

UNIT – 3 : CAPITAL ADEQUACY NORMS

LEARNING OUTCOMES

After studying this unit, you will be able to:

- Definitions of capital funds (Tier I & Tier II) and minimum capital requirement,
- Technique of computing weightage for the purpose of capital adequacy norms

3.1 CAPITAL FRAMEWORK OF BANKS FUNCTIONING IN INDIA

Capital adequacy is used to describe adequacy of capital resources of a bank in relation to the risks associated with its operations.

Capital Adequacy Ratio (CAR)

The Basel Committee on Banking Supervision had published the first Basel Capital Accord (popularly called as Basel I framework) in July, 1988 prescribing minimum capital adequacy requirements in banks for maintaining the soundness and stability of the International Banking System and to diminish existing source of competitive inequality among international banks. After Basel I framework, Basel II norms were released. The main objectives of Basel committee were:

- (i) to stop reckless lending by bank
- (ii) to strengthen the soundness and stability of the banking system and
- (iii) to have a comparative footing of the banks of different countries.

With a view to adopting the Basel Committee on Banking Supervision (BCBS) framework on capital adequacy which takes into account the elements of credit risk in various types of assets in the balance sheet as well as off-balance sheet business and also to strengthen the capital base of banks, Reserve Bank of India decided in April 1992 to introduce a risk asset ratio system for banks (including foreign banks) in India as a capital adequacy measure. Having regard to the necessary upgradation of risk

management framework as also capital efficiency likely to accrue to the banks by adoption of the advanced approaches envisaged under the Basel II Framework and the emerging international trend in this regard, in July 2009 it was considered desirable to lay down a timeframe for implementation of the advanced approaches in India.

Consequently, the Basel Committee on Banking Supervision (BCBS) released comprehensive reform package entitled "Basel III: A global regulatory framework for more resilient banks and banking systems" (known as Basel III capital regulations) in December 2010. Basel III reforms 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 etc. Reserve Bank issued Guidelines based on the Basel III reforms on capital regulation on May 2, 2012, to the extent applicable to banks operating in India. The Basel III capital regulation has been implemented from April 1, 2013 in India in phases and it will be fully implemented as on March 31, 2018.

NOTE: The capital adequacy norms given in this unit are as per existing Basel II norms. RBI requires Banks to maintain minimum capital risk adequacy ratio of 9 % on an ongoing basis*.

Every bank should maintain a minimum capital adequacy ratio based on capital funds and risk assets. As per the prudential norms, all Indian scheduled commercial banks (excluding regional rural banks) as well as foreign banks operating in India are required to maintain capital adequacy ratio (or capital to Risk Weighted Assets Ratio) which is specified by RBI from time to time. At present capital adequacy ratio is 9%.

The capital adequacy ratio is worked out as below:

$$\frac{\text{Capital fund **}}{\text{Risk weighted assets + off balance sheet items}} \times 100$$

** Capital Fund consists of Tier I & Tier II Capital

* RBI has issued a master circular No. DBOD.No.BP.BC.5/21.06.001/2014/15 dated July 1, 2014 on "Prudential Guidelines on Capital Adequacy and Market Discipline- New Capital Adequacy Framework (NCAF)".

The CAR measures financial solvency of Indian and foreign banks. Under Basel II norms, Banks can lend only about 22 times of their core Capital.

3.2 CAPITAL FUNDS

Capital is divided into two tiers according to the characteristics/qualities of each qualifying instrument. Tier I capital consists mainly of share capital and disclosed reserves and it is a bank's highest quality capital because it is fully available to cover losses.

Tier II capital on the other hand consists of certain reserves and certain types of subordinated debt. The loss absorption capacity of Tier II capital is lower than that of Tier I capital. When returns of the investors of the capital issues are counter guaranteed by the bank, such investments will not be considered as Tier I/II regulatory capital for the purpose of capital adequacy.

3.3 TIER-I AND TIER-II CAPITAL FOR INDIAN BANKS

Tier I capital (also known as core capital) provides the most permanent and readily available support to a bank against unexpected losses.

3.3.1 Tier I capital

The elements of Tier I capital include

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

Banks may include quarterly / half yearly profits for computation of Tier I capital only if the quarterly / half yearly results are audited by statutory auditors and not when the results are subjected to limited review.

As reduced by:

- intangible assets and losses in the current period and those brought forward from previous period.
- Creation of deferred tax asset (DTA) results in an increase in Tier I capital of a

bank without any tangible asset being added to the banks' balance sheet. Therefore, DTA, which is an intangible asset, should be deducted from Tier I capital.

3.3.2 Tier II capital: comprises elements that are less permanent in nature or are less readily available than those comprising Tier I capital. The elements comprising Tier II capital are as follows:

- (a) Undisclosed reserves
- (b) Revaluation reserves
- (c) General provisions and loss reserves
- (d) Hybrid debt capital instruments
- (e) Subordinated debt
- (f) Investment Reserve Account

(a) Undisclosed reserves and cumulative perpetual preference assets - These elements have the capacity to absorb unexpected losses and can be included in the capital, if they represent accumulations of post-tax profits and not encumbered by any known liability and should not be routinely used for absorbing normal loan or operating losses. Cumulative perpetual preference shares should be fully paid-up and should not contain clauses which permit redemption by the holder.

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

(c) General provisions and loss reserves - If these are not attributable to the actual diminution in value or identifiable potential loss in any specific asset and are available to meet unexpected losses, they can be included in Tier-II capital. Adequate care must be taken to see that sufficient provisions have been made to meet all known losses and foreseeable potential losses before considering general

provisions and loss reserves to be part of Tier-II capital. However, general provisions and loss reserves (including general provision on standard assets) may be taken only up to a maximum of 1.25 per cent of weighted risk assets.

'Floating Provisions' held by the banks, which is general in nature and not made against any identified assets, may be treated as a part of Tier II capital within the overall ceiling of 1.25 percent of total risk weighted assets.

Excess provisions which arise on sale of NPAs would be eligible Tier II capital subject to the overall ceiling of 1.25% of total Risk Weighted Assets.

(d) Hybrid Debt Capital instruments - Those instruments which have close similarities to equity, in particular when they are able to support losses on an ongoing basis without triggering liquidation, may be included in Tier II capital. At present the following instruments have been recognized and placed under this category:

- i. Debt capital instruments which has a combination of characteristics of both equity and debt, eligible for inclusion as Upper Tier II capital; and
- ii. Perpetual Cumulative Preference Shares (PCPS) / Redeemable Non-Cumulative Preference Shares (RNCPS) / Redeemable Cumulative Preference Shares (RCPS) as part of Upper Tier II Capital.

(e) Subordinated Debt - To be eligible for inclusion in the Tier-II capital the instrument should be fully paid up, unsecured, subordinated to the claims of other creditors, free of restrictive clauses and should not be redeemable at the initiative of the holder or without the consent of the Reserve Bank of India. They often carry a fixed maturity and as they approach maturity, they should be subjected to progressive discount for inclusion in Tier-II capital. Instrument with an initial maturity of less than five years or with a remaining maturity of one year should not be included as part of Tier-II capital. Subordinated debt instrument will be limited to 50% of Tier-I capital.

(f) Investment Reserve Account - In the event of provisions created on account of depreciation in the 'Available for Sale' or 'Held for Trading' categories being found to be in excess of the required amount in any year, the excess should be credited to the Profit & Loss account and an equivalent amount (net of taxes, if any and net of transfer to Statutory Reserves as applicable to such excess provision) should be appropriated to an Investment Reserve Account in Schedule 2 – "Reserves & Surplus" under the head "Revenue and other Reserves" in the Balance Sheet and would be eligible for inclusion under Tier II capital within the overall ceiling of 1.25

per cent of total risk weighted assets prescribed for General Provisions/ Loss Reserves.

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

3.3.3 Deductions from Tier I and Tier II Capital

a) Equity/non-equity investments in subsidiaries

The investments of a bank in the equity as well as non-equity capital instruments issued by a subsidiary, which are reckoned towards its regulatory capital as per norms prescribed by the respective regulator, should be deducted at 50 per cent each, from Tier I and Tier II capital of the parent bank, while assessing the capital adequacy of the bank on 'solo' basis, under the Basel I Framework.

b) Credit Enhancements pertaining to Securitization of Standard Assets

- i) Treatment of First Loss Facility:** The first loss credit enhancement provided by the originator shall be reduced from capital funds and the deduction shall be capped at the amount of capital that the bank would have been required to hold for the full value of the assets, had they not been securitised. The deduction shall be made at 50% from Tier I and 50% from Tier II capital.
- ii) Treatment of Second Loss Facility:** The second loss credit enhancement provided by the originator shall be reduced from capital funds to the full extent. The deduction shall be made 50% from Tier I and 50% from Tier II capital.
- iii) Treatment of credit enhancements provided by third party:** In case, the bank is acting as a third party service provider, the first loss credit enhancement provided by it shall be reduced from capital to the full extent as indicated at para (i) above.
- iv) Underwriting by an originator:** Securities issued by the SPVs and devolved / held by the banks in excess of 10 per cent of the original amount of issue, including secondary market purchases, shall be deducted 50% from Tier I capital and 50% from Tier II capital.

- v) **Underwriting by third party service providers:** If the bank has underwritten securities issued by SPVs devolved and held by banks which are below investment grade the same will be deducted from capital at 50% from Tier I and 50% from Tier II.

3.4 RATIO OF TIER II CAPITAL TO TIER I CAPITAL

The quantum of Tier II capital is limited to a maximum of 100% of Tier I Capital. This seeks to ensure that the capital funds of a bank predominantly comprise of core capital rather than items of a less permanent nature. It may be clarified that the Tier II capital of a bank can exceed its Tier I capital; however, in such a case, the excess will be ignored for the purpose of computing the capital adequacy ratio.

3.5 TIER I AND TIER II CAPITAL FOR FOREIGN BANKS

As in case of Indian banks, capital funds of foreign banks operating in India would also comprise of Tier I capital and Tier II capital.

Tier I capital of Foreign bank would comprise the following elements:

- (i) Interest free funds from Head Office kept in a separate account in Indian books specifically for the purpose of meeting the capital adequacy norms.
- (ii) Innovative Instruments eligible for inclusion as Tier I capital.
- (iii) Statutory reserves kept in Indian books.
- (iv) Remitable surplus retained in Indian books which is not repatriable so long as the bank functions in India.

Tier II Capital:

The elements of Tier II capital include the following elements.

- a) Elements of Tier II capital as applicable to Indian banks.
- b) Head Office (HO) borrowings raised in foreign currency (for inclusion in Upper Tier II Capital) subject to certain terms and conditions.

3.6 RISK-ADJUSTED ASSETS

For CAR purposes the entire assets side of the Banks Balance Sheet is recalculated on the basis of assigning risk weights to each category of assets. This follows the principle of conservatism by considering assets at their Risk Adjusted Values rather than at their face value in calculating the CAR

For example, cash balances are not susceptible to any risks whereas advances are susceptible to credit risks. Even within advances, the risk of loss arising from failure of the customer to settle his obligation fully is less in the case of loans guaranteed by DICGC/ECGC as compared to unguaranteed loans.

Similarly, different off-balance sheet items also involve varying degree of risk. For example, the risk involved in guarantees given against counter-guarantees of other banks is much less compared to other guarantees. Similarly, guarantees related to particular transactions are less risky compared to general guarantees of indebtedness.

Recognising the above, the Reserve Bank has assigned different risk weights to different categories of assets. For example, cash, balances with Reserve Bank of India is assigned a risk weight of zero (i.e. the asset will not be considered to be at risk at all), loan and advances have generally been assigned a risk weight of 100 per cent.

The risk adjusted value for any category of assets is determined by multiplying the value of the category of an asset as per the balance sheet with the risk weight assigned thereto.

For example, if a bank has DICGC/ECGC guaranteed advances of ₹ 100 crores outstanding on the balance sheet date, the risk-adjusted value of these advances would be ₹ 50 crores (loans guaranteed by DICGC/ECGC have been assigned a risk weight of 50).

So even though the Bank has extended a loan of ₹ 100 crores, after Risk –Adjusted Assets, for CAR purposes it will be reckoned as only ₹ 50 Crores.

In brief the important weights for the purpose of Ascertainment of CAR are as follows:-

Sr. No.	Item of asset	Risk Weight %
1.	Cash, balances with RBI	0
2.	Balances in current account with other banks	20
3.	Investments in Government Securities	0
4.	Other Investments	100
5.	Loans & Advances guaranteed by Government	0
6.	Other Loans & Advances	100
7.	Bank Premises, Furniture & Fittings etc.	100

8.	All Off- Balance Sheet Items like LC's, LG's, Bills	100
9.	Non funded exposure to Real estate	150

For detailed Risk Weights as per RBI guidelines for the purpose of CAR are given in Annexure IV.

3.7 REPORTING FOR CAPITAL ADEQUACY NORMS

Banks should furnish an annual return. The format for the returns is specified by the RBI under Capital Adequacy Norms. The returns should be signed by two officials who are authorised to sign the statutory returns now being submitted to the Reserve Bank.

Illustration 1

A commercial bank has the following capital funds and assets. Segregate the capital funds into Tier I and Tier II capitals. Find out the risk-adjusted asset and risk weighted assets ratio –

Capital Funds:	<i>(Figures in ₹ lakhs)</i>
<i>Equity Share Capital</i>	4,80,00
<i>Statutory Reserve</i>	2,80,00
<i>Capital Reserve (of which ₹ 280 lakhs were due to revaluation of assets and the balance due to sale)</i>	12,10
Assets:	
<i>Cash Balance with RBI</i>	4,80
<i>Balances with other Bank</i>	12,50
<i>Claims on Banks</i>	28,50
<i>Other Investments</i>	782,50
Loans and Advances:	
<i>(i) Guaranteed by government</i>	128,20
<i>(ii) Guaranteed by public sector undertakings of Government of India</i>	702,10
<i>(iii) Others</i>	52,02,50
<i>Premises, furniture and fixtures</i>	182,00
<i>Other Assets</i>	201,20
Off-Balance Sheet Items:	
<i>Acceptances, endorsements and letters of credit</i>	37,02,50

Solution

(i) Capital Funds - Tier I :	<i>₹ in lakhs</i>	<i>₹ in lakhs</i>	
Equity Share Capital		480,00	
Statutory Reserve		280,00	
Capital Reserve (arising out of sale of assets)		<u>9,30</u>	
		769,30	
Capital Funds - Tier II :			
Capital Reserve (arising out of revaluation of assets)	280		
Less : Discount to the extent of 55%	<u>(154)</u>	<u>1,26</u>	
		<u>770,56</u>	
(ii) Risk Adjusted Assets			
Funded Risk Assets	<i>₹ in lakhs</i>	<i>Percentage weight</i>	<i>Amount ₹ in lakhs</i>
Cash Balance with RBI	4,80	0	—
Balances with other Banks	12,50	20	2,50
Claims on banks	28,50	20	5,70
Other Investments	782,50	100	782,50
Loans and Advances:			
(i) guaranteed by government	128,20	0	—
(ii) guaranteed by public sector undertakings of Central Govt.	702,10	0	—
(iii) Others	52,02,50	100	52,02,50
Premises, furniture and fixtures	1,82,00	100	1,82,00
Other Assets	2,01,20	100	<u>2,01,20</u>
			<u>63,76,40</u>
<i>Off-Balance Sheet Item</i>	<i>₹ in lakhs</i>	<i>Credit Conversion Factor</i>	
Acceptances, Endorsements and Letters of credit	37,02,50	100	<u>37,02,50</u>

$$\text{Risk Weighted Assets Ratio: } \frac{\text{Capital Funds (Tier I \& Tier II)}}{\text{Risk Adjusted Assets + off Balance sheet items}} \times 100$$
$$= \frac{7,69,30 + 1,26}{63,76,40 + 37,02,50} \times 100$$

$$\text{Capital Adequacy Ratio} = \frac{770,56}{100,78,90} \times 100 = 7.65\%$$

Expected ratio is 9%. So the bank has to improve the ratio by introducing further Tier I capital.