<u>Annex</u>

Purpose

To put in place a regulatory framework for transacting of credit default swaps by the Reserve Bank regulated entities.

Classification

A statutory guideline issued by the Reserve Bank under Section 35A of the Banking Regulation Act 1949.

Previous Guidelines superseded

Nil

Scope of application

To all commercial banks (except RRBs and LABs) and primary dealers

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1 INTRODUCTION

1.1 Background

1.1.1 Credit risk is one of the material risks to which banks are exposed. Effective management of credit risk is, therefore, a critical factor in banks' risk management processes and is essential for the long-term financial health of banks. Credit risk management encompasses identification, measurement, monitoring and control of the credit risk exposures. While banks in India have developed systems and skills for identification, measurement and monitoring their credit risk exposures, the options available to them for controlling or transferring their credit risks were confined to the traditional means viz. restricting assumption of fresh exposures, outright sale of an existing fund based exposure, obtaining credit guarantee cover,

obtaining credit insurance, and securitisation. While banks have been provided the options of managing their interest rate risk and foreign currency risks through the use of derivatives, similar option is not available for managing their credit risks.

- 1.1.2 Credit derivatives are financial contracts designed to transfer credit risk on loans and advances, investments and other assets/ exposures from one party (protection buyer) to another party (protection seller). Transfer of credit risk may be for the whole life of the underlying asset or for a shorter period. The transfer may be for the entire amount of the underlying asset or for a part of it. A credit derivative may be referenced to a single entity or to a basket of several entities. Credit derivatives may also include cash instruments (e.g. credit linked notes) where repayment of principal is linked to the credit standing of a reference asset/entity.
- 1.1.3 Credit derivatives may be used for a variety of reasons. These include:
- To reduce capital required to support credit risk exposures;
- To release credit exposure limits to a counterparty;
- To reduce concentrations by shedding exposures to a counterparty (without affecting the relationship with the borrower since there is no transfer of title of the asset) or to a sector;
- To assume exposures to a counter-party or to a sector to diversify risks or to fill gaps in credit quality spectrum;

1.2 Scope

1.2.1 The regulatory framework provided in the guidelines covers use of credit default swaps where (a) the reference entity is a single resident entity; (b) it is settled either through physical delivery or through cash delivery or through payment of a fixed amount; (c) the eligible participants are as defined in paragraph 1.6; and (d) the product / contract is in strict compliance with various other requirements specified in these guidelines. The reference to 'bank' in the guidelines would include all the eligible participants.

1.2.2 The Reserve Bank will continue to assess the use and development of credit derivatives by banks. The prudential guidelines set out below may, therefore, be subject to review and revision as considered necessary to promote a healthy credit derivative market in the country.

1.3 Key Concepts

1.3.1 The broad meaning of various terms used in these guidelines is furnished below. These terms have been supplemented as appropriate at various relevant portions of these guidelines. However, while executing documentation under ISDA Master Agreements, banks are advised to refer to ISDA credit Derivative Definitions.

Calculation Agent

The party designated in a credit derivative contract to determine the required payments under the credit derivative transaction.

Credit Default Swap A type of credit derivative in terms of which, the protection buyer pays a fee to the protection seller in exchange for a credit event payment if a credit event occurs. This product is explained in detail in paragraph 2.

Credit event

An event specified under a credit derivative contract that affects the reference entity and triggers a credit event payment, e.g. bankruptcy, failure to pay, obligation acceleration, obligation default, repudiation/ moratorium of an obligation, restructuring in respect of the reference entity.

Credit event payment

The amount payable by the protection seller to the protection buyer when a credit event occurs. This is normally specified in the credit derivative contract and is normally made through one of the three types specified in paragraph 2.2.

Cross-acceleration clause

Recognition as a credit event of the occurrence of a default, event of default, or some other similar condition with respect to an obligation of the reference entity (other than the reference obligation or underlying obligation) which has resulted in that obligation becoming due and payable before it would otherwise become due and payable. This would count as a credit event as if the issuer had defaulted on the reference obligation.

Cross-default clause

Similar to a cross acceleration but more stringent to the extent that occurrence of a default, event of default, or some other similar condition with respect to an obligation of the reference entity (other than the reference obligation or underlying obligation) provides the reference obligation holder to declare a default of the reference obligation.

Deliverable asset/ obligation A financial obligation of a single reference entity which is uniquely specified in a credit derivative contract, that can be delivered by the protection buyer, under the terms of the credit derivative contract, if a credit event occurs. A deliverable asset/ obligation shall have the same obligor as the reference asset/ obligation and shall be identical with reference to (a) nature of obligation (b) seniority; and (c) maturity. A deliverable asset/ obligation is relevant for credit derivatives that are to be physically settled.

Materiality threshold

A term in some of the credit derivative contracts that is negotiated by the protection buyer and protection seller, whereby a pre-determined materiality (or loss) threshold must also be reached for the payment to be triggered. A materiality threshold may either determine the level of loss that must be reached before a credit event payment is triggered, or may reduce the amount of payout. Materiality can be determined with reference to the price of the underlying asset/ obligation or reference asset/ obligation. Materiality may also be referenced to the movement in credit spreads or credit ratings.

Premium

It is the fee the protection buyer pays to the protection seller.

Protection buyer

The party from whom the credit risk is transferred (without transfer of title to the underlying asset).

Protection seller

The party to whom the credit risk is transferred (without transfer of title to the underlying asset).

Reference asset / obligation

A financial obligation of a single reference entity which is uniquely specified in a credit derivative contract, to which the payments under the credit derivative contract or instrument are linked. It is usually a security issued by the reference entity, but could also be a loan. It mainly provides a basis for cash settlement or defines the seniority of deliverable obligations for physical settlement where applicable.

Reference entity

The single legal entity – corporate (including bank) – whose credit risk is being transferred by the credit derivative contract.

Underlying asset/ obligation

The financial obligation (a security or loan) of a single reference entity, on which a protection buyer is seeking to buy credit risk protection. The underlying asset need not be identical to the reference asset/ obligation or the deliverable asset/ obligation but shall have the same obligor.

1.4 Types of credit derivatives

1.4.1 The credit derivatives products can be broadly classified under the following four types and may range from plain vanilla products to complex structures.

Credit default swaps;

Total return swaps;

Credit linked notes; and

Credit spread options

- 1.4.2 As part of the gradual process of financial sector liberalisation in India, it is considered appropriate to introduce credit derivatives in a calibrated manner at this juncture. The risk management architecture of banks has strengthened and banks are on the way to becoming Basel II compliant, providing adequate comfort level for the introduction of such products. Furthermore, the recent amendment to the Reserve Bank of India Act, 1934 has provided legality of OTC derivative instruments, including credit derivatives. However, in view of the complexities involved in the valuation, accounting, and risk management aspects of credit derivatives and in view of the evolutionary stage of these skills among the eligible participants, the Reserve Bank has decided to initially allow only plain vanilla credit default swaps which satisfy the following requirements:
- a) the reference entity shall be a single legal entity, which is a resident:
- b) the reference entity shall be the obligor for underlying asset/ obligation, the reference asset/ obligation and the deliverable asset/ obligation.
- c) the protection buyer and the protection seller shall be resident entities;

- d) the underlying asset/ obligation, the reference asset/ obligation, the deliverable asset/ obligation shall be to a resident and denominated in Indian Rupees;
- e) the credit derivative contract shall be denominated and settled in Indian Rupees;
- f) the underlying asset/ obligation, the reference asset/ obligation, and the deliverable asset/ obligation shall be a tradable financial security or a fund-based credit exposure or a credit risk exposure to a reference entity assumed by a protection seller in a CDS contract. Primary Dealers may transact in CDS where the underlying/reference/deliverable asset/ obligation is a corporate debt security;
- g) the reference asset/ obligation shall be identical to the underlying asset / obligation with reference to (a) nature of obligation; (b) seniority (equal or junior); and (c) maturity;
- h) The protection seller shall not transact in credit derivatives with underlying assets/ obligations or deliverable assets/ obligations which they are not permitted to undertake;
- 1.4.3 The underlying, reference and deliverable assets/ obligations shall be those which are (a) rated; (b) the rating is current and maintained by the rating agency; (c) the rating is published in the monthly bulletin of the rating agency; and (d) the rating is included by the rating agency in its transition matrix.
- 1.4.4 Since a materiality threshold may affect the amount of protection that is recognised, banks are not permitted to transact in credit derivatives which include materiality thresholds.

1.5 Types of credit event payment

1.5.1 The credit event payment made by the protection seller may be made through any one of the following three types (explained in paragraph 2.2), which is to be specified in the credit derivative contract documentation: physical settlement, cash settlement or settlement of a fixed amount.

1.6 Types of participants

1.6.1 The participants in the credit derivative market can be broadly divided into protection buyers and protection sellers. These terms as relevant for the CDS market in India, are elaborated below:

Protection buyer

- Commercial Banks and Primary Dealers shall be eligible protection buyers.
- A protection buyer shall have an underlying credit risk exposure in the form of permissible underlying asset / obligation.

Protection sellers

• Commercial Banks and Primary Dealers (subject to extant regulations) shall be eligible protection sellers.

RBI will consider allowing insurance companies and mutual funds as protection buyer or protection seller as and when their respective regulators permit them to transact in credit default swaps.

2. PRODUCT REQUIREMENTS

2.1 Structure

2.1.1 Credit Default Swap **(CDS)** is a bilateral derivative contract on one or more *reference assets* in which the protection buyer pays a premium 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 (premium) 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 contract, 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 contract, 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. Generally, 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 the contract is settled through one of the types of settlement explained in paragraph 2.2, which is specified in the contract.

2.1.2 A CDS may be used

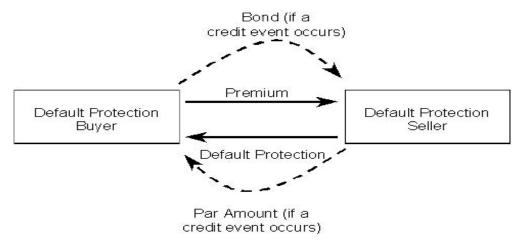
- By the eligible protection buyers, for buying protection on specified loans and advances, or investments where the protection buyer has a credit risk exposure; and
- By the eligible protection sellers, for selling protection on specified loans and advances, or investments on which the protection buyer has a credit risk exposure.

2.2 Settlement methodologies

A CDS may specify that on occurrence of a credit event the protection buyer shall deliver the reference obligation to the protection seller, in return for which the protection seller shall pay the face value of the delivered asset to the protection buyer. This type of settlement is known as "physical settlement". This settlement takes place in a CDS where the protection is bought on a specific reference obligation. It is also possible that the CDS contract may specify a number of alternative obligations of the reference entity that the protection buyer can deliver to the protection seller. These are known as deliverable obligations and this may apply in a CDS contract where the protection is bought on the reference entity instead of a specific obligation of the reference entity. Where more than one deliverable obligation is specified, the protection buyer will deliver the cheapest of the list of deliverable obligations. This is referred to as the cheapest to deliver

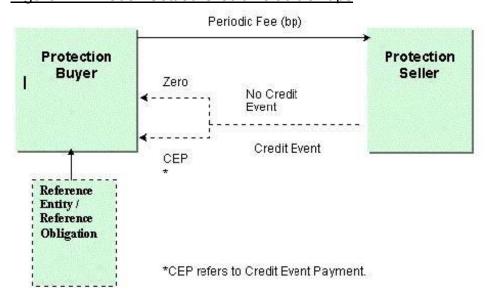
contract. The structure of a physically settled CDS is shown in Figure 1 below. This type of settlement is also known as *payment of par value*.

Figure 1: Physically Settled Credit Default Swap



2.2.2 A CDS may specify that on occurrence of a credit event the protection seller shall pay difference between the nominal value of the reference obligation and its market value at the time of credit event. This type of settlement is known as "cash settlement". This type of settlement is also known as payment of par less recovery. A calculation agent plays an important role in the process of settlement.

Figure 2: Cash Settled Credit Default Swaps



2.2.3 A CDS may specify a pre-determined value of the credit event payment on occurrence of a credit event. This may be the nominal value of the swap contract. Such a swap is known as a digital credit derivative. This type of settlement is known as "fixed amount settlement". This type of settlement is also known as binary payout.

2.3 Documentation

2.3.1 It is recommended that transactions in credit derivatives may be covered by the 1992 or 2002 ISDA Master Agreement and the 2003 ISDA Credit Derivatives Definitions and subsequent supplements to definitions, as amended or modified from time to time. However, banks should consult their legal advisors about adequate documentation and other legal requirements and issues concerning credit derivative contracts before engaging in any transactions. Banks should document the establishment of the legal enforceability of these contracts in all relevant jurisdictions before they undertake CDS transactions.

2.4 Credit events

- 2.4.1 The most important element of a CDS contract is the explicit identification of credit event(s) that will trigger a credit event payment. Definitions of credit events are provided in the 2003 ISDA Credit Derivatives Definitions. Some of the possible credit events are:
- Bankruptcy
- Obligation Acceleration
- Obligation Default
- Failure to pay
- Repudiation/ Moratorium
- Restructuring
- 2.4.2 The credit events identified in the ISDA definitions attempt to make a comprehensive list of events that may have an adverse impact on the credit quality of the reference entity or cause an adverse impact on the price of the

reference obligation. The parties to a CDS may include all of those events or select only those that they feel are the most relevant.

2.5 Minimum requirements

- 2.5.1 The credit derivative should conform to the following general criteria to be recognised as a credit risk protection:
- A CDS contract must represent a direct claim on the protection seller and must be explicitly referenced to specific exposures of the protection buyer, so that the extent of the cover is clearly defined and incontrovertible. The contract must be irrevocable; there must be no clause in the contract that would allow the protection seller unilaterally to cancel the cover or that would increase the effective cost of cover as a result of deteriorating credit quality in the underlying asset / obligation.
- ii) The CDS contract shall not have any clause that could prevent the protection seller from making the credit event payment in a timely manner after occurrence of the credit event and completion of necessary formalities in terms of the contract.
- iii) The protection seller shall have no recourse to the protection buyer for losses.
- iv) The credit events specified in the CDS contract shall contain as wide a range of triggers as possible with a view to adequately cover the credit risk in the underlying / reference asset and, at a minimum, cover the following. (If the set of credit events is restrictive, it is possible that the credit derivative will transfer insufficient risk.)
- o failure to pay the amounts due under terms of the underlying obligation that are in effect at the time of such failure (with a grace period that is closely in line with the grace period in the underlying obligation);
- bankruptcy, insolvency or inability of the obligor to pay its debts, or its failure or admission in writing of its inability generally to pay its debts as they become due, and analogous events;

- restructuring of the underlying obligation involving forgiveness or postponement of principal, interest or fees that results in a credit loss event (i.e. charge-off, specific provision or other similar debit to the profit and loss account); and
- v) CDS contracts must have a clearly specified period for obtaining post-credit-event valuations of the reference asset, typically no more than 30 days;
- vi) The credit protection must be legally enforceable in all relevant jurisdictions;
- vii) The underlying asset/ obligation shall have equal seniority with, or greater seniority than, the reference asset/ obligation, and legally effective cross-reference clauses (e.g. cross-default or cross-acceleration clauses) should apply.
- viii) The protection buyer must have the right/ability to transfer the reference/deliverable asset/ obligation to the protection seller, if required for settlement;
- ix) The credit risk transfer should not contravene any terms and conditions relating to the reference / deliverable / underlying asset/ obligation and where necessary all consents should have been obtained.
- x) If the reference obligation in a credit derivative does not include the underlying obligation, sub-paragraph (xiii) below governs whether the asset mismatch is permissible.
- xi) The credit derivative shall not terminate prior to expiration of any grace period required for a default on the underlying obligation to occur as a result of a failure to pay. The grace period in the credit derivative contract must not be longer than the grace period agreed upon under the loan agreement.

- xii) 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 seller of the occurrence of a credit event;
- xiii) Where there is an asset mismatch between the underlying asset/ obligation and the reference asset/ obligation then:
- the reference and underlying assets/ obligations must be issued by the same obligor (i.e. the same legal entity);
- the reference asset must rank *pari passu* or more junior than the underlying asset/ obligation; and
- there are legally effective cross-reference clauses
 (e.g. cross-default or cross-acceleration clauses) between the reference asset and the underlying asset.

3. RISK MANAGEMENT

3.1 Role of Board and Senior management

- 3.1.1 Banks' credit derivative activities shall be governed by the risk management, corporate governance and suitability and appropriateness requirements stipulated in our 'Comprehensive Guidelines on Derivatives' issued vide our circular DBOD.No.BP.BC. 86/21.04.157/2006-07 dated April 20, 2007.
- 3.1.2 Banks should consider carefully all related risks and rewards before entering the credit derivatives market. They should not enter into such transaction unless their management has the ability to understand and manage properly the credit and other risks associated with these instruments. They should establish sound risk management policy and procedures integrated into their overall risk management.

- 3.1.3 Credit risk assumed in connection with a credit derivative should undergo the bank's usual credit approval procedure and henceforth be subject to established review, monitoring and information requirement.
- 3.1.4 Banks which are protection buyers should periodically assess the ability of the protection sellers to make the credit event payment as and when they may fall due. The results of such assessments should be used to review the counterparty limits.
- 3.1.5 Banks which are active in the credit derivative market shall have in place internal limits on the gross amount of protection sold by them on a single entity as well as the aggregate of such individual gross positions. These limits shall be set in relation to the bank's capital funds. Banks shall also periodically assess the likely stress that these gross positions of protection sold, may pose on their liquidity position and their options / ability to raise funds, at short notice.
- 3.1.6 Banks should be aware of the potential legal risk arising from an unenforceable contract, e.g. due to inadequate documentation, lack of authority for a counterparty to enter into the contract (or to transfer the asset upon occurrence of a credit event), uncertain payment procedure associated with bankruptcy proceedings or inability to determine market value when required. They should consult their legal advisers on these and related legal aspects before engaging in credit derivative transactions.
- 3.1.7 Banks should address conflicts of interest that may arise within the institution in respect of privileged information if there is no widely traded asset of the reference entity.
- 3.1.8 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 use of credit derivatives. 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 of monitoring, reporting and risk control. The participants should verify that the types of transactions entered into by them are appropriate 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.

3.2 Policy requirements

- 3.2.1 The policy duly approved by the Board of Directors should cover at the minimum:
- i. The bank's strategy i.e., whether for hedging or for trading, appetite and limits for 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. Appropriate accounting and valuation principles for the credit derivatives.
- v. Pursuing with the underlying borrower when a credit event payment has been triggered,
- vi. Determination of contractual characteristics of the products,
- vii. Use of best market practices.

3.3 Procedures

- 3.3.1 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. This function in no case should be entrusted to the desk dealing with credit derivatives.

- 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. 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 increase the liability arising from the initial valuation of a credit derivative transaction by bank's approved 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.

3.4 Systems and Controls

- 3.4.1 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 appropriate 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 that (a) the credit derivative contract confirmations are received promptly and verified for accuracy; (b) appropriate systems to track the delays in confirmations and to escalate the delays in such confirmations to the appropriate levels within the bank; and (c) the systems provide for an appropriate authority (preferably the Chief Executive Officer) to decide on cessation of dealing

with the counterparties where the confirmations are in arrears beyond a reasonable number of business days.

- v. 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,
- vi. Assess and account for the possibility of default correlation between reference asset and the protection provider,
- vii. Ensure that trading activities, if undertaken, 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,
- viii. Ensure that the bank has the ability to pursue the underlying borrower when a credit event payment has been triggered.

4. PRUDENTIAL NORMS

4.1 Eligible counterparties

4.1.1. 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 credit derivative market in India will take some time to develop, it would be difficult to have an objective and transparent price discovery mechanism at this stage and, therefore, difficult to determine whether an arms' length relationship exits or not. Therefore, banks are not permitted to enter into credit derivative transactions where their 'related parties' are the counterparties or where the related parties are reference entities. Related parties for the purpose of these guidelines will be as defined in 'Accounting Standard 18 – Related Party Disclosures'. In the case of foreign banks operating in India, the term related parties shall include an entity which is a related party of the foreign bank, its parent, or group entity.

4.2 Classification – trading book & banking book

4.2.1 Credit derivatives qualify as a financial derivative and hence shall be included in the trading book unless (a) it is designated as a hedge of a credit risk exposure in the banking book at the time of entering into the derivative transaction; and (b) it is satisfying the hedge effectiveness criterion.

4.3 Applicability of guarantee norms

4.3.1 A CDS contract will not be deemed to be a guarantee and will consequently not be governed by the regulations applicable to bank guarantees. This is because CDS contracts are normally concluded under standardized master agreements, they are structurally different from bank guarantees, they may have a secondary market and they are regulated under these special regulations.

4.4 Amount of protection under CDS

- 4.4.1 **Amount of credit protection:** The credit event payment or settlement amount will determine the amount of credit protection bought /sold in case of CDS. The amount of credit protection shall be the amount that the protection seller has undertaken to pay in the event of occurrence of a credit event specified in the CDS contract without netting the value of the reference asset.
- 4.4.2 Amount of risk assumed when protection is sold: When a bank has sold credit protection using a credit derivative, it should be assumed that the protection seller has assumed credit risk on 100 per cent of the amount of protection (as defined in paragraph 4.4.1) irrespective of the credit events specified or mismatches if any between the underlying asset/ obligation and the reference / deliverable asset / obligation with regard to asset or maturity.
- 4.4.3 **Recognition of amount of protection bought:** When a bank has bought protection, the amount of credit protection (as defined in paragraph 4.4.1) shall be adjusted if there are any mismatches between the underlying asset/ obligation and the reference / deliverable asset / obligation with regard to *asset* or *maturity*. These are dealt with in detail in the following paragraphs.

- 4.4.4 **Asset mismatches:** Asset mismatch will arise if the underlying asset is different from the reference asset or deliverable obligation. Protection will be reckoned as available by the protection buyer only if the mismatched assets meet the requirements specified in paragraph 2.5.1 (xiii) above.
- 4.4.5 **Maturity mismatches:** The protection buyer would be eligible to reckon the amount of protection as per paragraph 4.4.1 if the maturity of the credit derivative contract were to be equal or more than the maturity of the underlying asset. If, however, the maturity of the credit derivative contract is less than the maturity of the underlying asset, then it would be construed as a maturity mismatch. In case of maturity mismatch the amount of protection will be determined in the following manner.
- i) If the residual maturity of the credit derivative product is less than one year no protection will be recognized.
- ii) If the residual maturity of the credit derivative contract is one year or more protection proportional to the period for which it is available will be recognized. When there is a maturity mismatch the following adjustment will be applied.

$$Pa = P \times (t-1) \div (T-1)$$

Where:

Pa = value of the credit protection adjusted for maturity mismatch

P = credit protection (as per paragraph 4.4.1) adjusted for any haircuts

t = min (T, residual maturity of the credit protection arrangement) expressed in years

T = min (5, residual maturity of the underlying exposure) expressed in years

Example (4.4.5: Suppose the underlying asset is a loan of Rs. 100 to a corporate where the residual maturity of 5 years and the residual maturity of the CDS is 4 years, the amount of credit protection is computed as under:

$$100 * \{(4-1) \div (5-1)\} = 100*(3 \div 4) = 75$$

iii) Once the residual maturity of the credit derivative contract reaches one year, protection ceases to be recognised.

4.5 Capital adequacy for Protection Buyer

- 4.5.1 Where the amount against which credit protection is held, is less than the amount of the exposure, and the covered and uncovered portions are of equal seniority, i.e. the bank and the protection provider share losses on a prorata basis, capital relief will be afforded on a proportional basis: i.e. the protected portion of the exposure will attract the risk weight applicable to the protection seller, with the remainder treated as unprotected. If the risk weight applicable to the protection seller is higher than that applicable to the reference entity the risk weight may not increase. For the unprotected portion of the exposure, if any, the risk weight relevant for the reference entity/ underlying asset, whichever is higher, will apply.
- 4.5.2 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 in paragraph 4.4.

4.5.3 **Maturity mismatches:**

- i) If the residual maturity of the credit derivative product is less than one year no protection will be recognized and the risk weight of the underlying asset will continue to apply.
- ii) If the residual maturity of the credit derivative contract is one year or more protection will be recognized, but shall be adjusted for maturity mismatch, if any. Consequently, where there is a maturity mismatch, an additional capital charge will apply for the unprotected portion of the credit exposure. The unprotected credit exposure will attract the risk weight of the underlying asset / reference entity, whichever is higher. Once the residual maturity of the credit derivative contract reaches one year, protection ceases to be recognised and the risk weight of the underlying asset/ reference entity, whichever is higher, will apply.
- iii) When there is a maturity mismatch with recognised credit protection, the risk weighted asset of the exposure will be computed as under:

Example 4.5.3: Continuing with the example 4.4.5 - A, suppose the underlying asset is a loan to a corporate warranting a risk weight of 100%, the credit risk protection seller is a bank which attracts a risk weight of 20%, the residual maturity of the loan is 5 years, the residual maturity of the CDS is 4 years, the amount of credit protection is as under: $100 * (3 \div 4) = 75$

The risk weight would be (75 * 20%) + (25*100%) = 40%

Therefore, the risk weight on the underlying exposure would be 40% until the residual maturity of the credit derivative is more than one year, thereafter the risk weight will be 100%.

- 4.5.4 If the sum of the capital needed for the underlying asset (after protection has been recognised) plus the forward exposure exceeds the original capital requirement for the underlying asset, the credit derivative can be ignored and the underlying asset may be risk weighted as normal.
- 4.5.5 Where a bank has hedged significant credit risk using CDS of shorter maturity than the underlying exposures, it should consider whether it would have sufficient capital to support the risk in the event of a replacement contract being unavailable immediately on maturity of the credit risk protection, or how such "rollover" risk could otherwise be avoided or limited.
- 4.5.6 As with securitisation, the extensive use of credit derivatives to facilitate risk transfer may lead to a change in the profile of the assets remaining on a bank's balance sheet, in terms of both quality and spread. The Reserve Bank will consider these implications in assessing the bank's overall capital requirements.
- 4.5.7 Where a protection purchased by a bank is not recognised by these guidelines as a credit protection {for example under the circumstances mentioned in paragraph 4.5.3(ii)} the credit protection is ignored for both capital adequacy and credit exposure purposes. However, these positions are to be included in the bank's trading book.

4.6 Capital Adequacy for Protection Seller

- 4.6.1 Where a Protection Seller has sold protection through a CDS it acquires exposure to the credit risk of the deliverable asset/ reference asset to the extent of the amount of protection computed as per paragraph 4.4. This exposure should be risk-weighted according to the risk weight of the reference entity or reference asset, whichever is higher.
- 4.6.2 The protection seller will also have an exposure on the protection buyer as a long position in a series of zero coupon bonds issued by the protection buyer (representing the periodic payment of premium).

4.7 Capital adequacy for Credit Derivatives in the Trading Book

- 4.7.1 Recognition of positions: The general norms for recognising positions by the participants dealing in CDS are as under:
- a) A credit default swap does not normally create a position for general market risk.
- b) A CDS creates a notional long or short position for specific risk in the reference asset/ obligation. The notional amount of the CDS must be used and the maturity of the CDS contract will be used instead of the maturity of the reference asset/ obligation.
- c) The premium payable / receivable create notional positions in government securities of relevant maturity with the appropriate fixed or floating rate. These positions will attract appropriate capital charge for general market risk.
- d) A CDS contract creates a counterparty exposure on the protection seller on account of the credit event payment and on the protection buyer on account of the amount of premium payable under the contract.
- 4.7.2 Banks may fully offset the specific risk capital charges when the values of two legs (i.e., long and short) always move in the opposite direction and broadly to the same extent. This would be the case when the two legs consist of completely identical instruments including the identity of the reference entity, maturity, and coupon; there is an exact match between the maturity of both the

reference obligation and the credit derivative, and the currency of the underlying exposure; the credit events are identical (including their definitions and settlement mechanisms) . In these cases, no specific risk capital requirement applies to both sides of the position.

- 4.7.3 Banks may offset 80% of the specific risk capital charges when the value of two legs (i.e. long and short) always moves in the opposite direction but not broadly to the same extent. This would be the case when a long cash position is hedged by a credit default swap (or vice versa) and there is an exact match in terms of the reference obligation, and the maturity of both the reference obligation and the credit derivative. In addition, key features of the credit derivative contract (e.g. credit event definitions, settlement mechanisms) should not cause the price movement of the credit derivative to materially deviate from the price movements of the cash position. To the extent that the transaction transfers risk, an 80% specific risk offset will be applied to the side of the transaction with the higher capital charge, while the specific risk requirement on the other side will be zero.
- 4.7.4 Banks may offset partially the specific risk capital charges when the value of the two legs (i.e. long and short) usually moves in the opposite direction. This would be the case in the following situations:
- (a) The position is captured in paragraph 4.7.2 or paragraph 4.7.3 but there is a maturity mismatch between the credit protection and the underlying asset.
- (b) The position is captured in paragraph 4.7.3 but there is an asset mismatch between the cash position and the credit derivative. However, the underlying asset is included in the (deliverable) obligations in the credit derivative documentation.

In these cases rather than adding the specific risk capital requirements for each side of the transaction (i.e. the credit protection and the underlying asset) only the higher of the two capital requirements will apply.

4.7.5 In cases not captured in paragraphs 4.7.2 to 4.7.4, a specific risk capital charge will be assessed against both sides of the position, without any offsets.

4.7.6 **Protection Seller:**

- a) The *protection seller* in a credit-default swap should enter into the maturity ladder a long position in a notional government debt instrument with appropriate fixed or floating rate, where regular fee/ premia cash flows are to be received, to reflect the general market risk associated with those cash flows.
- b) A specific risk capital charge must also be calculated on the long position in the reference entity (reference asset/ obligation).
- capital charge using the current exposure method if fee/ premia payments are outstanding. While computing the current exposure on the counterparty for transactions in the trading book the potential future exposure add-on factor of 10% should be applied. For contracts with multiple exchange of principal, the factor is to be multiplied by the number of remaining payments in the contract. The protection seller shall apply the add-on factor if it is subject to closeout upon the insolvency of the protection buyer while the underlying is still solvent. In this case, the add-on should be capped to the amount of unpaid premia.

4.7.7 **Protection buyer:**

- a) The *protection buyer* in a credit-default swap should enter into the maturity ladder a short position in a notional government debt instrument with appropriate fixed or floating rate, where regular fee/ premia cash flows are to be paid, to reflect the general market risk associated with those cash flows.
- b) A specific risk capital charge must also be calculated on a short position in the reference entity (reference asset/ obligation).
- c) The protection buyer in a CDS contract relies on the protection seller to pay the credit event payment if a credit event occurs, and therefore, should recognise a counterparty risk exposure on the protection seller.
- d) The protection buyer should compute the counterparty capital charge using the current exposure method. While computing the current exposure on the counterparty for transactions in the trading book the potential future exposure add-on factor of 10% should be applied. For contracts with multiple

exchange of principal, the factor is to be multiplied by the number of remaining payments in the contract.

4.8 Exposure Norms

- 4.8.1 **Protection buyer:** While computing its credit exposure to a reference entity, the protection buyer (a) may set off the exposure to the reference entity; and (b) shall reckon this exposure (which is non-fund based) on the protection seller to the extent of credit protection purchased through a CDS contract where there is no maturity mismatch. Where there is a maturity mismatch, credit derivatives do not reduce the credit exposure to the underlying asset/ reference entity and, therefore, the protection buyer shall continue to reckon exposure on the underlying asset/ obligor.
- 4.8.2 **Protection Seller:** Conversely, while computing its credit exposure to a reference entity, the protection seller shall add to the existing exposure (if any) on the reference entity, the extent of credit protection sold through a CDS contract, as a non-fund based exposure on the reference entity. In addition, the protection seller shall reckon an off-balance sheet credit exposure on the protection buyer to the extent of the premia receivable periodically over the term of the credit derivative contract.
- 4.8.3 Once the aggregate credit exposure on the reference entity or the protection seller or the protection buyer, including credit derivative contracts, is computed, banks will have to ensure that they are compliant with the prudential credit exposure limits (the lower of regulatory and internal limits) applicable to the reference entities/ protection sellers. In case the reference entity is a commercial bank or a cooperative bank, compliance with the internal limits set for each of those counterparties should be complied with. For the purpose of these guidelines
- a) the participants which are not subjected to a regulatory limit on their counterparty credit risk exposures similar to commercial banks but are subject to regulatory capital adequacy requirement, shall observe a counterparty exposure limit of 15 per cent of their capital funds or the counterparty exposure limits as stipulated by their regulator, whichever is less;

- b) exposure will include both fund based and non-fund based exposures;
- c) exposure shall be reckoned as limits or outstanding whichever is higher;
- d) participants which do not have a capital adequacy requirement similar to commercial banks shall compute their counterparty exposure limits as 15 per cent of their net worth. These entities will compute net worth as "paid up capital + reserves revaluation reserves accumulated losses intangible assets goodwill (if any)"
- 4.8.4 Extent of credit protection purchased / sold shall be reckoned as indicated in paragraph 4.4.

4.9 Provisioning Requirements

- 4.9.1 **Protection Buyer:** The underlying asset in respect of which the protection buyer has bought credit risk protection will continue to be on the protection buyer's balance sheet. Consequently, the protection buyer shall hold adequate "provision for standard assets" until the occurrence of a credit event.
- 4.9.2 **Protection Seller:** The protection seller is not assuming a fund based credit exposure on the reference entity/ underlying asset and hence, it may not hold "provisions for standard assets" until the occurrence of the credit event and the deliverable obligation.

4.10 Prudential treatment post credit event

4.10.1 **Protection buyer:** From the date of credit event and until receipt of credit event payment in accordance with the CDS contract, the protection buyer shall ignore the credit protection of the CDS and reckon the credit exposure on the underlying asset/ reference entity and maintain appropriate level of capital and provisions as warranted for the exposure. On receipt of the credit event payment, (a) the underlying asset shall be removed from the books if it has been delivered to the protection seller or (b) the book value of the underlying asset shall be reduced to the extent of credit event payment if the credit event payment does

not fully cover the book value of the underlying asset and appropriate provisions shall be maintained for the reduced value.

4.10.2 **Protection seller:** From the date of credit event and until making of the credit event payment in accordance with the CDS contract, the protection seller shall debit the profit and loss account and recognise a liability to pay to the protection buyer, for an amount equal to the amount of credit protection sold. After the credit event payment, the protection seller shall recognise the assets received, if any, from the protection buyer at the assessed realisable value and reverse the provisions made earlier, up to that amount. Thereafter, the protection seller shall subject these assets to the appropriate prudential treatment as applicable to loans and advances or investments, as the case may be.

5. ACCOUNTING ASPECTS

5.1 Issues related to Accounting

- 5.1.1 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.
- 5.1.2 The accounting norms applicable to credit derivative contracts shall be the same as detailed in "Discussion Paper on Derivative and Hedge Accounting by banks" issued vide Reserve Bank letter DBOD.No.BP.1763/21.04.157/ 2005-06 dated June 28, 2006.
- 5.1.3 Banks may adopt appropriate norms for accounting of Credit Default Swaps which are in compliance with the guidelines issued by the Reserve Bank from time to time, with the approval of their respective boards.
- Mark to market: The CDS contracts allowing for cash settlement are recognised for capital purposes insofar as a robust valuation process is in place to estimate loss reliably. Banks need to put in place appropriate and robust

methodologies for marking to market the CDS contracts as also to assess the hedge effectiveness, where applicable. These methodologies should also be subject to appropriate internal control and audit.

6. SUPERVISORY REPORTING

- 6.1.1 Banks shall report the details as per the proforma in paragraph 7 below, to the Department of Banking Supervision along with their periodical DSB returns. The supervisory reporting shall be made on a monthly basis.
- 6.1.2 All banks shall report the details of their CDS transactions on a fortnightly basis within a week after the end of the fortnight as per the proforma furnished in the Appendix, to the Department of Banking Supervision.
- 6.1.3 On the basis of the stage of development of the credit derivative market in India, the supervisory reporting requirements will be reviewed and may be revised to capture greater details.

7. DISCLOSURES

7.1.1. Banks shall disclose the following details in respect of the CDS transactions undertaken by them in the Notes on Accounts to their Balance sheets as part of their annual financial statements:

(Rs. Crore)

Particulars	Protection Buyer	Protection Seller
No. of transactions during the year-to-date	J	
of which transactions that are/ may be physically settledcash settled		
Amount of protection bought / sold during the year-		
to-date		
- of which transactions which are/ may be physically settled - cash settled		
No. of transactions where credit event payment		
was received / made during the year-to-date		
a) pertaining to current year transactions		
b) Pertaining to past year(s) transactions		
Net income/ profit (expenditure/ loss) in respect of		
transactions during year-to-date		
a) premium received (+)/ paid (-)		
b) Credit event payments made net of value of assets realised		
No. of outstanding transactions		
Amount of protection bought / sold in respect of the		
outstanding transactions		

			IX

CDS Transactions f	or the Fortnight ended	
 -		

N	ame	ot	bank:				

Part A – Protection Bought

(Rs. crore)

Transaction date	Reference entity	External Credit Rating	Protection Amount	Maturity Years & Months	Settlement type (Cash, Physical/ Fixed amount)
(1)	(2)	(3)	(4)	(5)	(6)

Underly obliga	-	Refere obliga		Delive obliga		Annual Premium	Counterparty
S/L/C ¹	Amt	S/L/C	Amt	S/L/C	Amt		
(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)

NOTE: 1 - S = Security; L = Loan; C = credit risk assumed while selling protection

Part B - Protection Sold: Similar details as in Part A

Part C - Credit event payments - Received / due

(Rs. crore)

Transaction date	Reference entity	Credit Event Date	Protection Amount	Settlement type (Cash, Physical/ Fixed amount)	Amount Received / due
(1)	(2)	(3)	(4)	(5)	(6)

Book Value of UO / DO / RO ²	Market Value of UO / DO / RO	Counterparty	Date of settlement
(7)	(8)	(9)	(10)

NOTE: 2 - UO: Underlying obligation; DO: Deliverable obligation; RO: Reference obligation

Part D - Credit event payments - paid / due

(Rs. crore)

	Fixed amount)	
(1) (2) (3) (4)	(5)	(6)

Market Value of UO / DO / RO	Counterparty	Date of settlement
(7)	(8)	(9)