

Risk Management – Additional Reading Material

Basel III & its implications

Introduction:

John Kenneth Galbraith, famous Harvard economist and the US ambassador to India during J.F. Kennedy's administration wrote:

'All financial crises are the result of debt that, in one fashion or another, has become dangerously out of scale'.

This was clearly demonstrated in the financial crisis which took place in the US in 2008. Aggressive lending characterized by sub-prime housing loans and excessive leverage in major banks and financial institutions led to the most serious financial challenge since the Great Depression of 1930s. The Sub Prime Crisis had reportedly led to a total write off of 1.18 trillion dollars. One has to understand the causes of the financial crisis and take appropriate measures to avoid its recurrence. In order to withstand such a shock in future, the Basel Committee on Banking Supervision (BCBS) has announced on September 13, 2010, new capital rules as agreed by the global regulators. The new requirement, known as Basel III, demands a substantial strengthening of existing capital requirements. This involves higher global minimum capital standards for banks.

As cited above, Basel III reforms are the response of BCBS to improve the banking sector's ability to absorb shocks arising from financial and economic stress, whatever the source, thus reducing the risk of spill over from the financial sector to the real economy. During the Pittsburgh Summit in September 2009, the G20 leaders committed to strengthen the regulatory system for banks and other financial firms and also act together to raise capital standards, to implement strong international compensation standards aimed at ending practices that lead to excessive risk-taking, to improve the over-the-counter derivatives market and to create more powerful tools to hold large global firms to account for the risks they take. For all these reforms, the leaders set for themselves strict and precise timetables. Consequently, the 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. (Source: RBI)

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. Besides, the reforms have a macro prudential focus also, addressing system wide risks, which can build up across the banking sector, as well as the pro-cyclical amplification of these risks over time. 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 (Pillar 2) and public disclosures (Pillar 3) 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. (Source: RBI)

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. Banks have started implementing the guidelines from April 1, 2013 in India in a phased manner. Banks are advised by RBI to report the CRAR as per Basel II and Basel III simultaneously in all their disclosures to the stakeholders. The Basel III guidelines are expected to be fully implemented by March 31, 2019.

Comparison between the Basel Guidelines:

Basel I Basel II Basel III Basel Committee BCBS came out with BCBS came out with Banking Supervision these guidelines in the this Consultative 13th (BCBS) had come out year June 2004 on **Paper** with these guidelines overcome September 2010 as a the in the year July, 1988 inadequate fall out of Sub-Prime risk solution Crisis of US, which а measurement mitigate the Herstatt approach of Basel I later on became a Risk that took place in arising out of the contagion effect and the year 1974 due to changed banking resulted into collapse of the German scenario more due to global crisis. Bank. technology adoption. As stated above. Besides, Basel III calls only for By definition, credit & market recognized only the risks, additional capital for Credit risk recognized the the **Banks** as the potential risk for the following additional withstand the global failure of the Banks. risk: shocks such as Subprime crisis in the Subsequently, Operational Risk. **BCBS** future. came out with Market The Credit risk of Basel Risk paper in the year was completely 1996 a set of rules to revamped and Basel II strengthen adopted a risk-based the treasury operations of approach. Also the banks. This was introduced risk necessitated out of mitigation techniques



Basel I	Basel II	Basel III
Nick Leeson Fraud, due to which the world saw the collapse of Barings Bank Ltd.	as Basel I did not recognize the role of credit risk mitigants, such as credit derivatives, securitizations, collaterals and guarantees in reducing the credit risk.	

Why Basel III?

- According to BCBS, the Basel III guidelines aim to improve the banking sectors' ability to absorb shocks arising from financial and economic stress.
- In short the objectives of Basel III are:
 - Strengthening of resilience of the banking sector against future shocks.
 - Supplementing the current recovery process.
 - Reducing the risk spillover effect of a financial crisis to the real economy.
- The new Basel III requirement demands bank's to hold top quality capital totaling 7% of the risk weighted assets.
- The sigh of relief for the Banks is that the guidelines have given long lead-time and graded approach for the banks to bring/raise the capital.
- The tier 1 capital ratio would require banks to hold 7% common equity including 2.50% of Capital Conservation Buffer.

• Capital Conservation Buffer (CCB):

- The CCB is designed to ensure that banks build up capital buffers during normal times (i.e. outside periods of stress) which can be drawn down as losses are incurred during a stressed period. The requirement is based on simple capital conservation rules designed to avoid breaches of minimum capital requirements.
- Banks have been given time until 2019 and in case banks do not comply with the guidelines, and then they may not be allowed to declare/pay dividends to the shareholders. The drawdown table of CCB as given by RBI is given below:

Minimum capital conservation standards for individual bank

Common Equity Tier 1 Ratio after including	Minimum Capital Conservation
the current periods retained earnings	Ratios
	(expressed as a percentage of
	earnings)
5.5% - 6.125%	100%
>6 125% - 6 75%	80%



>6.75% - 7.375%	60%
>7.375% - 8.0%	40%
>8.0%	0%

- For example, 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 no more than 20% in terms of dividends, share buybacks and discretionary bonus payments is allowed) – Source RBI.
- The Tier 1 Capital should be in the nature of **Going-Concern Capital**, i.e., Capital which can absorb losses without triggering bankruptcy of the Bank. The components of Tier 1 Capital is:
 - o Common Equity Tier 1, which would broadly consist of
 - Common shares (paid-up equity capital)
 - Share Premium.
 - Statutory Reserves.
 - Capital Reserves representing surplus arising out of sale process of assets.
 - Other disclosed reserves if any.
 - Balance in Profit & Loss account at the end of previous financial year.
 - Banks can also reckon the profits in current financial year for CRAR calculation on a quarterly basis provided the incremental provisions made for NPAs at the end of the four quarters of the previous financial year have not deviated more than 25% from average of the four quarters.
 - Revaluation reserves at a discount of 55% (This item was originally part of Tier II capital. RBI has brought the same under Tier I vide Circular of March 1, 2016).
 - Foreign currency translation reserve arising due to translation of financial statements of their foreign operations in terms of Accounting Standard (AS) 11 at a discount of 25%.
 - Deferred Tax Assets (DTAs) which related to timing differences (other than related to accumulated losses) can be recognized upto 10% of CET1. The DTA recognized portion + significant investments in the common shares of unconsolidated financial entities (i.e, banking, financial and insurance) taken together should not exceed 15% of the CET1.
 - Banks instead of recognizing as part of CET1 upto 10% can net the same with associated Deferred Tax Liabilities (DTLs) subject to approval of tax authorities. In case, a Bank has either not recognized part of DTA as CET1 or netted the same with associated DTL, then that portion of DTA would be risk weighted at 250%.
 - Accumulated losses and any other intangible assets if any such as goodwill have to be deducted.



- Additional Tier 1 Capital, which would broadly consist of
 - Perpetual Non-Cumulative Preference Shares (PNCPS).
 - Stock Surplus arising out of issue of instruments included in AT1.
 - Debt instruments such as Innovative Perpetual Debt Instruments (IPDI) and any other instruments as permitted by the Supervisor.
- The Tier 2 Capital should be in the nature of Gone-Concern Capital, i.e., capital
 which would absorb losses only in a situation of liquidation of the Bank. The
 components of Tier 2 capital are:
 - General Provisions and Loss Reserves such as Provision on Standard Assets, Floating Provisions, Incremental Provisions in respect of Unhedged foreign currency exposures, provision held for Country exposures, Investment Reserve Account, excess provision which arise on account of sale of NPAs. However, these provisions put together should not exceed 1.25% of total credit risk-weighted assets under Standardized Approach.
 - Debt Instruments issued by the Banks.
 - Preference Share Capital instruments such as Perpetual Cumulative Preference Shares (PCPS), Redeemable Non-Cumulative Preference Shares (RNCPS), Redeemable Cumulative Preference shares (RCPS) issued by the Banks.
 - o Premium receipt on account of issued above debt instruments.
- By virtue of the above, Banks have to raise equity capital to replace hybrids and other instruments such as Perpetual Bonds that will not qualify as Core Capital or Common Equity Capital under the new rules.
- RBI has given the full picture of the Basel III in a tabulated form as given below, once the full implementation of Basel III takes place.

	Regulatory Capital	As % to RWAs
(i)	Minimum Common Equity Tier 1 Ratio	5.5
(ii)	Capital Conservation Buffer (comprised of Common	2.5
	Equity)	
(iii)	Minimum Common Equity Tier 1 Ratio plus Capital	8.0
	Conservation Buffer [(i)+(ii)]	
(iv)	Additional Tier 1 Capital	1.5
(v)	Minimum Tier 1 Capital Ratio [(i) +(iv)]	7.0
(vi)	Tier 2 Capital	2.0
(vii)	Minimum Total Capital Ratio (MTC) [(v)+(vi)]	9.0
(viii)	Minimum Total Capital Ratio plus Capital	11.5
	Conservation Buffer [(vii)+(ii)]	

(Source: RBI)



Counter-cyclical buffer/provision:

- The above provision guidelines are based on the model followed by Spanish banks that fared better during the recent financial crisis by adhering to this provision approach.
- For example, in the second half of 2008, in India, the Banks shied away from lending (credit crunch) triggered by the psychological effect of global financial crisis, which led to negative effect of our economy and caused major downturn in the Sensex (From 20,900 as of February, 2008, the Sensex came down to 8,300 in March 2009). The sectors most affected were Realty, Automotive, Textile and IT.
- o Further a downturn in the economy generally leads to deterioration of asset quality of the Banks, which causes increase in the NPA levels of the Banks. To overcome this only, RBI had come out with special dispensation of restructuring of the loans for the sectors, which suffered due to macroeconomic fundamental, which is outside the control of the borrowers.
- O Higher NPA leads to creation of increased provision by banks. To avoid this, Banks would slow down their lending. In fact, the higher provisioning for NPA has led to several PSBs showing loss in their financials for the Quarter ended December, 2015. Such a situation would further tighten the credit, which would lead to deteriorating borrowers' financial position, thus making the general economy still worse.
- At the peak of the business cycle (boom), the borrowers' performances would be good and the Banks' NPA would also be low. Most of the corporates make profit in their business.
- In the boom time, the Banks tend to reduce the provisions because of lower NPAs, ease credit terms and expand their loan book. The economy is pushed into the fast economic growth (leads to high GDP growth).
- The easy credit approach during the boom period results in poor loan selection (example of Sub-Prime crisis), leading to higher NPAs when the cycle turns into recession.
- The result is that the Banks actions tend to further amplify the cycle (boom leading to more boom and recession leading to further recession).
- The alternative for this is recommended in the form of countercyclical provisioning approach under which, banks build their reserves during good times when their earnings are high and the accumulated reserves can be used during the economic slow down.
- One more argument in favor of this provision is that:
 - During the boom, the loans made are generally poorer in quality requiring more provision.
 - The loans made during recession are of superior quality as banks are very careful and hence need lesser provision.
- The creation of Capital Conservation Reserve provision is more forward looking based on expected loss method (EL) rather than the current incurred loss



provisioning model. These concepts would come very handy, when banks adopt IndAS by March, 2018 as proposed by the Ministry of Corporate Affairs, Government of India.

Leverage Ratio:

- Besides the above, BCBS has also introduced one more ratio called 'Leverage Ratio'. An underlying cause of the global financial crisis was the build-up of excessive on-and off-balance sheet leverage in the banking system. In many cases, banks built up excessive leverage while apparently maintaining strong risk-based capital ratios. During most severe part of the crisis, the banking sector was forced by the market to reduce its leverage in a manner that amplified downward pressure on asset prices. This deleveraging process exacerbated the feedback loop between losses, falling bank capital and contraction in credit availability. Therefore, under Basel III, a simple, transparent, non-risk based leverage ratio has been introduced. The leverage ratio is calibrated to act as a credible supplementary measure to the risk based capital requirements and is intended to achieve the following objectives:
 - Act as a Check on the build-up of leverage in the banking sector to avoid destabilising and deleveraging processes which can damage the broader financial system and the economy;
 - Reinforce the risk-based requirements with a simple, non-risk based "backstop" measure.
- The Basel III leverage ratio is defined as the capital measure (the numerator) divided by the exposure measure (the denominator), with this ratio expressed as a percentage.

• The BCBS will use the revised framework for testing a minimum Tier 1 leverage ratio of 3% during the parallel run period up to January 1, 2017. The BCBS will continue to track the impact of using either Common Equity Tier 1 (CET1) or total regulatory capital as the capital measure for the leverage ratio. The final calibration, and any further adjustments to the definition, will be completed by 2017, with a view to migrating to a Pillar 1 treatment on January 1, 2018. Currently, Indian banking system is operating at a leverage ratio of more than 4.5%. The final minimum leverage ratio will be stipulated by RBI taking into consideration the final rules prescribed by the BCBS by end-2017. In the meantime, these guidelines will serve as the basis for parallel run by banks and also for the purpose of disclosures as outlined by RBI. During this period, Reserve Bank will monitor individual banks against an indicative leverage ratio of 4.5% to curb the build-up of excessive on and off-balance sheet leverage in the banking system. (Source: RBI).



- Liquidity Risk: BCBS had observed that one of the factors for the recent financial crises were due to inaccurate and ineffective management of liquidity risk. To overcome this, BCBS had come out with two ratios – Liquidity Coverage Ratio and Net Stable Funding Ratio (NSFR).
 - The Liquidity Coverage Ratio (LCR): This ratio ensures enough liquid assets to survive an acute stress scenario lasting for 30 days.
 - The objective of the LCR is to promote the short-term resilience of the liquidity risk profile of the banks. This is done by ensuring that banks have an adequate stock of unencumbered high-quality assets (HQLA) that can be converted easily and immediately in private markets into cash to meet their liquidity needs for a 30 calendar day liquidity stress scenario. (Source BIS).
 - This ratio is introduced from 1st January 2015, after an observation period beginning in 2011.
 - The LCR would be binding on banks from January 1, 2015; with a view to provide a transition time for banks, the LCR requirement would be minimum 60% for the calendar year 2015, i.e. with effect from January 1, 2015 and rise in equal steps to reach 100% on January 1, 2019, as per the time-line given below by RBI.

	January 1				
	2015	2016	2017	2018	2019
Minimum LCR	60%	70%	80%	90%	100%

- The formula for arriving at LCR is given below:
 - LCR = (Stock of HQLA / Total Net Cash Outflows over the next 30 calendar days) x 100.
 - It should be minimum 100% or above 100% subject to timelines given by RBI as above.
- o RBI vide its circular of February, 2016 also relaxed the maintenance of HQLA by the Banks. Presently, the assets allowed as the Level 1 High Quality Liquid Assets (HQLAs) for the purpose of computing the LCR of banks, *inter alia*, include Government securities in excess of the minimum SLR requirement, and within the mandatory SLR requirement, Government securities to the extent allowed by RBI, under Marginal Standing Facility (MSF) [presently 2 per cent of the bank's NDTL] and under Facility to Avail Liquidity for Liquidity Coverage Ratio (FALLCR) [presently 5 per cent of the bank's NDTL]. RBI has, in addition to the abovementioned assets, permitted banks to reckon government securities held by them up to another 3 per cent of their NDTL under FALLCR within the mandatory SLR requirement as level 1 HQLA for the purpose of computing their LCR. Hence the total carve-out from SLR available to banks would be 10 per cent of their NDTL. (Source: RBI)



- The Net Stable Funding Ratio (NSFR): This ratio aims at promoting medium to long term structure funding of assets and activities of the Banks. BCBS aims to trial this ratio from 2012 and makes it mandatory in January 2018.
- RBI released its Draft guidelines on NSFR on May 28, 2015. The objective of NSFR is to ensure that banks maintain a stable funding profile in relation to the composition of their assets and off-balance sheet activities. A sustainable funding structure is intended to reduce the probability of erosion of a bank's liquidity position due to disruptions in its regular sources of funding that would increase the risk of its failure and potentially lead to broader systemic stress. The NFSR limits overreliance on short-term wholesale funding, encourages better assessment of funding risk across all on- and off-balance sheet items, and promotes funding stability. The Reserve Bank proposes to make NFSR applicable to banks in India from January 1, 2018. (Source RBI).
- Definition of the Standard Net Stable Funding Ratio =
 - (Available Stable Funding (ASF))/Required Stable Funding (RSF)) x 100 = Should be 100% or above.



RBI's Strategic Debt Restructuring (SDR)

RBI has given powers and a tool to the Banks vide its Circular of June 2015 to try and clean up their balance sheets through SDR. SDR allows banks to convert their debt or loans into equity holding in a defaulting company, change management if needed and also find a suitable buyer for the company or its assets so that the Bank can recover its dues. As per the reports published in newspapers, Banks have already used the SDR effectively and converted debt into equity in several cases.

To go back to history, Corporate Debt Restructuring (CDR) was introduced in our country in 2001 based on the systems that was prevalent in countries such as UK, Thailand, South Korea etc. CDR allows a distressed company to restructure with debt of more than Rs. 10 crores with two or more lenders. To carry out CDR, consent of lenders representing 75% or more in value and 60% or more by number is required.

When compared to CDR, SDR is a more powerful tool as the lenders can effect change in the management. Hence, the borrowers also have taken the SDR exercise more carefully than the routine CDR exercise. RBI also gives lot of importance to SDR exercise and the RBI, Governor has observed in a meeting held in November, 2014, 'The sanctity of the debt contract has been continuously eroded in India in recent years, not by small borrower but by the large borrower. And this has to change if we are to get banks to finance the enormous infrastructure needs and industrial growth that this country aims to attain'.

The only problem that the Banks may face is the challenge in finding a new buyer or strategic investor who can buy the majority of equity from the Banks and take over the company within the 18 months, a time period allowed to the Banks by RBI. The idea behind RBI encouraging the change of management is that the new management may bring better technology, governance on the table so that the unit can overcome its problem.

With a view to ensuring more stake of promoters in reviving stressed accounts and provide banks with enhanced capabilities to initiate change of ownership in accounts which fail to achieve the projected viability milestones, banks may, at their discretion, undertake a 'Strategic Debt Restructuring (SDR)' by converting loan dues to equity shares, which will have the following features:

i. At the time of initial restructuring, the Joint Lending Forum (JLF), created by the lenders must incorporate, in the terms and conditions attached to the restructured loan/s agreed with the borrower, an option to convert the entire loan (including unpaid interest), or part thereof, into shares in the company in the event the borrower is not able to achieve the viability milestones and/or adhere to 'critical conditions' as stipulated in the restructuring package. This should be supported by necessary



approvals/authorisations (including special resolution by the shareholders) from the borrower company, as required under extant laws/regulations, to enable the lenders to exercise the said option effectively.

- ii. Provisions of the SDR would also be applicable to the accounts which have been restructured before the date of RBI circular provided that the necessary enabling clauses, are included in the agreement between the banks and borrower;
- iii. The decision on invoking the SDR by converting the whole or part of the loan into equity shares should be taken by the JLF as early as possible but within 30 days from the review of the account. Such decision should be well documented and approved by the majority of the JLF members (minimum of 75% of creditors by value and 60% of creditors by number);
- iv. In order to achieve the change in ownership, the lenders under the JLF should collectively become the majority shareholder by conversion of their dues from the borrower into equity. However, the conversion by JLF lenders of their outstanding debt (principal as well as unpaid interest) into equity instruments shall be subject to the member banks' respective total holdings in shares of the company conforming to the statutory limit in terms of Section 19(2) of Banking Regulation Act, 1949;
- v. Post the conversion, all lenders under the JLF must collectively hold 51% or more of the equity shares issued by the company;
- vi. The share price for such conversion of debt into equity will be determined as per the method given prescribed by RBI;
- vii. Henceforth, banks should include necessary covenants in all loan agreements, including restructuring, supported by necessary approvals/authorisations (including special resolution by the shareholders) from the borrower company, as required under extant laws/regulations, to enable invocation of SDR in applicable cases;
- viii. The JLF must approve the SDR conversion package within 90 days from the date of deciding to undertake SDR;
- ix. The conversion of debt into equity as approved under the SDR should be completed within a period of 90 days from the date of approval of the SDR package by the JLF;
- x. The invocation of SDR will not be treated as restructuring for the purpose of asset classification and provisioning norms;
- xi. On completion of conversion of debt to equity as approved under SDR, the existing asset classification of the account, as on the reference date will continue for a period of 18 months from the reference date. Thereafter, the asset classification will be as per the extant IRAC norms;



xii. JLF should closely monitor the performance of the company and consider appointing suitable professional management to run the affairs of the company;

xiii. JLF and lenders should divest their holdings in the equity of the company as soon as possible. On divestment of banks' holding in favour of a 'new promoter', the asset classification of the account may be upgraded to 'Standard'. However, the quantum of provision held by the bank against the said account as on the date of divestment, which shall not be less than what was held as at the 'reference date', shall not be reversed. At the time of divestment of their holdings to a 'new promoter', banks may refinance the existing debt of the company considering the changed risk profile of the company without treating the exercise as 'restructuring' subject to banks making provision for any diminution in fair value of the existing debt on account of the refinance. Banks may reverse the provision held against the said account only when all the outstanding loan/facilities in the account perform satisfactorily during the 'specified period' (as defined in the extant norms on restructuring of advances), i.e. principal and interest on all facilities in the account are serviced as per terms of payment during that period. In case, however, satisfactory performance during the specified period is not evidenced, the asset classification of the restructured account would be governed by the extant IRAC norms as per the repayment schedule that existed as on the reference date. However, in cases where the bank exits the account completely, i.e. no longer has any exposure to the borrower, the provision may be reversed/absorbed as on the date of exit;

- xiv. The asset classification benefit provided at the above paragraph is subject to the following conditions:
- a. The 'new promoter' should not be a person/entity/subsidiary/associate etc. (domestic as well as overseas), from the existing promoter/promoter group.
- b. The new promoters should have acquired at least 51 per cent of the paid up equity capital of the borrower company. If the new promoter is a non-resident, and in sectors where the ceiling on foreign investment is less than 51 per cent, the new promoter should own at least 26 per cent of the paid up equity capital.
- 4. The conversion price of the equity shall be determined as per the guidelines given below:
- (i) Conversion of outstanding debt (principal as well as unpaid interest) into equity instruments should be at a 'Fair Value' which will not exceed the lowest of the following, subject to the floor of 'Face Value' (restriction under section 53 of the Companies Act, 2013):
- a) Market value (for listed companies): Average of the closing prices of the instrument on a recognized stock exchange during the ten trading days preceding the 'reference date'.
- b) Break-up value: Book value per share to be calculated from the company's latest audited balance sheet (without considering 'revaluation reserves', if any) adjusted for cash flows and financials post the earlier restructuring; the balance sheet should not be



more than a year old. In case the latest balance sheet is not available this break-up value shall be Re.1.

- 5. The above pricing formula under Strategic Debt Restructuring Scheme has been exempted from the Securities and Exchange Board of India (SEBI) (Issue of Capital and Disclosure Requirements) Regulations, 2009. Banks should adhere to all the prescribed conditions by SEBI in this regard.
- 6. In addition to conversion of debt into equity under SDR, banks may also convert their debt into equity at the time of restructuring of credit facilities under the extant restructuring guidelines.
- 7. Acquisition of shares due to such conversion will be exempted from regulatory ceilings/restrictions on Capital Market Exposures, investment in Para-Banking activities and intra-group exposure subject to reporting to RBI.

Central Repository of Information on Large Credits (CRILC)

RBI has set up a Central Repository of Information on Large Credits (CRILC) to collect, store, and disseminate credit data to lenders. Accordingly, Department of Banking Supervision (DBS) has advised vide circular of February 13, 2014 on 'Central Repository of Information on Large Credits (CRILC) — Revision in Reporting' that banks will be required to report credit information, including classification of an account as SMA to CRILC on all their borrowers having aggregate fund-based and non-fund based exposure of Rs.50 million and above with them (Rs. 5 crores). However, Crop loans are exempted from such reporting, but, banks should continue to report their other agriculture loans in terms of the above instruction. Banks need not report their interbank exposures to CRILC including exposures to NABARD, SIDBI, EXIM Bank and NHB.

As per RBI norms, before a loan account turns into a NPA, banks are required to identify incipient stress in the account by creating stress sub-categories under the Special Mention Account category as given below:

SMA	Sub-	Basis for classification
Categories	S	
SMA-0		Principal or interest payment not overdue for more than 30 days but account showing signs of incipient stress)
SMA-1		Principal or interest payment overdue between 31 – 60 days
SMA-2	•	Principal or interest payment overdue between 61 – 90 days

In cases where banks fail to report SMA (Special Mention Accounts) status of the accounts to CRILC or resort to methods with the intent to conceal the actual status of the accounts or evergreen the account, banks will be subjected to accelerated provisioning for these accounts and/or other supervisory actions as deemed appropriate



by RBI. The current provisioning requirement and the revised accelerated provisioning in respect of such non performing accounts are as under:

Asset Classification	Period as NPA	Current	Revised accelerated
		Provisioning (%)	Provisioning (%)
Sub-standard	Upto 6 months	15	No change
(secured)	6 months to 1 year	15	25
Sub-standard	Upto 6 months	25 (other than	25
(unsecured		infrastructure loans)	
abiinitio)		20 (Infrastructure	
		loans)	
	6 months to One	25 (other than	40
	year	infrastructure loans)	
		20 (Infrastructure	
		loans)	
Doubtful I	2 nd year	25 (secured portion)	40 (secured portion)
		100 (unsecured	100 (unsecured
		portion)	portion)
Doubtful II	3 rd & 4 th year	40 (secured portion)	100 (for both
		100 (unsecured	secured and
		portion)	unsecured portion)
Doubtful III	5 th year onwards	100	100



Base Rate System

Till the late 1980s, the interest rate structure in India was largely administered in nature by RBI and was characterized by numerous rate prescriptions for different activities. On account of the complexities under the administered rate structure, efforts were made since 1990 by RBI to rationalize the interest rate structure so as to ensure price discovery and transparency in the loan pricing system. The freeing up of lending rates of scheduled commercial banks for credit limits of over Rs.2 lacs along with the introduction of Prime Lending Rate (PLR) system in October1994 was a major step in this direction aimed at ensuring competitive loan pricing. Initially, PLR acted as a floor rate for credit above Rs. 2 lacs.

To bring in transparency, RBI directed banks to declare maximum spread over PLR for all advances other than consumer credit. Banks were allowed prescribing separate PLRs and spreads over PLRs, both for loan and cash credit component. With regard to term loans of 3 years and above, the banks were given the freedom to announce separate Prime Term Lending Rates (PTLRs) in 1997.

In 2001, RBI relaxed the requirement of PLR being the floor rate for loans above Rs.2 lakhs and allowed Banks to offer loans at below PLR to exporters and other creditworthy borrowers with objective policy approved by the Banks' Boards in a transparent manner. Banks were allowed to charge fixed/floating rate on their lending for credit limit of over Rs.2 lakh. However, there was large divergence among banks in their PLRs and spread over PLRs. It failed to reflect the credit market conditions in the country. Therefore, Benchmark PLR system (BPLR) came into being and tenor-linked PLRs got discontinued

The system of BPLR introduced in 2003 was expected to serve as a benchmark rate for banks' pricing of their loan products so as to ensure that it truly reflected the actual cost. In course of time, competition forced the Banks to price a significant portion of their loans out of alignment with BPLRs and thereby undermining the role of BPLR as a reference rate. The worrying factor was that most of the banks started lending at Sub-BPLR rates ignoring the risk sensitivity of the borrowers and also quoted 'competition' as the main reason for going below the BPLR. Hence, RBI opined that the BPLR system had fallen short of its original objective of bringing transparency to lending rates.

In April 2004, the then RBI Governor, Sri Y.V. Reddy had asked industry body IBA to come up with a transparent calculation of the BPLR. In October 2005, RBI again stated that the BPLR system might be reviewed as there is public perception that there is



under-pricing of credit for corporates, while there could be over-pricing of lending to agriculture and SME (cross subsidization).

Over time, sub-BPLR lending had become a rule rather than an exception as about two-thirds of bank lending took place at rates below the BPLR. Further Banks have been reluctant to adjust their BPLRs in response to policy changes. Mainly, it lacked the downward stickiness. To explain further, there was a general complaint from the borrowers that lenders are quick to raise their BPLR when the regulator raises the signaling rates (repo, reverse repo, CRR & SLR), but lag behind considerably when the regulator drop these rates. The BPLR system has, therefore, become an inadequate tool to evaluate monetary transmissions.

To overcome the above hiccups, RBI set up a Working Group headed by its Executive Director Shri Deepak Mohanty in the month of June 2009 to review the current system of loan pricing by the Banks popularly known as BPLR and also to improve the transmission of monetary signals to interest rates in the economy. The Group came out with its report on 20th October 2009. In April 2010, after a series of circulars, discussions and consultative process, the RBI announced its decision to implement the base rate from 1 July 2010. Banks were not allowed to lend below this rate. Under this new rule, banks were free to use any method to calculate their base rates (the RBI did provide an 'illustrative' formula), provided the RBI found it consistent. Banks were also directed to announce their base rates on their websites, in keeping with the objective of making lending rates more transparent.

Banking major, State Bank of India first announced its Base Rate on 29th June, 2010 by fixing the same at 7.50% per annum. Soon, all other banks announced their base rates. Most public sector banks kept their rates at 8%. As per RBI norms, the following inputs have to be factored while arriving at the Base Rate:

- Cost of deposits/borrowings.
- Negative Carry on CRR & SLR This arises as RBI is not paying any interest on the portion of CRR kept with it. Also, the investments that Banks make in Government Bonds having SLR status carries less rate of interest when compared to the deposit rate at which Banks accept deposits from the public.
- Unallocable overhead cost such as maintaining administrative office, Board expenses, and common advertisements about the Bank etc.
- Average Return on Networth (Profit element) as decided by the Bank's Board.



The cost of deposits has the highest weight in calculating the Base Rate. For arriving at the Cost of deposits/funds in Base Rate working, Banks can choose any benchmark for a specific tenor that may be disclosed transparently. For example, SBI took cost of its 6 month deposit into account while initially calculating its Base Rate. To the Base Rate, borrower-specific charges, product specific operating costs and premium on account of credit risks and tenure would be added for arriving at the borrower specific lending rate. The Base Rate would set the floor for interest rates on all types of loans. There would be exceptions as permitted by RBI (given below):

- Loans covered by schemes specially formulated by Government of India wherein banks have to charge interest rate as per the scheme.
- Working Capital Term Loan, Funded Interest Term Loan etc granted as part of the rectification / restructuring package.
- Loans granted under various refinance schemes formulated by Government of India or any Government Undertakings wherein banks charge interest at the rates prescribed under the schemes.
- Advances to banks' depositors against their own deposits.
- Advances to banks' own employees including retired employees.
- Advances granted to the Chief Executive Officer / Whole Time Directors.
- Loans linked to a market determined external benchmarks such as LIBOR, MIBOR etc.

RBI had stipulated that the banks should declare their Base Rate and made it effective from July, 1, 2010. However, all the existing loans, including home loans and other retail loans, would continue to be at the current rate. Only the new loans taken on or after July 1, 2010 would be linked to Base Rate. All the existing loans when they come for renewal, borrowers are given a choice either to go with Base Rate or with BPLR.

In the first year of operation of Base Rate, RBI had permitted banks a window of six months till December 2010 during which they can revisit the methodology. This flexibility was subsequently extended by RBI upto June 2011. Banks were allowed to use whatever benchmark they felt was best suited to arrive at the rate, provided, the Bank used the same consistently. However, RBI had asserted that:

- The methodology needed to be transparent.
- Banks are required to review the Base Rate at least once in a quarter with the approval of the Board or the Asset Liability Management Committees (ALCOs) as per the bank's practice.



Once the methodology for arriving at the Base Rate has been finalized by the Banks, they cannot change the same for first five years. In case a Bank desires to review its Base Rate methodology after five years from the date of its finalization, the Bank has to approach RBI for permission in this regard. However, RBI has recently (January 19, 2016) changed this norm. With a view to providing banks greater operational flexibility, RBI has permitted bank to review the Base Rate methodology after three years from the date of its finalization, instead the earlier periodicity of five years. Accordingly, Banks can change their Base Rate methodology after completion of prescribed period with the approval of their Board / ALCO.

Again in the methodology, Banks were following different methods. RBI wanted to streamline this procedure also. Hence, RBI took feedback from the Banks and other stakeholders. Thereafter, it has come out with its fresh guidelines in this regard (December 17, 2015). RBI has instructed all the Banks that for all the rupee loans sanctioned and credit limits renewed w.e.f. April 1, 2016 would be priced with reference to the Marginal Cost of Funds based Lending Rate (MCLR). Hence, from April, 2016, MCLR would act as Internal Benchmark for the lending rates. The component of MCLR is almost same when compared to the previous instructions and the same is given below:

- Marginal Cost of Funds.
- Negative carry on account of CRR.
- Operating Costs.
- Tenor premium.

Marginal Cost of funds = 92% x Marginal cost of borrowings + 8% x Return on networth

Negative Carry on CRR arises due to return on CRR balances being nil. This will be calculated as Required CRR x (marginal cost) / (1- CRR). The marginal cost of funds, as calculated above, will be used for arriving at negative carry on CRR.

Operating Costs associated with providing the loan product including cost of raising funds will be included under this head. It should be ensured that the costs of providing those services which are separately recovered by way of service charges do not form part of this component.

Tenor premium arise from loan commitments with longer tenor. The change in tenor premium should not be borrower specific or loan class specific. In other words, the tenor premium will be uniform for all types of loans for a given residual tenor.



Since MCLR will be a tenor linked benchmark, banks shall arrive at the MCLR of a particular maturity by adding the corresponding tenor premium to the sum of Marginal cost of funds, Negative carry on account of CRR and Operating costs.

Accordingly, RBI has permitted banks to publish the internal benchmark for the following maturities:

- 1. Overnight MCLR.
- 2. One-month MCLR.
- 3. 3 month MCLR.
- 4. 6 month MCLR.
- 5. One year MCLR.
- 6. In addition to the above, Banks are given the option of publishing MCLR of any other longer maturity.

Further, RBI has advised the Banks that they should have Board approved policy delineating the components of spread charged to a customer. Existing customers are given the option to move to the MCLR linked loan at mutually acceptable terms.

Loan to Value Ratio

The loan-to-value ratio (LTV Ratio) is a lending <u>risk assessment</u> ratio that Banks and F<u>inancial institutions</u> arrive at before sanctioning Housing or Home Loans. Typically, assessments with high LTV ratios are generally seen as higher risk and, therefore, if the <u>mortgage</u> is accepted, the loan would generally be charged with high interest when compared to another loan proposal with lesser LTV ratio.

The formula for calculating LTV ratio is:

Loan to Value Ratio = (Loan amount sanctioned/Apprised value of the property) x 100.

For example, Mr. X needs to borrow Rs. 60 lakhs to purchase a flat worth Rs. 80 lakhs. The LTV ratio would work out to 75% ($60/80 \times 100$). In fact, the Sub-Prime crisis that took place in 2007-08 and the Japanese Housing Bubble that occurred from 1986 to



1991 have emanated out of Lenders not giving the due importance that was required for maintaining this ratio.

Realizing the value of LTV ratio, RBI has also come out with its norms on this ratio. As per RBI guidelines, lending to individuals meant for acquiring residential property which are fully secured by mortgages on the residential property that is or would be occupied by the borrower, or that is rented, would be risk weighted as per norms stipulated by RBI. Based on RBI guidelines, every bank should have a Board mandated Valuation Policy. RBI has also given its formula for arriving at this ratio.

LTV ratio should be computed as a percentage with total outstanding in the account (viz. "principal + accrued interest + other charges pertaining to the loan" without any netting) in the numerator and the realisable value of the residential property mortgaged to the bank in the denominator.

RBI has, in the month of October, 2015 rationalized this ratio for individual housing loans as given below, for <u>loans sanctioned upto June 6, 2017</u>.

Category of Loan	LTV ratio (%)	Risk Weight (%)
Upto Rs. 30 lakhs	Equal to and less than 80%	35
	More than 80% and equal	50
	to and less than 90%	
Above Rs. 30 lakhs and	Equal to and less than 75%	35
upto Rs. 75 lakhs	More than 75% and equal	50
	to and less than 80%	
Above Rs. 75 lakhs	Equal to and less than 75%	75

RBI, in its second bi-monthly monetary policy statement 2017-18, revised the LTV ratio, Risk Weight and Standard Asset Provisioning rates, as under, <u>for loans sanctioned on or</u> after June 7, 2017:

Category of Loan	LTV ratio (%)	Risk Weight (%)	Standard Asset Provision (%)
Upto Rs. 30 lakhs	Equal to and less than 80%	35	0.25
	More than 80% and	50	



	equal to and less		
	than 90%		
Above Rs. 30 lakhs	Equal to and less		
and upto Rs. 75	than 80%	35	
lakhs			
Above Rs. 75 lakhs	Equal to and less	50	
	than 75%	50	