BASEL III – CAPITAL REGLULATIONS

Introduction:

The main objective of the **Basel III** framework issued by the Basel Committee on Banking Supervision (BCBS) in Dec. 2010 is to improve the banking sector's ability to absorb shocks arising from financial and economic stress, whatever the source, thus reducing the risk of spillover from financial sector to real economy. The framework is to strengthen the bank- level i.e. micro prudential regulation, with the intention to raise the resilience of individual banking institutions in periods of stress. These new global regulatory and supervisory standards mainly seek to raise the quality and level of capital to ensure banks are better able to absorb losses on both a going concern and a gone concern basis, increase the risk coverage of the capital framework, introduce leverage ratio to serve as a backstop to the risk-based capital measure, raise the standards for the supervisory review process and public disclosures etc. The macro prudential aspects of Basel III are largely enshrined in the capital buffers. Both the buffers i.e. the **capital conservation buffer** and the **countercyclical buffer** are intended to protect the banking sector from periods of excess credit growth.

A. Guidelines on Minimum Capital Requirement (Pillar 1)

The Basel III capital regulations continue to be based on three-mutually reinforcing Pillars, viz. minimum capital requirements (Pillar 1), supervisory review of capital adequacy (Pillar 2), and market discipline (Pillar 3) of the Basel II capital adequacy framework. Under Pillar 1, the Basel III framework will continue to offer the three distinct options for computing capital requirement for credit risk and three other options for computing capital requirement for operational risk, albeit with certain modifications / enhancements. These options for credit and operational risks are based on increasing risk sensitivity and allow banks to select an approach that is most appropriate to the stage of development of bank's operations. The options available for computing capital for credit risk are:-

- a) Standardised Approach,
- b) Foundation Internal Rating Based Approach; and
- c) Advanced Internal Rating Based Approach.

The options available for computing capital for operational risk are:-

- a) Basic Indicator Approach (BIA),
- b) The Standardised Approach (TSA); and
- c) Advanced Measurement Approach (AMA).

Keeping in view the Reserve Bank's goal to have consistency and harmony with international standards, as also capital efficiency likely to accrue to the banks by adoption of the advanced approaches, a time schedule was laid down in 2009 that all commercial banks in India (excluding Local Area Banks and Regional Rural Banks) may switch over to Internal Rating Based Approach (Both Foundation as well as Advanced Internal Rating Based Approach) for credit risk and Advanced Measurement Approach for operational risk by 31.03.2014. Accordingly, banks were advised to undertake an internal assessment of their

preparedness for migration to advanced approaches and take a decision with the approval of their Boards/RBI, whether they would like to migrate to any of the advanced approaches. Banks may choose a suitable date to apply for implementation of advanced approach.

The provisions of Basel III include:-

- a) The Basel III capital regulation has been implemented from April 1, 2013 in India in phases.
- b) As per the transitional arrangement under the framework, the regulations would be fully implemented by implemented as on **March 31, 2019**.
- c) Banks are required to maintain a minimum Pillar 1 Capital to Risk-weighted Assets Ratio (CRAR) of 9% on an on-going basis (other than capital conservation buffer and countercyclical capital buffer etc.).
- d) Capital requirements for the implementation of Basel III guidelines are lower in the initial periods and higher in later years.
- e) The RBI may consider prescribing a higher level of minimum capital ratio for each bank under Pillar 2 framework on the basis of their respective risk profiles and their risk management systems.
- f) Banks are required to maintain a capital conservation buffer of 2.5%, comprised of Common Equity Tier 1 capital, above the regulatory minimum capital requirement of 9%.
- g) Banks are required to comply with the capital adequacy ratio at two levels viz. consolidated (Group) and standalone (Solo) level.

Under the Basel II framework, the total regulatory capital comprises of **Tier I (core capital)** and **Tier 2 capital** (supplementary capital). Regulatory capital will predominantly consist of Common Equity under Basel III. Non-equity Tier 1 and Tier 2 capital would continue to form part of regulatory capital subject to eligibility criteria as laid down in Basel III.

Composition of Regulatory Capital

The total regulatory capital fund will consist of the sum of the following categories:-

- (i) Tier 1 Capital (going-concern capital*): comprises of:-
 - (a) Common Equity Tier 1 capital
 - (b) Additional Tier 1 capital

(ii) Tier 2 Capital (gone-concern capital*)

(*From regulatory capital perspective, going-concern capital is the capital which can absorb losses without triggering bankruptcy of the bank. Gone-concern capital is the capital which will absorb losses only in a situation of liquidation of the bank).

Banks are required to compute the Basel III capital ratios in the following manner:-

Common Equity	Tier	1	Common Equity Tier 1 Capital
			Credit Risk RWA* + Market Risk RWA + Operational Risk RWA
Tier 1 Capital Ratio	כ		Eligible Tier 1 Capital

	Credit Risk RWA* + Market Risk RWA + Operational Risk RWA
Total Capital (CRAR#)	Eligible Total Capital Credit Risk RWA + Market Risk RWA + Operational Risk RWA

* RWA = Risk weighted Assets;

Capital to Risk Weighted Asset Ratio

Elements of Capital funds – Indian Banks

(i) Common Equity Tier 1 capital

- i) Common shares (All common shares should ideally be the voting shares as detailed in RBI M. Cir.)
- ii) Stock surplus (share premium)
- iii) Statutory reserves
- iv) Capital reserves representing surplus arising out of sale proceeds of assets
- v) Other disclosed free reserves, if any
- vi) Balance in Profit & Loss Account at the end of previous year
- vii) Profit for current year calculated on quarterly basis as per the formula given in RBI Cir. (Less: Regulatory adjustments/ deductions)

(ii) Additional Tier 1 capital

- i) Perpetual Non-cumulative Preference shares (PNCPS)
- ii) Stock surplus (share premium)
- iii) Debt capital instruments
- iv) Any other type of instruments as notified by RBI from time to time. (Less: Regulatory adjustments/ deductions)

(iii) Tier 2 Capital

- i) General Provisions and Loss Reserves
- ii) Debt capital instruments issued by banks
- iii) Preference share capital instruments (PCPS/RNCPS/RCPS)
- iv) Stock surpluses
- v) Revaluation reserves at a discount of 55%
- vi) Any other type of instruments generally notified by RBI for inclusion under Tier 2 capital (Less: Regulatory adjustments/deductions)

Elements of Capital funds – Foreign Banks

Common Equity Tier I capital

- i) Interest free funds from H.O.
- ii) Statutory reserves
- iii) Remittance surplus retained in Indian Books (non-repatriable)
- iv) Interest free funds remitted from abroad for acquisition of property

v) Capital reserves arising out of sale of assets (non-repatriable), etc. (Less: Regulatory adjustments/ deductions)

Additional Tier 1 capital

- i) H.O. borrowings for foreign currency
- ii) Any other item as allowed by RBI (Less: Regulatory adjustments/ deductions)

Tier 2 Capital

- i) General Provisions and Loss Reserves
- ii) H.O. borrowings in foreign currency
- iii) Revaluation reserves at a discount of 55% (Less: Regulatory adjustments/deductions)

Capital requirement

- a) All scheduled commercial banks (excl. LABs & RRBs) operating in India shall maintain a Minimum Total Capital (MTC) of 9% of total Risk Weighted Assets (RWA) i.e. capital to risk weighted assets (CRAR) as against 8% prescribed under Basel III rules.
- b) Out of the MTC of 9%, Common Equity Tier I (CET1) capital shall be at least 5.5% of RWA (i.e. for credit risk + market risk + operational risk) on an ongoing basis (Basel III at least 4.5% of RWA).
- c) Tier 1 capital shall be at least 7% of RWA on an ongoing basis. In other words, within the Tier 1 capital, Additional Tier 1 capital shall be maximum 1.5% of RWAs (Basel III 6%).
- d) Total Capital (Tier 1 capital + Tier 2 capital) shall be at least 9% of RWAs on an ongoing basis i.e. within the minimum CRAR of 9%, Tier 2 capital can be admitted maximum up to 2% (Basel III Tier 1 + Tier 2 shall be 8%).
- e) If a bank has complied with Minimum Common Equity Tier 1 and Additional Tier 1 capital ratios, then the excess Additional Tier 1 capital can be admitted for compliance with the minimum CRAR of 9% of RWAs.
- f) In addition to the minimum Common Equity Tier 1 capital of 5.5% of RWAs, banks are also required to maintain a capital conservation buffer (CCB) of 2.5% of RWAs (dealt separately) in the form of Common Equity Tier 1 capital.

With the full implementation of capital ratios (For smooth migration to these capital ratios, transitional arrangements have been provided) and CCB the capital requirements would be as follows:-

	Regulatory Capital	As % to RWAs
1.	Minimum Common Equity Tier 1 Ratio	5.50
2.	Capital Conservation Buffer (comprised of Common Equity)	2.50
3.	MCE Tier 1 Ratio + CCB	8.00
4.	Additional Tier 1 Capital	1.50
5.	Minimum Tier 1 Capital Ratio (1 + 4)	7.00

6.	Tier 2 Capital	2.00
7.	Minimum Total Capital Ratio (MTC) {5 +	9.00
	6 }	
8.	MTC + CCB (7 + 2)	11.50

- a) The 'capital funds' comprises of the sum total of Common Equity Tier 1 capital, Additional Tier 1 capital, and Tier 2 capital eligible for computing and reporting CRAR of the bank. It may be noted that the term 'Common Equity Tier 1 capital' **does not include** capital conservation buffer and countercyclical capital buffer.
- b) For the purpose of reporting Tier 1 capital and CRAR, any excess Additional Tier 1 (AT1) capital and Tier 2 (T2) capital will be recognized in the same proportion as that applicable towards minimum capital requirements. In other words, to admit any excess AT1 and T2 capital, the bank should have excess CET1 over and above 8% (5.5% +2.5%).
- c) In cases where the a bank does not have minimum Common Equity Tier 1 + capital conservation buffer of 2.5% of RWAs as required but, has excess Additional Tier 1 and / or Tier 2 capital, no such excess capital can be reckoned towards computation and reporting of Tier 1 capital and Total Capital.

Regulatory adjustments/deductions

The regulatory adjustments / deductions which will be applied to regulatory capital both at solo and consolidated level are as under:-

- a) Goodwill and all other intangible assets are required to be deducted from the Common Equity component of Tier 1.
- b) DTA associated with accumulated losses and DTA (other than associated with accumulated losses) net of DTL.
- c) The amount of cash flow hedge reserve which relates to hedging of items that are not fair valued in the balance sheet (including projected cash flows) should be derecognized in the calculation of Common Equity Tier 1.

d) Shortfall of stock of provisions to expected losses under the Internal Ratings Based (IRB) approach should be deducted in the calculation of Common Equity Tier 1 capital.

- e) Other areas such as Gain-on-Sale Related to Securitisation Transactions, defined benefit pension fund liabilities, Investment in a bank's own shares, etc. are to be deducted appropriately from Common Equity Tier 1 capital.
- f) The investment of banks in the regulatory capital instruments of other financial entities contributes to the inter-connectedness amongst the financial institutions and hence it should be deducted from the respective tiers of regulatory capital so as to avoid double counting of capital in the financial system.

- g) Reciprocal cross holdings of capital might result in artificially inflating the capital position of banks and hence such holdings of capital has to be fully deducted from component of capital (Common Equity, Additional Tier 1 and Tier 2 capital) for which the capital would qualify if it was issued by the bank itself,.
- h) Capital instruments which no longer qualify as non-common equity Tier 1 capital or Tier 2 capital (e.g. IPDI and Tier 2 debt instruments with step-ups) are to be phased out beginning 01.01.2013, etc.

Transitional Arrangements

As per Basel III terms, in order to ensure smooth migration without any near stress, appropriate transitional arrangements for capital ratios have been made which commenced as on 01.04.2013. Capital ratios and deductions from Common Equity will be fully phased-in and implemented as on 31.03.2019 and accordingly the phase-in arrangements for SCBs operating in India are drawn as under:-

Minimum capital	01.04.13	31.03.14	31.03.15	31.03.16	31.03.17	31.03.18	31.03.19
ratios							
CET 1	4.50	5.00	5.50	5.500	5.50	5.500	5.50
CCB	-	-	-	0.625	1.25	1.875	2.50
Minimum CET1 + CCB	4.50	5.00	5.50	6.125	6.75	7.375	8.00
Minimum Tier 1 capital	6.00	6.50	7.00	7.00	7.00	7.00	7.00
Minimum Total capital *	9.00	9.00	9.00	9.00	9.00	9.00	9.00
Minimum Total Capital + CCB	9.00	9.00	9.00	9.625	10.25	10.875	11.50
Phase-in of all deductions from CET 1 (in %) #	20	40	60	80	100	100	100

Transitional Arrangements (Excl. LABs and RRBs)

* The difference between the minimum total capital requirement of 9% and the Tier 1 requirement can be met with Tier 2 and higher forms of capital;

The same transition approach will apply to deductions from Additional Tier 1 and Tier 2 capital

The regulatory adjustments (i.e. deductions and prudential filters) would be fully deducted from Common Equity Tier 1 only by March 31, 2017. During this transition period, the remainder not deducted from Common Equity Tier 1 / Additional Tier 1 / Tier 2 capital will continue to be subject to treatments given under Basel II capital adequacy framework.

1. Capital charge for Credit Risk

RBI has identified external credit rating agencies that meet the eligibility criteria specified under the revised Framework. Banks are required to choose the external rating agencies identified by RBI for assigning risk weights for capital adequacy purposes as per the mapping furnished in the Basel III guidelines.

<u>Claims on Domestic Sovereigns (standard Assets)</u>

- a. Both fund based and non fund based claims on the Central Government including Central Govt. guaranteed claims carry zero risk weight.
- b. Direct Loans/credit/overdraft exposure, if any, of banks to State Govt. and investment in State Govt. securities carry zero risk weight. State Government guaranteed claims will attract 20 per cent risk weight'.
- c. Risk weight applicable to Central Govt. exposure (Zero risk weight) would also apply to claims on RBI, CGTMSE, and Credit Risk Guarantee Fund Trust for Low Income Housing (CRGFTLIH). The claims on ECGC will attract a risk weight of 20%.
- d. 'Amount Receivable from GOI' under Agricultural Debt Waiver Scheme 2008 is to be treated as claim on GOI and attract zero risk weight whereas the amount outstanding in the accounts covered by the Debt Relief Scheme shall be treated as a claim on the borrower and risk weighted as per the extant norms.

Claims on Foreign Sovereigns

Claims on Foreign Sovereigns in foreign currency would be as per the rating assigned as detailed in the RBI circular. In case of claims dominated in domestic currency of Foreign Sovereign met out of the resources in the same currency, the zero risk weight would be applicable.

Claims on Public Sector Entities (PSE)

Claims on domestic PSEs and Primary Dealers (PD) would be risk weighted in the same manner that of corporate and foreign PSEs as per the rating assigned by foreign rating agencies as detailed in the Circular.

Other claims

- Claims on IMF, Bank for International Settlements (BIS), and eligible Multilateral Development Banks (MDBs) evaluated by the BCBS will be treated similar to claims on scheduled banks at a uniform 20% risk weight. Similarly, claims on the International Finance Facility for Immunization (IFFIm) will also attract a 20% risk weight
- Claims on Banks incorporated in India and Foreign Banks' branches in India, the applicable risk weight is detailed in the RBI Master Circular dt. 01.07.14
- Banks' investment in capital instruments of other banks such investments would not be deducted, but would attract appropriate risk as detailed in the RBI M. Circular.
- Claims on corporate Asset Finance Companies (AFCs) and Non-Banking Finance Companies-Infrastructure Finance Companies (NBFC-IFC)⁻ shall be risk weighted as per the ratings assigned by the rating agencies registered with the SEBI and accredited by the RBI (Detailed in the Circular).
- The claims on non-resident corporate will be risk weighted as per the ratings assigned by international rating agencies.
- Regulatory Retail claims (both fund and non-fund based) which meet the Qualifying criteria, viz.
- a) **Orientation Criterion**: Exposure to individual person/s or to a small business (Average annual turnover less than Rs. 50 crore for last 3 years in case of existing or projected turnover in case of new units);
- b) **Product Criterion**: Exposure (both fund-based and non fund-based) in form of revolving credits and lines of credit (incl. overdrafts), term loans & leases (e.g. instalment loans and leases, student and educational loans) and small business facilities and commitments
- c) **Granularity Criterion** Sufficient diversification to reduce the risk portfolio; and
- d) **Low value of individual exposures** The maximum aggregated retail exposure to one counterpart should not exceed the absolute threshold limit of Rs. 5 crore.

Would attract risk weight of 75% except NPAs. As part of the supervisory review process, the RBI would also consider whether the credit quality of regulatory retail claims held by individual banks should warrant a standard risk weight higher than 75%.

The RWA on claims secured by mortgage of residential properties would be as under:-

Category of Loan	LTV Ratio (%)	Risk Weight (%)
(a) Individual Housing Loans		
(i) Up to Rs. 20 lakh	90	50
(ii) Above Rs. 20 lakh and up to Rs. 75 lakh	80	50
(iii) Above Rs.75 lakh	75	75
b) Commercial Real Estate - Residential Housing (CRE-RH)	N/A	75
(c) Commercial Real Estate (CRE)	N/A	100

Note: 1. The LTV ratio should not exceed the prescribed ceiling in all fresh cases of sanction. In case the LTV ratio is currently above the ceiling prescribed for any reasons, efforts shall be made to bring it within limits.

2. Banks' exposures to **third** dwelling unit onwards to an individual will also be treated as CRE exposures.

- Restructured housing loans should be risk weighted with an additional risk weight of 25% to the risk weights prescribed above.
- Loans / exposures to intermediaries for on-lending will not be eligible for inclusion under claims secured by residential property but will be treated as claims on corporate or claims included in the regulatory retail portfolio as the case may be.
- Investments in mortgage backed securities (MBS) backed by exposures will be governed by the guidelines pertaining to securitisation exposures (as detailed in the RBI Cir.)

Non-performing Assets (NPAs)

The risk weight in respect of the unsecured portion of NPA (other than a qualifying residential mortgage loan), net of specific provisions (including partial write-offs), shall be:-

Specific Provisions	Risk Weight %
Less than 20% of outstanding	150
At least 20% of outstanding	100
At least 50% of outstanding	50

- The risk weight applicable for secured NPA is 100%, net of provisions when provisions reach 15% of the outstanding amount.
- NPA Home Loan claims secured by residential property, the risk weight shall be 100% net of specific provisions. In case the specific provisions are at least 20% but less than 50% of the outstanding, the risk weight shall be 75% (net of specific provisions) and specific provisions are 50% or more the applicable risk weight is 50%.

Other specified categories

	Category	Risk Weight (%)
01.	Venture capital	150 or higher
02.	Consumer credit including	125
	personal loans, credit card	
	receivables, but excl.	
	educational loan	
03.	Capital market exposure	125
04.	Investment in capital	125
	instruments of NBFC	
05.	The exposure to equity	250
	Instruments issued by NBFCs	
05.	Investment in paid up equity of	125
	non-financial entities (other than	
	subsidiaries) where investment	
	is below 10% of equity of	
	investee entity.	
	Above 10%	1111
06	Staff loans backed fully by	20
00.	superannuation benefits and/or	20
	mortgage of flat/house	
07.	Other loans and advances to	75
	staff eligible for inclusion under	-
	retail portfolio	
08.	All other assets	100
09.	Off balance sheet items (Market	As detailed in
	related and non-market related	the RBI
	items)	Circular.
10.	Securitization Exposure	As per Cir.
		Based on
		rating by
		external credit
		agency
11.	Commercial real estate (MBS	-do-
	backed)	

Definitions and general terminology

Counterparty Credit Risk (CCR)

CCR is the risk that the counterparty to a transaction could default before the final settlement of the transaction's cash flows.

Securities Financing Transactions (SFTs)

SFTs are transactions such as repurchase agreements, reverse repurchase agreements, security lending and borrowing, collateralised borrowing and lending (CBLO) and margin lending transactions, where the value of the transactions depends on market valuations and the transactions often subject are to margin agreements.

Hedging Set

Hedging Set is a group of risk positions from the transactions within a single netting set for which only their balance is relevant for determining the exposure amount or EAD under the CCR standardised method.

Current Exposure

Current Exposure is the larger of zero, or the market value of a transaction or portfolio of transactions within a netting set with a counterparty that would be lost upon the default of the counterparty, assuming no recovery on the value of those transactions in bankruptcy. Current exposure is often also called Replacement Cost.

Credit Valuation Adjustment

It is an adjustment to the mid-market valuation of the portfolio of trades with counterparty. This adjustment reflects the market value of the credit risk due to any failure to perform on contractual agreements with counterparty. This adjustment may reflect the market value of the credit risk of the counterparty or the market value of the credit risk of both the bank and the counterparty.

One-Sided Credit Valuation Adjustment

It is a credit valuation adjustment that reflects the market value of the credit risk of the counterparty to the firm, but does not reflect the market value of the credit risk of the bank to the counterparty.

Default Risk Capital Charge for CCR

The exposure amount for the purpose of computing for default risk capital charge for counterparty credit risk will be calculated using the Current Exposure Method (CEM) as detailed in the Circular.

Capitalization of mark-to-market counterparty risk losses (CVA capital charge)

In addition to the default risk capital requirement for counterparty credit risk, banks are also required to compute an additional capital charge to cover the risk of mark-tomarket losses on the expected counterparty risk (such losses being known as credit value adjustments, CVA) to OTC derivatives. The CVA capital charge will be calculated in the manner as indicated in the RBI Circular.

Failed Transactions

a. With regard to unsettled securities and foreign exchange transactions, banks are exposed to counterparty credit risk from trade date, irrespective of the booking or the accounting of the transaction. Banks may develop and implement suitable systems for tracking and monitoring the credit risk exposure arising from unsettled transactions as appropriate for producing management information that facilitates action on a timely basis.

- Banks must closely monitor securities and foreign exchange transactions that have failed, starting from the day they fail for producing management information that facilitates action on a timely basis
- c. Failure of transactions settled through a delivery-versus-payment system (DvP), providing simultaneous exchanges of securities for cash, expose banks to a risk of loss on the difference between the transaction valued at the agreed settlement price and the transaction valued at current market price (i.e. positive current exposure).
- d. For DvP Transactions If the payments have not yet taken place five business days after the settlement date, banks are required to calculate a capital charge by multiplying the positive current exposure of the transaction by the appropriate factor as given in the Circular. In order to capture the information, banks may upgrade their information systems in order to track the number of days after the agreed settlement date and calculate the corresponding capital charge.
- e. For non-DvP transactions (free deliveries) after the first contractual payment/ delivery leg, the bank that has made the payment will treat its exposure as a loan if the second leg has not been received by the end of the business day.

External Credit Assessment

RBI has identified various credit agencies whose ratings may be used by banks for the purposes of risk weighting their claims for capital adequacy purposes under the revised framework as under:-

- (a) Brickwork Ratings India Pvt. Limited (Brickwork);
- (b) Credit Analysis and Research Limited;
- (c) CRISIL Limited;
- (d) ICRA Limited;
- (e) India Ratings and Research Private Limited (India Ratings); and
- (f) SME Rating Agency of India Ltd. (SMERA)

International Agencies (where specified)

- a. Fitch
- b. Moodys; and
- c. Standard & Poor's

Banks are required to use the chosen credit rating agencies and their ratings consistently for each type of claim, for both risk weighting and risk management purposes. The revised framework recommends development of a mapping process to assign the ratings issued by eligible credit rating agencies to the risk weights available under the Standardised risk weighting framework. Under the Framework, ratings have been mapped for appropriate risk weights applicable as per Standardised approach. The risk weight mapping for Long Term and Short Term Ratings are given in the Circular.

Credit Risk Mitigation Techniques

Banks use a number of techniques to mitigate the credit risks to which they are exposed. For example, exposures may be collateralised in whole or in part by cash or securities, deposits from the same counterparty, guarantee of a third party, etc. In order for banks to obtain capital relief for any use of CRM techniques, certain minimum standards for legal documentation must be met. All documentation used in collateralised transactions and guarantees must be binding on all parties and legally enforceable in all relevant jurisdictions. Banks must have conducted sufficient legal review, which should be well documented, to verify this requirement. Such verification should have a well-founded legal basis for reaching the conclusion about the binding nature and enforceability of the documents

Few of such CRM techniques are given below:-

a) Collateralized transactions -

- The credit exposure is hedged in whole or part by collaterals by a counterparty (party to whom a bank has an on-or off balance sheet credit exposure) or by a third party on behalf of the counterparty and banks have specific lien over the collaterals
- Under the Framework, banks are allowed to adopt either Simple Approach or Comprehensive Approach. The former approach substitutes the risk weighting of the collateral for the risk weighting of the counterparty for the collateraised portion of the exposure and under the latter approach which allows fuller offset of collaterals against exposures. Comprehensive approach is being adopted by banks in India.
- 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.

Hair Cut

In the comprehensive approach, 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 haircuts will produce volatility adjusted amounts for both exposure and collateral. 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.

It may be noted that the purpose underlying the application of haircut is to capture the market-related volatility inherent in the value of exposures as well as of the eligible financial collaterals. Where the volatility-adjusted exposure amount is greater than the volatility-adjusted collateral amount (including any further adjustment for foreign exchange risk), banks shall calculate their risk-weighted assets as the difference between the two multiplied by the risk weight of the counterparty.

Banks have two ways of calculating the haircuts viz. (i) Standard supervisory haircuts; using parameters set by the Basel Committee, and (ii) Own estimate 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. The Standard

Supervisory Haircuts (assuming daily mark-to-market, daily re-margining and a 10 businessday holding period), expressed as percentages, are given in detail in the RBI Circular.

Eligible Financial Collateral in Comprehensive approach

Cash, Gold, Securities issued by Central & State Governments, KVP, NSC (no lock in period is operational), LIC policies, Debt securities (rated by a chosen rating agency), Debt Securities (not rated by a chosen Credit Rating Agency in respect of which banks should be sufficiently confident about the market liquidity), Units of Mutual Funds, etc. are eligible financial instruments for recognition in the Comprehensive Approach.

Calculation of capital requirement

For a collateralised transaction, the exposure amount after risk mitigation is calculated as follows:

$E^* = \max \{0, [E x (1 + H_e) - C x (1 - H_c - H_{fx})]\}$

Where:

E* = the exposure value after risk mitigation

E = current value of the exposure for which the collateral qualifies as a risk mitigant

 H_e = haircut appropriate to the exposure

C = the 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

The exposure amount after risk mitigation (i.e., E*) will be **multiplied by the risk weight** of the counterparty to obtain the risk-weighted asset amount for the collateralised transaction. (Illustrative examples calculating the effect of Credit Risk Mitigation is furnished in the RBI Circular).

b) On Balance Sheet Netting -

On-balance sheet netting is confined to loans/advances and deposits. Under this technique, banks have legally enforceable netting arrangements involving specific lien with proof of documentation. Capital requirement is reckoned on the basis of net credit exposure. Banks may calculate capital requirements on the basis of net credit exposures subject to some conditions as listed in the Circular.

c) Guarantees -

Explicit, irrevocable, and unconditional guarantees may be taken as credit protection in calculating capital requirements. Guarantees issued by entities with lower risk weight as compared to the counterparty will lead to reduced capital charges since the protected portion of the counterparty exposure is assigned the risk weight of the guarantor, whereas the uncovered portion retains the risk weight of the underlying counterparty. Detailed operational requirements for guarantees eligible for being treated as a CRM are given in the RBI Circular.

2. Capital charge for Market Risk

Market Risk relates to risk of losses in on-balance sheet and off-balance sheet positions arising on account of movement in market prices. The market risk positions subject to capital charge requirement are risks pertaining to **interest rate** related instruments in trading books and equities and **Foreign Exchange risk** (including gold and other precious metals) in both trading and banking books.

Trading book for the purpose of capital adequacy will include:

- a. Securities included under the Held for Trading (HFT) category
- b. Securities included under the Available for Sale (AFS) category
- c. Open gold position limits
- d. Open foreign exchange position limits
- e. Trading positions in derivatives, and
- f. Derivatives entered into for hedging trading book exposures.

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.

Capital for market risk would not be relevant for securities which have already matured and remain unpaid. These securities will attract capital only for credit risk. On completion of 90 days delinquency, these will be treated on par with NPAs for deciding the appropriate risk weights for credit risk.

Measurement of capital charge for Interest Rate Risk

The capital charge for interest rate related instruments would apply to current market value of the instruments in bank's trading book and banks are required to maintain capital for market risks on an ongoing basis by mark to market their trading positions on a daily basis.

The minimum capital requirement is measured/ expressed in two ways viz. (i) **Specific Risk charge** and (ii) **General Market Risk** (dealt separately).

In view of possible longer holding period and higher risk thereto in respect of debt securities held under AFS category, banks are required to hold capital charge for market risk equal to or greater of the Specific Risk Capital charge or Alternative Total Capital Charge.

i) Specific Market Risk

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 both short (short position is not allowed in India except in derivatives) and long positions. The specific risk charges and Alternative Total Capital Charge for various kinds of exposures are detailed in Tabular Form in the RBI Circular.

ii) General Market Risk

It relates to charge towards interest rate risk in the portfolio, where long and short position (which is not allowed in India except in derivatives & Central Govt. securities) in different

securities or instruments can be offset. The capital requirements for general market risk are designed to capture the risk of loss arising from changes in market interest rates.

General Market Risk is the sum of the following four components:-

- The net short (short position is not allowed in India except in derivatives) or long position in the whole trading book;
- b) a small proportion of the matched positions in each time-band (the "vertical disallowance");
- c) a larger proportion of the matched positions across different time-bands (the "horizontal disallowance"), and
- d) a net charge for positions in options, where appropriate.

The Basel Committee has suggested two broad methodologies for computation of capital charge for market risks viz. Standardised Method and Internal Risk Management models method of which banks have been advised to adopt Standardised Method as banks have not yet developed their Internal Risk Management system.

Under the standardised method there are two principal methods of measuring market risk viz. a "maturity" method and a "duration" method. It has been decided to adopt standardised "duration" method as the same is more accurate method to arrive 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. The mechanics under the method - Time band and assumed changes in yield are detailed in the Circular for reference.

Measurement for capital charge for Equity Risk

The capital charge for equities would apply on their current market value in bank's trading book. The Minimum capital requirement, to cover the risk of holding or taking positions in equities in the trading book is detailed in the Circular. 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.

Capital charge for specific risk (akin to credit risk) will be 11.25% or capital charge in accordance with the risk warranted by external rating of the counterparty, whichever is higher and specific risk is computed on banks' gross equity positions (i.e. the sum of all long and all short equity positions - short equity position is, however, not allowed for banks in India). In addition, the general market risk charge will also be 9% on the gross equity positions. These capital charges will also be applicable to all trading book exposures, which are exempted from capital market exposure ceilings for direct investments.

Specific Risk Capital Charge for banks' investment in Security Receipts will be 13.5% (equivalent to 150 per cent risk weight). Since the Security Receipts are by and large illiquid and not traded in the secondary market, there will be no General Market Risk Capital Charge on them.

Measurement of capital charge for Foreign Exchange Risk

The bank's net open position in each currency shall be calculated by summing up:

- a) The net spot position (i.e. all asset items less all liability items, including accrued interest, denominated in the currency in question);
- b) The net forward position (i.e. all amounts to be received less all amounts to be paid under forward foreign exchange transactions, including currency futures and the principal on currency swaps not included in the spot position);
- c) Guarantees (and similar instruments) that are certain to be called and are likely to be irrecoverable;
- d) Net future income/expenses not yet accrued but already fully hedged (at the discretion of the reporting bank);
- e) Depending on particular accounting conventions in different countries, any other item representing a profit or loss in foreign currencies;
- f) The net delta-based equivalent of the total book of foreign currency options.

The open positions both Foreign exchange and gold are at present risk-weighted at 100% and the capital charge for market risks in foreign exchange and gold open position is 9%. These open positions, limits or actual whichever is higher, would continue to attract capital charge at 9%. This capital charge is in addition to the capital charge for credit risk on the on-balance sheet and off-balance sheet items pertaining to foreign exchange and gold transactions.

Measurement of capital charge for Credit Default Swap (CDS) in the trading book, Capital charge for Counterparty Credit Risk, Capital charge for Counterparty Risk for Collaterised Transactions in CDS, Treatment for Illiquid Positions, Valuation Methodologies, etc. are detailed in the RBI Circular for reference.

Aggregation of the capital charge for Market Risks

The capital charges for specific risk and general market risk are to be computed **separately** and the same can be aggregated as per the Performa table provided in the Circular. While calculating the eligible capital for market risk, it would be necessary to calculate the minimum capital requirement for credit and operational risk first to ascertain how much component of capital is available to support the market risk and the same can be computed.

3. Capital charge for Operational Risk

Operational risk is termed as the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events. This includes legal risk, but excludes strategic and reputational risk. Legal risk includes, but is not limited to, exposure to fines, penalties, or punitive damages resulting from supervisory actions, as well as private settlements.

Measurement Methodologies

Three methods for calculating operational risk capital charges in continuum of increasing sophistication and risk sensitivity are provided under NCAF viz.

- i) The Basic Indicator Approach (BIA)
- ii) / The Standardized Approach (TSA), and
- iii) Advanced Measurement Approach (AMA).

Banks are advised, to begin with, to adopt the Basic Indicator Approach (BIA) and RBI would review the capital requirement under BIA for general credibility and in case it is found

any laxity, appropriate Supervisory action under Pillar 2 will be considered. The capital charge for operational risk is calculated under BIA is as under:-

Where:

KBIA = the capital charge under the Basic Indicator Approach

GI = annual gross income, where positive, over the previous three years

n = number of the previous three years for which gross income is positive

I = 15% (alpha) which is set by the BCBS, relating the industry wide level of required capital to the industry wide level of the indicator.

(Gross income is defined as "Net interest income" plus "net non-interest income" with adjustments as detailed in the circular).

Banks are advised to compute capital charge for operational risk under the BIA as follows:

- a) Average of [Gross Income * alpha] for each of the last three financial years, excluding years of negative or zero gross income
- b) Gross income = Net Profit (+) Provisions & Contingencies (+) Operating Expenses
- c) Alpha = 15 per cent

Under BIA, banks are required to hold capital for operational risk equal to the average positive annual gross income over the previous 3 years. In case the gross income for any year is negative or zero, the same should be excluded while calculating the average. RBI will initiate necessary supervisory action under Pillar 2 in case the negative gross income distorts banks Pillar I capital charge.

Supervisory Review and Evaluation Process (SREP) – (Pillar 2)

The objective of Supervisory Review Process (SRP) is to:-

- a. Ensure that banks have adequate capital to support all the risks in their business; and
- b. Encourage them to develop and use better risk management techniques for monitoring and managing their risks.

This in turn would require a well-defined internal assessment process within banks through which they assure the RBI that adequate capital is indeed held towards the various risks to which they are exposed. The process of assurance could also involve an active dialogue between the bank and the RBI so that, when warranted, appropriate intervention could be made to reduce the risk exposure of the bank or augment / restore its capital. Thus, Internal Capital Adequacy Assessment Process (ICAAP) is an important component of the SRP.

The main aspects to be addressed under SRP/ICAAP would include:-

- a) The risks that are not fully captured by the minimum capital ratio prescribed under Pillar 1;
- b) The risks that are not at all taken into account by the Pillar 1; and

c) The factors external to the bank.

The capital adequacy ratio prescribed under Pillar 1 is only the minimum and addresses only the three risks viz. credit, market and operation risks. Holding of additional capital might be necessary for banks to take care of the possible under-estimation of risks under the Pillar 1 and the actual risk exposure of a bank vis-à-vis the quality of its risk management architecture. Some of the risks which are generally exposed to but not fully captured in the regulatory CRAR include:-

- a) Interest rate risk in the banking book;
- b) Credit concentration risk;
- c) Liquidity risk;
- d) Settlement risk;
- e) Reputational risk;
- f) Strategic risk;
- g) Risk of under-estimation of credit risk under the Standardised approach;
- h) Model risk i.e., the risk of under-estimation of credit risk under the IRB approaches;
- i) Risk of weakness in the credit-risk mitigants;
- j) Residual risk of securitisation, etc.

It is, therefore, only appropriate that the banks make their own assessment of their various risk exposures, through a well-defined internal process, and maintain an adequate capital cushion for such risks. Banks were advised to develop and put in place, with the approval of their Boards, an **ICAAP**, in addition to a bank's calculation of regulatory capital requirements under Pillar 1, commensurate with their size, level of complexity, risk profile and scope of operations. The ICAAP was operationalised w.e.f. March 2008 by foreign banks and March 2009 by Indian Banks.

Based on the three mutually reinforcing Pillars i.e. Pillar 1, Pillar 2, and Pillar 3, the Basel Committee lays down four key principles under the SRP as under:-

- a) Banks are required to have a process for assessing their overall capital adequacy in relation to their risk profile and a strategy for maintaining their capital levels.
- b) Evaluation of banks' internal capital adequacy assessments and strategies as well as their ability to monitor and ensure their compliance with the regulatory capital ratios by Supervisors.
- c) Supervisors should expect banks to operate above the minimum regulatory capital ratios and should have the ability to require banks to hold capital in excess of the minimum.
- d) Supervisors should intervene at an early stage to prevent capital from falling below the minimum levels required to support the risk characteristics of a particular bank and should require rapid remedial action if capital is not maintained or restored.

The Principles **a** & **c** relates to the supervisory expectations while others i.e. **b** & **d** deals with the role of the supervisors under Pillar 2. This necessitates evolvement of an effective ICAAP for assessing their capital adequacy based on the risk profiles as well as strategies for maintaining their capital levels. Pillar 2 also requires the Supervisory authorities to put in place an evaluation process known as **Supervisory Review and Evaluation Process (SREP)** and to initiate supervisory measures as may be necessary. This would also facilitate RBI to take suitable steps either to reduce exposure of the bank or augment/restore its capital.

Based on the principles, responsibilities have been casted on banks and Supervisors under SREP and based on which banks are expected to operate above the minimum regulatory capital ratios commensurate with their individual risk profiles, etc. Under SREP, the RBI will assess the overall capital adequacy through comprehensive evaluation along with Annual Financial Inspection (AFI) based relevant data and ICAAP document being received from banks and available information. ICAAP and SREP are 2 important components of Pillar 2.

Every bank (except LABs & RRBs) should have an ICAAP both at solo and consolidated levels and the responsibility of designing and implementation of the ICAAP rests with the Board. Before embarking on new activities or introducing new products the senior management should identify and review the related risks arising from these potential new products or activities and ensure that the infrastructure and internal controls necessary to manage the related risks are in place.

Banks are required to put in place an effective MIS which should provide the board and senior management a clear and concise manner with timely and relevant information concerning their institutions' risk profile including risk exposure. MIS should be capable of capturing limit breaches (concentrations) and same should be promptly reported to senior management, as well as to ensure that appropriate follow-up actions are taken. Risk management process should be frequently monitored and tested by independent control areas and internal and external auditors.

The ICAAP should form an integral part of the management and decision-making culture of a bank. The implementation of ICAAP should be guided by the principle of proportionality and RBI expects degree of sophistication in the ICAAP in regard to risk measurement which should commensurate with the nature, scope, scale and the degree of complexity in the bank's business operations.

Internal Capital Adequacy Assessment Process (ICAAP)

ICAAP is a comprehensive paper which would provide:-

- a) detailed information on the ongoing assessment of bank's entire spectrum of risks;
- b) how the bank intends to mitigate those risks; and
- c) Current and future capital necessary thereof reckoning their mitigating factors.

ICAAP, duly approved by the BOD, is to be submitted to RBI. It should contain all the relevant information necessary for the bank and RBI to make an informed judgement as to the appropriate capital level of the bank and its risk management approach.

Contents

ICAAP document should normally contain various sections as under:-

- a) Executive Summary
- b) Background
- c) Summary of current and projected financial and capital positions
- d) Capital adequacy
- e) Key sensitivities and future scenarios
- f) Aggregation and diversification
- g) Testing and adoption of the ICAAP
- h) Use of ICAAP with the bank.

Executive Summary

Executive Summary would include:

- a) Purpose of the report
- b) Main findings
- c) Summary of financial position of the bank, etc.

Background

Background should include the relevant organizational and historical financial data for the bank viz. group structure, operating profit, profit before tax, etc. and conclusions from the trends in the data which may have implications for the bank's future.

• Summary of current and projected financial and capital positions

This section would explain the present financial position of the bank and expected changes to the current business profile, the environment in which it expects to operate, its projected business plans (by appropriate lines of business), projected financial position, and future planned sources of capital, etc.

Capital adequacy

This would provide description of the bank's risk appetite, in quantitative terms, amount of capital required to meet minimum **regulatory needs or** whether it suffice to **meet its business plans**, etc. The information provided should include the effective date of the ICAAP calculations together with the rationale for capital requirement has been assessed, etc.

The section would also discuss the major risks faced by the bank in each categories, viz. credit risk, market risk, operational risk, liquidity risk, concentration risk, interest rate risk in the banking book, residual risk of securitization, strategic risk, business risk, reputation risk, pension obligation risk, other residual risk; and any other risks that might have been identified.

The section would further contain the methodology and assumptions on how assessments for each of the major risks have been arrived and the main assumptions made, etc.

Risk oversight and specific aspects of risk management

This section discusses the risk management system in the bank, Off-balance sheet exposures with a focus on securitization, Assessment of reputational risk and implicit support, Assessment of valuation and liquidity risk, Stress Testing practices, & Sound compensation practices, etc.

Key sensitivities and future scenarios

The section would include how an economic downturn would affect the bank's capital funds and future earnings and the banks CRAR taking into account the future changes in the projected balance sheet, etc.

The section would further explain on the management actions assumed in deriving the ICAAP in particular the quantitative impact of management actions and the evidence of management actions implemented in the past during similar periods of economic stress, etc.

Aggregation and Diversification

This section would describe how the results of the various separate risk assessments are brought together and an overall view taken on capital adequacy taking into account the various related factors.

• Testing and Adoption of the ICAAP

This section describes the extent of testing that the ICAAP has been subjected to and would

include the testing and control process applied, models and calculations, test results, etc.

• Use of ICAAP with the bank

This section would explain the concept of capital management implemented in the bank. This would further include the extent and use of capital modeling or scenario analysis and stress testing within the bank's capital management policy, etc.

Structural Aspects of ICAAP

While designing the ICAAP, banks are required comply with certain broad parameters such as:-

- a) Every bank must have an ICAAP
- b) The ICAAP should encompass firm-wide risk profile including risk management principles
- c) Board and Senior Management Oversight
- d) Policies, procedures, limits and controls
- e) Identifying, measuring, monitoring and reporting of risk
- f) Internal controls; and
- g) Submission of the outcome of the ICAAP to the BOD and RBI. ICAAP should reach the RBI latest by end of the first quarter (i.e. April-June) of the relevant financial year.

Other features/requirements

- a) Review of ICAAP by BOD should be carried annually to assess the success of implementation and achievement of objectives as envisaged thereunder.
- b) ICAAP should be an Integral part of the Management and Decision-making Culture
- c) The implementation of ICAAP should be guided by the principle of proportionality
- d) ICAAP should be subject to regular and independent review through an internal or external audit process, separately from the SREP conducted by the RBI
- e) ICAAP should be forward looking in nature and banks should have an explicit Board approved capital plan to achieve its objectives, etc. The adequacy of a bank's capital is a function of its risk profile.
- f) Being part of ICAAP, the management of the bank should carry out stress tests to evaluate the vulnerability of the bank to some unlikely events or market movements / conditions which could have an adverse impact of the bank
- g) Banks to develop suitable methodologies for estimating and maintaining economic capital.

Operational aspects of ICAAP

- a) The first and foremost objective of ICAAP is to identify, measure, and quantify the various material risks associated with the bank.
- b) The risks to which banks are exposed include credit risk, market risk, operational risk, interest rate risk in the banking book, credit concentration risk and liquidity risk.
- c) Banks should not solely rely on the external credit ratings instead conduct analysis of underlying risks while investing in the structured products as permitted by RBI.
- d) Bank's risk management process including the ICAAP should be consistent with the existing RBI guidelines on these risks.
- e) If banks adopt risk mitigation techniques, they should understand the risk to be mitigated and reckoning its enforceability and effectiveness on the risk profile of the bank.

- f) Sound Stress Testing Practices: Stress testing that alerts bank management to adverse unexpected outcomes related to a broad variety of risks and provides an indication to banks of how much capital might be needed to absorb losses should large shocks occur. It is an important tool that is used by banks as part of their internal risk management. Moreover, stress testing supplements other risk management approaches and measures.
- g) Sound Compensation Practices: Risk management must be embedded in the culture of a bank and should be under the critical focus of the Senior Management of the bank. For developing and maintaining a broad and deep risk management culture over time, compensation policies may be drawn which should be linked to longer-term capital preservation and the financial strength of the firm, and should consider risk-adjusted performance measures.
- h) Banks should provide adequate disclosure regarding its compensation policies to stakeholders.

Market Discipline - (Pillar - 3)

Market Discipline is termed as development of a set of disclosure requirements so that the market participants would be able to access key pieces of information on the scope of application, capital, risk exposures, risk assessment processes, and in turn the capital adequacy of the institution. Market discipline can contribute to a safe and sound banking environment. Hence, non-compliance of the prescribed disclosure requirement attracts penalty including financial penalty. Banks should have a formal disclosure policy approved by the Board of Directors that addresses the bank's approach for determining what disclosures it will make and the internal controls over the disclosure process.

The Pillar 3 disclosures as introduced under Basel III would become effective from **01.07.2013** and the first set of disclosures as required should be made by banks as on **30.09.2013** (with exception of Post March 31, 2017 template (dealt separately). Banks are required to make Pillar 3 disclosures at least on a half yearly basis, irrespective of whether financial statements are audited, with the exception i.e. Capital Adequacy, Credit Risk: General Disclosure for all banks; and Credit Risk: Disclosures for Portfolios subject to the Standardised Approach. These are to be made at least on a quarterly basis by banks. All disclosures must either be included in a bank's published financial results/ statements or at a minimum, must be disclosed on bank's website.

Banks are required to make disclosures in the prescribed format by RBI. Banks are also required to maintain a 'Regulatory Disclosures Section' on their website where all information relating to disclosures will be made available to the market participants. The link should be prominently provided on the home page of the website so as to make it easily accessible. An archive for at least three years of all templates relating to prior reporting periods should be made available by banks on their websites.

Post March 31, 2017 Disclosure Template

A common template which will be used by banks to report the details of their regulatory capital after March 31, 2017 i.e. after the transition period for the phasing-in of deductions is over. It is designed to meet the Basel III requirement to disclose all regulatory adjustments. The template enhances consistency and comparability in the disclosure of the elements of capital between banks and across jurisdictions.

Template during the Transitional Period

During the transition period of phasing-in of regulatory adjustments under Basel III in India i.e. from April 1, 2013 to March 31, 2017, banks will use a modified version of the post March 31, 2017 template. This template is designed to meet the Basel III requirement for banks to disclose the components of capital which will benefit from the transitional arrangements.

Main Features Template

A common template has been designed to capture the main features of all regulatory capital instruments issued by a bank at one place. This disclosure requirement is intended to meet the Basel III requirement to provide a description of the main features of capital instruments.

Other Disclosure Requirements

This disclosure enables banks in meeting the Basel III requirement to provide the full terms and conditions of capital instruments on their websites.

Banks operating in India are required to make additional disclosures in respect of:-

- a. Securitisation exposures in the trading book;
- b. Sponsorship of off-balance sheet vehicles;
- c. Valuation with regard to securitisation exposures; and
- d. Pipeline and warehousing risks with regard to securitisation exposures

Capital Conservation Buffer Framework

Objective

The capital conservation buffer (CCB) is designed to ensure that banks build up capital buffers during normal times (i.e. outside periods of stress). CCB can be used against losses incurred during a stressed period. The requirement is based on simple capital conservation rules designed to avoid breaches of minimum capital requirements. Outside the period of stress, banks should hold buffers of capital above the regulatory minimum. When buffers have been set off, one way banks should look to rebuild them is through reducing discretionary distributions of earnings. This could include reducing dividend payments, share buybacks and staff bonus payments. Banks may also choose to raise new capital from the market as an alternative to conserving internally generated capital

The capital conservation buffer can be used only when a bank faces a systemic stress. A bank should not choose in normal times to operate in the buffer range simply to compete with other banks and win market share. This aspect would be specifically looked into by RBI during the SREP. The banks which draw down their capital conservation buffer during a stressed period should also have a definite plan to replenish the buffer as part of its ICAAP and strive to bring the buffer to the desired level within a time limit agreed to with RBI during the SREP.

The framework of capital conservation buffer will enable the banks to:-

- a) Strengthen the ability of banks to withstand adverse economic environment conditions,
- b) Help increase banking sector resilience both going into a downturn; and

c) Provide the mechanism for rebuilding capital during the early stages of economic recovery.

By retaining a greater proportion of earnings during a downturn, banks will be able to help ensure that capital remains available to support the ongoing business operations / lending activities during the period of stress. Therefore, this framework is expected to help reduce procyclicality.

Framework

Banks are required to maintain a capital conservation buffer of 2.5% of RWA in the form of Common Equity Tier 1 capital above the regulatory minimum capital requirement of 9%. CCB is to be phased-in over a period of 4 years in a uniform manner of 0.625% per year, commencing from 31.3.15. Banks should not distribute capital (i.e. pay dividends or bonuses in any form) in case capital level falls within this range. The constraints imposed are related to the distributions only and are not related to the operations of banks. The distribution constraints imposed on banks, when their capital levels fall into the range, increase as the banks' capital levels approach the minimum requirements. The minimum capital conservation ratios a bank must meet at various levels of the Common Equity Tier 1 capital ratios is shown as under:-

Minimum capital conservation standards for individual bank				
CET 1 Ratio after including the	Minimum Capital Conservation			
current periods of retained	Ratios (in % of earnings)			
earnings				
5.5% - 6.125%	100%			
>6.125% - 6.75%	80%			
>6.75% - 7.375%	60%			
>7.375% - 8.0%	40%			
>8.0%	0%			

It may be observed from the above that a bank with a Common Equity Tier 1 capital ratio in the range of 6.125% to 6.75% is required to conserve 80% of its earnings in the subsequent financial year (i.e. payout not more than 20% in terms of dividends, share buybacks and discretionary bonus payments is allowed). Basel III minimum capital conservation standards apply with reference to the applicable minimum CET1 capital and applicable CCB.

During the transition period, the build-up of CCB as prescribed by RBI would be as under:-

Minimum capital conservation standards for individual bank

1						
	Common Equity Tie					
	periods		Minimum Capital			
		retained earnings		Conservation Ratios		
	As on	As on	As on	(expressed as % of earnings)		
	March 31, 2016	March 31, 2017	March 31, 2018	0,		
	5.5% - 5.65625%	5.5% - 5.8125%	5.5% - 5.96875%	100%		
	>5.65 <mark>62</mark> 5% - 5.8125%	>5.8125% - 6.125%	>5.96875% - 6.4375%	80%		
	>5.8125% - 5.96875%	>6.125% - 6.4375%	>6.4375% - 6.90625%	60%		

>5.96875% - 6.125%	>6.4375% - 6.75%	>6.90625% - 7.375%	40%
>6.125%	>6.75%	>7.375%	0%

Capital conservation buffer is applicable both at the solo level (global position) as well as at the consolidated level, i.e. restrictions would be imposed on distributions at the level of both the solo bank and the consolidated group.

Leverage Ratio Framework

The leverage ratio provisions in the Basel III document are intended to serve as the basis for testing the leverage ratio during the parallel run period. The Basel Committee will test a minimum Tier 1 leverage ratio of 3% during the parallel run period from January 1, 2013 to January 1, 2017. The leverage ratio is calibrated to act as a credible supplementary measure to the risk based capital requirements. The main objective of the leverage ratio framework is:-

- a) constrain the build-up of leverage in the banking sector, helping avoid destabilising deleveraging processes which can damage the broader financial system and the economy; and
- b) reinforce the risk based requirements with a simple, non-risk based "backstop" measure

During the period of parallel run, banks should strive to maintain their existing level of leverage ratio but, in no case the leverage ratio should fall below 4.5%. A bank whose leverage ratio is below 4.5% may endeavor to bring it above 4.5% as early as possible. Final leverage ratio requirement would be prescribed by RBI after the parallel run taking into account the prescriptions given by the Basel Committee.

The leverage ratio shall be maintained on a quarterly basis. The basis of calculation at the end of each quarter is "the average of the month end leverage ratio over the quarter based on the definitions of capital (i.e. the capital measure) and the total exposure (i.e. the exposure measure) respectively as detailed in the RBI Circular.

(The criteria for Classification as Common Shares (Paid up Equity Capital) for Regulatory Purposes for Indian Banks as well as Foreign Banks, Detailed guidelines on issuance of various Debt Instruments viz. Innovative Perpetual Debt Instrument (IPDI), Perpetual Noncumulative Preference Shares (PNCPS), Debt Capital Instruments, Perpetual Cumulative Preference Shares (PCPS), Credit Default Swaps (CDS), Illustrations on Credit Risk Mitigation (Loan Exposures) – Calculation of Exposure Amount for Collateralized transactions, Illustrations on computation of capital charge for Counterparty Credit Risk (CCR) – Repo Transactions, Measurement of capital charge for Market Risks in respect of Interest Rate Derivatives and Options, An Illustrative Approach for Measurement of Interest Rate Risk in the Banking Book (IRRBB) under Pillar 2, Redeemable Non-cumulative Preference Shares (RNPS), Redeemable Cumulative Preference Shares (RCPS), Subordinated Debts, Guidelines on Securitization of Standard Assets, Illustrative Approach on Measurement of Capital Charge for Market Risks in respect of Interest Rate Risk and Derivatives, etc. are given in detail in the RBI Master Circular which also may be referred).

(Source: RBI M. Circular dt. 01.07.14)