July 1, 2006

All Commercial Banks (excluding RRBs)

Dear Sir,

## Master Circular- Prudential Norms on Capital Adequacy

Please refer to the Master Circular No. DBOD. BP. BC. 13/ 21.01.002/ 2005-2006 dated July 4, 2005 consolidating instructions/ guidelines issued to banks till 4th July 2005 on matters relating to prudential norms on capital adequacy. The Master Circular has been suitably updated by incorporating instructions issued up to 30<sup>th</sup> June 2006 and has also been placed on the RBI web-site (http://www.rbi.org.in).

It may be noted that all relevant instructions on the above subject contained in the circulars listed in the Appendix have been consolidated. We advise that the revised Master Circular supersedes the instructions contained in these circulars issued by the RBI.

Yours faithfully,

(Prashant Saran)

Chief General Manager-in-Charge

## PRUDENTIAL NORMS ON CAPITAL ADEQUACY

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#### PRUDENTIAL NORMS ON CAPITAL ADEQUACY

#### 1. General

- 1.1 With a view to adopting the Basle Committee framework on capital adequacy norms which takes into account the elements of risk in various types of assets in the balance sheet as well as off-balance sheet business and also to strengthen the capital base of banks, Reserve Bank of India decided in April 1992 to introduce a risk asset ratio system for banks (including foreign banks) in India as a capital adequacy measure.
- 1.2 Essentially, under the above system the balance sheet assets, non-funded items and other off-balance sheet exposures are assigned weights according to the prescribed risk weights and banks have to maintain unimpaired minimum capital funds equivalent to the prescribed ratio on the aggregate of the risk weighted assets and other exposures on an ongoing basis. The broad details of the capital adequacy framework are given below.

# 2. Capital funds

## 2.1 Capital funds of Indian banks

For Indian banks, 'capital funds' would include the following elements:

#### 2.1.1 Elements of Tier I capital

- i) Paid-up capital (ordinary shares), statutory reserves, and other disclosed free reserves, if any.
- ii) Innovative Perpetual Debt Instruments (IPDI) eligible for inclusion as Tier 1 capital;
- iii) Perpetual non-cumulative preference shares eligible for inclusion as Tier 1 capital - subject to laws in force from time to time;
- iv) Capital reserves representing surplus arising out of sale proceeds of assets.

The guidelines governing the instruments at (ii) above, indicating the minimum regulatory requirements are furnished in Annex 1. Detailed guidelines regarding item (iii) above will be issued separately as appropriate in due course.

#### 2.1.2 Elements of Tier II capital

#### i) <u>Undisclosed reserves</u>

These often have characteristics similar to equity and disclosed reserves. These elements have the capacity to absorb unexpected losses and can be included in capital, if they represent accumulations of post-tax profits and not encumbered by any known liability and should not be routinely used for absorbing normal loss or operating losses.

#### ii) Revaluation reserves

These reserves often serve as a cushion against unexpected losses, but they are less permanent in nature and cannot be considered as 'Core Capital'. Revaluation reserves arise from revaluation of assets that are undervalued on the bank's books, typically bank premises and marketable securities. The extent to which the revaluation reserves can be relied upon as a cushion for unexpected losses depends mainly upon the level of certainty that can be placed on estimates of the market values of the relevant assets, the subsequent deterioration in values under difficult market conditions or in a forced sale, potential for actual liquidation at those values, tax consequences of revaluation, etc. Therefore, it would be prudent to consider revaluation reserves at a discount of 55 percent while determining their value for inclusion in Tier II capital. Such reserves will have to be reflected on the face of the Balance Sheet as revaluation reserves.

## iii) General provisions and loss reserves

Such reserves, if they are not attributable to the actual diminution in value or identifiable potential loss in any specific asset and are

available to meet unexpected losses, can be included in Tier II capital. Adequate care must be taken to see that sufficient provisions have been made to meet all known losses and foreseeable potential losses before considering general provisions and loss reserves to be part of Tier II capital. General provisions/loss reserves will be admitted up to a maximum of 1.25 percent of total risk weighted assets.

'Floating Provisions' held by the banks, which is general in nature and not made against any identified assets, may be treated as a part of Tier II capital within the overall ceiling of 1.25 percent of total risk weighted assets, if such provisions are not netted off from gross NPAs to arrive at disclosure of net NPAs

#### iv) **Hybrid debt capital instruments**

In this category, fall a number of capital instruments, which combine certain characteristics of equity and certain characteristics of debt. Each has a particular feature, which can be considered to affect its quality as capital. Where these instruments have close similarities to equity, in particular when they are able to support losses on an ongoing basis without triggering liquidation, they may be included in Tier II capital. At present following instruments have been recognized and placed under this category.

- (a) Debt capital instruments eligible for inclusion as Upper Tier 2 capital; and
- (b) Redeemable cumulative preference shares eligible for inclusion asTier 2 capital subject to laws in force from time to time

The guidelines governing the instruments at (a) above, indicating the minimum regulatory requirements are furnished in Annex 2. Detailed guidelines regarding item (b) above will be issued separately as appropriate in due course

## v) Subordinated debt

- (a) To be eligible for inclusion in Tier II capital, the instrument should be fully paid-up, unsecured, subordinated to the claims of other creditors, free of restrictive clauses, and should not be redeemable at the initiative of the holder or without the consent of the Reserve Bank of India. They often carry a fixed maturity, and as they approach maturity, they should be subjected to progressive discount, for inclusion in Tier II capital. Instruments with an initial maturity of less than 5 years or with a remaining maturity of one year should not be included as part of Tier II capital. Subordinated debt instruments eligible to be reckoned as Tier II capital will be limited to 50 percent of Tier I capital.
- (b) Banks can raise, with the approval of their Boards, rupee-subordinated debt as Tier II capital, subject to the terms and conditions given in the <u>Annexure 3</u>.
- (c) Banks should indicate the amount of subordinated debt raised as Tier II capital by way of explanatory notes/ remarks in the Balance Sheet as well as in Schedule 5 under 'Other Liabilities & Provisions'.

#### (vi) Deferred Revenue Expenditure under VRS

In the case of public sector banks, the bonds issued to the VRS employees as a part of the compensation package, net of the unamortised VRS Deferred Revenue Expenditure, could be treated as Tier II capital, subject to compliance with the terms and conditions stipulated in para 2.1.2 (v)(b).

#### vii) Investment Reserve Account

In the event provisions created on account of depreciation in the 'Available for Sale' or 'Held for Trading' categories are found to be in excess of the required amount in any year, the excess should be credited to the Profit & Loss account and an equivalent amount ( net of taxes, if any and net of transfer to Statutory Reserves as applicable to such excess provision) should be appropriated to an Investment Reserve Account in Schedule 2 –"Reserves &

Surplus" under the head "Revenue and other Reserves" and would be eligible for inclusion under Tier II within the overall ceiling of 1.25 per cent of total Risk Weighted Assets prescribed for General Provisions/ Loss Reserves.

(vii) Banks are allowed to include the 'General Provisions on Standard Assets' and 'provisions held for country exposures' in Tier II capital. However, the provisions on 'standard assets together with other 'general provisions/ loss reserves' and 'provisions held for country exposures' will be admitted as Tier II capital up to a maximum of 1.25 per cent of the total risk-weighted assets.

#### 2.1.3. Deductions from Computation of Capital funds

#### (i) Tier I Capital

- a) Equity investments in subsidiaries, intangible assets and losses in the current period and those brought forward from previous periods, should be deducted from Tier I capital.
- b) In the case of public sector banks which have introduced Voluntary Retirement Scheme (VRS), in view of the extra-ordinary nature of the event, the VRS related Deferred Revenue Expenditure would not be reduced from Tier I capital. However, it will attract 100% risk weight for capital adequacy purpose.
- c) Creation of deferred tax asset (DTA) results in an increase in Tier I capital of a bank without any tangible asset being added to the banks' balance sheet. Therefore, DTA, which is an intangible asset, should be deducted from Tier I capital.

#### (ii). Tier I & Tier II Capital

## Credit Enhancements pertaining to Securitisation of Standard Assets

#### a) Treatment of First Loss Facility

The first loss credit enhancement provided by the originator shall be reduced from capital funds and the deduction shall be capped at the amount of capital that the bank would have been required to hold for the full value of the assets, had they not been securitised. The deduction shall be made 50% from Tier 1 and 50% from Tier 2 capital.

#### b) Treatment of Second Loss Facility

The second loss credit enhancement provided by the originator shall be reduced from capital funds to the full extent. The deduction shall be made 50% from Tier 1 and 50% from Tier 2 capital.

#### c) Treatment of credit enhancements provided by third party

In case, the bank is acting as a third party service provider, the first loss credit enhancement provided by it shall be reduced from capital to the full extent as indicated at para (a) above.

#### d) Underwriting by an originator

Securities issued by the SPVs and devolved / held by the banks in excess of 10 per cent of the original amount of issue, including secondary market purchases, shall be deducted 50% from Tier 1 capital and 50% from Tier 2 capital.

#### e) Underwriting by third party service providers

If the bank has underwritten securities issued by SPVs devolved and held by banks which are below investment grade will be deducted from capital at 50% from Tier 1 and 50% from Tier 2.

#### 2.1.4 Limit for Tier II elements

Tier II elements should be limited to a maximum of 100 percent of total Tier I elements for the purpose of compliance with the norms.

#### 2.1.5 Norms on cross holdings

- (i) A bank's / FI's investments in all types of instruments listed at 2.1.5 (ii) below, which are issued by other banks / FIs and are eligible for capital status for the investee bank / FI, will be limited to 10 per cent of the investing bank's capital funds (Tier I plus Tier II capital).
- (ii) Banks' / Fls' investment in the following instruments will be included in the prudential limit of 10 per cent referred to at 2.1.5(i) above.
  - a) Equity shares;
  - b) Innovative Perpetual Debt Instruments eligible for Tier I capital status
  - c) Preference shares eligible for capital status;
  - d) Subordinated debt instruments;
  - e) Debt capital Instruments qualifying for Upper Tier 2 status; and
  - f) Any other instrument approved as in the nature of capital.
- (iii) Banks / FIs should not acquire any fresh stake in a bank's equity shares, if by such acquisition, the investing bank's / FI's holding exceeds 5 per cent of the investee bank's equity capital.
- (iv) Banks' / Fls' investments in the equity capital of subsidiaries are at present deducted from their Tier I capital for capital adequacy purposes. Investments in the instruments issued by banks / Fls which are listed at paragraph 2.1.5(ii) above, which are not deducted from Tier I capital of the investing bank/ Fl, will attract 100 per cent risk weight for credit risk for capital adequacy purposes.

#### Note:

Following investments are excluded from the purview of the ceiling of 10 percent prudential norm prescribed above:

a) Investments in equity shares of other banks /FIs in India held under the provisions of a statute.

- b) Strategic investments in equity shares of other banks/FIs incorporated outside India as promoters/significant shareholders (i.e. Foreign Subsidiaries / Joint Ventures / Associates).
- c) Equity holdings outside India in other banks / FIs incorporated outside India.

#### 2.2. Capital funds of foreign banks operating in India

For foreign banks, 'capital funds' would include the following elements:

#### 2.2.1 Elements of Tier I capital

- i) Interest-free funds from Head Office kept in a separate account in Indian books specifically for the purpose of meeting the capital adequacy norms.
- ii) Innovative Instruments for inclusion as Tier 1 capital: Foreign banks in India may raise Head Office (HO) borrowings in foreign currency for inclusion as Tier 1 capital subject to the same terms and conditions as indicated at para 6 of Annex I.
- iii) Statutory reserves kept in Indian books.
- iv) Remittable surplus retained in Indian books which is not repatriable so long as the bank functions in India.

Notes:

- a) The foreign banks are required to furnish to Reserve Bank, (if not already done), an undertaking to the effect that the banks will not remit abroad the remittable surplus retained in India and included in Tier I capital as long as the banks function in India.
- b) These funds may be retained in a separate account titled as 'Amount Retained in India for Meeting Capital to Risk-weighted Asset Ratio (CRAR) Requirements' under 'Capital Funds'.
- c) An auditor's certificate to the effect that these funds represent surplus remittable to Head Office once tax assessments are completed or tax appeals are decided and do not include funds in the nature of

provisions towards tax or for any other contingency may also be furnished to Reserve Bank.

- d) Foreign banks operating in India are permitted to hedge their entire Tier I capital held by them in Indian books subject to the following conditions:
  - (i) the forward contract should be for tenor of one year or more and may be rolled over on maturity. Rebooking of cancelled hedge will require prior approval of Reserve Bank.
  - (ii) the capital funds should be available in India to meet local regulatory and CRAR requirements. Therefore, foreign currency funds accruing out of hedging should not be parked in nostro accounts but should remain swapped with banks in India at all times.
- v) Capital reserve representing surplus arising out of sale of assets in India held in a separate account and which is not eligible for repatriation so long as the bank functions in India.
- vi) Interest-free funds remitted from abroad for the purpose of acquisition of property and held in a separate account in Indian books.
- vii) The net credit balance, if any, in the inter-office account with Head Office/overseas branches will not be reckoned as capital funds. However, any debit balance in Head Office account will have to be set-off against the capital.

#### 2.2.2 Elements of Tier II capital

- a) Foreign banks in India may raise Head Office (HO) borrowings in foreign currency for inclusion as Upper Tier 2 capital subject to the same terms and conditions as mentioned at para 6 of Annex 2.
- b) To the extent relevant, elements of Tier II capital as indicated above in paragraph 2.1.2 in respect of Indian banks will be eligible.

- c) Foreign banks also would not require prior approval of RBI for raising subordinated debt in foreign currency through borrowings from Head Office for inclusion in Tier II capital. To ensure transparency and uniformity, detailed guidelines in this regard are given at <u>Annexure 3A</u>
- d) Foreign banks operating in India are also required to comply with the instructions contained at paras 2.1.4 and 2.1.5 above.
- e) The elements of Tier I & Tier II capital do not include foreign currency loans granted to Indian parties.

## 2.3. Swap Transactions

Banks are advised not to enter into swap transactions involving conversion of fixed rate rupee liabilities in respect of Innovative Tier I/Tier II bonds into floating rate foreign currency liabilities

## 2.4 Minimum requirement of capital funds

Banks are required to maintain a minimum CRAR of 9 percent on an ongoing basis.

#### 3. Risk adjusted assets and off-balance sheet items

- 3.1 Risk adjusted assets would mean weighted aggregate of funded and non-funded items. Degrees of credit risk expressed as percentage weightings, have been assigned to balance sheet assets and conversion factors to off-balance sheet items.
- 3.2 The banks' overall minimum capital requirement will be the sum of the following:
  - (a) capital requirement for credit risk on all credit exposures excluding items comprising trading book as defined in para 4.5.1 and including counter party credit risk on all OTC derivatives on the basis of the risk weights indicated in Annexure 4 and
  - (b) capital requirement for market risks in the trading book.

- 3.3 The value of each asset/ item shall be multiplied by the relevant weights to produce risk adjusted values of assets and off-balance sheet items. The aggregate will be taken into account for reckoning the minimum capital ratio.
- 3.4 The risk-weights allotted to each of the items of assets and off-balance sheet items are furnished in the *Annexure 4*.

#### 4. Capital charge for market risk

#### Introduction

- 4.1 The Basel Committee on Banking Supervision (BCBS) had issued the 'Amendment to the Capital Accord to incorporate market risks' containing comprehensive guidelines to provide explicit capital charge for market risks. Market risk is defined as the risk of losses in on-balance sheet and off-balance sheet positions arising from movements in market prices. The market risk positions subject to capital charge requirement are:
  - The risks pertaining to interest rate related instruments and equities in the trading book; and
  - Foreign exchange risk (including open position in precious metals) throughout the bank (both banking and trading books).
- 4.2 As an initial step towards prescribing capital requirement for market risks, banks were advised to:
  - i) assign an additional risk weight of 2.5 per cent on the entire investment portfolio;
  - ii) assign a risk weight of 100 per cent on the open position limits on foreign exchange and gold; and
  - iii) build up Investment Fluctuation Reserve up to a minimum of five per cent of the investments held in Held for Trading and Available for Sale categories in the investment portfolio.
- 4.3 The interim measures adopted in India represent a broad brush and simplistic approach. Besides, over a period of time, banks' ability to identify and measure market risk has improved. Keeping in view the ability of banks to identify and

measure market risk, it was decided to assign explicit capital charge for market risks. Banks are required to maintain capital charge for market risk on securities included in the Held for Trading and Available for Sale categories, open gold position, open forex position, trading positions in derivatives and derivatives entered into for hedging trading book exposures. Consequently, the additional risk weight of 2.5% towards market risk on the investment included under Held for Trading and Available for Sale categories is not required.

4.4 The guidelines in this regard are organized under the following four seven sections:

| Section  | Particulars   |  |  |  |
|----------|---|--|--|--|
| <u>A</u> | Scope and coverage of capital charge for market risks                           |  |  |  |
| <u>B</u> | Measurement of capital charge for interest rate risk in the trading book        |  |  |  |
| <u>C</u> | Measurement of capital charge for equities in the trading book                  |  |  |  |
| <u>D</u> | Measurement of capital charge for foreign exchange risk and gold open positions |  |  |  |

#### Section A

#### 4.5 Scope and coverage of capital charge for market risks

#### General

- 4.5.1. These guidelines seek to address the issues involved in computing capital charges for interest rate related instruments in the trading book, equities in the trading book and foreign exchange risk (including gold and other precious metals) in both trading and banking books. Trading book for the purpose of these guidelines will include:
  - Securities included under the Held for Trading category
  - Securities included under the Available for Sale category
  - Open gold position limits
  - Open foreign exchange position limits
  - Trading positions in derivatives, and

- Derivatives entered into for hedging trading book exposures.
- 4.5.2 To begin with, capital charge for market risks is applicable to banks on a global basis. At a later stage, this would be extended to all groups where the controlling entity is a bank.
- 4.5.3. Banks are required to manage the market risks in their books on an ongoing basis and ensure that the capital requirements for market risks are being maintained on a continuous basis, i.e. at the close of each business day. Banks are also required to maintain strict risk management systems to monitor and control intra-day exposures to market risks.
- 4.5.4 The capital charge for interest rate related instruments and equities would apply to **current market value** of these items in bank's trading book. The current market value will be determined as per extant RBI guidelines on valuation of investments

#### Section B

# 4.6 Measurement of capital charge for interest rate risk in the trading book other than derivatives

- 4.6.1 This section describes the framework for measuring the risk of holding or taking positions in debt securities and other interest rate related instruments in the in the trading book.
- 4.6.2 The minimum capital requirement is expressed in terms of two separately calculated charges, (i) "specific risk" charge for each security, which is akin to the conventional capital charge for credit risk, both for short (short position is not allowed in India except in derivatives) and long positions, and (ii) "general market risk" charge towards interest rate risk in the portfolio, where long and short positions (which is not allowed in India except in derivatives) in different securities or instruments can be offset.

# Specific risk

4.6.3 The capital charge for specific risk is designed to protect against an adverse movement in the price of an individual security owing to factors related to the individual issuer. The specific risk charge is graduated for various exposures as follows:

| Sr.<br>No. | Nature of investment  | Maturity | Specific risk capital charge (as % of exposure) |
|------------|---|----------|---|
|            | Claims on Government  |          |   |
| 1.         | Investments in Government Securities.   | All      | 0.0   |
| 2.         | Investments in other approved securities guaranteed by Central/ State Government.   | All      | 0.0   |
| 3.         | Investments in other securities where payment of interest and repayment of principal are guaranteed by Central Govt. (This will include investments in Indira/Kisan Vikas Patra (IVP/KVP) and investments in Bonds and Debentures where payment of interest and principal is guaranteed by Central Govt.)                                     | All      | 0.0   |
| 4.         | Investments in other securities where payment of interest and repayment of principal are guaranteed by State Governments.   | All      | 0.0   |
| 5.         | Investments in other approved securities where payment of interest and repayment of principal are not guaranteed by Central/State Govt.   | All      | 1.80  |
| 6.         | Investments in Government guaranteed securities of Government Undertakings which do not form part of the approved market borrowing programme.   | All      | 1.80  |
| 7          | Investment in state government guaranteed securities included under items 2, 4 and 6 above where the investment is non-performing. However the banks need to maintain capital at 9.0% only on those State Government guaranteed securities issued by the defaulting entities and not on all the securities issued or guaranteed by that State | All      | 9.00  |

| Sr.<br>No. | Nature of investment  | Maturity  | Specific risk<br>capital charge<br>(as % of<br>exposure) |  |
|------------|---|---|--|--|
|            | Government.   |   | onpooding)   |  |
|            | Claims on Banks   |   |  |  |
| 8          |   | For residual term to final maturity 6 months or less                    | 0.30   |  |
|            |   | For residual<br>term to final<br>maturity<br>between 6 and<br>24 months | 1.125  |  |
|            |   | For residual<br>term to final<br>maturity<br>exceeding 24<br>months     | 1.80   |  |
| 9.         | Investments in subordinated debt instruments and bonds issued by other banks for their Tier II capital.   | All   | 9.00   |  |
|            | Claims on Others  |   |  |  |
| 10.        | Investment in Mortgage Backed Securities (MBS) of residential assets of Housing Finance Companies (HFCs) which are recognised and supervised by National Housing Bank (subject to satisfying terms & conditions given in <i>Annexure</i> 4B). | All   | 6.75   |  |
| 11.        | Investment in securitised paper pertaining to an infrastructure facility. (subject to satisfying terms & conditions given in Annexure 5).   | All   | 4.50   |  |
| 12.        | All other investments including investment in securities issued by SPVs set up for securitisation transactions  | All   | 9.00   |  |
| 13         | Direct investment in equity shares, convertible bonds, debentures and units of equity oriented mutual funds   | All   | 11.25  |  |
| 14         | Investment in Mortgaged Backed Securities and other securitised exposures to Commercial Real Estate   | All   | 13.5   |  |
| 15         | Investments in Venture Capital Funds  | All   | 13.5   |  |

4.6.4. The category 'claim on government' will include all forms of government securities including dated Government securities, Treasury bills and other short-term investments and instruments where repayment of both principal

and interest are fully guaranteed by the Government. The category 'Claims on Others' will include issuers of securities other than Government and banks.

## **General Market Risk**

- 4.6.5. The capital requirements for general market risk are designed to capture the risk of loss arising from changes in market interest rates. The capital charge is the sum of four components:
  - the net short (short position is not allowed in India except in derivatives) or long position in the whole trading book;
  - a small proportion of the matched positions in each time-band (the "vertical disallowance");
  - a larger proportion of the matched positions across different time-bands (the "horizontal disallowance"), and
  - a net charge for positions in options, where appropriate.
- 4.6.6. The Basle Committee has suggested two broad methodologies for computation of capital charge for market risks. One is the standardised method and the other is the banks' internal risk management models method. As banks in India are still in a nascent stage of developing internal risk management models, it has been decided that, to start with, banks may adopt the standardised method. Under the standardised method there are two principal methods of measuring market risk, a "maturity" method and a "duration" method. As "duration" method is a more accurate method of measuring interest rate risk, it has been decided to adopt standardised duration method to arrive at the capital charge. Accordingly, banks are required to measure the general market risk charge by calculating the price sensitivity (modified duration) of each position separately. Under this method, the mechanics are as follows:
  - first calculate the price sensitivity (modified duration) of each instrument;

- next apply the assumed change in yield to the modified duration of each instrument between 0.6 and 1.0 percentage points depending on the maturity of the instrument (see Table-1 below);
- slot the resulting capital charge measures into a maturity ladder with the fifteen time bands as set out in Table-1;
- subject long and short positions (short position is not allowed in India except in derivatives) in each time band to a 5 per cent vertical disallowance designed to capture basis risk; and
- carry forward the net positions in each time-band for horizontal offsetting subject to the disallowances set out in Table-2.

**Table 1**Duration method – time bands and assumed changes in yield

| Time Bands        | Assumed         |
|-------------------|-----------------|
|                   | Change in Yield |
| Zone 1            |                 |
| 1 month or less   | 1.00            |
| 1 to 3 months     | 1.00            |
| 3 to 6 months     | 1.00            |
| 6 to 12 months    | 1.00            |
| Zone 2            |                 |
| 1.0 to 1.9 years  | 0.90            |
| 1.9 to 2.8 years  | 0.80            |
| 2.8 to 3.6 years  | 0.75            |
| Zone 3            |                 |
| 3.6 to 4.3 years  | 0.75            |
| 4.3 to 5.7 years  | 0.70            |
| 5.7 to 7.3 years  | 0.65            |
| 7.3 to 9.3 years  | 0.60            |
| 9.3 to 10.6 years | 0.60            |
| 10.6 to 12 years  | 0.60            |
| 12 to 20 years    | 0.60            |
| over 20 years     | 0.60            |

Table 2
Horizontal Disallowances

| Zones  | Time band         | Within the | Between        | Between zones |
|--------|-------------------|------------|----------------|---------------|
|        |                   | zones      | adjacent zones | 1 and 3       |
|        | month or less     |            |                |               |
| Zone 1 | 1 to 3 months     | 40%        |                |               |
| >      | 3 to 6 months     | , .        |                |               |
|        | 6 to 12 months    |            | 40%            |               |
|        | 1>0 to 1.9 years  |            | 4070           |               |
| Zone 2 | 1.9 to 2.8 years  | 30%        |                | 100%          |
|        | 2.8 to 3.6 years  |            |                | 10070         |
|        | 3.6 to 4.3 years  |            |                |               |
|        | 4.3 to 5.7 years  |            | 40%            |               |
|        | 5.7 to 7.3 years  |            |                |               |
| Zone 3 | 7.3 to 9.3 years  | 30%        |                |               |
| Zone 3 | 9.3 to 10.6 years | 30 /0      |                |               |
|        | 10.6 to 12 years  |            |                |               |
|        | 12 to 20 years    |            |                |               |
|        | over 20 years     |            |                |               |

4.6.7. Capital charges should be calculated for each currency separately and then summed with no offsetting between positions of opposite sign. In the case of those currencies in which business is insignificant (where the turnover in the respective currency is less than 5 per cent of overall foreign exchange turnover), separate calculations for each currency are not required. The bank may, instead, slot within each appropriate time-band, the net long or short position for each currency. However, these individual net positions are to be summed within each time-band, irrespective of whether they are long or short positions, to produce a gross position figure. In the case of residual currencies the gross positions in each time-band will be subject to the assumed change in yield set out in table with no further offsets.

#### Capital charge for interest rate derivatives

4.6.8 The measurement of capital charge for market risks should include all interest rate derivatives and off-balance sheet instruments in the trading book and derivatives entered into for hedging trading book exposures which would react to changes in the interest rates, like FRAs, interest rate positions etc. The details of measurement of capital charge for interest rate derivatives are furnished in **Attachment I**.

#### **Worked out Examples**

4.6.9. Two examples for computing capital charge for market risks, including the vertical and horizontal disallowances are given in Para 7 below.

#### **Section C**

#### 4.7 Measurement of capital charge for equities in the trading book

4.7.1 Minimum capital requirement to cover the risk of holding or taking positions in equities in the trading book is set out below. This is applied to all instruments that exhibit market behaviour similar to equities but not to non-convertible preference shares (which are covered by the interest rate risk requirements described earlier). The instruments covered include equity shares, whether voting or non-voting, convertible securities that behave like equities, for example: units of mutual funds, and commitments to buy or sell equity.

#### Specific and general market risk

4.7.2 Capital charge for specific risk (akin to credit risk) will be 9% and specific risk is computed on the banks' gross equity positions (i.e. the sum of all long equity positions and of all short equity positions – short equity position is, however, not allowed for banks in India). The general market risk charge will also be 9% on the gross equity positions.

#### Section D

# 4.8. Measurement of capital charge for foreign exchange and gold open positions

4.8.1 Foreign exchange open positions and gold open positions are at present risk weighted at 100%. Thus, capital charge for foreign exchange and gold open position is 9% at present. These open positions, limits or actual whichever is higher, would continue to attract capital charge at 9%. This is in line with the Basel Committee requirement.

#### 5. Capital Adequacy for Subsidiaries

- 5.1 The Basel Committee on Banking Supervision has proposed that the New Capital Adequacy Framework should be extended to include, on a consolidated basis, holding companies that are parents of banking groups. On prudential considerations, it is necessary to adopt best practices in line with international standards, while duly reflecting local conditions.
- 5.2 Accordingly, banks may voluntarily build-in the risk weighted components of their subsidiaries into their own balance sheet on notional basis, at par with the risk weights applicable to the bank's own assets. Banks should earmark additional capital in their books over a period of time so as to obviate the possibility of impairment to their net worth when switchover to unified balance sheet for the group as a whole is adopted after sometime. The additional capital required may be provided in the bank's books in phases, beginning from the year ended March 2001.
- 5.3 A Consolidated bank defined as a group of entities which include a licensed bank should maintain a minimum Capital to Risk-weighted Assets Ratio (CRAR) as applicable to the parent bank on an ongoingbasis. While computing capital funds, parent bank may consider the following points:
  - (i) Banks are required to maintain a minimum capital to risk weighted assets ratio of 9%. Non-bank subsidiaries are required to maintain the capital adequacy ratio prescribed by their respective regulators. In case of

any shortfall in the capital adequacy ratio of any of the subsidiaries, the parent should maintain capital in addition to its own regulatory requirements to cover the shortfall.

(ii) Risks inherent in deconsolidated entities (i.e., entities which are not consolidated in the Consolidated Prudential Reports) in the group need to be assessed and any shortfall in the regulatory capital in the deconsolidated entities should be deducted (in equal proportion from Tier 1 and Tier 2 capital) from the consolidated bank's capital in the proportion of its equity stake in the entity.

## 6. Procedure for computation of CRAR

- 6.1 While calculating the aggregate of funded and non-funded exposure of a borrower for the purpose of assignment of risk weight, banks may 'net-off' against the total outstanding exposure of the borrower -
  - (a) advances collateralised by cash margins or deposits,
  - (b) credit balances in current or other accounts which are not earmarked for specific purposes and free from any lien,
  - (c) in respect of any assets where provisions for depreciation or for bad debts have been made
  - (d) claims received from DICGC/ ECGC and kept in a separate account pending adjustment, and
  - (e) subsidies received against advances in respect of Government sponsored schemes and kept in a separate account.
- 6.2 After applying the conversion factor as indicated in Annexure 4, the adjusted off Balance Sheet value shall again be multiplied by the risk weight attributable to the relevant counter-party as specified.
- 6.3 Foreign exchange contracts with an original maturity of 14 calendar days or less, irrespective of the counterparty, may be assigned "zero" risk weight as per international practice.

## 6.4 Foreign Exchange and Interest Rate related Contracts

- (i) Foreign exchange contracts include the following:
  - (a) Cross currency interest rate swaps
  - (b) Forward foreign exchange contracts
  - (c) Currency futures
  - (d) Currency options purchased
  - (e) Other contracts of a similar nature
- (ii) As in the case of other off-Balance Sheet items, a two stage calculation prescribed below shall be applied:
  - (a) **Step 1** The notional principal amount of each instrument is multiplied by the conversion factor given below:

| Original Maturity                | Conversion     |
|----------------------------------|----------------|
|                                  | Factor         |
| Less than one year               | 2%             |
| One year and less than two years | 5%             |
|                                  | (i.e. 2% + 3%) |
| For each additional year         | 3%             |

- (b) **Step 2** The adjusted value thus obtained shall be multiplied by the risk weightage allotted to the relevant counter-party as given in II of Annex 4 and above.
- (iii) Interest rate contracts include the following:
  - (a) Single currency interest rate swaps
  - (b) Basis swaps
  - (c) Forward rate agreements
  - (d) Interest rate futures
  - (e) Interest rate options purchased
  - (f) Other contracts of a similar nature
- (iv) As in the case of other off-Balance Sheet items, a two stage calculation prescribed below shall be applied:

(a) **Step 1** - The notional principal amount of each instrument is multiplied by the percentages given below:

| Original Maturity                | Conversion Factor |
|----------------------------------|-------------------|
| Less than one year               | 0.5%              |
| One year and less than two years | 1.0%              |
| For each additional year         | 1.0%              |

(b) Step 2 - The adjusted value thus obtained shall be multiplied by the risk weightage allotted to the relevant counter-party as given in II of Annex 4 above.

# 6.5 Aggregation of capital charge for market risks

#### Calculation of the risk-weighted assets for market risk

6.5.1. As explained earlier capital charges for specific risk and general market risk are to be computed separately before aggregation. For computing the total capital charge for market risks, the calculations may be plotted in the following table:

#### Proforma 1

(Rs. in crore)

| Risk Category   | Capital charge |
|---|----------------|
| I. Interest Rate (a+b)                                  |                |
| a. General market risk                                  |                |
| <ul> <li>Net position (parallel shift)</li> </ul>       |                |
| <ul> <li>Horizontal disallowance (curvature)</li> </ul> |                |
| <ul> <li>Vertical disallowance (basis)</li> </ul>       |                |
| <ul> <li>Options</li> </ul>                             |                |
| b. Specific risk  |                |
| II. Equity (a+b)  |                |
| a. General market risk                                  |                |
| b. Specific risk  |                |
| III. Foreign Exchange & Gold                            |                |
| IV.Total capital charge for market risks (I+II+III)     |                |

#### 6.5.2 Calculation of total risk-weighted assets and capital ratio

- a) Arrive at the risk weighted assets for credit risk in the banking book and for counterparty credit risk on all OTC derivatives.
- b) Convert the capital charge for market risk to notional risk weighted assets by multiplying the capital charge arrived at as above in Proforma-1 by 100 ÷ 9 [the present requirement of CRAR is 9% and hence notional risk weighted assets are arrived at by multiplying the capital charge by (100 ÷ 9)]
- c) Add the risk-weighted assets for credit risk as at (a) above and notional risk-weighted assets of trading book as at (b) above to arrive at total risk weighted assets for the bank.
- d) Compute capital ratio on the basis of regulatory capital maintained and risk-weighted assets.

## Computation of capital available for market risk:

6.5.3 Capital required for supporting credit risk should be deducted from total capital funds to arrive at capital available for supporting market risk. This is illustrated below:

#### Illustration 1

(Rs. in Crore)

| 1 | Capital funds   | ,    | 105  |
|---|---|------|------|
|   | Tier I capital  | 55   |      |
|   | Tier II capital   | 50   |      |
| 2 | Total risk weighted assets                                |      | 1140 |
|   | RWA for credit risk                                       | 1000 |      |
|   | RWA for market risk                                       | 140  |      |
| 3 | Total CRAR  |      | 9.21 |
| 4 | Minimum capital required to support credit risk (1000*9%) |      | 90   |
|   | <ul> <li>Tier I - 45 (@ 4.5% of 1000)</li> </ul>          | 45   |      |
|   | <ul> <li>Tier II - 45 (@ 4.5% of 1000)</li> </ul>         | 45   |      |
| 5 | Capital available to support market risk (105 - 90)       |      | 15   |
|   | <ul><li>Tier I - (55 - 45)</li></ul>                      | 10   |      |
|   | • Tier II - (50 - 45)                                     | 5    |      |

# 7. Worked out examples for computing capital charge for credit and market risks

# Example I

- 7.1. Where the trading book does not contain equities and interest rate related derivative instruments
- 7.1.1 A bank may have the following position:

| SI. | Details                        | Amount    |
|-----|--------------------------------|-----------|
| No  |                                | Rs. Crore |
| 1   | Cash & Balances with RBI       | 200.00    |
| 2   | Bank balances                  | 200.00    |
| 3.  | Investments                    | 2000.00   |
|     | 3.1 Held for Trading (Market   |           |
|     | Value)                         | 500.00    |
|     | 3.2 Available for Sale (Market | 1000.00   |
|     | Value)                         |           |
|     | 3.3 Held to Maturity           | 500.00    |
| 4   | Advances (net)                 | 2000.00   |
| 5   | Other Assets                   | 300.00    |
| 6   | Total Assets                   | 4700.00   |

7.1.2 In terms of counter party, the investments are assumed to be as under:

Government - Rs.1000 crore
Banks - Rs. 500 crore
Others - Rs. 500 crore

For simplicity sake let us assume the details of investments as under:

#### i) Government securities

| Date of    | Date of    | Maturity   | Amount | Coupon | Type |
|------------|------------|------------|--------|--------|------|
| Issue      | reporting  | Date       | Rs.in  | (%)    |      |
|            |            |            | crore  |        |      |
| 01/03/1992 | 31/03/2003 | 01/03/2004 | 100    | 12.50  | AFS  |
| 01/05/1993 | 31/03/2003 | 01/05/2003 | 100    | 12.00  | AFS  |
| 01/03/1994 | 31/03/2003 | 31/05/2003 | 100    | 12.00  | AFS  |
| 01/03/1995 | 31/03/2003 | 01/03/2015 | 100    | 12.00  | AFS  |
| 01/03/1998 | 31/03/2003 | 01/03/2010 | 100    | 11.50  | AFS  |
| 01/03/1999 | 31/03/2003 | 01/03/2009 | 100    | 11.00  | AFS  |
| 01/03/2000 | 31/03/2003 | 01/03/2005 | 100    | 10.50  | HFT  |
| 01/03/2001 | 31/03/2003 | 01/03/2006 | 100    | 10.00  | HTM  |
| 01/03/2002 | 31/03/2003 | 01/03/2012 | 100    | 8.00   | HTM  |
| 01/03/2003 | 31/03/2003 | 01/03/2023 | 100    | 6.50   | HTM  |
| Total      |            |            | 1000   |        |      |

#### ii) Bank Bonds

| Date of Issue | Date of reporting | Maturity<br>Date | Amount<br>Rs. in<br>crore | Coupon<br>(%) | Type |
|---------------|-------------------|------------------|---------------------------|---------------|------|
| 01/03/1992    | 31/03/2003        | 01/03/2004       | 100                       | 12.50         | AFS  |
| 01/05/1993    | 31/03/2003        | 01/05/2003       | 100                       | 12.00         | AFS  |
| 01/03/1994    | 31/03/2003        | 31/05/2003       | 100                       | 12.00         | AFS  |
| 01/03/1995    | 31/03/2003        | 01/03/2006       | 100                       | 12.50         | AFS  |
| 01/03/1998    | 31/03/2003        | 01/03/2007       | 100                       | 11.50         | HFT  |
| Total         |                   |                  | 500                       |               |      |

# iii) Other securities

| Date of Issue | Date of Maturity reporting Date |            | Amount Rs. in | Coupon<br>(%) | Туре |
|---------------|---------------------------------|------------|---------------|---------------|------|
|               |                                 |            | crore         |               |      |
| 01/03/1992    | 31/03/2003                      | 01/03/2004 | 100           | 12.50         | HFT  |
| 01/05/1993    | 31/03/2003                      | 01/05/2003 | 100           | 12.00         | HFT  |
| 01/03/1994    | 31/03/2003                      | 31/05/2003 | 100           | 12.00         | HFT  |
| 01/03/1995    | 31/03/2003                      | 01/03/2006 | 100           | 12.50         | HTM  |
| 01/03/1998    | 31/03/2003                      | 01/03/2017 | 100           | 11.50         | HTM  |
| Total         |                                 |            | 500           |               |      |

# iv) Overall position

|         | Break-up o                  | nts (Rs. in | ( Rs. in crore) |      |
|---------|-----------------------------|-------------|-----------------|------|
|         | Government Bank bonds Other |             | Total           |      |
|         | Securities                  |             | securities      |      |
| HFT     | 100                         | 100         | 300             | 500  |
| AFS     | 600                         | 400         | 0               | 1000 |
| Trading | 700                         | 500         | 300             | 1500 |
| Book    |                             |             |                 |      |
| HTM     | 300                         | 0           | 200             | 500  |
| Total   | 1000                        | 500         | 500             | 2000 |

# 7.1.3 Computation of risk weighted assets

# A. Risk weighted assets for credit risk

As per the guidelines, Held for Trading and Available for Sale securities would qualify to be categorized as Trading Book. Thus, trading book in the instant case would be Rs.1500 crore as indicated above. While computing the credit risk, the securities held

under trading book would be excluded and hence the risk-weighted assets for credit risks would be as under:

(Rs. in crore)

| SI.No. | Details of<br>Assets     | Market<br>Value* | Risk<br>Weight<br>(%) | Risk<br>weighted<br>Assets |
|--------|--------------------------|------------------|-----------------------|----------------------------|
| 1      | Cash & balances with RBI | 200              | 0                     | 0                          |
| 2      | Bank balances            | 200              | 20                    | 40                         |
| 3      | Investments:             |                  |                       |                            |
|        | Government               | 300              | 0                     | 0                          |
|        | Banks                    | 0                | 20                    | 0                          |
|        | Others                   | 200              | 100                   | 200                        |
| 4      | Advances (net)           | 2000             | 100                   | 2000                       |
| 5      | Other Assets             | 300              | 100                   | 300                        |
| 6      | Total Assets             | 3200             |                       | 2540                       |

<sup>\*</sup>Assumed as Market Value for illustration

## B. Risk weighted assets for market risk (Trading Book)

( Please refer to table in para 7.1.2(iv)

# a. Specific Risk

(i) Government securities: Rs.700 crore - Nil

(ii) Bank bonds:

(Rs. in crore)

| Details   | Capital charge | Amount | Capital charge |
|---|----------------|--------|----------------|
| For residual term to final maturity 6 months or less        | 0.30%          | 200    | 0.60           |
| For residual term to final maturity between 6 and 24 months | 1.125%         | 100    | 1.125          |
| For residual term to final maturity exceeding 24 months     | 1.80%          | 200    | 3.60           |
| Total   |                | 500    | 5.325          |

(iii) Other securities: Rs.300 crore @ 9% =Rs. 27 crore

# Total charge for specifc risk (i)+(ii)+(iii)

= Rs.0 crore+Rs.5.325 crore + Rs.27 crore = **Rs. 32.325 crore** 

Therefore, capital charge for specific risk in trading book is Rs.32.33 crore.

#### b. General Market Risk

Modified duration is used to arrive at the price sensitivity of an interest rate related instrument. For all the securities listed below, date of reporting is taken as 31/3/2003.

(Rs. in crore)

| Counter | Maturity   | Amount  | Coupon | Capital Charge |
|---------|------------|---------|--------|----------------|
| Party   | Date       | (market | (%)    | for general    |
|         |            | value)  |        | market risk    |
| Govt.   | 01/03/2004 | 100     | 12.50  | 0.84           |
| Govt.   | 01/05/2003 | 100     | 12.00  | 0.08           |
| Govt.   | 31/05/2003 | 100     | 12.00  | 0.16           |
| Govt.   | 01/03/2015 | 100     | 12.50  | 3.63           |
| Govt.   | 01/03/2010 | 100     | 11.50  | 2.79           |
| Govt.   | 01/03/2009 | 100     | 11.00  | 2.75           |
| Govt.   | 01/03/2005 | 100     | 10.50  | 1.35           |
| Banks   | 01/03/2004 | 100     | 12.50  | 0.84           |
| Banks   | 01/05/2003 | 100     | 12.00  | 0.08           |
| Banks   | 31/05/2003 | 100     | 12.00  | 0.16           |
| Banks   | 01/03/2006 | 100     | 12.50  | 1.77           |
| Banks   | 01/03/2007 | 100     | 11.50  | 2.29           |
| Others  | 01/03/2004 | 100     | 12.50  | 0.84           |
| Others  | 01/05/2003 | 100     | 12.00  | 0.08           |
| Others  | 31/05/2003 | 100     | 12.00  | 0.16           |
|         | Total      | 1500    |        | 17.82          |

#### c. Total charge for market risk

Adding the capital charges for specific risk as well as general market risk would give the total capital charge for the trading book of interest rate related instruments. Therefore, capital charge for Market Risks = Rs.32.33 crore + Rs.17.82 crore, i.e., Rs.50.15 crore.

d. To facilitate computation of CRAR for the whole book, this capital charge needs to be converted into equivalent risk weighted assets. In India, the minimum CRAR is 9%. Hence, the capital charge could be converted to risk weighted assets by multiplying the capital charge by  $(100 \div 9)$ , Thus risk weighted assets for market risk is  $50.15*(100 \div 9) = Rs.557.23$  crore.

## 7.1.4 Computing the capital ratio

(Rs. in Crore)

| 1 | Total Capital                           | 400     |
|---|---|---------|
| 2 | Risk weighted assets for Credit Risk    | 2540.00 |
| 3 | Risk weighted assets for Market<br>Risk | 557.23  |
| 4 | Total Risk weighted assets (2+3)        | 3097.23 |
| 5 | CRAR [(1÷4)*100]                        | 12.91 % |

#### **Example II**

7.2 Example indicating computation of capital charge for credit and market risks – with equities and interest rate related derivative instruments. Foreign exchange and gold open positions also have been assumed.

#### 7.2.1 A bank may have the following position:

| SI. | Details   | Rs. in                      |
|-----|---|-----------------------------|
| No  |   | Crore                       |
| 1   | Cash & Balances with  | 200.00                      |
| 2   | Bank balances   | 200.00                      |
| 3   | <u>Investments</u>  |                             |
|     | 3.1 Interest Rate related Securities Held for Trading Available for Sale Held to Maturity | 500.00<br>1000.00<br>500.00 |
|     | 3.2 Equities  | 300.00                      |
| 4   | Advances (net)  | 2000.00                     |
| 5   | Other Assets  | 300.00                      |
| 6   | Total Assets  | 5000.00                     |

In addition,

- (a) foreign exchange open position limit is assumed as Rs.60 crore and
- (b) Gold open position is assumed at Rs.40 crore.
- (c) Let us also assume that the bank is having the following **positions in interest** rate related derivatives:

- (i) Interest Rate Swaps (IRS), Rs.100 crore bank received floating rate interest and pays fixed, next interest fixing after 6 months, residual life of swap 8 years, and
- (ii) Long position in interest rate future (IRF), Rs.50 crore, delivery after 6 months, life of underlying government security 3.5 years.

#### 7.2.2 In terms of counter party the investments are assumed to be as under:

| a) Interest rate related securities |               |
|-------------------------------------|---------------|
| Government                          | Rs.1000 crore |
| Banks                               | Rs. 500 crore |
| Corporate Bonds                     | Rs. 500 crore |
| b) Equities                         |               |
| Others                              | Rs.300 crore  |

For interest rate swaps and interest rate futures the counterparties are assumed to be corporates. For simplicity sake let us assume the details of investments in interest rate related securities as under:

## i) Government securities

| Date of    | Date of    | Maturity   | Amount   | Coup  | Type |
|------------|------------|------------|----------|-------|------|
| Issue      | reporting  | Date       | Rs.crore | on    |      |
|            |            |            |          | (%)   |      |
| 01/03/1992 | 31/03/2003 | 01/03/2004 | 100      | 12.50 | AFS  |
| 01/05/1993 | 31/03/2003 | 01/05/2003 | 100      | 12.00 | AFS  |
| 01/03/1994 | 31/03/2003 | 31/05/2003 | 100      | 12.00 | AFS  |
| 01/03/1995 | 31/03/2003 | 01/03/2015 | 100      | 12.50 | AFS  |
| 01/03/1998 | 31/03/2003 | 01/03/2010 | 100      | 11.50 | AFS  |
| 01/03/1999 | 31/03/2003 | 01/03/2009 | 100      | 11.00 | AFS  |
| 01/03/2000 | 31/03/2003 | 01/03/2005 | 100      | 10.50 | HFT  |
| 01/03/2001 | 31/03/2003 | 01/03/2006 | 100      | 10.00 | HTM  |
| 01/03/2002 | 31/03/2003 | 01/03/2012 | 100      | 8.00  | HTM  |
| 01/03/2003 | 31/03/2003 | 01/03/2023 | 100      | 6.50  | HTM  |
| Total      |            |            | 1000     |       |      |

## ii) Bank Bonds

| Date of    | Date of    | Maturity   | Amount   |        | Type |
|------------|------------|------------|----------|--------|------|
| Issue      | reporting  | Date       | Rs.crore | Coupon |      |
|            |            |            |          | (%)    |      |
| 01/03/1992 | 31/03/2003 | 01/03/2004 | 100      | 12.50  | AFS  |
| 01/05/1993 | 31/03/2003 | 01/05/2003 | 100      | 12.00  | AFS  |
| 01/03/1994 | 31/03/2003 | 31/05/2003 | 100      | 12.00  | AFS  |
| 01/03/1995 | 31/03/2003 | 01/03/2006 | 100      | 12.50  | AFS  |
| 01/03/1998 | 31/03/2003 | 01/03/2007 | 100      | 11.50  | HFT  |
| Total      |            |            | 500      |        |      |

# iii) Other securities

| Date of Issue | Date of reporting | Maturity<br>Date | Amount<br>Rs.crore | Coupon (%) | Туре |
|---------------|-------------------|------------------|--------------------|------------|------|
| 01/03/1992    | 31/03/2003        | 01/03/2004       | 100                | 12.50      | HFT  |
| 01/05/1993    | 31/03/2003        | 01/05/2003       | 100                | 12.00      | HFT  |
| 01/03/1994    | 31/03/2003        | 31/05/2003       | 100                | 12.00      | HFT  |
| 01/03/1995    | 31/03/2003        | 01/03/2006       | 100                | 12.50      | HTM  |
| 01/03/1998    | 31/03/2003        | 01/03/2017       | 100                | 11.50      | HTM  |
| Total         |                   |                  | 500                |            |      |

#### iv) Overall Position

|         | Break-up of total investments |               |            |       |        |       |  |
|---------|-------------------------------|---------------|------------|-------|--------|-------|--|
|         | Intere                        | st rate relat | ed instrui | ments | Equity |       |  |
|         | Govt.                         | Bank          | Other      | Total |        | Grand |  |
|         | Secur                         | bonds         | securiti   |       |        | Total |  |
|         | ities                         |               | es         |       |        |       |  |
| HFT     | 100                           | 100           | 300        | 500   | 300    | 800   |  |
| AFS     | 600                           | 400           | 0          | 1000  | 0      | 1000  |  |
| Trading | 700                           | 500           | 300        | 1500  | 300    | 1800  |  |
| Book    |                               |               |            |       |        |       |  |
| HTM     | 300                           | 0             | 200        | 500   | 0      | 500   |  |
| Grand   | 1000                          | 500           | 500        | 2000  | 300    | 2300  |  |
| Total   |                               |               |            |       |        |       |  |

# 7.2.3 Computation of risk weighted assets

# A. Risk weighted assets for credit risk

As per the guidelines, held for trading and available for sale securities would qualify to be categorized as Trading Book. Thus trading book in respect of interest rate related investments in the instant case would be Rs.1500 crore.

In addition, equities position of Rs.300 crore would be in the trading book, as indicated above. The derivative products held by banks are to be considered as part of trading book. Open position on foreign exchange and gold also would be considered for market risk. While computing the capital charge for credit risk, the securities held under trading book would be excluded and hence the credit risk based risk-weights would be as under:

(Rs. in crore)

| Details of Assets             | Book Value                   | Risk Weight | Risk<br>weighted<br>Assets |
|-------------------------------|------------------------------|-------------|----------------------------|
| Cash& RBI                     | 200                          | 0%          | 0                          |
| Bank balances                 | 200                          | 20%         | 40                         |
| Investments in (HTM category) |                              |             |                            |
| Government                    | 300                          | 0%          | 0                          |
| Banks                         | 0                            | 20%         | 0                          |
| Corporate Bonds               | 200                          | 100%        | 200                        |
| Advances (net)                | 2000                         | 100%        | 2000                       |
| Other Assets                  | 300                          | 100%        | 300                        |
| Total                         | 3200                         |             | 2540                       |
| Credit Risk for OTC           |                              |             |                            |
| Derivatives:                  |                              |             |                            |
| IRS                           | 100                          | 100%        | 8.00                       |
|                               | (Credit conversion           |             |                            |
|                               | <i>factor</i> - 1% + 1% per  |             |                            |
|                               | year)                        |             |                            |
| IRF                           | 50                           | 100%        | 0.25                       |
|                               | (Credit conversion           |             |                            |
|                               | <i>factor</i> for maturities |             |                            |
|                               | less than one year -         |             |                            |
|                               | 0.5%                         |             |                            |
| Total                         | 3350                         |             | 2548.25                    |

#### B. Risk weighted assets for market risk (Trading Book)

(please refer to table in para 7.2.2(iv))

#### a. Specific Risk

- 1. Investments in interest rate related instruments:
  - (i) Government securities Rs.700 crore Nil

## (ii) Bank bonds

| ,   | (Rs.crore)     |        |                   |
|---|----------------|--------|-------------------|
| Details   | Capital charge | Amount | Capital<br>Charge |
| For residual term to final maturity 6 months or less        | 0.30%          | 200    | 0.600             |
| For residual term to final maturity between 6 and 24 months | 1.125%         | 100    | 1.125             |
| For residual term to final maturity exceeding 24 months     | 1.80%          | 200    | 3.600             |
| Total   |                | 500    | 5.325             |

(iii) Others Rs.300 crore @ 9% = Rs.27 crore

Total: (i)+(ii)+(iii)

= Rs.0 crore+Rs.5.325 crore+Rs.27 crore = **Rs.32.325 crore** 

2. Equities – capital charge of 9% - Rs.27 crore

# Total specific charge (1+2)

Therefore, capital charge for specific risk in the trading book is Rs. 59.33 crore (Rs. 32.33 crore + Rs. 27 crore).

# b. General Market Risk

#### (1). Investments in interest rate related instruments:

Modified duration is used to arrive at the price sensitivity of an interest rate related instrument. For all the securities listed below, date of reporting is taken as 31/3/2003.

(Rs.crore)

| Counter<br>Party | Maturity<br>Date | Amount<br>market<br>value | Coupon<br>(%) | Capital<br>charge for<br>general<br>market<br>risk |
|------------------|------------------|---------------------------|---------------|--|
| Govt.            | 01/03/2004       | 100                       | 12.50         | 0.84   |
| Govt.            | 01/05/2003       | 100                       | 12.00         | 0.08   |
| Govt.            | 31/05/2003       | 100                       | 12.00         | 0.16   |
| Govt.            | 01/03/2015       | 100                       | 12.50         | 3.63   |
| Govt.            | 01/03/2010       | 100                       | 11.50         | 2.79   |
| Govt.            | 01/03/2009       | 100                       | 11.00         | 2.75   |
| Govt.            | 01/03/2005       | 100                       | 10.50         | 1.35   |

| Banks  | 01/03/2004 | 100  | 12.50 | 0.84  |
|--------|------------|------|-------|-------|
| Banks  | 01/05/2003 | 100  | 12.00 | 0.08  |
| Banks  | 31/05/2003 | 100  | 12.00 | 0.16  |
| Banks  | 01/03/2006 | 100  | 12.50 | 1.77  |
| Banks  | 01/03/2007 | 100  | 11.50 | 2.29  |
| Others | 01/03/2004 | 100  | 12.50 | 0.84  |
| Others | 01/05/2003 | 100  | 12.00 | 0.08  |
| Others | 31/05/2003 | 100  | 12.00 | 0.16  |
|        | Total      | 1500 |       | 17.82 |

## (2) Positions in interest rate related derivatives

#### Interest rate swap

| Counter<br>Party | Maturity<br>Date | Notional<br>Amount<br>(i.e.,market<br>value) | Modified duration or price sensitivity | Assumed change in yield (ACI) | Capital<br>charge* |
|------------------|------------------|--|--|-------------------------------|--------------------|
| GOI              | 30/09/2003       | 100  | 0.47                                   | 1.00                          | 0.47               |
| GOI              | 31/03/2011       | 100  | 5.14                                   | 0.60                          | (-) 3.08           |
|                  |                  |  |  |                               | (-) 2.61           |

# Interest rate future

| Counter<br>Party | Maturity<br>Date | Notional<br>Amount<br>(i.e.,market<br>value) | Modified duration or price sensitivity | Assumed change in yield | Capital<br>charge |
|------------------|------------------|--|--|-------------------------|-------------------|
| GOI              | 30/09/2003       | 50   | 0.45                                   | 1.00                    | (-) 0.225         |
| GOI              | 31/03/2007       | 50   | 2.84                                   | 0.75                    | 1.070             |
|                  |                  |  |  |                         | 0.840             |

#### (3) Disallowances

The price sensitivities calculated as above have been slotted into a duration-based ladder with fifteen time-bands (Attachment II). Long and short positions within a time band have been subjected to vertical disallowance of 5%. In the instant case, vertical disallowance is applicable under 3-6 month time band and 7.3-9.3 year time band. Then, net positions in each time band have been computed for horizontal offsetting subject to the disallowances mentioned in the table. In the instant case, horizontal

disallowance is applicable only in respect of Zone 3. Horizontal disallowances in respect of adjacent zones are not applicable in the instant case.

(4) The total capital charge in this example for general market risk for interest rate related instruments is computed as under:

| SI.<br>No | Capital charge  | Amount<br>(Rs.) |
|-----------|---|-----------------|
| 1         | For the vertical disallowance (under 3-6 month time band)   | 1,12,500        |
| 2         | For the vertical disallowance (under 7.3-9.3 year time band)  | 13,95,000       |
| 3         | For the horizontal disallowance (under Zone 3)  | 9,00,000        |
| 4         | For the horizontal disallowances between adjacent zones   | 0               |
| 5         | For the overall net open position (17.82 – 2.61 + 0.84)   | 16,06,00,000    |
| 6         | Total capital charge for general market risk on interest rate related instruments (1 + 2 + 3 + 4 + 5) | 16,30,07,500    |

## (5) Equities

Capital charge for General Market Risk for equities is 9%. Thus, general market risk capital charge on equities would work out to Rs.27 crore.

# (6) Forex / Gold Open Position

Capital charge on forex/gold position would be computed at 9%. Thus the same works out to Rs.9 crore

(7) Capital charge for market risks in this example is computed as under:

(Rs. crore)

|                                   |                                  | (170.0                                    |        |
|-----------------------------------|----------------------------------|---|--------|
| Details                           | Capital charge for Specific Risk | Capital charge for<br>General Market Risk | Total  |
| Interest Rate Related instruments | 32.33                            | 16.30                                     | 48.63  |
| Equities                          | 27.00                            | 27.00                                     | 54.00  |
| Forex/Gold                        | -                                | 9.00                                      | 9.00   |
| Total                             | 59.33                            | 52.30                                     | 111.63 |

#### **Computing Capital Ratio**

7.2.4 To facilitate computation of CRAR for the whole book, this capital charge for market risks in the Trading Book needs to be converted into equivalent risk weighted assets. As in India, a CRAR of 9% is required, the capital charge could be converted to risk weighted assets by multiplying the capital charge by  $(100 \div 9)$ , i.e. Rs.  $111.63*(100 \div 9) = Rs$ . 1240.33 crore. Therefore, risk weighted assets for market risk is: Rs. 1240.33 crore.

(Rs. Crore)

|   |   | 1.101 -1.010 |
|---|---|--------------|
| 1 | Total Capital                           | 400.00       |
| 2 | Risk weighted assets for Credit Risk    | 2548.25      |
| 3 | Risk weighted assets for Market<br>Risk | 1240.33      |
| 4 | Total Risk weighted assets (2+3)        | 3788.58      |
| 5 | CRAR [(1÷4)*100]                        |              |
|   |   | 10.56 %      |

### 8. Reporting Formats

| 8.1 Reporting format for the | purpose of | of monitoring | the capital | ratio is | given |
|------------------------------|------------|---------------|-------------|----------|-------|
| hereunder:                   |            |               |             |          |       |

| Name of bank: | <br>Position as on: |  |
|---------------|---------------------|--|
|               |                     |  |

### A. Capital Base

(Rs. in crore)

| SI. No. | Details                  | Amount |
|---------|--------------------------|--------|
| A1.     | Tier I Capital           |        |
| A2.     | Tier II Capital          |        |
| A3.     | Total Regulatory Capital |        |

#### B. Risk Weighted Assets

| B1. | Risk Weighted Assets on Banking Book |
|-----|--------------------------------------|
|     | a) On-balance sheet assets           |
|     | b) Contingent Credits                |
|     | c) Forex contracts                   |
|     | d) Other off-balance sheet items     |
|     | Total                                |

| B2. | Risk Weighted Assets on Trading Book                        | AFS | Other<br>trading<br>book<br>exposur<br>es | Total |
|-----|---|-----|---|-------|
|     | a) Capital charge on account of Specific Risk               |     |   |       |
|     | <ul> <li>i) On interest rate related instruments</li> </ul> |     |   |       |
|     | ii) On Equities   |     |   |       |
|     | Sub-total   |     |   |       |
|     | b) Capital charge on account of general market              |     |   |       |
|     | risk  |     |   |       |
|     | <ul> <li>i) On interest rate related instruments</li> </ul> |     |   |       |
|     | ii) On Equities   |     |   |       |
|     | iii) On Foreign Exchange and gold open                      |     |   |       |
|     | positions   |     |   |       |
|     | Sub-total   |     |   |       |
|     | Total Capital Charge on Trading Book                        |     |   |       |
|     | Total Risk weighted Assets on Trading Book                  |     |   |       |
|     | (total capital charge on trading book * (100/9))            |     |   |       |
| B3. | Total Risk Weighted Assets (B1 + B2)                        |     |   |       |

### C. Capital Ratio

| C1 | Capital to Risk-weighted Assets Ratio (CRAR) |  |
|----|--|--|
|    | (A3/B3*100)                                  |  |

#### D. Memo items

| D1 | Investment Fluctuation Reserve                |  |
|----|---|--|
| D2 | Book value of securities held in HFT category |  |
| D3 | Book value of securities held in AFS category |  |
| D4 | Net unrealised gains in HFT category          |  |
| D5 | Net unrealised gains in AFS category          |  |

8.2 Banks should furnish data in the above format as on the last day of each calendar quarter to the Chief General Manager-in-Charge, Department of Banking Supervision, Central Office, World Trade Centre I, 3<sup>rd</sup> floor, Cuffe Parade, Mumbai 400 005 both in hard copy and soft copy. Soft copy in excel format may also be forwarded through e-mail to <a href="mailto:osmos@rbi.org.in">osmos@rbi.org.in</a> and <a href="mailto:dbodmrg@rbi.org.in">dbodmrg@rbi.org.in</a>...

# Attachment I (Para 4.6.8, Section B)

Measurement system in respect of interest rate derivatives and options

#### A. Interest rate derivatives

The measurement system should include all interest rate derivatives and off-balance-sheet instruments in the trading book, which react to changes in interest rates, (e.g. forward rate agreements (FRAs), other forward contracts, bond futures, interest rate and cross-currency swaps and forward foreign exchange positions). Options can be treated in a variety of ways as described in B.1 below. A summary of the rules for dealing with interest rate derivatives is set out in the Table at the end of this section.

#### 1. Calculation of positions

The derivatives should be converted into positions in the relevant underlying and be subjected to specific and general market risk charges as described in the guidelines. In order to calculate the capital charge, the amounts reported should be the market value of the principal amount of the underlying or of the notional underlying. For instruments where the apparent notional amount differs from the <u>effective notional</u> amount, banks must use the effective notional amount.

#### (a) Futures and forward contracts, including forward rate agreements

These instruments are treated as a combination of a long and a short position in a notional government security. The maturity of a future or a FRA will be the period until delivery or exercise of the contract, plus - where applicable - the life of the underlying instrument. For example, a long position in a June three-month interest rate future (taken in April) is to be reported as a long position in a government security with a maturity of five months and a short position in a government security with a maturity of two months. Where a range of deliverable instruments may be delivered to fulfill the contract, the bank has flexibility to elect which deliverable security goes into the duration ladder but should take account of any conversion factor defined by the exchange.

#### (b) Swaps

Swaps will be treated as two notional positions in government securities with relevant maturities. For example, an interest rate swap under which a bank is receiving floating rate interest and paying fixed will be treated as a long position in a floating rate instrument of maturity equivalent to the period until the next interest fixing and a short position in a fixed-rate instrument of maturity equivalent to the residual life of the swap. For swaps that pay or receive a fixed or floating interest rate against some other reference price, e.g. a stock index, the interest rate component should be slotted into the appropriate repricing maturity category, with the equity component being included in the equity framework.

Separate legs of cross-currency swaps are to be reported in the relevant maturity ladders for the currencies concerned.

# 2. Calculation of capital charges for derivatives under the standardised methodology

#### (a) Allowable offsetting of matched positions

Banks may exclude the following from the interest rate maturity framework altogether (for both specific and general market risk);

- Long and short positions (both actual and notional) in identical instruments with exactly the same issuer, coupon, currency and maturity.
- A matched position in a future or forward and its corresponding underlying may also be fully offset, (the leg representing the time to expiry of the future should however be reported) and thus excluded from the calculation.

When the future or the forward comprises a range of deliverable instruments, offsetting of positions in the future or forward contract and its underlying is only permissible in cases where there is a readily identifiable underlying security which is most profitable for the trader with a short position to deliver. The price of this security, sometimes called the "cheapest-to-deliver", and the price of the future or forward contract should in such cases move in close alignment.

No offsetting will be allowed between positions in different currencies; the separate legs of cross-currency swaps or forward foreign exchange deals are to be treated as notional positions in the relevant instruments and included in the appropriate calculation for each currency.

In addition, opposite positions in the same category of instruments can in certain circumstances be regarded as matched and allowed to offset fully. To qualify for this treatment the positions must relate to the same underlying instruments, be of the same nominal value and be denominated in the same currency. In addition:

- for futures: offsetting positions in the notional or underlying instruments to which the futures contract relates must be for identical products and mature within seven days of each other;
- for swaps and FRAs: the reference rate (for floating rate positions) must be identical and the coupon closely matched (i.e. within 15 basis points); and
- for swaps, FRAs and forwards: the next interest fixing date or, for fixed coupon positions or forwards, the residual maturity must correspond within the following limits:
  - less than one month hence: same day;
  - o between one month and one year hence: within seven days;
  - o over one year hence: within thirty days.

Banks with large swap books may use alternative formulae for these swaps to calculate the positions to be included in the duration ladder. The method would be to calculate the sensitivity of the net present value implied by the change in yield used in the duration method and allocate these sensitivities into the time-bands set out in Table 1 in Section B.

#### (b) Specific risk

Interest rate and currency swaps, FRAs, forward foreign exchange contracts and interest rate futures will not be subject to a specific risk charge. This exemption also applies to futures on an interest rate index (e.g. LIBOR). However, in the case of futures contracts where the underlying is a debt security, or an index representing a basket of debt securities, a specific risk charge will apply according to the credit risk of the issuer as set out in paragraphs above.

#### (c) General market risk

General market risk applies to positions in all derivative products in the same manner as for cash positions, subject only to an exemption for fully or very closely matched positions in identical instruments as defined in paragraphs above. The various categories of instruments should be slotted into the maturity ladder and treated according to the rules identified earlier.

Table - Summary of treatment of interest rate derivatives

| Instrument  | Specific<br>risk<br>charge | General Market risk<br>charge   |
|---|----------------------------|---|
| Exchange-traded future  - Government debt security  - Corporate debt security  - Index on interest rates (e.g. MIBOR) | No<br>Yes<br>No            | Yes, as two positions<br>Yes, as two positions<br>Yes, as two positions |
| OTC forward  - Government debt security  - Corporate debt security  - Index on interest rates (e.g. MIBOR)            | No<br>Yes<br>No            | Yes, as two positions<br>Yes, as two positions<br>Yes, as two positions |
| FRAs, Swaps   | No                         | Yes, as two positions   |
| Forward Foreign Exchange  | No                         | Yes, as one position in each currency                                   |
| Options - Government debt security - Corporate debt security - Index on interest rates (e.g. MIBOR) - FRAs, Swaps     | No<br>Yes<br>No<br>No      |   |

#### **B.** Treatment of Options

- 1. In recognition of the wide diversity of banks' activities in options and the difficulties of measuring price risk for options, alternative approaches are permissible as under:
- those banks which solely use purchased options<sup>1</sup> will be free to use the simplified approach described in Section I below;

<sup>1</sup> Unless all their written option positions are hedged by perfectly matched long positions in exactly the same options, in which case no capital charge for market risk is required

- those banks which also write options will be expected to use one of the intermediate approaches as set out in Section II below.
- 2. In the *simplified approach*, the positions for the options and the associated underlying, cash or forward, are not subject to the standardised methodology but rather are "carved-out" and subject to separately calculated capital charges that incorporate both general market risk and specific risk. The risk numbers thus generated are then added to the capital charges for the relevant category, i.e. interest rate related instruments, equities, and foreign exchange as described in Sections B to D. The *delta-plus method* uses the sensitivity parameters or "Greek letters" associated with options to measure their market risk and capital requirements. Under this method, the delta-equivalent position of each option becomes part of the standardised methodology set out in Section B to D with the delta-equivalent amount subject to the applicable general market risk charges. Separate capital charges are then applied to the gamma and vega risks of the option positions. The **scenario approach** uses simulation techniques to calculate changes in the value of an options portfolio for changes in the level and volatility of its associated underlyings. Under this approach, the general market risk charge is determined by the scenario "grid" (i.e. the specified combination of underlying and volatility changes) that produces the largest loss. For the delta-plus method and the scenario approach the specific risk capital charges are determined separately by multiplying the delta-equivalent of each option by the specific risk weights set out in Section B and Section C.

#### I. Simplified approach

3. Banks which handle a limited range of purchased options only will be free to use the simplified approach set out in Table A, on page 32, for particular trades. As an example of how the calculation would work, if a holder of 100 shares currently valued at Rs.10 each holds an equivalent put option with a strike price of Rs.11, the capital charge would be: Rs.1,000 x 18% (i.e. 9% specific plus 9% general market risk) = Rs.180, less the amount the option is in the money (Rs.11 – Rs.10) x 100 = Rs.100, i.e. the capital charge would be Rs.80. A similar methodology applies for options whose underlying is a foreign currency or an interest rate related instrument.

Table A
Simplified approach: capital charges

| ompiniou approuem expitar enargee |   |  |  |
|-----------------------------------|---|--|--|
| Position                          | Treatment   |  |  |
| Long cash and Long put            | The capital charge will be the market value of the            |  |  |
| Or                                | underlying security <sup>2</sup> multiplied by the sum of     |  |  |
| Short cash and Long call          | specific and general market risk charges <sup>3</sup> for the |  |  |

<sup>2</sup> In some cases such as foreign exchange, it may be unclear which side is the "underlying security"; this should be taken to be the asset which would be received if the option were exercised. In addition the nominal value should be used for items where the market value of the underlying instrument could be zero, e.g. caps and floors, swaptions etc.

<sup>&</sup>lt;sup>3</sup> Some options (e.g. where the underlying is an interest rate or a currency) bear no specific risk, but specific risk will be present in the case of options on certain interest rate-related instruments (e.g. options on a corporate debt security or corporate bond index; see Section B for the relevant capital charges) and for options on equities and stock indices (see Section C). The charge under this measure for currency options will be 9%.

| Position  | Treatment  |
|-----------|--|
|           | underlying less the amount the option is in the money (if any)   |
|           | bounded at zero <sup>4</sup>   |
| Long call | The capital charge will be the lesser of:  |
| or        | (i) the market value of the underlying security  |
| Long put  | multiplied by the sum of specific and general market risk charges <sup>3</sup> for the underlying (ii) the market value of the option <sup>5</sup> |

#### II. Intermediate approaches

#### (a) Delta-plus method

4. Banks which write options will be allowed to include delta-weighted options positions within the standardised methodology set out in Section B - D. Such options should be reported as a position equal to the market value of the underlying multiplied by the delta.

However, since delta does not sufficiently cover the risks associated with options positions, banks will also be required to measure gamma (which measures the rate of change of delta) and vega (which measures the sensitivity of the value of an option with respect to a change in volatility) sensitivities in order to calculate the total capital charge. These sensitivities will be calculated according to an approved exchange model or to the bank's proprietary options pricing model subject to oversight by the Reserve Bank of India<sup>6</sup>.

5. Delta-weighted positions with *debt securities or interest rates as the underlying* will be slotted into the interest rate time-bands, as set out in Table 1 of Section B, under the following procedure. A two-legged approach should be used as for other derivatives, requiring one entry at the time the underlying contract takes effect and a second at the time the underlying contract matures. For instance, a bought call option on a June three-month interest-rate future will in April be considered, on the basis of its delta-equivalent value, to be a long position with a maturity of five months and a short position with a maturity of two months<sup>7</sup>. The written option will be

<sup>4</sup> For options with a residual maturity of more than six months, the strike price should be compared with the forward, not current, price. A bank unable to do this must take the "in-the-money" amount to be zero.

<sup>5</sup> Where the position does not fall within the trading book (i.e. options on certain foreign exchange or commodities positions not belonging to the trading book), it may be acceptable to use the book value instead.

<sup>6</sup> Reserve Bank of India may wish to require banks doing business in certain classes of exotic options (e.g. barriers, digitals) or in options "at-the-money" that are close to expiry to use either the scenario approach or the internal models alternative, both of which can accommodate more detailed revaluation approaches.

<sup>7</sup> A two-months call option on a bond future, where delivery of the bond takes place in September, would be considered in April as being long the bond and short a five-months deposit, both positions being delta-weighted.

similarly slotted as a long position with a maturity of two months and a short position with a maturity of five months. Floating rate instruments with caps or floors will be treated as a combination of floating rate securities and a series of European-style options. For example, the holder of a three-year floating rate bond indexed to six month LIBOR with a cap of 15% will treat it as:

- (i) a debt security that reprices in six months; and
- (ii) a series of five written call options on a FRA with a reference rate of 15%, each with a negative sign at the time the underlying FRA takes effect and a positive sign at the time the underlying FRA matures<sup>8</sup>.
- 6. The capital charge for *options with equities as the underlying* will also be based on the delta-weighted positions which will be incorporated in the measure of market risk described in Section C. For purposes of this calculation each national market is to be treated as a separate underlying. The capital charge for *options on foreign exchange* and gold positions will be based on the method set out in Section D. For delta risk, the net delta-based equivalent of the foreign currency and gold options will be incorporated into the measurement of the exposure for the respective currency (or gold) position.
- 7. In addition to the above capital charges arising from delta risk, there will be further capital charges for *gamma* and for *vega risk*. Banks using the delta-plus method will be required to calculate the gamma and vega for each option position (including hedge positions) separately. The capital charges should be calculated in the following way:
  - (i) for **each individual option** a "gamma impact" should be calculated according to a Taylor series expansion as:

Gamma impact = ½ x Gamma x VU<sup>2</sup>

where VU = Variation of the underlying of the option.

- (ii) VU will be calculated as follows:
  - for interest rate options if the underlying is a bond, the price sensitivity should be worked out as explained. An equivalent calculation should be carried out where the underlying is an interest rate.
  - for options on equities and equity indices; which are not permitted at present, the market value of the underlying should be multiplied by 9%<sup>9</sup>;
  - for foreign exchange and gold options: the market value of the underlying should be multiplied by 9%;
- (iii) For the purpose of this calculation the following positions should be treated as *the same underlying*:

<sup>&</sup>lt;sup>8</sup> The rules applying to closely-matched positions set out in paragraph 2 (a) of this Attachment will also apply in this respect.

<sup>&</sup>lt;sup>9</sup> The basic rules set out here for interest rate and equity options do not attempt to capture specific risk when calculating gamma capital charges. However, Reserve Bank may require specific banks to do so.

- for interest rates,<sup>10</sup> each time-band as set out in Table 1 of Section B;<sup>11</sup>
- for equities and stock indices, each national market;
- for foreign currencies and gold, each currency pair and gold;
- (iv) Each option on the same underlying will have a gamma impact that is either positive or negative. These individual gamma impacts will be summed, resulting in a net gamma impact for each underlying that is either positive or negative. Only those net gamma impacts that are negative will be included in the capital calculation.
- (v) The total gamma capital charge will be the sum of the absolute value of the net negative gamma impacts as calculated above.
- (vi) For **volatility risk**, banks will be required to calculate the capital charges by multiplying the sum of the vegas for all options on the same underlying, as defined above, by a proportional shift in volatility of ±25%.
- (vii) The *total capital charge* for vega risk will be the sum of the absolute value of the individual capital charges that have been calculated for vega risk.

#### (b) Scenario approach

- 8. More sophisticated banks will also have the right to base the market risk capital charge for options portfolios and associated hedging positions on *scenario matrix analysis*. This will be accomplished by specifying a fixed range of changes in the option portfolio's risk factors and calculating changes in the value of the option portfolio at various points along this "grid". For the purpose of calculating the capital charge, the bank will revalue the option portfolio using matrices for simultaneous changes in the option's underlying rate or price and in the volatility of that rate or price. A different matrix will be set up for each individual underlying as defined in paragraph 7 above. As an alternative, at the discretion of each national authority, banks which are significant traders in options for interest rate options will be permitted to base the calculation on a minimum of six sets of time-bands. When using this method, not more than three of the time-bands as defined in Section B should be combined into any one set.
- 9. The options and related hedging positions will be evaluated over a specified range above and below the current value of the underlying. The range for interest rates is consistent with the assumed changes in yield in Table 1 of Section B. Those banks using the alternative method for interest rate options set out in paragraph 8 above should use, for each set of time-bands, the highest of the assumed changes in yield applicable to the group to which the time-bands belong. The other ranges are ±9 % for equities and ±9 % for foreign exchange and gold. For all risk categories, at least

<sup>11</sup> Banks using the duration method should use the time-bands as set out in Table 1 of Section B

<sup>&</sup>lt;sup>10</sup> Positions have to be slotted into separate maturity ladders by currency.

<sup>&</sup>lt;sup>12</sup> If, for example, the time-bands 3 to 4 years, 4 to 5 years and 5 to 7 years are combined, the highest assumed change in yield of these three bands would be 0.75.

seven observations (including the current observation) should be used to divide the range into equally spaced intervals.

- 10. The second dimension of the matrix entails a change in the volatility of the underlying rate or price. A single change in the volatility of the underlying rate or price equal to a shift in volatility of + 25% and 25% is expected to be sufficient in most cases. As circumstances warrant, however, the Reserve Bank may choose to require that a different change in volatility be used and / or that intermediate points on the grid be calculated.
- 11. After calculating the matrix, each cell contains the net profit or loss of the option and the underlying hedge instrument. The capital charge for each underlying will then be calculated as the largest loss contained in the matrix.
- 12. In drawing up these intermediate approaches it has been sought to cover the major risks associated with options. In doing so, it is conscious that so far as specific risk is concerned, only the delta-related elements are captured; to capture other risks would necessitate a much more complex regime. On the other hand, in other areas the simplifying assumptions used have resulted in a relatively conservative treatment of certain options positions.
- 13. Besides the options risks mentioned above, the RBI is conscious of the other risks also associated with options, e.g. rho (rate of change of the value of the option with respect to the interest rate) and theta (rate of change of the value of the option with respect to time). While not proposing a measurement system for those risks at present, it expects banks undertaking significant options business at the very least to monitor such risks closely. Additionally, banks will be permitted to incorporate rho into their capital calculations for interest rate risk, if they wish to do so.

# Example for computing the capital charge including the vertical and horizontal disallowances on interest rate related instruments

\*\* 0.22 x 5%=0.01

@ 2.79 x 5%=0.14 # 0.29 x 30%=0.09

|   | 3.22 X 3/3 3.3 |              |                  |            |               |              | # 0120 % 0070 0100 |              |              |              |              |               |              |            |             |                   |
|---|----------------|--------------|------------------|------------|---------------|--------------|--------------------|--------------|--------------|--------------|--------------|---------------|--------------|------------|-------------|-------------------|
|   | Zone 1         |              |                  |            | Zone 2 Zone 3 |              |                    |              |              |              |              |               |              |            |             |                   |
| Time-band   | 0-1<br>month   | 1-3<br>month | 3-6<br>mont<br>h | 6m<br>- 1y | 1–<br>1.9y    | 1.9–<br>2.8y | 2.8-<br>3.6y       | 3.6-<br>4.3y | 4.3–<br>5.7y | 5.7-<br>7.3y | 7.3-<br>9.3y | 9.3-<br>10.6y | 10.6-<br>12y | 12-<br>20y | Over<br>20y | Capital<br>Charge |
| Position  |                | 0.72         |                  | 2.51       |               | 1.35         | 1.77               | 2.29         |              | 2.75         | 2.79         |               | 3.63         |            |             | 17.82             |
| Derivatives (long)                                |                |              | 0.47             |            |               |              |                    | 1.07         |              |              |              |               |              |            |             | 1.54              |
| Derivatives (short)                               |                |              | (-)0.22          |            |               |              |                    |              |              |              | (-)3.08      |               |              |            |             | (-)3.30           |
| Net Position                                      |                | 0.72         | 0.25             | 2.51       |               | 1.35         | 1.77               | 3.36         |              | 2.75         | (-)0.29      |               | 3.63         |            |             | 16.06             |
| Vertical<br>Disallowance<br>(5%)                  |                |              | 0.01**           |            |               |              |                    |              |              |              | 0.14         |               |              |            |             | 0.15              |
| Horizontal<br>Disallowance<br>1 (under Zone<br>3) |                |              |                  |            |               |              |                    |              |              |              | 0.09#        |               |              |            |             | 0.09              |
| Horizontal disallowance 2                         |                |              |                  |            |               |              |                    |              |              |              |              |               |              |            |             |                   |
| Horizontal<br>Disallowance<br>3                   |                |              |                  |            |               |              |                    |              |              |              |              |               |              |            |             |                   |

#### 1. Calculation of Vertical Disallowance

While calculating capital charge for general market risk on interest rate related instruments, banks should recognize the basis risk (different types of instruments whose price responds differently for movement in general rates) and gap risk (different maturities within timebands). This is addressed by a small capital charge (5%) on matched (off-setting) positions in each time band ("Vertical Disallowance")

An off-setting position, for vertical disallowance, will be the either the sum of long positions and or the short positions within a time band, whichever is lower. In the above example, except for the time band 3-6 months in Zone 1 and the time band of 7.3-9.3 years, where there are off-setting positions of (-) 0.22 and 2.79, there is no off-setting position in any other time band. The sum of long positions in the 3-6 months time band is + 0.47 and the sum of short positions in this time band is (-) 0.22. This off-setting position of 0.22 is subjected to a capital charge of 5% i.e. 0.01. The sum of long positions in the 7.3-9.3 years time band is + 2.79 and the sum of short positions in this time band is (-) 3.08. This off-setting position of 2.79 is subjected to a capital charge of 5% i.e. 0.1395. It may be mentioned here that if a bank does not have both long and short positions in the same time band, there is no need for any vertical disallowance. Banks in India are not allowed to take any short position in their books, except in derivatives. Therefore, banks in India will generally not be subject to vertical disallowance unless they have a short position in derivatives.

#### 2. Calculation of Horizontal Disallowance

While calculating capital charge for general market risk on interest rate related instruments, banks must subject their positions to a second round of off-setting across time bands with a view to give recognition to the fact that interest rate movements are not perfectly correlated across maturity bands (yield curve risk and spread risk) i.e matched long and short positions in different time bands may not perfectly off-set. This is achieved by a "Horizontal Disallowance".

An off-setting position, for horizontal disallowance, will be the either the sum of long positions and or the short positions within a Zone, whichever is lower. In the above example, except in Zone 3 (7.3 to 9.3 years) where there is an off-setting (matched) position of (-) 0.29, there is no off-setting position in any other Zone. The sum of long positions in this Zone is 9.74 and the sum of short positions in this Zone is (-) 0.29. This off-setting position of 0.29 is subject to horizontal disallowance as under:

With in the same Zone (Zone 3) 30% of 0.29 = 0.09 Between adjacent Zones (Zone 2 & 3) = Nil Between Zones 1 and Zone 3 = Nil

It may be mentioned here that if a bank does not have both long and short positions in different time zones, there is no need for any horizontal disallowance. Banks in India are not allowed to take any short position in their books except in derivatives. Therefore, banks in India will generally not be subject to horizontal disallowance unless they have short positions in derivatives.

# 3. Total capital charge for interest rate related instruments

| 16.06 |
|-------|
| 0.15  |
| 0.09  |
| nil   |
| Nil   |
|       |
| 16.30 |
|       |

# Terms and conditions applicable to Innovative Perpetual Debt Instruments for inclusion as Tier 1 capital

The Innovative Perpetual Debt Instruments (Innovative Instruments) that may be issued as bonds or debentures by Indian banks should meet the following terms and conditions to qualify for inclusion as Tier 1 Capital for capital adequacy purposes.

#### 1. Terms of Issue of innovative instruments

#### i) Currency of issue

Banks shall issue innovative instruments in Indian Rupees. Banks shall obtain prior approval of the Reserve Bank of India, on a case-by-case basis, for issue of innovative instruments in foreign currency.

#### ii) Amount

The amount of innovative instruments to be raised may be decided by the Board of Directors of banks.

#### iii) Limits

Innovative instruments shall not exceed 15 per cent of total Tier 1 capital. The above limit will be based on the amount of Tier 1 capital after deduction of goodwill and other intangible assets but before the deduction of investments. Innovative instruments in excess of the above limits shall be eligible for inclusion under Tier 2, subject to limits prescribed for Tier 2 capital. However, investors' rights and obligations would remain unchanged.

#### iv) Maturity period

The innovative instruments shall be perpetual.

#### v) Rate of interest

The interest payable to the investors may be either at a fixed rate or at a floating rate referenced to a market determined rupee interest benchmark rate.

#### vi) Options

Innovative instruments shall not be issued with a 'put option'. However banks may issue the instruments with a call option subject to strict compliance with each of the following conditions:

- a) Call option may be exercised after the instrument has run for at least ten years; and
- b) Call option shall be exercised only with the prior approval of RBI (Department of Banking Operations & Development). While considering the proposals received from banks for exercising the call option the RBI would, among other things, take into consideration the bank's CRAR position both at the time of exercise of the call option and after exercise of the call option.

#### vii) Step-up option

The issuing bank may have a step-up option which may be exercised only once during the whole life of the instrument, in conjunction with the call option, after the lapse of ten years from the date of issue. The step-up shall not be more than 100 bps. The limits on step-up apply to the all-in cost of the debt to the issuing banks.

#### viii) Lock-In Clause

- (a) Innovative instruments shall be subjected to a lock-in clause in terms of which the issuing bank shall not be liable to pay interest, if
  - 1. the bank's CRAR is below the minimum regulatory requirement prescribed by RBI; OR
  - 2. the impact of such payment results in bank's capital to risk assets ratio (CRAR) falling below or remaining below the minimum regulatory requirement prescribed by Reserve Bank of India;
- (b) However, banks may pay interest with the prior approval of RBI when the impact of such payment may result in net loss or increase the net loss, provided the CRAR remains above the regulatory norm.

- (c) The interest shall not be cumulative.
- (d) All instances of invocation of the lock-in clause should be notified by the issuing banks to the Chief General Managers-in-Charge of Department of Banking Operations & Development and Department of Banking Supervision of the Reserve Bank of India, Mumbai.

#### ix) Seniority of claim

The claims of the investors in innovative instruments shall be

- a) Superior to the claims of investors in equity shares; and
- b) Subordinated to the claims of all other creditors.

#### x) Discount

The innovative instruments shall <u>not</u> be subjected to a progressive discount for capital adequacy purposes since these are perpetual.

#### xi) Other conditions

- a) Innovative instruments should be fully paid-up, unsecured, and free of any restrictive clauses.
- b) Investment in these instruments by FIIs and NRIs shall be within an overall limit of 49% and 24% of the issue respectively, subject to the investment by each FII not exceeding 10% of the issue and investment by each NRI not exceeding 5% of the issue.
- capital through Innovative Perpetual Debt Instruments with reference to the Tier I capital as on the last annual balance sheet date (i.e. March 31). A bank may raise fresh capital through Innovative Perpetual Debt Instruments from FIIs and NRIs up to 49 percent and 24 percent (respectively) of the amount proposed to be raised within one year or the eligible limit whichever is less. The bank should, however, raise the remaining amount from the domestic investors within a period of one

year from the date of issue to FIIs / NRIs, to ensure compliance with the limits set for FIIs and NRIs at the end of the one year period.

d) Banks should comply with the terms and conditions, if any, stipulated by SEBI / other regulatory authorities in regard to issue of the instruments.

#### 2. Compliance with Reserve Requirements

- i) The funds collected by various branches of the bank or other banks for the issue and held <u>pending</u> finalisation of allotment of the innovative instruments will have to be taken into account for the purpose of calculating reserve requirements.
- ii) The total amount raised by a bank through innovative instruments shall be reckoned as liability for the calculation of net demand and time liabilities for the purpose of reserve requirements and, as such, will attract CRR/SLR requirements.

#### 3. Reporting Requirements

Banks issuing innovative instruments shall submit a report to the Chief General Manager-in-charge, Department of Banking Operations & Development, Reserve Bank of India, Mumbai giving details of the debt raised, including the terms of issue specified at item 1 above together with a copy of the offer document soon after the issue is completed.

#### 4. Investment in innovative instruments issued by other banks/ Fls

i) A bank's investment in innovative instruments issued by other banks and financial institutions will be reckoned along with the investment in other instruments eligible for capital status while computing compliance with the overall ceiling of 10 percent for cross holding of capital among banks/Fls prescribed vide circular DBOD.BP.BC.No.3/ 21.01.002/ 2004-05 dated 6th July 2004 and also subject to cross holding limits. ii) Bank's investments in innovative instruments issued by other banks/ financial institutions will attract a 100% risk weight for capital adequacy purposes.

#### 5. Grant of advances against innovative instruments

Banks should not grant advances against the security of the innovative instruments issued by them.

# 6. Raising of innovative Instruments for inclusion as Tier 1 capital by foreign banks in India

Foreign banks in India may raise Head Office (HO) borrowings in foreign currency for inclusion as Tier 1 capital subject to the same terms and conditions as mentioned in items 1 to 5 above for Indian banks. In addition, the following terms and conditions would also be applicable:

#### i) Maturity period

If the amount of innovative Tier 1 capital raised as Head Office borrowings shall be retained in India on a perpetual basis .

#### ii) Rate of interest

Rate of interest on innovative Tier 1 capital raised as HO borrowings should not exceed the on-going market rate. Interest should be paid at half yearly rests.

#### iii) Withholding tax

Interest payments to the HO will be subject to applicable withholding tax.

#### iv) Documentation

The foreign bank raising innovative Tier 1 capital as HO borrowings should obtain a letter from its HO agreeing to give the loan for supplementing the capital base for the Indian operations of the foreign bank. The loan documentation should confirm that the loan given by Head Office shall be eligible for the same level of seniority of claim as the investors in innovative instruments capital instruments issued by Indian banks. The loan

agreement will be governed by and construed in accordance with the Indian law.

#### v) Disclosure

The total eligible amount of HO borrowings shall be disclosed in the balance sheet under the head 'Innovative Tier 1 capital raised in the form of Head Office borrowings in foreign currency'.

# vi) Hedging

The total eligible amount of HO borrowing should remain fully swapped in Indian Rupees with the bank at all times.

### vii) Reporting and certification

Details regarding the total amount of innovative Tier 1 capital raised as HO borrowings, along with a certification to the effect that the borrowing is in accordance with these guidelines, should be advised to the Chief General Managers-in-Charge of the Department of Banking Operations & Development (International Banking Section), Department of External Investments & Operations and Foreign Exchange Department (Forex Markets Division), Reserve Bank of India, Mumbai.

# Terms and conditions applicable to Debt capital Instruments to qualify for inclusion as Upper Tier 2 Capital

The debt capital instruments that may be issued as bonds / debentures by Indian banks should meet the following terms and conditions to qualify for inclusion as Upper Tier 2 Capital for capital adequacy purposes.

#### 1.Terms of Issue of Upper Tier 2 Capital instruments

#### i) Currency of issue

Banks shall issue Upper Tier 2 instruments in Indian Rupees. Banks shall obtain prior approval of the Reserve Bank of India, on a case-by-case basis, for issue of Upper Tier 2 instruments in foreign currency.

#### ii) Amount

The amount of Upper Tier 2 instruments to be raised may be decided by the Board of Directors of banks.

#### iii) Limits

Upper Tier 2 instruments along with other components of Tier 2 capital shall not exceed 100% of Tier 1 capital. The above limit will be based on the amount of Tier 1 capital after deduction of goodwill and other intangible assets but before the deduction of investments.

#### iv) Maturity period

The Upper Tier 2 instruments should have a minimum maturity of 15 years.

#### v) Rate of interest

The interest payable to the investors may be either at a fixed rate or at a floating rate referenced to a market determined rupee interest benchmark rate.

#### vi) Options

Upper Tier 2 instruments shall not be issued with a 'put option'. However banks may issue the instruments with a call option subject to strict compliance with each of the following conditions:

- a) Call option may be exercised only if the instrument has run for at least ten years;
- b) Call option shall be exercised only with the prior approval of RBI (Department of Banking Operations & Development). While considering the proposals received from banks for exercising the call option the RBI would, among other things, take into consideration the bank's CRAR position both at the time of exercise of the call option and after exercise of the call option.

#### vii) Step-up option

The issuing bank may have a step-up option which may be exercised only once during the whole life of the instrument, in conjunction with the call option, after the lapse of ten years from the date of issue. The step-up shall not be more than 100 bps. The limits on step-up apply to the all-in cost of the debt to the issuing banks.

#### viii) Lock-In Clause

- a) Upper Tier 2 instruments shall be subjected to a lock-in clause in terms of which the issuing bank shall not be liable to pay either interest or principal, even at maturity, if
  - 1. the bank's CRAR is below the minimum regulatory requirement prescribed by RBI OR
  - 2. the impact of such payment results in bank's capital to risk assets ratio (CRAR) falling below or remaining below the minimum regulatory requirement prescribed by Reserve Bank of India.
- b) However, banks may pay interest with the prior approval of RBI when the impact of such payment may result in net loss or increase the net loss provided CRAR remains above the regulatory norm.
- c) The interest amount due and remaining unpaid may be allowed to be paid in the later years in cash/ cheque subject to the bank complying with the above regulatory requirement. While paying such unpaid interest and principal banks are allowed to pay compound interest at a rate not

exceeding the coupon rate of the relative Upper Tier 2 bonds, on the outstanding principal and interest.

d) All instances of invocation of the lock-in clause should be notified by the issuing banks to the Chief General Managers-in-Charge of Department of Banking Operations & Development and Department of Banking Supervision of the Reserve Bank of India, Mumbai.

#### ix) Seniority of claim

The claims of the investors in Upper Tier 2 instruments shall be

- i. Superior to the claims of investors in instruments eligible for inclusion in Tier 1 capital; and
- ii. Subordinate to the claims of all other creditors.

#### x) Discount

The Upper Tier 2 instruments shall be subjected to a progressive discount for capital adequacy purposes as in the case of long term subordinated debt over the last five years of their tenor. As they approach maturity these instruments should be subjected to progressive discount as indicated in the table below for being eligible for inclusion in Tier 2 capital.

| Remaining Maturity of Instruments             | Rate of Discount (%) |  |  |
|---|----------------------|--|--|
| Less than one year                            | 100                  |  |  |
| One year and more but less than two years     | 80                   |  |  |
| Two years and more but less than three years  | 60                   |  |  |
| Three years and more but less than four years | 40                   |  |  |
| Four years and more but less than five years  | 20                   |  |  |

#### xi) Redemption

Upper Tier 2 instruments shall not be redeemable at the initiative of the holder. All redemptions shall be made only with the prior approval of the Reserve Bank of India (Department of Banking Operations & Development).

#### xii) Other conditions

- Upper Tier 2 instruments should be fully paid-up, unsecured, and free of any restrictive clauses.
- ii. Investment in Upper Tier 2 instruments by FIIs shall be within the limits as laid down in the ECB Policy for investment in debt instruments. In addition, NRIs shall also be eligible to invest in these instruments as per existing policy.
- iii. Banks should comply with the terms and conditions, if any, stipulated by SEBI/other regulatory authorities in regard to issue of the instruments.

#### 2. Compliance with Reserve Requirements

- i) The funds collected by various branches of the bank or other banks for the issue and held <u>pending</u> finalisation of allotment of the Upper Tier 2 Capital instruments will have to be taken into account for the purpose of calculating reserve requirements.
- ii) The total amount raised by a bank through Upper Tier 2 instruments shall be reckoned as liability for the calculation of net demand and time liabilities for the purpose of reserve requirements and, as such, will attract CRR/SLR requirements.

# 3. Reporting Requirements

Banks issuing Upper Tier 2 instruments shall submit a report to the Chief General Manager-in-charge, Department of Banking Operations & Development, Reserve Bank of India, Mumbai giving details of the debt raised, including the terms of issue specified at item 1 above together with a copy of the offer document soon after the issue is completed.

#### 4. Investment in Upper Tier 2 instruments issued by other banks/ Fls

i) A bank's investment in Upper Tier 2 instruments issued by other banks and financial institutions will be reckoned along with the investment in other instruments eligible for capital status while computing compliance with the overall ceiling of 10 percent for cross holding of capital among banks/Fls prescribed vide circular DBOD.BP.BC.No.3/ 21.01.002/ 2004-05 dated 6th July 2004 and also subject to cross holding limits.

ii) Bank's investments in Upper Tier 2 instruments issued by other banks/ financial institutions will attract a 100% risk weight for capital adequacy purposes.

### 5. Grant of advances against Upper Tier 2 instruments

Banks should not grant advances against the security of the Upper Tier 2 instruments issued by them.

#### 6. Raising of Upper Tier 2 Instruments by foreign banks in India

Foreign banks in India may raise Head Office (HO) borrowings in foreign currency for inclusion as Upper Tier 2 capital subject to the same terms and conditions as mentioned in items 1 to 5 above for Indian banks. In addition, the following terms and conditions would also be applicable:

### i) Maturity period

If the amount of Upper Tier 2 capital raised as Head Office borrowings is in tranches, each tranche shall be retained in India for a minimum period of fifteen years.

#### ii) Rate of interest

Rate of interest on Upper Tier 2 capital raised as HO borrowings should not exceed the on-going market rate. Interest should be paid at half yearly rests.

#### iii) Withholding tax

Interest payments to the HO will be subject to applicable withholding tax.

#### iv) Documentation

The foreign bank raising Upper Tier 2 capital as HO borrowings should obtain a letter from its HO agreeing to give the loan for supplementing the capital base for the Indian operations of the foreign bank. The loan documentation should confirm that the loan given by Head Office shall be eligible for the same level of seniority of claim as the investors in Upper

Tier 2 debt capital instruments issued by Indian banks. The loan agreement will be governed by and construed in accordance with the Indian law.

#### v) Disclosure

The total eligible amount of HO borrowings shall be disclosed in the balance sheet under the head 'Upper Tier 2 capital raised in the form of Head Office borrowings in foreign currency'.

# vi) Hedging

The total eligible amount of HO borrowing should remain fully swapped in Indian Rupees with the bank at all times.

#### vii) Reporting and certification

Details regarding the total amount of Upper Tier 2 capital raised as HO borrowings, along with a certification to the effect that the borrowing is in accordance with these guidelines, should be advised to the Chief General Managers-in-Charge of the Department of Banking Operations & Development (International Banking Division), Department of External Investments & Operations and Foreign Exchange Department (Forex Markets Division), Reserve Bank of India, Mumbai.

# Terms and conditions applicable to issue of unsecured bonds as Subordinated Debt by banks for raising Tier II capital

#### I. Rupee Subordinated Debt

#### 1. Terms of Issue of Bond

To be eligible for inclusion in Tier - II Capital, terms of issue of the bonds as subordinated debt instruments should be in conformity with the following:

#### (i) Amount

The amount of subordinated debt to be raised may be decided by the Board of Directors of the banks.

### (ii) Maturity period

(a) Subordinated debt instruments with an initial maturity period of less than 5 years, or with a remaining maturity of one year should not be included as part of Tier-II Capital. Further, they should be subjected to progressive discount as they approach maturity at the rates shown below:

| Remaining Maturity of Instruments              | Rate of      |
|--|--------------|
|  | Discount (%) |
| Less than one year                             | 100          |
| More than One year and less than Two years     | 80           |
| More than Two years and less than Three years  | 60           |
| More than Three years and less than Four years | 40           |
| More than Four years and less than Five years  | 20           |

(b) The bonds should have a minimum maturity of 5 years. However if the bonds are issued in the last quarter of the year i.e. from 1st January to 31st March, they should have a minimum tenure of sixty three months.

#### (iii) Rate of interest

The interest rate should not be more than 200 basis points above the yield on Government of India securities of equal residual maturity at the time of issuing bonds. The instruments should be 'vanila' with no special features like options etc.

#### (iv) Other conditions

- a) The instruments should be fully paid-up, unsecured, subordinated to the claims of other creditors, free of restrictive clauses and should not be redeemable at the initiative of the holder or without the consent of the Reserve Bank of India.
- b) Necessary permission from Foreign Exchange Department should be obtained for issuing the instruments to NRIs/OCBs/FIIs.
- c) Banks should comply with the terms and conditions, if any, set by SEBI/other regulatory authorities in regard to issue of the instruments.
- d) In the case of foreign banks rupee subordinated debt should be issued by the Head Office of the bank, through the Indian branch after obtaining specific approval from Foreign Exchange Department.

#### 2. Inclusion in Tier II capital

Subordinated debt instruments will be limited to 50 per cent of Tier-I Capital of the bank. These instruments, together with other components of Tier II capital, should not exceed 100% of Tier I capital.

#### 3. Grant of advances against bonds

Banks should not grant advances against the security of their own bonds.

#### 4. Compliance with Reserve Requirements

The total amount of Subordinated Debt raised by the bank has to be reckoned as liability for the calculation of net demand and time liabilities for the purpose of reserve requirements and, as such, will attract CRR/SLR requirements.

#### 5. Treatment of Investment in subordinated debt

Investments by banks in subordinated debt of other banks will be assigned 100% risk weight for capital adequacy purpose. Also, the bank's aggregate investment in Tier II bonds issued by other banks and financial institutions shall be within the overall ceiling of 10 percent of the investing bank's total capital. The capital for this purpose will be the same as that reckoned for the purpose of capital adequacy.

# II. Subordinated Debt in foreign currency and Subordinated Debt in the form of Foreign Currency Borrowings from Head Office by foreign banks

Banks may take approval of RBI on a case-by-case basis.

# III. Reporting Requirements

The banks should submit a report to Reserve Bank of India giving details of the capital raised, such as, amount raised, maturity of the instrument, rate of interest together with a copy of the offer document soon after the issue is completed.

# Tier II capital - Subordinated debt - Head Office borrowings in foreign currency raised by foreign banks operating in India for inclusion in Tier II capital

Detailed guidelines on the standard requirements and conditions for Head Office borrowings in foreign currency raised by foreign banks operating in India for Inclusion, as subordinated debt in Tier II capital are as indicated below:-

#### **Amount of borrowing**

2. The total amount of HO borrowing in foreign currency will be at the discretion of the foreign bank. However, the amount eligible for inclusion in Tier II capital as subordinated debt will be subject to a maximum ceiling of 50% of the Tier I capital maintained in India, and the applicable discount rate mentioned in para 5 below. Further as per extant instructions, the total of Tier II capital should not exceed 100% of Tier I capital.

#### **Maturity period**

3. Head Office borrowings should have a minimum initial maturity of 5 years. If the borrowing is in tranches, each tranche will have to be retained in India for a minimum period of five years. HO borrowings in the nature of perpetual subordinated debt, where there may be no final maturity date, will not be permitted.

#### **Features**

4. The HO borrowings should be fully paid up, i.e. the entire borrowing or each tranche of the borrowing should be available in full to the branch in India. It should be unsecured, subordinated to the claims of other creditors of the foreign bank in India, free of restrictive clauses and should not be redeemable at the instance of the HO.

#### Rate of discount

5. The HO borrowings will be subjected to progressive discount as they approach maturity at the rates indicated below:

| Remaining maturity of borrowing         | Rate of discount  |
|---|---|
| More than 5 years                       | Not Applicable (the entire amount can be included as subordinated debt in Tier II capital subject to the ceiling mentioned in para 2) |
| More than 4 years and less than 5 years | 20%   |
| More than 3 years and less than 4 years | 40%   |
| More than 2 years and less than 3 years | 60%   |
| More than 1 year and less than 2 years  | 80%   |
| Less than 1 year                        | 100% (No amount can be treated as   |
|   | subordinated debt for Tier II capital)  |

#### Rate of interest

6. The rate of interest on HO borrowings should not exceed the on-going market rate. Interest should be paid at half yearly rests.

# Withholding tax

7. The interest payments to the HO will be subject to applicable withholding tax.

#### Repayment

8. All repayments of the principal amount will be subject to prior approval of Reserve Bank of India, Department of Banking Operations and Development.

#### **Documentation**

9. The bank should obtain a letter from its HO agreeing to give the loan for supplementing the capital base for the Indian operations of the foreign bank. The loan documentation should confirm that the loan given by Head Office would be subordinated to the claims of all other creditors of the foreign bank in India. The loan agreement will be governed by, and construed in accordance with the Indian law. Prior approval of the RBI should be obtained in case of any material changes in the original terms of issue.

#### **Disclosure**

10. The total eligible amount of HO borrowings may be disclosed in the balance sheet under the head 'Subordinated loan in the nature of long term borrowings in foreign currency from Head Office'.

#### Reserve requirements

11. The total amount of HO borrowings is to be reckoned as liability for the calculation of net demand and time liabilities for the purpose of reserve requirements and, as such, will attract CRR/SLR requirements.

#### Hedging

12. The total eligible amount of HO borrowing should remain fully swapped with banks at all times. The swap should be in Indian rupees.

#### **Reporting & Certification**

13. Such borrowings done in compliance with the guidelines set out above, would not require prior approval of Reserve Bank of India. However, information regarding the total amount of borrowing raised from Head Office under this circular, along with a certification to the effect that the borrowing is as per the guidelines, should be advised to the Chief General Managers-in-Charge of the Department of Banking Operations & Development (International Banking Section), Department of External Investments & Operations and Foreign Exchange Department (Forex Markets Division), Reserve Bank of India, Mumbai.

# **Risk Weights for Calculation of CRAR**

(Vide paragraph 3.4)

# I. <u>Domestic Operations</u>

# A Funded Risk Assets

| Sr. | Item of asset or liability   | Risk   |
|-----|--|--------|
| No. |  | Weight |
|     |  | %      |
| I   | Balances   |        |
| 1.  | Cash, balances with RBI  | 0      |
| 2.  | i. Balances in current account with other banks  | 20     |
|     | ii. Claims on Bank   | 20     |
|     |  |        |
| II  | Investments(Applicable to securities held in HTM)  |        |
| 1.  | Investments in Government Securities.  | 0      |
| 2.  | Investments in other approved securities guaranteed by   | 0      |
|     | Central/ State Government.   |        |
|     | Note: If the repayment of principal / interest in respect of State Government Guaranteed securities included in item 2, 4 and 6 has remained in default, for a period of more than 90 days banks should assign 102.5% risk weight. However the banks need to assign 102.5% risk weight only on those State Government guaranteed securities issued by the defaulting entities and not on all the securities issued or guaranteed by that State Government. |        |
| 3.  | Investments in other securities where payment of interest and repayment of principal are guaranteed by Central Govt. (This will include investments in Indira/Kisan Vikas Patra (IVP/KVP) and investments in Bonds and Debentures where payment of interest and principal is guaranteed by Central Govt.)  (cf para (i) of circular listed at item 4 part 'B' of Appendix)   | 0      |

| 4.  | Investments in other securities where payment of interest and repayment of principal are guaranteed by State Governments.   | 0   |
|-----|---|-----|
| 5.  | Investments in other approved securities where payment of interest and repayment of principal are not guaranteed by Central/State Govt.   | 20  |
| 6.  | Investments in Government guaranteed securities of Government Undertakings which <b>do not</b> form part of the approved market borrowing programme.  | 20  |
| 7.  | Claims on commercial banks  | 20  |
| 8.  | Investments in bonds issued by other banks  | 20  |
| 9.  | Investments in securities which are guaranteed by banks as to payment of interest and repayment of principal.   | 20  |
| 10. | Investments in subordinated debt instruments and bonds issued by other banks or Public Financial Institutions for their Tier II capital.  | 100 |
| 11. | Deposits placed with SIDBI/NABARD in lieu of shortfall in lending to priority sector.   | 100 |
| 12. | Investment in Mortgage Backed Securities (MBS) of residential assets of Housing Finance Companies (HFCs) which are recognised and supervised by National Housing Bank (subject to satisfying terms & conditions given in <i>Annexure</i> 4B). | 75  |
| 13. | Investment in securitised paper pertaining to an infrastructure facility. (subject to satisfying terms & conditions given in Annexure 4C).  | 50  |
| 14  | Investments in debentures/ bonds/ security receipts/ Pass Through Certificates issued by Securitisation Company / SPVs/ Reconstruction Company and held by banks as investment  | 100 |
| 15. | All other investments including investments in securities issued by PFIs.   | 100 |

|         | Note: Equity investments in subsidiaries, intangible assets  |     |
|---------|--|-----|
|         | and losses deducted from Tier I capital should be assigned   |     |
|         | zero weight  |     |
| 16      | Direct investment in equity shares, convertible bonds,   | 125 |
|         | debentures and units of equity oriented mutual funds   |     |
| 17      | Investment in Mortgaged Backed Securities and other  | 150 |
|         | securitised exposures to Commercial Real Estate  |     |
| 18      | Investments in Venture Capital Funds   | 150 |
| 19      | Securities issued by SPVs in respect of securitisaion  | 100 |
|         | standard asset transactions underwritten and devolved by   |     |
|         | originator banks during the stipulated period of three   |     |
|         | months   |     |
| 20      | Securities issued by SPVs in respect of securitisaion  | 100 |
|         | standard asset transactions underwritten and devolved to   |     |
|         | bank as party service provider during the stipulated period  |     |
|         | of three months  |     |
| 21      | NPA Investment purchased from other banks  | 100 |
| Ш       | Loans & Advances including bills purchased and   |     |
|         | discounted and other credit facilities   |     |
| 1.      | Loans guaranteed by Govt. of India   | 0   |
| 2.      | Loans guaranteed by State Govts.   | 0   |
|         | <b>Note:</b> If the loans guaranteed by State Govts. have remained in default for a period of more than 90 days a risk weight of 100 percent should be |     |
| 3.      | assigned.  Loans granted to public sector undertakings of Govt. of   | 100 |
|         | India  |     |
| 4.      | Loans granted to public sector undertakings of State   | 100 |
|         | Govts.   |     |
| <u></u> |  |     |

| (ii) For the purpose of credit exposure, bills purchased/discounted /negotiated under LC (where payment to the beneficiary is not under reserve) is treated as an exposueon the LC issuing bank and assigned risk weight as is normally applicable to inter-bank exposures.  (iii) Bills negotiated undr LCs 'under reserve', bills purchased/discounted/negotiated without LCs, will be reckoned as exposure on the borrower constituent. Accordingly, the exposure will attract a risk weight appropriate to the borrower.  (i) Govt (ii) Banks (iii) Others  6. Others including PFIs 7. Leased assets  8. Advances covered by DICGC/ECGC  Note: The risk weight of 50% should be limited to the amount guaranteed and not the entire outstanding balance in the accounts. In other words, the outstandings in excess of the amount guaranteed, will carry 100% risk weight.  9. SSI Advances Guaranteed by Credit Guarantee Fund Trust for Small Industries (CGTSI) up to the guaranteed portion.  Note: Banks may assign zero risk weight for the guaranteed portion. The balance outstanding in excess of the guaranteed portion would attract a risk-weight as appropriate to the counter-party. Two |      |   |     |  |  |  |  |
|---|------|---|-----|--|--|--|--|
| purchased/discounted /negotiated under LC (where payment to the beneficiary is not under reserve) is treated as an exposueon the LC issuing bank and assigned risk weight as is normally applicable to inter-bank exposures.  (ii) Bills negotiated undr LCs 'under reserve', bills purchased/discounted/negotiated without LCs, will be reckoned as exposure on the borrower constituent. Accordingly, the exposure will attract a risk weight appropriate to the borrower.  (i) Govt (ii) Banks (iii) Others  100  6. Others including PFIs  7. Leased assets  8. Advances covered by DICGC/ECGC  Note: The risk weight of 50% should be limited to the amount guaranteed and not the entire outstanding balance in the accounts. In other words, the outstandings in excess of the amount guaranteed, will carry 100% risk weight.  9. SSI Advances Guaranteed by Credit Guarantee Fund Trust for Small Industries (CGTSI) up to the guaranteed portion.  Note: Banks may assign zero risk weight for the guaranteed portion. The balance outstanding in excess of the guaranteed portion would attract a risk-weight as appropriate to the counter-party. Two   | 5.   |   |     |  |  |  |  |
| payment to the beneficiary is not under reserve) is treated as an exposueon the LC issuing bank and assigned risk weight as is normally applicable to inter-bank exposures.  (ii) Bills negotiated undr LCs 'under reserve', bills purchased/discounted/negotiated without LCs, will be reckoned as exposure on the borrower constituent. Accordingly, the exposure will attract a risk weight appropriate to the borrower.  (i) Govt (ii) Banks 20 (iii) Others 100  6. Others including PFIs 7. Leased assets 100  8. Advances covered by DICGC/ECGC  Note: The risk weight of 50% should be limited to the amount guaranteed and not the entire outstanding balance in the accounts. In other words, the outstandings in excess of the amount guaranteed, will carry 100% risk weight.  9. SSI Advances Guaranteed by Credit Guarantee Fund Trust for Small Industries (CGTSI) up to the guaranteed portion.  Note: Banks may assign zero risk weight for the guaranteed portion. The balance outstanding in excess of the guaranteed portion would attract a risk-weight as appropriate to the counter-party. Two   | (i)  |   | 20  |  |  |  |  |
| as an exposueon the LC issuing bank and assigned risk weight as is normally applicable to inter-bank exposures.  (ii) Bills negotiated undr LCs 'under reserve', bills purchased/discounted/negotiated without LCs, will be reckoned as exposure on the borrower constituent. Accordingly, the exposure will attract a risk weight appropriate to the borrower.  (i) Govt (ii) Banks (iii) Others  7. Leased assets  8. Advances covered by DICGC/ECGC  Note: The risk weight of 50% should be limited to the amount guaranteed and not the entire outstanding balance in the accounts. In other words, the outstandings in excess of the amount guaranteed, will carry 100% risk weight.  9. SSI Advances Guaranteed by Credit Guarantee Fund Trust for Small Industries (CGTSI) up to the guaranteed portion.  Note: Banks may assign zero risk weight for the guaranteed portion. The balance outstanding in excess of the guaranteed portion would attract a risk-weight as appropriate to the counter-party. Two   |      | purchased/discounted /negotiated under LC (where            |     |  |  |  |  |
| weight as is normally applicable to inter-bank exposures.  (ii) Bills negotiated undr LCs 'under reserve', bills purchased/discounted/negotiated without LCs, will be reckoned as exposure on the borrower constituent. Accordingly, the exposure will attract a risk weight appropriate to the borrower.  (i) Govt (ii) Banks (iii) Others  6. Others including PFIs 7. Leased assets 8. Advances covered by DICGC/ECGC Note: The risk weight of 50% should be limited to the amount guaranteed and not the entire outstanding balance in the accounts. In other words, the outstandings in excess of the amount guaranteed, will carry 100% risk weight.  9. SSI Advances Guaranteed by Credit Guarantee Fund Trust for Small Industries (CGTSI) up to the guaranteed portion.  Note: Banks may assign zero risk weight for the guaranteed portion. The balance outstanding in excess of the guaranteed portion would attract a risk-weight as appropriate to the counter-party. Two  |      | payment to the beneficiary is not under reserve) is treated |     |  |  |  |  |
| (ii) Bills negotiated undr LCs 'under reserve', bills purchased/discounted/negotiated without LCs, will be reckoned as exposure on the borrower constituent. Accordingly, the exposure will attract a risk weight appropriate to the borrower.  (i) Govt (ii) Banks 20 (iii) Others 100  6. Others including PFIs 7. Leased assets 100  8. Advances covered by DICGC/ECGC Note: The risk weight of 50% should be limited to the amount guaranteed and not the entire outstanding balance in the accounts. In other words, the outstandings in excess of the amount guaranteed, will carry 100% risk weight.  9. SSI Advances Guaranteed by Credit Guarantee Fund Trust for Small Industries (CGTSI) up to the guaranteed portion.  Note: Banks may assign zero risk weight for the guaranteed portion. The balance outstanding in excess of the guaranteed portion would attract a risk-weight as appropriate to the counter-party. Two   |      | as an exposueon the LC issuing bank and assigned risk       |     |  |  |  |  |
| purchased/discounted/negotiated without LCs, will be reckoned as exposure on the borrower constituent. Accordingly, the exposure will attract a risk weight appropriate to the borrower.  (i) Govt (ii) Banks 20 (iii) Others 100  6. Others including PFIs 100  7. Leased assets 100  8. Advances covered by DICGC/ECGC Note: The risk weight of 50% should be limited to the amount guaranteed and not the entire outstanding balance in the accounts. In other words, the outstandings in excess of the amount guaranteed, will carry 100% risk weight.  9. SSI Advances Guaranteed by Credit Guarantee Fund Trust for Small Industries (CGTSI) up to the guaranteed portion.  Note: Banks may assign zero risk weight for the guaranteed portion. The balance outstanding in excess of the guaranteed portion would attract a risk-weight as appropriate to the counter-party. Two  |      | weight as is normally applicable to inter-bank exposures.   |     |  |  |  |  |
| purchased/discounted/negotiated without LCs, will be reckoned as exposure on the borrower constituent. Accordingly, the exposure will attract a risk weight appropriate to the borrower.  (i) Govt (ii) Banks (iii) Others  6. Others including PFIs  7. Leased assets  8. Advances covered by DICGC/ECGC  Note: The risk weight of 50% should be limited to the amount guaranteed and not the entire outstanding balance in the accounts. In other words, the outstandings in excess of the amount guaranteed, will carry 100% risk weight.  9. SSI Advances Guaranteed by Credit Guarantee Fund Trust for Small Industries (CGTSI) up to the guaranteed portion.  Note: Banks may assign zero risk weight for the guaranteed portion. The balance outstanding in excess of the guaranteed portion would attract a risk-weight as appropriate to the counter-party. Two  | (ii) | Bills negotiated undr LCs 'under reserve', bills            |     |  |  |  |  |
| Accordingly, the exposure will attract a risk weight appropriate to the borrower.  (i) Govt (ii) Banks (iii) Others  6. Others including PFIs 7. Leased assets  100  8. Advances covered by DICGC/ECGC Note: The risk weight of 50% should be limited to the amount guaranteed and not the entire outstanding balance in the accounts. In other words, the outstandings in excess of the amount guaranteed, will carry 100% risk weight.  9. SSI Advances Guaranteed by Credit Guarantee Fund Trust for Small Industries (CGTSI) up to the guaranteed portion.  Note: Banks may assign zero risk weight for the guaranteed portion. The balance outstanding in excess of the guaranteed portion would attract a risk-weight as appropriate to the counter-party. Two  |      | purchased/discounted/negotiated without LCs, will be        |     |  |  |  |  |
| appropriate to the borrower.  (i) Govt (ii) Banks (iii) Others  100  6. Others including PFIs  7. Leased assets  100  8. Advances covered by DICGC/ECGC  Note: The risk weight of 50% should be limited to the amount guaranteed and not the entire outstanding balance in the accounts. In other words, the outstandings in excess of the amount guaranteed, will carry 100% risk weight.  9. SSI Advances Guaranteed by Credit Guarantee Fund Trust for Small Industries (CGTSI) up to the guaranteed portion.  Note: Banks may assign zero risk weight for the guaranteed portion. The balance outstanding in excess of the guaranteed portion would attract a risk-weight as appropriate to the counter-party. Two  |      | reckoned as exposure on the borrower constituent.           |     |  |  |  |  |
| appropriate to the borrower.  (i) Govt (ii) Banks (iii) Others  100  6. Others including PFIs  7. Leased assets  100  8. Advances covered by DICGC/ECGC Note: The risk weight of 50% should be limited to the amount guaranteed and not the entire outstanding balance in the accounts. In other words, the outstandings in excess of the amount guaranteed, will carry 100% risk weight.  9. SSI Advances Guaranteed by Credit Guarantee Fund Trust for Small Industries (CGTSI) up to the guaranteed portion.  Note: Banks may assign zero risk weight for the guaranteed portion. The balance outstanding in excess of the guaranteed portion would attract a risk-weight as appropriate to the counter-party. Two   |      | Accordingly, the exposure will attract a risk weight        |     |  |  |  |  |
| (ii) Govt (iii) Banks (iii) Others  100  6. Others including PFIs  7. Leased assets 100  8. Advances covered by DICGC/ECGC Note: The risk weight of 50% should be limited to the amount guaranteed and not the entire outstanding balance in the accounts. In other words, the outstandings in excess of the amount guaranteed, will carry 100% risk weight.  9. SSI Advances Guaranteed by Credit Guarantee Fund Trust for Small Industries (CGTSI) up to the guaranteed portion.  Note: Banks may assign zero risk weight for the guaranteed portion. The balance outstanding in excess of the guaranteed portion would attract a risk-weight as appropriate to the counter-party. Two  |      |   |     |  |  |  |  |
| 6. Others including PFIs 100  7. Leased assets 100  8. Advances covered by DICGC/ECGC 50  Note: The risk weight of 50% should be limited to the amount guaranteed and not the entire outstanding balance in the accounts. In other words, the outstandings in excess of the amount guaranteed, will carry 100% risk weight.  9. SSI Advances Guaranteed by Credit Guarantee Fund Trust for Small Industries (CGTSI) up to the guaranteed portion.  Note: Banks may assign zero risk weight for the guaranteed portion. The balance outstanding in excess of the guaranteed portion would attract a risk-weight as appropriate to the counter-party. Two   |      | (i) Govt  | 0   |  |  |  |  |
| 6. Others including PFIs 100  7. Leased assets 100  8. Advances covered by DICGC/ECGC 50  Note: The risk weight of 50% should be limited to the amount guaranteed and not the entire outstanding balance in the accounts. In other words, the outstandings in excess of the amount guaranteed, will carry 100% risk weight.  9. SSI Advances Guaranteed by Credit Guarantee Fund Trust for Small Industries (CGTSI) up to the guaranteed portion.  Note: Banks may assign zero risk weight for the guaranteed portion. The balance outstanding in excess of the guaranteed portion would attract a risk-weight as appropriate to the counter-party. Two   |      | (ii) Banks  | 20  |  |  |  |  |
| 7. Leased assets  Advances covered by DICGC/ECGC  Note: The risk weight of 50% should be limited to the amount guaranteed and not the entire outstanding balance in the accounts. In other words, the outstandings in excess of the amount guaranteed, will carry 100% risk weight.  9. SSI Advances Guaranteed by Credit Guarantee Fund Trust for Small Industries (CGTSI) up to the guaranteed portion.  Note: Banks may assign zero risk weight for the guaranteed portion. The balance outstanding in excess of the guaranteed portion would attract a risk-weight as appropriate to the counter-party. Two   |      | (iii) Others  | 100 |  |  |  |  |
| 7. Leased assets  Advances covered by DICGC/ECGC  Note: The risk weight of 50% should be limited to the amount guaranteed and not the entire outstanding balance in the accounts. In other words, the outstandings in excess of the amount guaranteed, will carry 100% risk weight.  9. SSI Advances Guaranteed by Credit Guarantee Fund Trust for Small Industries (CGTSI) up to the guaranteed portion.  Note: Banks may assign zero risk weight for the guaranteed portion. The balance outstanding in excess of the guaranteed portion would attract a risk-weight as appropriate to the counter-party. Two   |      | . ,   |     |  |  |  |  |
| 8. Advances covered by DICGC/ECGC  Note: The risk weight of 50% should be limited to the amount guaranteed and not the entire outstanding balance in the accounts. In other words, the outstandings in excess of the amount guaranteed, will carry 100% risk weight.  9. SSI Advances Guaranteed by Credit Guarantee Fund Trust for Small Industries (CGTSI) up to the guaranteed portion.  Note: Banks may assign zero risk weight for the guaranteed portion. The balance outstanding in excess of the guaranteed portion would attract a risk-weight as appropriate to the counter-party. Two  | 6.   | Others including PFIs                                       | 100 |  |  |  |  |
| Note: The risk weight of 50% should be limited to the amount guaranteed and not the entire outstanding balance in the accounts. In other words, the outstandings in excess of the amount guaranteed, will carry 100% risk weight.  9. SSI Advances Guaranteed by Credit Guarantee Fund Trust for Small Industries (CGTSI) up to the guaranteed portion.  Note: Banks may assign zero risk weight for the guaranteed portion. The balance outstanding in excess of the guaranteed portion would attract a risk-weight as appropriate to the counter-party. Two   | 7.   | Leased assets   | 100 |  |  |  |  |
| amount guaranteed and not the entire outstanding balance in the accounts. In other words, the outstandings in excess of the amount guaranteed, will carry 100% risk weight.  9. SSI Advances Guaranteed by Credit Guarantee Fund Trust for Small Industries (CGTSI) up to the guaranteed portion.  Note: Banks may assign zero risk weight for the guaranteed portion. The balance outstanding in excess of the guaranteed portion would attract a risk-weight as appropriate to the counter-party. Two   | 8.   | Advances covered by DICGC/ECGC                              | 50  |  |  |  |  |
| balance in the accounts. In other words, the outstandings in excess of the amount guaranteed, will carry 100% risk weight.  9. SSI Advances Guaranteed by Credit Guarantee Fund Trust for Small Industries (CGTSI) up to the guaranteed portion.  Note: Banks may assign zero risk weight for the guaranteed portion. The balance outstanding in excess of the guaranteed portion would attract a risk-weight as appropriate to the counter-party. Two  |      | Note: The risk weight of 50% should be limited to the       |     |  |  |  |  |
| outstandings in excess of the amount guaranteed, will carry 100% risk weight.  9. SSI Advances Guaranteed by Credit Guarantee Fund Trust for Small Industries (CGTSI) up to the guaranteed portion.  Note: Banks may assign zero risk weight for the guaranteed portion. The balance outstanding in excess of the guaranteed portion would attract a risk-weight as appropriate to the counter-party. Two   |      | amount guaranteed and not the entire outstanding            |     |  |  |  |  |
| will carry 100% risk weight.  9. SSI Advances Guaranteed by Credit Guarantee Fund Trust for Small Industries (CGTSI) up to the guaranteed portion.  Note: Banks may assign zero risk weight for the guaranteed portion. The balance outstanding in excess of the guaranteed portion would attract a risk-weight as appropriate to the counter-party. Two  |      | balance in the accounts. In other words, the                |     |  |  |  |  |
| 9. SSI Advances Guaranteed by Credit Guarantee Fund Trust for Small Industries (CGTSI) up to the guaranteed portion.  Note: Banks may assign zero risk weight for the guaranteed portion. The balance outstanding in excess of the guaranteed portion would attract a risk-weight as appropriate to the counter-party. Two  |      | outstandings in excess of the amount guaranteed,            |     |  |  |  |  |
| Trust for Small Industries (CGTSI) up to the guaranteed portion.  Note: Banks may assign zero risk weight for the guaranteed portion. The balance outstanding in excess of the guaranteed portion would attract a risk-weight as appropriate to the counter-party. Two  |      | will carry 100% risk weight.                                |     |  |  |  |  |
| portion.  Note: Banks may assign zero risk weight for the guaranteed portion. The balance outstanding in excess of the guaranteed portion would attract a risk-weight as appropriate to the counter-party. Two  | 9.   | SSI Advances Guaranteed by Credit Guarantee Fund            | 0   |  |  |  |  |
| Note: Banks may assign zero risk weight for the guaranteed portion. The balance outstanding in excess of the guaranteed portion would attract a risk-weight as appropriate to the counter-party. Two  |      | Trust for Small Industries (CGTSI) up to the guaranteed     |     |  |  |  |  |
| guaranteed portion. The balance outstanding in excess of the guaranteed portion would attract a risk-weight as appropriate to the counter-party. Two  |      | portion.  |     |  |  |  |  |
| excess of the guaranteed portion would attract a risk-weight as appropriate to the counter-party. Two   |      | Note: Banks may assign zero risk weight for the             |     |  |  |  |  |
| risk-weight as appropriate to the counter-party. Two  |      | guaranteed portion. The balance outstanding in              |     |  |  |  |  |
|   |      | excess of the guaranteed portion would attract a            |     |  |  |  |  |
| illustrative examples are given in Anneyure 44  |      | risk-weight as appropriate to the counter-party. Two        |     |  |  |  |  |
| illustrative examples are given in <i>Annexure 4A</i> .   | 1    |   |     |  |  |  |  |

| 10. | Insurance cover under Business Credit Shield the product   | 50  |
|-----|--|-----|
|     | of New India Assurance Company Ltd. (Subject to  |     |
|     | Conditions given in Annexure 4D)   |     |
|     | Note: The risk weight of 50% should be limited to the  |     |
|     | amount guaranteed and not the entire outstanding balance   |     |
|     | in the accounts. In other words, the outstandings in excess  |     |
|     | of the amount guaranteed, will carry 100% risk weight.   |     |
| 11  | Advances against term deposits, Life policies, NSCs, IVPs  | 0   |
|     | and KVPs where adequate margin is available.   |     |
| 12. | Loans and Advances granted to staff of banks which are   | 20  |
|     | fully covered by superannuation benefits and mortgage of   |     |
|     | flat/house.  |     |
| 13. | Housing loans to individuals against the mortgage of   | 75  |
|     | residential housing properties.  |     |
| 14  | Consumer credit including personal loans and credit cards  | 125 |
| 15. | Takeout Finance  |     |
|     | <ul> <li>(i) Unconditional takeover (in the books of lending institution)</li> <li>(a) Where full credit risk is assumed by the taking over institution</li> <li>(b) Where only partial credit risk is assumed by taking over institution</li> </ul> | 20  |
|     | i) the amount to be taken over   | 20  |
|     | ii) the amount not to be taken over  | 100 |
|     | (ii) Conditional take-over (in the books of lending and  | 100 |
|     | Taking over institution)   |     |
| 16  | Advances against shares to individuals for investment in   | 125 |
|     | equity shares (including IPOs/ESOPs), bonds and  |     |
|     | debentures, units of equity oriented mutual funds, etc.  |     |
| 17  | Secured and unsecured advances to stock brokers  | 125 |
| 18  | Fund based exposures commercial real estate  | 150 |
| 19  | Funded liquidity facility for securitisation of standard asset   | 100 |
|     | transactions   |     |
| 20  | NPA purchased from other banks   | 100 |

| IV | Other Asse                                  | ets  |     |
|----|---|--|-----|
| 1. | Premises, f                                 | urniture and fixtures                        | 100 |
| 2. | (i)   | Income tax deducted at source (net of        | 0   |
|    |   | provision)                                   |     |
|    | (ii)  | Advance tax paid (net of provision)          | 0   |
|    | (iii) Interest due on Government securities |  | 0   |
|    | (iv)  | Accrued interest on CRR balances and claims  | 0   |
|    |   | on RBI on account of Government transactions |     |
|    |   | (net of claims of Government/RBI on banks on |     |
|    |   | account of such transactions)                |     |
|    | (v)   | All other assets                             | 100 |

#### B. Off-Balance Sheet Items

The credit risk exposure attached to off-Balance Sheet items has to be first calculated by multiplying the face value of each of the off-Balance Sheet items by 'credit conversion factor' as indicated in the table below. This will then have to be again multiplied by the weights attributable to the relevant counter-party as specified above.

| Sr.<br>No. | Instruments   | Credit<br>Conversion<br>Factor (%) |
|------------|---|------------------------------------|
| 1.         | Direct credit substitutes e.g. general guarantees of indebtedness | 100                                |
|            | (including standby L/Cs serving as financial guarantees for loans |                                    |
|            | and securities) and acceptances (including endorsements with      |                                    |
|            | the character of acceptance).                                     |                                    |
| 2.         | Certain transaction-related contingent items (e.g. performance    | 50                                 |
|            | bonds, bid bonds, warranties and standby L/Cs related to          |                                    |
|            | particular transactions).   |                                    |
| 3.         | Short-term self-liquidating trade-related contingencies (such as  | 20                                 |
|            | documentary credits collateralised by the underlying shipments).  |                                    |
| 4.         | Sale and repurchase agreement and asset sales with recourse,      | 100                                |
|            | where the credit risk remains with the bank.                      |                                    |
| 5.         | Forward asset purchases, forward deposits and partly paid         | 100                                |
|            | shares and securities, which represent commitments with certain   |                                    |
|            | drawdown.   |                                    |

| Instruments  | Credit<br>Conversion<br>Factor (%)  |
|--|---|
| Note issuance facilities and revolving underwriting facilities.    | 50  |
| Other commitments (e.g., formal standby facilities and credit      | 50  |
| lines) with an original maturity of over one year.                 |   |
| Similar commitments with an original maturity upto one year, or    | 0   |
| which can be unconditionally cancelled at any time.                |   |
| Aggregate outstanding foreign exchange contracts of original       |   |
| maturity -   |   |
| less than one year   | 2   |
| for each additional year or part thereof                           | 3   |
| Take-out Finance in the books of taking-over institution           |   |
| (i) Unconditional take-out finance                                 | 100   |
| (ii) Conditional take-out finance                                  | 50  |
| Note: As the counter-party exposure will determine the risk        |   |
| weight, it will be 100 percent in respect of all borrowers or zero |   |
| percent if covered by Government guarantee.                        |   |
| Non-Funded exposures to commercial real estate                     | 150   |
| Guarantees issued on behalf of stock brokers and market            | 125   |
| makers   |   |
| Commitment to provide liquidity facility for secuitisation of      | 100   |
| stanadard asset transactions                                       |   |
| Second loss credit enchancement for securitisation of standard     | 100   |
| asset transactions provided by third party                         |   |
|  | Note issuance facilities and revolving underwriting facilities.  Other commitments (e.g., formal standby facilities and credit lines) with an original maturity of over one year.  Similar commitments with an original maturity upto one year, or which can be unconditionally cancelled at any time.  Aggregate outstanding foreign exchange contracts of original maturity -  • less than one year  • for each additional year or part thereof  Take-out Finance in the books of taking-over institution  (i) Unconditional take-out finance  (ii) Conditional take-out finance  Note: As the counter-party exposure will determine the risk weight, it will be 100 percent in respect of all borrowers or zero percent if covered by Government guarantee.  Non-Funded exposures to commercial real estate  Guarantees issued on behalf of stock brokers and market makers  Commitment to provide liquidity facility for secuitisation of standard asset transactions  Second loss credit enchancement for securitisation of standard |

NOTE: In regard to off-balance sheet items, the following transactions with non-bank counterparties will be treated as claims on banks and carry a risk-weight of 20%

- a) Guarantees issued by banks against the counter guarantees of other banks.
- b) Rediscounting of documentary bills accepted by banks. Bills discounted by banks which have been accepted by another bank will be treated as a funded claim on a bank.

In all the above cases banks should be fully satisfied that the risk exposure is in fact on the other bank.

## C. Risk weights for Open positions

| Sr. | Item  | Risk       |
|-----|---|------------|
| No. |   | weight (%) |
| 1.  | Foreign exchange open position.                       | 100        |
| 2.  | Open position in gold                                 | 100        |
|     | Note: The risk weighted position both in respect of   |            |
|     | foreign exchange and gold open position limits should |            |
|     | be added to the other risk weighted assets for        |            |
|     | calculation of CRAR                                   |            |

## D. Risk weights for Forward Rate Agreement (FRA) /Interest Rate Swap (IRS)

For reckoning the minimum capital ratio, the computation of risk weighted assets on account of FRAs / IRS should be done as per the two steps procedure set out below:

## Step 1

The notional principal amount of each instruments is to be multiplied by the conversion factor given below:

| Original Maturity                | Conversion Factor |
|----------------------------------|-------------------|
| Less than one year               | 0.5 per cent      |
| One year and less than two years | 1.0 per cent      |
| For each additional year         | 1.0 per cent      |

## Step 2

The adjusted value thus obtained shall be multiplied by the risk weightage allotted to the relevant counter-party as specified below:

| Counter party         | Risk weight  |
|-----------------------|--------------|
| Banks                 | 20 per cent  |
| Central & State Govt. | 0 percent    |
| All others            | 100 per cent |

# II. Overseas operations (applicable only to Indian banks having branches abroad)

## A. Funded Risk Assets

| Sr.<br>No. | Item of asset or liability                                   | Risk<br>Weight % |
|------------|--|------------------|
| i)         | Cash   | 0                |
| ii)        | Balances with Monetary Authority                             | 0                |
| iii)       | Investments in Government securities                         | 0                |
| iv)        | Balances in current account with other banks                 | 20               |
| v)         | All other claims on banks including but not limited to funds |                  |
|            | loaned in money markets, deposit placements, investments in  | 20               |
|            | CDs/FRNs. Etc.   |                  |
| vi)        | Investment in non-bank sectors                               | 100              |
| vii)       | Loans and advances, bills purchased and discounted and       |                  |
|            | other credit facilities                                      |                  |
|            | a) Claims guaranteed by Government of India.                 | 0                |
|            | b) Claims guaranteed by State Governments                    | 0                |
|            | c) Claims on public sector undertakings of Government of     | 100              |
|            | India.   |                  |
|            | d) Claims on public sector undertakings of State Governments | 100              |
|            | e) Others  | 100              |
| viii)      | All other banking and infrastructural assets                 | 100              |

## B. Non-funded risk assets

| Sr.  | Instruments  | Credit                |
|------|--|-----------------------|
| No.  |  | Conversion Factor (%) |
| i)   | Direct credit substitutes, e.g. general guarantees of            | 100                   |
|      | indebtedness (including standby letters of credit serving as     |                       |
|      | financial guarantees for loans and securities) and acceptances   |                       |
|      | (including endorsements with the character of acceptances)       |                       |
| ii)  | Certain transaction-related contingent items (e.g. performance   | 50                    |
|      | bonds, bid bonds, warranties and standby letters of credit       |                       |
|      | related to particular transactions)                              |                       |
| iii) | Short-term self-liquidating trade related contingencies- such as | 20                    |
|      | documentary credits collateralised by the underlying shipments   |                       |

| Sr.   | Instruments   | Credit                |
|-------|---|-----------------------|
| No.   |   | Conversion Factor (%) |
| iv)   | Sale and repurchase agreement and asset sales with recourse, where the credit risk remains with the bank.                           | 100                   |
| v)    | Forward asset purchases, forward deposits and partly paid shares and securities, which represent commitments with certain draw down | 100                   |
| vi)   | Note issuance facilities and revolving underwriting facilities  | 50                    |
| vii)  | Other commitments (e.g. formal standby facilities and credit lines) with an original maturity of over one year.                     | 50                    |
| viii) | Similar commitments with an original maturity up to one year, or which can be unconditionally cancelled at any time.                | 0                     |

#### **ANNEXURE 4A**

SSI Advances Guaranteed by Credit Guarantee Fund Trust for Small Industries (CGTSI) – Risk weights and Provisioning norms (paragraph I (A)(III)(9) of *Annexure 4*)

#### Risk-Weight

#### Example I

CGTSI Cover: 75% of the amount outstanding or 75% of the unsecured amount or

Rs.18.75 lakh, whichever is the least.

Realisable value of Security : Rs.1.50 lakh

a) Balance outstanding : Rs. 10.00 lakh
b) Realisable value of security : Rs. 1.50 lakh
c) Unsecured amount (a) - (b) : Rs 8.50 lakh
d) Guaranteed portion (75% of (c) ) : Rs. 6.38 lakh

e) Uncovered portion (8.50 lakh – 6.38: Rs. 2.12 lakh

lakh)

Risk-weight on (b) and (e) — Linked to the counter party

Risk-weight on (d) – Zero

#### Example II

CGTSI cover: 75% of the amount outstanding or 75% of the unsecured amount or

Rs.18.75 lakh whichever is the least.

Realisable value of Security : Rs. 10.00 lakh.

a) Balance outstanding : Rs. 40.00 lakh

b) Realisable value of security : Rs. 10.00 lakh

c) Unsecured amount (a) - (b) : Rs. 30.00 lakh

d) Guaranteed portion (max.) : Rs. 18.75 lakh

e) Uncovered portion (Rs.30 lakh-18.75: Rs. 11.25 lakh

lakh)

Risk-weight (b) and (e) - Linked to the counter

party

Risk-weight on (d) - Zero

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Terms and conditions for the purpose of liberal Risk Weight for Capital Adequacy for investments in Mortgage Backed Securities (MBS) of residential assets of Housing Finance Companies (HFC).

(Vide item (I)(A)(II)(12)of Annexure 4)

- 1(a) The right, title and interest of a HFC in securitised housing loans and receivables thereunder should irrevocably be assigned in favour of a Special Purpose Vehicle (SPV) / Trust.
- 1(b) Mortgaged securities underlying the securitised housing loans should be held exclusively on behalf of and for the benefit of the investors by the SPV/Trust.
- 1(c) The SPV or Trust should be entitled to the receivables under the securitised loans with an arrangement for distribution of the same to the investors as per the terms of issue of MBS. Such an arrangement may provide for appointment of the originating HFC as the servicing and paying agent. However, the originating HFC participating in a securitisation transaction as a seller, manager, servicer or provider of credit enhancement or liquidity facilities:
  - shall not own any share capital in the SPV or be the beneficiary of the trust used as a vehicle for the purchase and securitisation of assets.
     Share capital for this purpose shall include all classes of common and preferred share capital;
  - ii. shall not name the SPV in such manner as to imply any connection with the bank;
  - shall not have any directors, officers or employees on the board of the SPV unless the board is made up of at least three members and where there is a majority of independent directors. In addition, the official(s) representing the bank will not have veto powers;
  - iv. shall not directly or indirectly control the SPV; or

- v. shall not support any losses arising from the securitisation transaction or by investors involved in it or bear any of the recurring expenses of the transaction.
- 1(d) The loans to be securitised should be loans advanced to individuals for acquiring/constructing residential houses which should have been mortgaged to the HFC by way of exclusive first charge.
- 1(e) The loans to be securitised should be accorded an investment grade credit rating by any of the credit rating agencies at the time of assignment to the SPV.
- 1(f) The investors should be entitled to call upon the issuer SPV to take steps for recovery in the event of default and distribute the net proceeds to the investors as per the terms of issue of MBS.
- 1(g) The SPV undertaking the issue of MBS should not be engaged in any business other than the business of issue and administration of MBS of individual housing loans.
- 1(h) The SPV or Trustees appointed to manage the issue of MBS should have to be governed by the provisions of Indian Trusts Act, 1882.
- 2. If the issue of MBS is in accordance with the terms and conditions stated in paragraph 1 above and includes irrevocable transfer of risk and reward of the housing loan assets to the Special Purpose Vehicle (SPV)/Trust, investment in such MBS by any bank would not be reckoned as an exposure on the HFC originating the securitised housing loan. However, it would be treated as an exposure on the underlying assets of the SPV / Trust.

## Conditions for availing concessional risk weight on investment in securitised paper pertaining to an infrastructure facility (Vide item (I)(A)(II)(13)of Annexure 4)

- 1. The infrastructure facility should satisfy the conditions stipulated in our circular DBOD. No. BP. BC. 92/21.04.048/ 2002- 2003 dated June 16, 2004.
- 2. The infrastructure facility should be generating income/ cash flows which would ensure servicing/ repayment of the securitised paper.
- 3. The securitised paper should be rated at least 'AAA' by the rating agencies and the rating should be current and valid. The rating relied upon will be deemed to be current and valid if:
  - (i) The rating is not more than one month old on the date of opening of the issue, and the rating rationale from the rating agency is not more than one year old on the date of opening of the issue, and the rating letter and the rating rationale is a part of the offer document.
  - (ii) In the case of secondary market acquisition, the 'AAA' rating of the issue should be in force and confirmed from the monthly bulletin published by the respective rating agency.
- 4. The securitised paper should be a performing asset on the books of the investing/lending institution.

Conditions for availing concessional risk weight for Advances covered by Insurance cover under Business Credit Shield the product of New India Assurance Company Ltd.

(Vide item (I)(A)(III)(10)of Annexure 4)

New India Assurance Company Limited (NIA) should comply with the provisions of the Insurance Act, 1938, the Regulations made thereunder - especially those relating to Reserves for unexpired risks and the Insurance Regulatory and Development Authority (Assets, Liabilities and Solvency Margin of Insurers) Regulations, 2000 and any other conditions/regulations that may be prescribed by IRDA in future, if their insurance product - Business Credit Shield (BCS) - is to quality for the above treatment.

- 2. To be eligible for the above regulatory treatment in respect of export credit covered by BCS policy of **NIA**, **banks should ensure that:** 
  - i) The BCS policy is assigned in its favour, and
  - ii) NIA abides by the provisions of the Insurance Act, 1938 and the regulations made thereunder, especially those relating to Reserves for unexpired risks and the Insurance Regulatory and Development Authority (Assets, Liabilities and Solvency Margin of Insurers) Regulations, 2000, and any other conditions/regulations that may be prescribed by IRDA in future.
- **3.** Banks should maintain separate account(s) for the advances to exporters, which are covered by the insurance under the "Business Credit Shield" to enable easy administration/verification of risk weights/provisions.

## PRUDENTIAL NORMS ON CAPITAL ADEQUACY

## Part - A

## **List of Circulars**

| No. | Circular No.                                  | Date                | Subject   | Para No. in this circular                                       |
|-----|---|---------------------|---|---|
| 1   | DBOD.No.BP.BC. 57 /<br>21.01.002 / 2005-2006  | January 25,<br>2006 | Enhancement of banks' capital raising options for capital adequacy purposes   | 2.1.1,  |
| 2.  | DBOD.NO.BP.BC.23/21.<br>01.002/2002-03        | 29.8.2002           | Capital Adequacy and Provisioning Requirements for Export Credit Covered by Insurance/Guarantee.                                    |   |
| 3.  | DBOD. No. IBS. BC.65/<br>23. 10.015 / 2001-02 | 14.02.2002          | Subordinated debt for inclusion in Tier II capital – Head Office borrowings in foreign currency by Foreign Banks operating in India |   |
| 4.  | DBOD No. BP. BC. 106/21. 01.002/2001- 02      | 24.05 2002          | Risk Weight on Housing<br>Finance and Mortgage<br>Backed Securities   | Annexure<br>2(I)(A)(II)(12)<br>Annexure<br>2(I)(A)(III)<br>(11) |
| 5.  | DBOD.No.BP.BC.128/21.<br>04.048/00-01         | 7.06.2001           | SSI Advances Guaranteed<br>by Credit Guarantee Fund<br>Trust for Small Industries<br>(CGTSI)  | 2(III)(9)   |
| 6.  | DBOD.BP.BC.110/21.01.<br>002/00-01            | 20.04.2001          | Risk Weight on Deposits placed with SIDBI /NABARD in lieu of shortfall in lending to Priority Sectors                               | 2(II)(11)   |
| 7.  | DBOD.BP.BC.83/21.01.0<br>02/00-01             | 28.02.2001          | Loans and advances to staff  – assignment of risk weight and treatment in the balance sheet.  | 2(I)(A)(10)   |
| 8.  | DBOD.No.BP.BC.87/21.0<br>1.002/99             | 08.09.99            | Capital Adequacy Ratio -  | 2(I)(A)(2) (ii)   |

| No. | Circular No.                          | Date     | Subject   | Para No. in this circular   |
|-----|---------------------------------------|----------|---|---|
| 9.  | DBOD.No.BP.BC.5/21.01<br>.002/98-99   | 08.02.99 | Issue of Subordinated Debt for Raising Tier II Capital                                  | 2.1.4 (v)(c)<br>2.4.1,<br>2.4.2   |
| 10. | DBOD.No.BP.BC.119/21.<br>01.002/ 98   | 28.12.98 | ,   | Annexure<br>2(I)(A)(2) (ii)   |
| 11. | DBOD.No.BP.BC.152/21.<br>01.002/ 96   | 27.11.96 | Capital Adequacy Measures   | 2.3.1 (ii)  |
| 12. | DBOD.No.IBS.BC.64/23.<br>61.001/ 96   | 24.05.96 | Capital Adequacy Measures   | 2.2.1 (a) & (b)   |
| 13. | DBOD.No.BP.BC.13/21.0<br>1.002/96     |          | Capital Adequacy Measures   | Annexure<br>2(I)(A)(II) (10)  |
| 14. | DBOD.No.BP.BC.99/21.0<br>1.002/94     |          | Capital Adequacy Measures   | 2.1.4 (ii)  |
| 15. | DBOD.No.BP.BC.9/21.01<br>.002/94      |          | Capital Adams Massures  | Annexure 2(I)(A)(II)(7),  Annexure 2(I)(A)(III)(2),  Annexure 2(I)(B),  Annexure 2(I)(A)(III)(7),  Annexure 2(I)(A)(IV)(2),  Annexure 2(I)(A)(IV)(2), |
| 16. | DBOD.No.IBS.BC.98/23-<br>50-001-92/93 | 06.04.93 | Capital Adequacy Measures - Treatment of Foreign Currency Loans to Indian Parties (DFF) |   |
| 17. | DBOD.No.BP.BC.117/21.<br>01.002-92    | 22.04.92 | Capital Adequacy Measures   | 2   |

Part – B

List of Other Circulars containing Instructions/
Guidelines/Directives related to Prudential Norms

|   | Circular No.                                 | Para No.<br>of<br>circular |            | Subject  | Para No. in this circular   |
|---|--|----------------------------|------------|--|-----------------------------|
| 1 | DBOD.BP.BC.105/<br>21.01.002/2002-<br>2003,  | 1                          | 7.05.2003  | Monetary And Credit<br>Policy 2003-04 -<br>Investment Fluctuation<br>Reserve   | 2.1.4(vi)                   |
| 2 | DBOD.No.BP.BC.9<br>6/21.04.048/2002-<br>03   | 5(B) of<br>Annexure        | 23.4.2003  | Guidelines on Sale Of Financial Assets to Securitisation Company (SC)/Reconstruction Company (RC) (Created Under The Securitisation and Reconstruction of Financial Assets And Enforcement of Security Interest Act, 2002) and Related Issues. |                             |
| 3 | DBOD No. BP.BC.<br>89/21.04.018/2002-<br>03  |                            | 29.3.2003  | Guidelines on compliance with Accounting Standards (AS) by banks   | 2.1.4                       |
| 4 | DBOD.No.BP.BC.7<br>2/21.04.018/2002-<br>03   | _                          | 25.2.2003  | Guidelines for Consolidated Accounting And Other Quantitative Methods to Facilitate Consolidated Supervision.  | 4.3                         |
| 5 | DBOD NO. BP.BC<br>71/21.04.103/2002-<br>03   |                            | 19.2.2003  | Risk Management<br>system in Banks<br>Guidelines in Country<br>Risk Managements  | 2.1.5 (vii)                 |
| 6 | DBOD.No.BP.BC.<br>67/21.04.048/2002-<br>2003 | 5.2 of<br>Annexure         | 4.2.2003   | Guidelines on Infrastructure Financing.  | Annexure2<br>(I)(A)(II)(13) |
| 7 | DBOD.Dir.BC.<br>62/13.07.09/2002-<br>03      | 2(iv)                      | 24.1.2003  | Discounting/<br>Rediscounting of Bills<br>by Banks.  | Annexure2<br>(I)(A)(III)(5) |
| 8 | A.P.(DIR Series)<br>Circular No. 63          | 5                          | 21.12.2002 | Risk Management and Inter Bank Dealings  | 2.2.1 Notes (d)             |

| No. | Circular No.                               | Para No.<br>of<br>circular | Date       | Subject   | Para No. in this circular    |
|-----|--|----------------------------|------------|---|------------------------------|
| 9   | No.EC.CO.FMD.6/0<br>2.03.75/2002-2003      |                            | 20.11.2002 | Hedging of Tier I<br>Capital  | 2.2.1 Notes (d)              |
| 10  | DBOD.No.BP.BC.<br>57/<br>21.04.048/2001-02 | 2(v)                       | 10.01.2002 | Valuation of investments by banks   | 2.1.4(vi)                    |
| 11  | DBOD.No.BC.34/1<br>2.01.001/2001-02        | 2(b)                       | 22.10.2001 | Section 42(1) Of The<br>Reserve Bank Of India<br>Act, 1934 -<br>Maintenance of Cash<br>Reserve Ratio (CRR).                   | (1) (4)                      |
| 12  | DBOD.BP.BC.<br>73/21.04.018/2000-<br>01    | 3                          | 30.01.2001 | Voluntary Retirement Scheme (VRS) Expenditure – Accounting and Prudential Regulatory Treatment.                               | 2.1.4(v)(b)                  |
| 13  | DBOD.No.BP.BC.3<br>1/21.04.048/ 2000       | 2 & 3                      | 10.10.2000 | Monetary & Credit<br>Policy Measures – Mid<br>term review for the<br>year 2000-01   |                              |
| 14  | DBOD.No.BP.BC.1<br>69/21.01.002/ 2000      | 3                          | 03.05.2000 | Monetary & Credit Policy Measures   | 5.2                          |
| 15  | DBOD.No.BP.BC.1<br>44/21.04.048/ 2000      | 1 (A),<br>(B)(a)           | 29.02.2000 | Income Recognition, Asset Classification and Provisioning and Other Related Matters and Adequacy Standards - Takeout Finance  | (I)(A)(III)(14)              |
| 16  | DBOD.No.BP.BC.1<br>21/21.04.124/ 99        | 1(i)                       | 03.11.99   | Monetary & Credit Policy Measures   | 3.2                          |
| 17  | 01/21.04.048/ 99                           | 2 & 3                      | 18.10.99   | Income Recognition,<br>Asset Classification<br>and Provisioning –<br>Valuation of<br>Investments by Banks<br>in Subsidiaries. |                              |
| 18  | DBOD.No.BP.BC.8<br>2/ 21.01.002/99         | 2                          | 18.08.99   | Monetary & Credit Policy Measures   | Report                       |
| 19  | 01 /99                                     | 5(i)                       | 17.7.1999  | Equipment Leasing Activity - Accounting / Provisioning Norms  | Annexure<br>2(I)(A)(III)(6), |
| 20  | MPD.BC.187/07.01<br>.279/1999-2001         | 11                         | 7.7.1999   | Forward Rate<br>Agreements / Interest<br>Rate Swaps   | Annexure<br>2.(I)(D)         |

| No. | Circular No.                                    | Para No. of circular | Date             | Subject  | Para No. in this circular  |
|-----|---|----------------------|------------------|--|--|
| 21  | DBOD.No.BP.BC.2<br>4/ 21.04.048/99              | 1 & 2                | 30.03.99         |  | Annexure<br>2.(III)(1)   |
| 22  | DBOD.No.BP.BC.3<br>5/ 21.01.002/99              | 2(ii)                | 24.04.99         | Policy Measures  | Annexure 2 (II)(10), 2.1.5   |
| 23  | DBOD.No.BP.BC.1<br>03/21.01.002/ 98             | 1,2,3,4              | 31.10.98         | Monetary & Credit<br>Policy Measures   | 2.3, 3.2,<br>Annexure 2<br>(I) (A) (II)<br>(Sr.no.1–11)<br>Annexure<br>2(I)(III)(2)<br>Annexure<br>2(I)(C) |
| 24  | DBOD.No.BP.BC.3<br>2/ 21.04.018/98              | (i)                  | 29.04.98         | Monetary and Credit Policy Measures  |  |
| 25  | DBOD.No.BP.BC.9/<br>21.04.018/98                | (v)                  | 27.01.1998       |  | 2.1.4(v)(c)  |
| 26  | DBOD.No.BP.BC.9/<br>21.04.048/97                | 1                    | 29.01.97         | Prudential Norms -<br>Capital Adequacy,<br>Income Recognition,<br>Asset Classification<br>and Provisioning | Annexure 2 (III)(1)  |
| 27  | DBOD. BP. BC.<br>No.<br>3/21.01.002/2004-<br>05 | 1,2                  | 06.07.04         | Prudential norms on Capital Adequacy – Cross holding of capital among banks/ financial institutions        | 2.1.7,   |
| 28  | DBOD.No.BP.BC.<br>103 / 21.04.151/<br>2003-04   |                      | June 24,<br>2004 | Guidelines on Capital<br>Charge for Market<br>risks  |  |
| 29  | DBOD.No.BP.BC.<br>92 / 21.04.048/<br>2003-04    |                      | June 16,<br>2004 | Annual Policy<br>Statement for the year<br>2004-05 — Guidelines<br>on infrastructure<br>financing          | Annexure 3 (1)   |

| No. | Circular No.                                | Para No. of circular  | Date                                 | Subject   | Para No. in this circular     |
|-----|---|---|--------------------------------------|---|-------------------------------|
| 30  | DBOD.No.BP.BC.<br>91/21.01.002/<br>2003-04  | Annexure<br>2. I. A.2<br>(ii), 7,8,9;<br>III.5 (ii); D<br>(Step 2). | 2004                                 | Annual Policy<br>Statement for the year<br>2004-05 – Risk Weight<br>for Exposure to Public<br>Financial Institutions<br>(PFIs)          | 7,8,9; III.5<br>(ii); D (Step |
| 31  | F.No.11/7/2003-<br>BOA                      | Annexure<br>1 I.19 (iv)<br>(d)                                      | 2004                                 | Permission to nationalised banks to issue subordinated debt for augmenting Tier II capital  |                               |
| 32  | DBS.FID.No.C-<br>15/01.02.00/2003-<br>04    | 3   | 2004                                 | Risk Weight for<br>Exposures to PFIs  | Annexure 2                    |
| 33  | DBOD.BP.BC.29/2<br>1.01.048/2004-05         | 3(a) & (b)  | 13 <sup>th</sup> August<br>2004      | Prudential Norms-<br>State Govt.<br>guaranteed<br>expsosures  | Annexure 2                    |
| 34  | DBOD. BP.BC. 61<br>/ 21.01.002/ 2004-<br>05 | 2(i)  | 23 <sup>rd</sup><br>December<br>2004 | Mid-Term Review of<br>the Annual Policy<br>Statement for the<br>year 2004-05. Risk<br>weight on housing<br>loans and consumer<br>credit | Item A.III<br>(13)            |
| 35  | DBOD.No.BP.BC.8<br>5/21.04.141/2004-<br>05  | 2   | 30 <sup>th</sup> April<br>2005       | Capital<br>Adequacy- IFR  | 2.1.5 (vi)                    |
| 36  | DBOD.No.BP.BC.1<br>6/21.04.048/2005-<br>06  | 6(D)  | July<br>13,2005                      | Guidelines on purchase of Non-Performing Assets   | Annex 4                       |
| 37  | DBOD.No.BP.BC.2<br>1/21.01.002/2005-<br>06  | 1 & 2   | July 26,<br>2005                     | Risk weight on<br>Capital market<br>Exposure  | Annex 4                       |
| 38  | DBOD.No.BP.BC.3<br>8/21.04.141/2005-<br>06  | 4   | Oct 10,<br>2005                      | Capital<br>Adequacy-IFR   | 2.1.5 (vii)                   |
| 39  | DBOD.No.BP.BC.6<br>0/21.04.048/2005-<br>06  | 12.1,12.2,<br>13.1,13.2,<br>15.1,17.1,<br>17.2, &<br>19.1           |                                      | Guidelines on<br>Securitisation of<br>Standad Assts   | 2.1.6, Annex<br>4             |

| No. | Circular No.                                      | Para No. of circular | Date              | Subject   | Para No. in this circular |
|-----|---|----------------------|-------------------|---|---------------------------|
| 40  | DBOD.No.BP.BC.7<br>3/21.04.048/2005-<br>06        | 2(i) & (ii)          | March 24,<br>2006 | Bills Discounted under LC-Risk Weight and Exposure Norms                                      | Annex 4                   |
| 41  | DBOD.No.BP.BC.8<br>4/21.01.002/2005-<br>06        | 1 &2                 | May 25,<br>2006   | APS for 2006-07- Risk Weight on Exposures to Commercial Real estate and Venture Capital Funds | Annex 4                   |
| 42  | DBOD.BP.BC. 87<br>/21.01.002/2005-<br>06          | 1                    | June 8,<br>2006   | Innovative Tier I/Tier II Bonds - Hedging by banks through Derivative Structures              | 2.3                       |
| 43  | DBOD.NO.BP.<br>BC. 89 /<br>21.04.048/ 2005-<br>06 | 2(iii)               | June<br>22,2006   | Prudential norms on creation and utilisation of floating provisions                           | 2.1.2((iii)               |