March 31, 2008

The Chairman and Chief Executive Officer
All Commercial Banks
(excluding Local Area Banks and Regional Rural Banks)

Dear Sir,

Prudential Guidelines on Capital Adequacy and Market Discipline – Implementation of New Capital Adequacy Framework (NCAF) – <u>Amendments</u>

Please refer to our circular DBOD.No.BP.BC.90/20.06.001/2006-07 dated April 27, 2007 on the captioned subject. The banks had also been advised to undertake a parallel run of the new capital adequacy framework (as per the draft guidelines of February 15, 2005) with a view to ensuring smooth transition to the Revised Framework.

2. In the light of clarifications sought by banks during the course of implementation of the parallel run of the NCAF, the guidelines have been reviewed, and it has been decided to effect certain amendments as detailed in the **Annex**. All other provisions of the April 27, 2007 circular, except to the extent modified as per the Annex, remain unchanged. The amendments will come into force with immediate effect.

Yours faithfully,

(Prashant Saran) Chief General Manager-in-Charge

Amendments to the circular DBOD.No.BP.BC.90 / 20.06.001 / 2006-07 dated April 27, 2007

SI. No	Ref in our circul ar dt. 27.4.'0	Existing Text / Table / Reference (Deletions from the existing text have been indicated in bold italics)	Amended Text / Table (Additions to the existing text have been indicated in bold italics)
1.	Page No.11 Para 4.3.5	Any other type of instrument generally notified by the Reserve Bank from time to time for inclusion in Tier 2 capital.	4.3.5 Innovative Perpetual Debt Instruments (IPDI) IPDI in excess of 15 per cent of Tier 1 to be included in Tier 2 {cf, Annexure I, Para 1(ii)} Note: The existing paragraphs Nos. 4.3.5, 4.3.6 and 4.3.7 will stand renumbered as 4.3.6, 4.3.7 and 4.3.8
2.	Page No.14 Para 4.4.8	A bank's aggregate investment in all types of instruments listed at paragraph 4.4.9 below, excluding those deducted in terms of paragraph 4.4.6, which are issued by other banks / Fls / NBFCs / Primary Dealers and are eligible for capital status for the investee entity, should not exceed 10 per cent of the investing bank's capital funds (Tier 1 plus Tier 2 capital, after above adjustments). Any investment in excess of this limit shall be deducted at 50 per cent from Tier 1 and 50 per cent from	respectively. A bank's aggregate investment in all types of instruments, eligible for capital status of investee banks / Fls / NBFCs / PDs as listed in paragraph 4.4.9 below, excluding those deducted in terms of paragraph 4.4.6, should not exceed 10 per cent of the investing bank's capital funds (Tier 1 plus Tier 2, after adjustments). Any investment in excess of this limit shall be deducted at 50 per cent from Tier 1 and 50 per cent from Tier 2 capital.
		Tier 2 capital. Investments in equity or instruments eligible for capital status issued by <i>banks</i> / Fls / NBFCs / Primary Dealers which are not deducted from capital funds will attract a risk weight of 100 per cent or the risk weight as applicable to the ratings assigned	Investments in equity or instruments eligible for capital status issued by FIs / NBFCs / Primary Dealers which are, within the aforesaid ceiling of 10 per cent and thus, are not deducted from capital funds will attract a risk weight of 100 per cent or the risk weight as applicable to the ratings assigned to the relevant

		which			Jher.	instrur		(The rephrolarity As investing a forest the i	paragased (). regar stmer sal-elig dulect said se sec ner, dulect vorth inves ole in afores be sal, as	graph as ds in ds in gible d ban ceilli e par in th has tmen strur said full per	ichever is has bee above for the treat equity a instrum anks, wit ng of 10 per of the case become if the the the case become if the the the case th	n slig r gre ment and o nents thin per o 6.1. of r e CR nega e cap e cap en wi cent i	ahtly sater of ther of the sent, solital- ithin limit from
3.	Page No.15 Para 5.2.2	Gove	ernme ct ze ernme attra	ent ero r ent g	in secu isk wo juaran 0 per	rities eight. teed d	laims	overo bank and Gove attrac Gove	draft s to t the ernme ct ze ernme attra	expendent expension of the second expension of the sec	loan / osure, if state Gove estment securitie isk weigh juarantee	any ernme in S es ht. S d cla	of ents state will state nims
4.	Page Nos. 16 & 22	S& P/ Fitc h Rati ngs	AA A To AA	А	BBB	Below BB	Unrated	S& P/ Fitc h Rati ngs	AA A To AA	А	BBB to BB	Below BB	Unrated
	s 3 & 7	Mo ody 's rati ngs	Aaa to Aa	A	Baa to Ba	Below Ba	Unrated	Mo ody 's rati ngs	Aaa to Aa	A	Baa to Ba	Below Ba	Unrated
		RW (%)	20	50	100	150	100	RW (%)	20	50	in the first	150	100
									colum		evised from		B' to
5.	Page No.18 Para 5.6.1	Please refer to the existing paragraph 5.6.1. (Provisions relating to claims on banks)					revise , plea		ext of p ee Apper	aragı ndix -	-		

6.	No. Corporate - Risk Weights							B - Short rate - Risk			
	21		Short Term	Ratings		Risk		Short Term Ratings			
	Table	CARE	CRISIL	Fitch	ICRA	Weight s	CARE	CRISI L	Fitch	ICRA	Risk Weights
	-6	PR1+	P1+	F1+	A1+	20 %	PR1+	P1+	F1+(ind)	A1+	20 %
	Part B	PR1	P1	F1	A1	30 %	PR1	P1	F1(ind)	A1	30 %
		PR2	P2	F2	A2	50 %	PR2	P2	F2(ind)	A2	50 %
		PR3	P 3	F3	A3	100 %	PR3	P 3	F3 (ind)	А3	100 %
		PR4 & PR5	P 4 & P5	B, C, D	A4 / A5	150 %	PR4 & PR5	P 4 & P5	F4/F5 (ind)	A4 / A5	150 %
		Unrated	Unrated	Unrated	Unrate d	100 %	Unrated	Unrat ed	Unrated	Unrated	100 %
7.	Page No. 28 Para 5.13.3	receiva risk we risk we warran (or th counte up to and sil	al loans ables wi eight of eight (me ted by to e lack erparty. Rs. 1 l ver orna	ill attra 125 % ore that the exte of l Howe lakh ag aments	credit ct a l or a l n 125 ernal it) of ever, gainst	nigher nigher %) as rating the loans gold attract	column Consu persor receive educat higher cent o the ex of it) gold eligible counter respec secure jewelle under approa The 'e mitigat	mer hal loadles tional risk of the condition of the condi	but I loans, I weigh gher, if I rating e coun gold ancial of y ex of per oy gold will be ne coun sure va	revised t, in d cred will a t of t warra iterpar jewelle collate kposur sonal d and work ompre paragra ttract	cluding cluding cluding ttract a l25 per nted by the lack ty. As ery are ral, the loans
8.	Page No. 33 Para 5.15.2 (v) 2 nd bullet	'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'				Bills have bank	bills di and b which anothe	iscou ills have ban	n ted by discount been	/ othe ed by accep e treat	mentary r banks banks bted by ed as a

9. Page No. 57

Para 7.3.4 (i)

In the comprehensive approach, when taking collateral, banks will need to calculate their adjusted exposure to a counterparty for capital adequacy purposes in order to take account of the effects of that collateral. Banks are required to adjust both the amount of the exposure to the counterparty and the value of any collateral received in support of that counterparty to take account of possible future fluctuations in the value of either. occasioned by market movements. These adjustments are referred to as 'haircuts'. The application of will produce volatility haircuts adjusted amounts for both collateral. exposure and The volatility adjusted amount for the exposure will be higher than the exposure and the volatility adjusted amount for the collateral will be lower than the collateral, unless either side of the transaction is cash. In other words, the 'haircut' for the exposure will be a premium factor and the 'haircut' for the collateral will be a discount factor.

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It may be noted that the purpose underlying the application of haircut is to capture the marketrelated volatility inherent in the value of exposures as well as of the eligible financial collaterals. Since value of the credit exposures acquired bv banks in the course of their banking operations, would not be subject to market volatility, (since the loan disbursal / investment would be a "cash" transaction) though the value of eligible collateral financial

							in Tarrespect only to not to bank. On the banks, transact upward as the sold/le transact market	ble-1 t of the the c othe aris ction d adju he nt/ple ction	credit eligible redit ex er hand, ing out	exposic of repuld of solution the subtruction the subtruction the subtruction to the subtruction to the subtruction the subtruction the subtruction to the subtructio	oly in actions actions aral but of the ures of o-style require platility, ecurity a report to such
10	Page No.	Table 13 term ratin			apping of c rating a				sk weight the domes		of Short g agencies
	50	S	hort Teri	n Ratings	<u> </u>	Risk		hort Te	erm Rating	s	Risk
	Table	CARE	CRISIL	Fitch	ICRA	Weight s	CARE	CRISI L	Fitch	ICRA	Weights
	– 13	PR1+	P1+	F1+	A1+	20 %	PR1+	P1+	F1+(ind)	A1+	20 %
		PR1	P1	F1	A1	30 %	PR1	P1	F1(ind)	A1	30 %
		PR2	P2	F2	A2	50 %	PR2	P2	F2(ind)	A2	50 %
		PR3	P 3	F3	A3	100 %	PR3	Р3	F3 (ind)	А3	100 %
		PR4 & PR5	P 4 & P5	B, C, D	A4 / A5	150 %	PR4 & PR5	P 4 & P5	F4/F5 (ind)	A4 / A5	150 %
		Unrated	Unrated	Unrated	Unrated	100 %	Unrated	Unrat ed	Unrated	Unrated	100 %
							•	_	symbols i re been i		
	Page No. 59 Para 7.3.5 (viii) & (ix)	(viii) Equities (including convertible bonds) that are listed on a recognised stock exchange and are included in the following indices: 'BSESENSEX' and 'BSE-200' of the Bombay Stock Exchange; 'S&P CNX NIFTY' and 'Junior NIFTY' of the National Stock Exchange and the main index of any other recognised stock exchange, in the jurisdiction of bank's operation.				are stock ed in : : : : : : : : : : : : : : : : : :			agraph N as 7.3.5		ō (ix) is

12.	Page No.60 Para 7.3.7	Existing paragraph contains 11 sub-paragraphs { (i.e [7.3.7 (i) to (xi)] }	The existing paragraph 7.3.7 is replaced with the text provided in the Appendix – 2.
13.	Page No. 63	NIL	New paragraph No.7.3.8 entitled 'Capital Adequacy framework for Repo- / Reverse Repo —style Transactions', is inserted:
			For the text of paragraph 7.3.8, please refer to Appendix – 3 .
14.	Page No. 68 Para 7.6.1	For the purposes of calculating risk-weighted assets, a maturity mismatch occurs when the residual maturity of a collateral is less than that of the underlying exposure. Where there is a maturity mismatch and the CRM has an original maturity of less than one year, the CRM is not recognised for capital purposes. In other cases where there is a maturity mismatch, partial recognition is given to the CRM for regulatory capital purposes as detailed below in paragraphs 7.6.2 to 7.6.4.	For the purposes of calculating risk-weighted assets, a maturity mismatch occurs when the residual maturity of a collateral is less than that of the underlying exposure. Where there is a maturity mismatch and the CRM has an original maturity of less than one year, the CRM is not recognised for capital purposes. In other cases where there is a maturity mismatch, partial recognition is given to the CRM for regulatory capital purposes as detailed below in paragraphs 7.6.2 to 7.6.4.
			'In case of loans collateralised by the bank's own deposits, even if the tenor of such deposits is less than three months or deposits have maturity mismatch vis-à-vis the tenor of the loan, the provisions of paragraph 7.6.1 regarding derecognition of collateral would not be attracted provided an explicit consent of the depositor has been obtained from the depositor (i.e, borrower) for adjusting the maturity proceeds of such deposits against the outstanding loan or for renewal of such deposits till the full repayment of the underlying loan.

15.	Page Nos. 70 to 75	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.	Paragraph 8.2.2 is deleted and the paragraph 8.2.3 and 8.2.4 are renumbered as 8.2.2 and 8.2.3 respectively.
16.	Page Nos. 71 to 75	Please refer to the existing paragraphs 8.3.1 to 8.3.6. (Measurement of capital charge for interest rate risk)	For text of revised paragraphs, please see Appendix – 4.
17.	Page No. 79 Para 8.4.1	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 nonconvertible 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.	The capital charge for equities would apply on their current market value in bank's trading book. 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 nonconvertible 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
18.	Anne x - 4 Page No.11 8	Please refer to page 118 of the circular (Illustrations on credit risk mitigation)	For revised text, please refer to the Appendix – 5 .

19. Miscellaneous amendments:

- A) The caption for the Table No.8 (page No.32) may be read as 'Credit conversion factors Non-market related off-balance sheet items', instead of 'Credit conversion factors Off-balance sheet items'.
- B) The type of the instruments referred to at SI. No.7 of Table No.8 in page No.33 may be read as 'Note issuance facilities and revolving underwriting facilities' instead of 'Note issuance facilities and revolving underwriting facilities'
- C) The word 'realised' in Page No.40 at paragraph 5.16.2 may be read as 'recognised'.
- D) The description 'Risk weight' appearing in the first column 2nd row in Table Nos. 10 and 11 on page No.43 may be read as 'Risk weight for banks other than the originators'.
- E) The references to the 'Table 12 / 13' in the following portions of the circular dated April 27, 2007 may please be changed to read as:
 - a) Page No.77 paragraph 8.3..8 (ii) and (iii) as 'Table 17'
 - b) Page No.77 paragraph 8.3..8 (v) as '**Table 18**'
 - b) Annex 5 Page No.121 para 2(a) last sentence as 'Table 17'
 - c) Annex 5 Page No.126 Para B II (a) 5 (2nd line) as '**Table 17**'
 - d) Annex 5 Page No.129 Para 9 (2nd line) as '**Table 17**'
- F) The words 'of paragraph 8 of this circular' may please be added to the following:
 - a) Annex 5 Page No.123 Paragraph B 2 In the 7th line, at the end of 2nd paragraph
 - b) Annex 5 Page No.126 Para B II (a) 4 at the end of 2nd line.

Appendix – 1 (cf. Sl. No.5 of the Annex)

The paragraph 5.6.1 of the circular DBOD.No.BP.BC.90/20.01.006/2006-07 dated April 27, 2007 may be substituted by the following:

Quote:

5.6 Claims on banks

5.6.1. The claims on banks incorporated in India and the branches of foreign banks in India, other than those referred to in para 4.4.6 and para 4.4.8 above, which are deducted from capital, will be risk weighted as under:

Table 4: Claims on banks incorporated in India and foreign bank branches in India

Level of	Risk Weight						
CRAR (in per	All Scheduled	Banks	All Non-Scheduled Banks				
cent) of the	(Commercial, I	Regional	((Commercial, Re	egional Rural			
investee bank	Rural Banks, Lo		Banks, Local Area				
	Banks and Co-O	perative	Co-Operative	Banks)			
(where	Banks)						
available)	Investments	All other	Investments	All Other			
	within 10 % limit	claims	within 10 % limit	Claims			
	referred to in	(in per	referred to in para	(in per cent)			
	para 4.4.8 above	cent)	4.4.8 above				
	(in per cent)		(in per cent)				
1	2	3	4	5			
9 and above	Higher of 100 % or		Higher of 100 per				
	the risk weight as	20	cent or the risk	100			
	per the rating		weight as per the				
			rating				
6 to <9	150	50	250	150			
3 to <6	250	100	350	250			
0 to <3	350	150	625	350			
Negative	625	625	Full deduction	625			

Notes

- i) In the case of banks where no capital adequacy norms have been prescribed by the RBI, the lending / investing bank may calculate the CRAR of the cooperative bank concerned, notionally, by obtaining necessary information from the investee bank, using the capital adequacy norms as applicable to the commercial banks. In case, it is not found feasible to compute CRAR on such notional basis, the risk weight of 350 or 625 per cent, as per the risk perception of the investing bank, should be applied uniformly to the investing bank's entire exposure.
- ii) In case of banks where capital adequacy norms are not applicable at present, the matter of investments in their capital-eligible instruments would not arise for now. However, column No. 2 and 4 of the Table above will become applicable to them, if in future they issue any capital instruments where other banks are eligible to invest.

Appendix – 2 (cf. Sl. No.12 of the Annex)

The paragraph 7.3.7 in the circular DBOD.No.BP.BC.90/20.01.006/2006-07 dated April 27, 2007 may be substituted by the following:

Quote:

7.3.7 Haircuts

- (i) In principle, banks have two ways of calculating the haircuts: (i) standard supervisory haircuts, using parameters set by the Basel Committee, and (ii) ownestimate haircuts, using banks' own internal estimates of market price volatility. Banks in India shall use only the standard supervisory haircuts for both the exposure as well as the collateral.
- (ii) The Standard Supervisory Haircuts (assuming daily mark-to-market, daily re-margining and a 10 business-day holding period), expressed as percentages, would be as follows:

Table – 14: Standard Supervisory Haircuts for Sovereign and other securities which constitute Exposure and Collateral

		Issue Rating	Residual Maturity	Haircut		
		for Debt securities	(in years)	(in percentage)		
Α	Secu	urities issued / guaranteed by the G				
		ernments (Sovereign securities)		-		
		Rating not applicable – as	= 1 year	0.5		
	i	Government securities are not	> 1 year and < or = 5	2		
		currently rated in India	years			
		,	> 5 years	4		
В		estic debt securities other than thos		A above including the		
	secu	rities guaranteed by Indian State Gove	I			
			= 1 year	1		
	ii	AAA to AA	> 1 year and < or = 5	4		
		PR1/P1/F1/A1	years			
			> 5 years	8		
		A to BBB	= 1 year	2		
	iii	PR2 / P2 / F2 /A2; PR3 /P3 / F3 / A3 and unrated bank securities as specified in	4 5			
			> 1 year and < or = 5	6		
			years	40		
		paragraph 7.3.5 (vii) of the circular	> 5 years	12		
				Highest haircut		
				applicable to any of the		
	vi	Units of Mutual Funds		above securities, in		
	VI			which the eligible		
				mutual fund {cf. para		
				7.3.5 (viii)} can invest		
С	Cash	n in the same currency		0		

¹⁵ Holding period will be the time normally required by the bank to realise the value of collateral.

iii) The ratings indicated in Table – 14 represent the ratings assigned by the domestic rating agencies. In the case of exposures toward debt securities issued by foreign Central Governments and foreign corporates, the haircut may be based on ratings of the international rating agencies, as indicated below:

Table – 15: Standard Supervisory Haircut for Exposures and Collaterals which are obligations of foreign central sovereigns/foreign corporates

Issue rating for debt securities as assigned by international rating agencies	Residual Maturity	Sovereigns	Other Issues
	= 1 year	0.5	1
AAA to AA /	> 1 year and < or	2	4
A-1	= 5 years		
	> 5 years	4	8
A to BBB /	= 1 year	1	2
A-2 / A-3 / P-3	> 1 year and < or	3	6
and Unrated Bank	= 5 years		
Securities	> 5 years	6	12

- iv) Sovereign will include Reserve Bank of India, DICGC and CGTSI, which are eligible for zero per cent risk weight.
- v) Banks may apply a zero haircut for eligible collateral where it is a National Savings Certificate, Kisan Vikas Patras, surrender value of insurance policies and banks' own deposits.
- vi) The standard supervisory haircut for currency risk where exposure and collateral are denominated in different currencies is eight per cent (also based on a 10-business day holding period and daily mark-to-market)
- vii) For transactions in which the banks' exposures are unrated or bank lends non-eligible instruments (i.e, non-investment grade corporate securities), the haircut to be applied on a exposure should be 25 per cent. (Since, at present, the repos are allowed only in the case of Government securities, the banks are not likely to have any exposure which will attract the provisions of this clause. However, this would be relevant, if in future, repos/security lending transactions are permitted in the case of unrated corporate securities).
- viii) Where the collateral is a basket of assets, the haircut on the basket will be,

$$H=\sum_i a_i H_i$$

where a_i is the weight of the asset (as measured by the amount/value of the asset in units of currency) in the basket and $H_{i,}$ the haircut applicable to that asset.

ix) Adjustment for different holding periods

For some transactions, depending on the nature and frequency of the revaluation and remargining provisions, different holding periods (other than 10 business-days) are appropriate. The framework for collateral haircuts distinguishes between repo-style transactions (i.e. repo/reverse repos and securities lending/borrowing), "other capital-market-driven transactions" (i.e. OTC derivatives transactions and margin lending) and secured lending. In capital-market-driven transactions and repo-style transactions, the documentation contains remargining clauses; in secured lending transactions, it generally does not. In view of different holding periods, in the case of these transactions, the minimum holding period shall be taken as indicated below:

Transaction type	Minimum holding period	Condition
Repo-style transaction	five business days	daily remargining
Other capital market transactions	ten business days	daily remargining
Secured lending	twenty business days	daily revaluation

The haircut for the transactions with other than 10 business-days minimum holding period, as indicated above, will have to be adjusted by scaling up/down the haircut for 10 business –days indicated in the Table-14, as per the formula given in paragraph 7.3.7 (xi) below.

x) Adjustment for non-daily mark-to-market or remargining:

In case a transaction has margining frequency different from daily margining assumed, the applicable haircut for the transaction will also need to be adjusted by using the formula given in paragraph 7.3.7 (xi) below.

xi) <u>Formula for adjustment for different holding periods and/or non-daily mark</u> – to–market or remargining.

Adjustment for the variation in holding period and margining / mark - to - market, as indicated in paragraph (ix) and (x) above will be done as per the following formula:

$$H = H_{10} \sqrt{\frac{N_R + (T_M - 1)}{10}}$$

where

H = haircut;

 $H_{10} = 10$ – business-day standard supervisory haircut for instrument

 N_R = actual number of business days between remargining for capital market transactions or revaluation for secured transactions.

 $T_{\rm M}$ = minimum holding period for the type of transaction

Appendix – 3 (cf. Item No.13 of the Annex)

The following new paragraph 7.3.8 may be added:

Quote:

7.3.8 <u>Capital Adequacy Framework for Repo-/Reverse Repo-style</u> transactions.

The repo-style transactions also attract capital charge for Counterparty credit risk (CCR), in addition to the credit risk and market risk. The CCR is defined as the risk of default by the counterparty in a repo-style transaction, resulting in non-delivery of the security lent/pledged/sold or non-repayment of the cash.

A. Treatment in the books of the borrower of funds

- i) Where a bank has borrowed funds by selling / lending or posting, as collateral, of securities, the 'Exposure' will be an off-balance sheet exposure equal to the 'market value' of the securities sold/lent as scaled up after applying appropriate haircut. For the purpose, the haircut as per Table 14 would be used as the basis which should be applied by using the formula in paragraph 7.3.7 (xi), to reflect minimum (prescribed) holding period of five business-days for repo-style transactions and the variations, if any, in the frequency of re-margining, from the daily margining assumed for the standard supervisory haircut. The 'off-balance sheet exposure' will be converted into 'on-balance sheet' equivalent by applying a credit conversion factor of 100 per cent., as per item 5 in Table 8 of the circular.
- ii) The amount of money received will be treated as collateral for the securities lent/sold/pledged. Since the collateral is cash, the haircut for it would be zero.
- iii) The credit equivalent amount arrived at (i) above, net of amount of cash collateral, will attract a risk weight as applicable to the counterparty.
- iv) As the securities will come back to the books of the borrowing bank after the repo period, it will continue to maintain the capital for the credit risk in the securities in the cases where the securities involved in repo are held under HTM category, and capital for market risk in cases where the securities are held under AFS/HFT categories. The capital change for credit risk / specific risk would be determined according to the credit rating of the issuer of the security. In the case of Government securities, the capital charge for credit / specific risk will be 'zero'.

Treatment in the books of the lender of funds

- i) The amount lent will be treated as on-balance sheet/funded exposure on the counter party, collateralised by the securities accepted under the repo.
- ii) The exposure, being cash, will receive a zero haircut.
- iii) The collateral will be adjusted downwards/marked down as per applicable haircut.
- iv) The amount of exposure reduced by the adjusted amount of collateral, will receive a risk weight as applicable to the counterparty, as it is an on- balance sheet exposure.
- v) The lending bank will not maintain any capital charge for the security received by it as collateral during the repo period, since such collateral does not enter its balance sheet but is only held as a bailee.

(For illustration, please see Part B of the Appendix – 5 of this circular)

Appendix – 4 (cf. Sl. No.16 of the Annex)

The existing paragraph Nos. 8.3.1 to 8.3.6 in the circular DBOD.No.BP.BC.90/20.01.006/2006-07 dated April 27, 2007 may be substituted by the following:

Quote:

Section B

8.3 Measurement of capital charge for interest rate risk

- 8.3.1 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 trading book.
- 8.3.2 The capital charge for interest rate related instruments would apply to current market value of these items in bank's trading book. Since banks are required to maintain capital for market risks on an ongoing basis, they are required to mark to market their trading positions on a daily basis. The current market value will be determined as per extant RBI guidelines on valuation of investments.
- 8.3.3 The minimum capital requirement is expressed in terms of two separately calculated charges, (i) "specific risk" charge for each security, which is designed to protect against an adverse movement in the price of an individual security owing to factors related to the individual issuer, 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.
- 8.3.4 For the debt securities held under AFS category, in view of the possible longer holding period and attendant higher specific risk, the banks shall hold total capital charge for market risk equal to greater of (a) or (b) below:
 - a) Specific risk capital charge, computed notionally for the AFS securities treating them as held under HFT category (as computed according to Table 16: Part A/C/E, as applicable) plus the General Market Risk Capital Charge.
 - b) Alternative total capital charge for the AFS category computed notionally treating them as held in the banking book (as computed in accordance with table 16: Part B/D/F, as applicable)

Specific Risk

8.3.5 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 charges for various kinds of exposures would be as applied as detailed below:

S.No.	Nature of debt securities / issuer	Table to be followed
a.	Central, State and Foreign Central Governments' bonds:	
	(i) Held in HFT category	Table 16 – Part A
	(ii) Held in AFS category	Table 16 – Par B
b.	Banks' Bonds:	
	(i) Held in HFT category	Table 16 – Part C
	(ii) Held in AFS category	Table 16 – Par D
C.	Corporate Bonds and securitised debt:	
	(i) Held in HFT category	Table 16 – Par E
	(ii) Held in AFS category	Table 16 – Part F

Table 16 - Part A

Specific Risk Capital Charge for Sovereign securities issued by Indian and foreign sovereigns – Held by banks under HFT Category

Sr. No.	Nature of Investment	Residual Maturity	Specific risk capital (as % of exposure)
Α.	Indian Central Government and St	ate Governments	
1.	Investment in Central and State Government Securities	All	0.00
2.	Investments in other approved securities guaranteed by Central Government	All	0.00
		6 months or less	0.28
3.	Investments in other approved securities guaranteed by State Government	More than 6 months and up to and including 24 months	1.13
		More than 24 months	1.80
4.	Investment in other securities where payment of interest and repayment of principal are guaranteed by Central Government	All	0.00
	Investments in other accuration	6 months or less	0.28
5.	Investments in other securities where payment of interest and repayment of principal are guaranteed by State Government.	More than 6 months and up to and including 24 months	1.13
		More than 24 months	1.80
B.	Foreign Central Governments		
1.	AAA to AA	All	0.00
		6 months or less	0.28
2.	A to BBB	More than 6 months and up to and including 24 months	1.13
		More than 24 months	1.80
3.	BB to B	All	9.00
4.	Below B	All	13.50
5.	Unrated	All	13.50

Table 16 - Part B

Alternative Total Capital Charge for securities issued by Indian and foreign sovereigns – Held by banks under AFS Category

Sr. No.	Nature of Investment	Residual Maturity	Specific risk capital (as % of exposure)			
A.	Indian Central Government and State Governments					
1.	Investment in Central and State Government Securities	All	0.00			
2.	Investments in other approved securities guaranteed by Central Government	All	0.00			
3.	Investments in other approved securities guaranteed by State Government	All	1.80			
4.	Investment in other securities where payment of interest and repayment of principal are guaranteed by Central Government	All	0.00			
5.	Investments in other securities where payment of interest and repayment of principal are guaranteed by State Government.	All	1.80			
B.	Foreign Central Governments					
1.	AAA to AA	All	0.00			
2.	Α	All	1.80			
3.	BBB	All	4.50			
4.	BB to B	All	9.00			
5.	Below B	All	13.50			
	Unrated	All	13.50			

Table 16 - Part C

Specific risk capital charge for bonds issued by banks – Held by banks under HFT category

		Specific risk capital charge				
Level of CRAR	Residual	All Scheduled Banks (Commercial, Co- Operative and Regional Rural Banks)		All Non-Scheduled Banks (Commercial, Co-Operative and Regional Rural Banks)		
(where available) (in per cent)	maturity	Investments All other within 10 per claims cent limit		Investments within 10 per cent limit referred to in para 4.4.8 (in per cent)	All other claims (in per cent)	
1	2	3	4	5	6	
	6 months or less	1.40	0.28	1.40	1.40	
9 and above	Greater than 6 months and up to and including 24 months	5.65	1.13	5.65	5.65	
	Exceeding 24 months	9.00	1.80	9.00	9.00	
6 to <9	All maturities	13.50	4.50	22.50	13.50	
3 to <6	All maturities	22.50	9.00	31.50	22.50	
0 to <3	All maturities	31.50	13.50	56.25	31.50	
Negative	All maturities	56.25	56.25	Full deduction	56.25	

Notes

- i) In the case of banks where no capital adequacy norms have been prescribed by the RBI, the lending / investing bank may calculate the CRAR of the bank concerned, notionally, by obtaining necessary information from the investee bank and using the capital adequacy norms as applicable to the commercial banks. In case, it is not found feasible to compute CRAR on such notional basis, the specific risk capital charge of 31.50 or 56.25 per cent, as per the risk perception of the investing bank, should be applied uniformly to the investing bank's entire exposure.
- ii) In case of banks where capital adequacy norms are not applicable at present, the matter of investments in their capital-eligible instruments would not arise for now. However, column Nos. 3 and 5 of the Table above will become applicable to them, if in future they issue any capital instruments where other banks are eligible to invest.

Table 16 - Part D

Alternative Total Capital Charge for bonds issued by banks – Held by banks under AFS category

(subject to the conditions stipulated in paragraph 8.3.4)

		Alternative To	tal Capital Charg	pital Charge	
	All Schedu	ıled Banks	All Non-Scheduled Banks		
Level of	(Commercial, Co-operative and Regional Rural Banks)		(Commercial, Co-operative and Regional Rural Banks)		
CRAR (where available) (in per cent)	Investments within 10 % limit referred to in para 4.4.8 above (in per cent)	nvestments within 10 % limit All other referred to n para 4.4.8 above (in per cent)		All other claims (in per cent)	
1	2	3	4	5	
9 and above	9.00	1.80	9.00	9.00	
6 to <9	13.50	4.50	22.50	13.50	
3 to <6	22.50	9.00	31.50	22.50	
0 to <3	31.50	13.50	50.00	31.50	
Negative	56.25	56.25	Full deduction	56.25	

Notes

- i) In the case of banks where no capital adequacy norms have been prescribed by the RBI, the lending / investing bank may calculate the CRAR of the bank concerned, notionally, by obtaining necessary information from the investee bank and using the capital adequacy norms as applicable to the commercial banks. In case, it is not found feasible to compute CRAR on such notional basis, the specific risk capital charge of 31.50 or 56.25 per cent, as per the risk perception of the investing bank, should be applied uniformly to the investing bank's entire exposure.
- ii) In case of banks where capital adequacy norms are not applicable at present, the matter of investments in their capital-eligible instruments would not arise for now. However, column Nos. 2 and 4 of the Table above will become applicable to them, if in future they issue any capital instruments where other banks are eligible to invest.

Table -16 Part - E

Specific Risk Capital Charge for Corporate Bonds and Securitised Debt Instruments (SDIs) (other than bank bonds) - Held by banks under HFT category

			Specific risk ca	apital charge
*Rating by the ECAI	Residual maturity	Corporate Bonds (in per cent)	Securitisation exposures (in per cent)	Securitisation exposures (SDIs) relating to Commercial real estate exposures (in per cent)
1	2	3	4	5
	6 months or less	0.28	0.28	0.56
AAA to BBB	Greater than 6 months and up to and including 24 months	1.14	1.14	2.28
	Exceeding 24 months	1.80	1.80	3.60
BB	All maturities	13.50	31.50	36.00
B and Below	All maturities	13.50	Deduction	Deduction
Unrated (if permitted)	All maturities	13.50 @	Deduction	Deduction

^{*} These ratings indicate the ratings assigned by Indian rating agencies/ECAIs or foreign rating agencies. In the case of foreign ECAIs the ratings symbols used here correspond to Standard and Poor. The modifiers "+" or "-" have been subsumed with the main rating category.

[@] In case the amount invested is less than the threshold limit prescribed in para 5.8.2, the capital charge will be 9 %.

Table 16 - Part F

Specific Risk Capital Charge Corporate Bonds and Securitised Debt Instruments (SDIs) (other than bank bonds) – Held by banks under AFS category

(subject to the conditions stipulated in para 8.3.4)

# Rating		Total capital charge	Total capital charge		
by the ECAIs	Corporate Bonds (in per cent)	Securitisation exposures(SDIs) (in per cent)	Securitisation exposures (SDIs) relating to Commercial real estate exposures (in per cent)		
1	3	4	5		
AAA	1.80	1.80	4.50		
AA	2.70	2.70	6.75		
Α	4.50	4.50	9.00		
BBB	9.00	9.00	13.50		
BB	13.50	31.50 (Deduction in the case of originator)	36.00 (Deduction in the case of originator)		
B and below	13.50	Deduction	Deduction		
Un-rated (if permitted)	13.50	Deduction	Deduction		

[#] These ratings indicate the ratings assigned by Indian rating agencies/ECAIs or foreign rating agencies. In the case of foreign ECAIs the ratings symbols used here correspond to Standard and Poor. The modifiers "+" or "-" have been subsumed with the main rating category.

8.3.6 Banks shall, in addition to computing the counterparty credit risk (CCR) charge for OTC derivatives as part of capital for credit risk as per the Standardised Approach covered in paragraph 5 above, compute the specific risk charge for OTC derivatives in the trading book as required in terms of **Annex 5** of the circular (dated April 27, 2007).

Appendix - 5 (cf. Sl. No.18 of Annex)

The existing "Annexure – 4" in the circular DBOD.No.BP.BC.90/20.01.006/2006-07 dated April 27, 2007 may be substituted by the following:

Quote:

"Annexure – 4"

Part – A

Illustrations on Credit Risk Mitigation (Cf. paragraph 7.3.6) (Loan- Exposures)

Calculation of Exposure amount for collateralised transactions:

$$E^* = Max \{ 0, [Ex(1 + H_e) - Cx(1 - H_c - H_{FX})] \}$$

Where,

E* = Exposure value after risk mitigation

E = Current value of the exposure

 H_e = Haircut appropriate to the exposure

C = Current value of the collateral received

 H_c = Haircut appropriate to the collateral

 H_{FX} = Haircut appropriate for currency mismatch between the collateral and exposure

SI No	<u>Particulars</u>	<u>Case I</u>	Case 2	Case 3	Case 4	Case 5
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	Exposure	100	100	100	100	100
2	Maturity of the exposure	2	3	6	3	3
3	Nature of the exposure	Corporate Loan	Corporate Loan	Corporate Loan	Corporate Loan	Corporate Loan
4	Currency	INR	INR	USD	INR	INR
5	Exposure in rupees	100	100	4000 (Row 1 x exch. rate##)	100	100
6	Rating of exposure	BB	Α	BBB-	AA	B-
	Applicable Risk weight	150	50	100@	30	150
7	Haircut for exposure*	0	0	0	0	0
8	Collateral	100	100	4000	2	100
9	Currency	INR	INR	INR	USD	INR
10	Collateral in Rs.	100	100	4000	80 (Row 1 x Exch. Rate)	100
11	Residual maturity of collateral (years)	2	3	6	3	5
12	Nature of collateral	Sovereign (Gol) Security	Bank Bonds	Corporate Bonds	Foreign Corporate Bonds	Units of Mutual Funds

13	Rating of Collateral	NA	Unrated	BBB	AAA (S & P)	AA
14	Haircut for collateral (%)	0.02	0.06	0.12	0.04	0.08
15	Haircut for currency mismatch (%) [cf. para 7.3.7 (vi) of circular]	0	0	0.08	0.08	0
16	Total Haircut on collateral [Row 10 x (row 14+15)]	2	6	800	9.6	8
17	Collateral after haircut (Row 10 - Row 16)	98	94	3200	70.4	92
18	Net Exposure (Row 5 – Row 17)	2	6	800	29.6	8
19	Risk weight (%)	150	50	100@	30	150
20	RWA (Row 18 x 19)	3	3	800	8.88	12

- ## Exchange rate assumed to be 1 USD = Rs.40
- # Not applicable
- In case of long term ratings, as per para 6.4.2 of the circular, where "+" or "-" notation is attached to the rating, the corresponding main rating category risk weight is to be used. Hence risk weight is 100 %.
- (*) Haircut for exposure is taken as zero because the loans are not marked to market and hence are not volatile
- Case 4: Haircut applicable as per Table 14

Case 5: It is assumed that the Mutual Fund meets the criteria specified in paragraph 7.3.5(viii) and has investments in the securities all of which have residual maturity of more than five years are rated AA and above – which would attract a haircut of eight per cent in terms of Table 14 of the Circular.

Part - B

<u>Illustrations on computation of capital charge for counterparty credit risk</u> (CCR) – Repo Transactions

An illustration showing computation of total capital charge for a repo transaction comprising the capital charge for CCR and Credit/Market risk for the underlying security, under Basel-II is furnished below:

A. Particulars of a Repo Transaction:

Let us assume the following parameters of a hypothetical repo transaction:

Type of the Security	GOI security
Residual Maturity	5 years
Coupon	6 %
Current Market Value	Rs.1050
Cash borrowed	Rs.1000
Modified Duration of the security	4.5 years
Assumed frequency of margining	Daily
Haircut for security	2 % (Cf. Item A(i), Table 14 of the Circular)
Haircut on cash	Zero (Cf. Item C in Table 14 of the Circular)
Minimum holding period	5 business-days (Cf. para 7.3.7 (ix) of the Circular)
Change in yield for computing the capital charge for general market risk	0.7 % p.a. (Cf. Zone 3 in Table 17 of the Circular)

B. Computation of total capital charge comprising the capital charge for Counterparty Credit Risk (CCR) and Credit / Market risk for the underlying security

<u>B.1</u> In the books of the borrower of funds (for the off-balance sheet exposure due to lending of the security under repo)

(In this case, the security lent is the exposure of the security lender while cash borrowed is the collateral)

SI.No.	Items	Particulars	Amount (in Rs.)		
A.	Capital Charge for CCR				
1.	Exposure	MV of the security	1050		
2.	CCF for Exposure	100 %			
3.	On-Balance Sheet Credit Equivalent	1050 * 100 %	1050		
4.	Haircut	1.4 % @			
5.	Exposure adjusted for haircut as per Table 14 of the circular	1050 * 1.014	1064.70		
6.	Collateral for the security lent	Cash	1000		
7.	Haircut for exposure	0 %			
8.	Collateral adjusted for haircut	1000 * 1.00	1000		
9.	Net Exposure (5-8)	1064.70 - 1000	64.70		
10.	Risk weight (for a Scheduled CRAR-compliant bank)	20 %			
11.	Risk weighted assets for CCR (9 x 10)	64.70 * 20 %	12.94		
12.	Capital Charge for CCR (11 x 9%)	12.94 * 0.09	1.16		
B.	Capital for Credit/ market Risk of the				
1.	Capital for credit risk (if the security is held under HTM)	Credit risk	Zero (Being Govt. security)		
2.	Capital for market risk (if the security is held under AFS / HFT)	Specific Risk	Zero (Being Govt. security)		
		General Market Risk (4.5 * 0.7 % * 1050) {Modified duration * assumed yield change (%) * market value of security}	33.07		
To	tal capital required (for CCR + credit ri general market risk)	34.23			

[@] The supervisory haircut of 2 % has been scaled down using the formula indicated in paragraph 7.3.7 of the circular.

<u>B.2</u> In the books of the lender of funds (for the on-balance sheet exposure due to lending of funds under repo)

(In this case, the cash lent is the exposure and the security borrowed is collateral)

SI.No	Items	Particulars	Amount (in Rs.)
A.	Capital Charge for CCR		
1.	Exposure	Cash	1000
2.	Haircut for exposure	0 %	
3.	Exposure adjusted for		1000
	haircut as per Table 14 of the circular	1000 * 1.00	
4.	Collateral for the cash lent	Market value of the security	1050
5.	Haircut for collateral	1.4 % @	
6.	Collateral adjusted for haircut	1050 * 0.986	1035.30
7.	Net Exposure (3 - 6)	Max { 1000 -1035.30}	0
8.	Risk weight (for a Scheduled CRAR-compliant bank)	20 %	
9.	Risk weighted assets for CCR (7 x 8)	0 * 20 %	0
10.	Capital Charge for CCR	0	0
B.	Capital for Credit/ market Ri	sk of the security	
1.	Capital for credit risk (if the security is held under HTM)	Credit Risk	Not applicable, as it is maintained by the borrower of funds
2.	Capital for market risk (if the security is held under AFS/HFT)	Specific Risk	Not applicable, as it is maintained by the borrower of funds
		General Market Risk	Not applicable, as it is maintained by the borrower of funds

[@] The supervisory haircut of 2 % has been scaled down using the formula indicated in paragraph 7.3.7 of the circular.