adequate oversight of its Board of Directors and senior management. Written policies and procedures should be established to cover credit derivatives business. Banks using credit derivatives should have adequate policies and procedures in place to manage associated risks. There should be adequate separation between the function of transacting credit derivatives business and those monitoring, reporting and risk control. The participants should verify that the types of transactions entered into by them are not inappropriate to their needs and needs of the counterparty. Further, all staff

engaged in the business should be fully conversant with the relevant policies and procedures. Any changes to the policy or engagement in new types of credit derivatives business should be approved by the Board.

Policies

The policy duly approved by the Board of Directors should cover at the minimum;

- i. The bank's strategy, appetite and limits for different types of credit derivatives business,
- ii. Authorization levels for engaging in such business and identification of those responsible for managing it,
- iii. Procedure for measuring, monitoring, reviewing, reporting and managing the associated risks like credit risk, market risk, liquidity risk and specific risks,
- iv. Fair and cautious valuation and risk assessment of a portfolio's position,
- v. Calculation of derivative value adjustments independent of the business, size and reasons for adjustments to be transparent to the business management,
- vi. Pursuing the underlying borrower when a credit event payment has been triggered,
- vii. Determination of contractual characteristics of the products,
- viii. Use of best market practices.

Procedures

The bank should have adequate procedures for:

- i. Measuring, monitoring, reviewing, reporting and managing the associated risks,
- ii. Full analysis of all credit risks to which the banks will be exposed, the minimization and management of such risks,
- iii. Ensuring that the credit risk of a reference asset is captured in the bank's normal credit approval and monitoring regime,

iv. Management of market risk associated with credit derivatives held by banks in their trading books by measuring portfolio exposures at least daily using robust market accepted methodology,

v. Management of the potential legal risk arising from unenforceable contracts and uncertain payment procedures,

vi. Valuation procedures and mechanism to determine adequate liquidity, especially, where the reference asset is a loan or the derivative has multiple obligors. Sometimes, banks may face liquidity risk when counterparties are able to terminate transactions prematurely under the contract. This should be indicated in the bank's liquidity management policy,

vii. Determination of an appropriate liquidity reserve to be held against uncertainty in valuation. This is important especially where the reference asset is illiquid like a loan,

viii. Valuation adjustments to decrease the asset or increases the liability arising from the initial valuation of a credit derivative transaction by bank's approved mathematical model. The purpose of the valuation adjustments are to report in the bank's statements of accounts the "fair" economic value that the bank expects to realise from its credit derivative portfolios based upon current market prices and taking into account credit and market risk characteristics arising from those portfolio position.

Systems and Controls

The senior management should establish an independent framework for reporting, monitoring and controlling all aspects of risks, assessing performance, valuing exposures, monitoring and enforcing position and other limits. The systems and controls should:

i. Ensure that the types of transactions entered into by the counterparty are not inappropriate for their needs,

ii. Ensure that the senior most levels of management at the counterparty are involved in transactions by methods like obtaining from the counterparty a copy of a resolution passed by their Board of Directors, authorising the counterparty to transact in credit derivatives,

iii. Ensure that counterparties do not enter into transactions that violate other rules and regulations,

iv. Ensure adequate Management Information Systems to make senior management aware of the risks being undertaken, which should provide information on the types of transactions carried out and their corresponding risks, the trading income/losses,

realized/unrealized from various types of risks/exposures taken by the bank, contribution of derivatives to the total business and the risk portfolio, and value of derivative positions,

v. Assess and account for the possibility of default correlation between reference asset and the protection provider,

vi. Ensure that trading activities, if undertaken (in case of credit linked notes for the present) are properly supervised and are subject to an effective framework of internal controls and audits so that transactions are in compliance with regulations and internal policy of execution, recording, processing and settlement,

vii. Ensure that the bank has the ability to pursue the underlying borrower when a credit event payment has been triggered.

4.1.2 Satisfaction of minimum criteria

The credit derivative should conform to the following **minimum criteria i.e.**, it should be **direct, explicit, irrevocable and unconditional**. These criteria are explained below:

Direct

The credit protection must represent a direct claim on the protection provider.

Explicit

The credit protection must be linked to specific exposures, so that the extent of the cover is clearly defined and incontrovertible.

Irrevocable

Other than a protection purchaser's non-payment of money due in respect of the credit protection contract, there must be no clause in the contract that would allow the protection provider unilaterally to cancel the credit cover.

Unconditional

There should be no clause in the protection contract that could prevent the protection provider from being obliged to pay out in a timely manner in the event that the original obligor fails to make the payment(s) due.

4.1.3 Satisfaction of Minimum Operational requirements

In order for protection from a credit derivative to be recognised, the following conditions must be satisfied:

(a) The credit events specified by the contracting parties must, at a minimum, include:

- failure to pay the amounts due according to reference asset specified in the contract;

- a reduction in the rate or amount of interest payable or the amount of scheduled interest accruals;
 - a reduction in the amount of principal or premium payable at maturity or at scheduled redemption dates;
 - a change in the ranking in the priority of payment of any obligation, causing the subordination of such obligation.
- (b) Contracts allowing for cash settlement are recognised for capital purposes insofar as a robust valuation process is in place to estimate loss reliably. There must also be a clearly specified period for obtaining post-credit-event valuations of the reference asset, typically no more than 30 days;
- (c) The credit protection must be legally enforceable in all relevant jurisdictions;
- (b) Default events must be triggered by any material event, e.g. failure to make payment over a certain period or filing for bankruptcy or protection from creditors;
- (c) The grace period in the credit derivative contract must not be longer than the grace period agreed upon under the loan agreement;
- (d) The protection purchaser must have the right/ability to transfer the underlying exposure to protection provider, if required for settlement;
- (e) The identity of the parties responsible for determining whether a credit event has occurred must be clearly defined. This determination must not be the sole responsibility of the protection seller. The protection buyer must have the right/ability to inform the protection provider of the occurrence of a credit event;
- (f) Where there is an asset mismatch between the exposure and the reference asset then:
- the reference and underlying assets must be issued by the same obligor (i.e. the same legal entity); and
 - the reference asset must rank *pari passu* or more junior than the underlying asset, and legally effective cross-reference clauses (e.g. cross-default or cross-acceleration clauses) must apply.

4.2 Recognition of amount of protection bought and sold

4.2.1 The credit event payment or settlement amount will determine the amount of credit protection bought /sold in case of CDS. This could be payment of par or other specified value in exchange for physical delivery of the Reference Asset (or a variety of assets of the Reference Entity as allowed under some contracts (**Physical Delivery Settlement**)), or payment of par less recovery value (**Cash Settlement**) or payment of fixed amount as per the CDS agreement (**Fixed Amount Settlement**). In case of CLN the amount of protection bought will be equal to the funds raised from issue of the CLNs and the amount of protection sold will be equal to the book value of the CLN.

4.2.2 Some credit derivative contracts may contain a materiality threshold specified for determining the loss that must be reached before a credit event is triggered. Therefore, the materiality threshold may affect the amount of credit protection that may be recognized.

4.3 Capital Adequacy for Credit Derivatives in the Banking Book

As stated in Paragraphs 3.(ii) and (iii) above banks will be initially permitted to use credit derivatives only for the purpose of managing their credit risk and not for taking derivative positions with a trading intent. It means that banks may hold the derivatives in their banking books and not in the trading books except in case of Credit Linked Notes, which can be held as investments in the trading book.

4.3.1 Protection Buyer

Where an asset is protected by a credit default swap (CDS), the Protection Buyer may replace the risk weight of the underlying asset with that of the Protection Seller to the extent of amount of protection as determined as per paragraph 4.2 above. Where an asset is protected by a credit derivative funded by cash (CLN), the Protection Buyer may reduce the amount of its exposure to the underlying asset by the amount of funding received. For the unprotected portions the risk weight of the underlying asset will apply. The treatment of capital requirement will be modified if there are mismatches in the structures as discussed below.

Presence of Mismatches

In many credit derivative transactions, it is difficult to achieve an effective hedge due to the existence of mismatches and therefore, suitable adjustments will be made to the extent of credit protection recognizable on account of presence of such mismatches as outlined below:

(a) **Asset mismatches:** Asset mismatch will arise if the underlying asset is different from the reference obligation (in case of cash settlement) or deliverable obligation (in case of physical settlement). The recognition of availability of protection will be made in terms of provisions of paragraph 4.1.3(f) above.

(b) **Maturity mismatches:** If the maturity of the credit derivative contract is less than the maturity of the underlying asset, then it would construe as a maturity mismatch though the

protection buyer would be completely hedged if the contract maturity were to be higher than the maturity of the underlying asset. In case maturity mismatches the capital adequacy will be determined in the following manner.

- (i) If the residual maturity of the derivative product is less than one year no protection will be recognized and the risk weight of the underlying asset will apply.
- (ii) If the residual maturity of the credit derivative is one year or more protection will be recognized and the risk weight will be weighted average of risk weight of the Protection Seller and risk weight of the reference entity (weighted by proportions of period for which protection is available and the period for which protection is not available, counted from the date of contract till maturity of the derivative. Thereafter, the risk weight of the reference will apply.

(c) **Currency mismatches:** A currency mismatch is caused if the credit derivative contract is denominated in a currency different to the underlying asset. In such an event, the credit protection obtained should be marked to market to the prevailing exchange rate and if the value of credit protection (valued in terms of the currency of the underlying asset) is less than the value of the underlying asset, the residual risk must be risk-weighted on the basis of the underlying asset.

4.3.2 Protection Seller

Where a Protection Seller has sold protection through a CDS it acquires credit exposure to the Reference Asset. This exposure is to be risk-weighted according to the risk weight of the Reference Asset. In a funded credit derivative (CLN), the Protection Seller acquires on balance-sheet exposure to both the Reference Asset and the Protection Buyer. The CLN can be held in the banking book or trading book as decided by the bank. If held in the banking book, the amount of exposure will be equal to the book value of the note and will be risk weighted by the higher of the risk weight of the reference entity or the Protection Buyer. Where the credit derivative is referenced to more than one obligor, the amount of credit protection provided would depend on the structure of the contract.

Capital adequacy for Credit Derivatives in the Trading Book

As stated in paragraph 3.(v) above banks will hold investments in CLNs issued by Protection Sellers in their banking book or trading book. The assets in the trading book are held primarily for generating profit on short-term differences in prices/yields as against assets in the banking book which are contracted basically on account of relationship or for steady income and statutory obligations and are generally held till maturity. A CLN held in the trading book will represent a position to the note itself, with an embedded credit default product. A credit-linked note has a notional position to the specific risk of the Reference Asset. There is also specific risk to the Protection Buyer and general market risk according to the coupon or interest rate of the note. The risk weight for such positions would be the risk weight for 'All other Investments' i.e. 102.50% as per present guidelines.

4.5 Provisioning Requirements

4.5.1 Sufficient provisioning (based on what would be the provisioning applicable if the reference asset were on the seller's books) would have to be made by the credit protection seller if it is offering credit protection on a non performing asset.

4.5.2 The protection buyer should not make any provision for a reference asset that has turned NPA and on which it has bought protection which is valid on date.

5. Exposure Norms

5.1.1 Exposure ceilings for all fund based and non-fund based exposures will be computed in relation to total capital as defined under capital adequacy standards. As per present policy, from April 1, 2003 exposure calculation will be computed on the basis of 100% of non-fund based exposures in addition to fund-based exposures.

5.1.2 While determining the overall sectoral / borrower group / individual company exposure, suitable reduction will be allowed in the level of exposure with respect to the credit protection bought by means of credit derivatives. Conversely, the protection seller's exposure would increase as the protection seller acquires what is equivalent to a credit exposure on the reference asset. For the credit protection seller, the method of measuring exposure that would be applicable would be similar to the manner in which non-fund based credit limits such as

guarantees are reckoned. Once the exposure is computed to individual/group entities, banks will have to ensure that they are within the overall ceiling as laid out in the relevant RBI guidelines.

6. Issues Relating to Documentation

It is recommended that transactions in credit derivatives may be covered by the 1992 ISDA Master Agreement and the 1999 ISDA Credit Derivatives Definitions and subsequent supplements to definitions with suitable modifications to suit conditions in India. Credit Linked Notes that are typically issued as bonds will be subject to additional documentation requirements of bonds. However, banks should consult their legal advisors about adequate documentation and other legal requirements and issues of credit derivative contracts before engaging in any transactions.

7. Issues related to Accounting

7.1 Normal accounting entries for credit derivative transactions are fairly straightforward depending on cash flows that take place at various points in time during the tenor of the transaction. e.g. for a credit default swap, there will be periodic payment of fees by the protection buyer to the protection seller. If there is a credit event, then settlement will be appropriately accounted depending on whether cash settled or settled via physical exchange versus par payment.

Fair Value Accounting

7.2 Prudent accounting principles require that derivatives create assets and liabilities which should be captured on the balance sheet at fair economic value based on current market prices taking into account credit and market risk characteristics arising from these positions. All future cash flows arising from the contracts should be brought to present value using appropriate discount rates from mid-market data. The determination of future cash flows may require use of appropriate valuation models ranging from simple deterministic derivations to exotic pricing models.

7.3 Banks may adopt suitable norms for accounting of Credit Default Swaps and Credit Linked Notes with the approval of their respective boards. All derivatives should be fair valued at least on a quarterly basis. The changes in fair value must be reported in current earnings.

8. Maintenance of Statutory reserves on CLN issued by banks

Normally CLNs will be issued by SPVs set up by banks for specific purpose. However, it is possible that some banks may consider issuing CLNs themselves, in which case they have to maintain CRR and SLR as required. However, before issuing CLNs, banks will be required to take prior approval of RBI.

9. Disclosures

The banks will be required to disclose the following in the Notes on Accounts of their annual accounts in respect of the credit derivative transactions:

- The types of transactions carried out and their corresponding risks,
- The gains/losses, realized/unrealized from various types credit derivative transactions undertaken by the banks,
- Contribution of derivatives to the total business and the risk portfolio,
- Fair Value of derivative positions.
