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BASEL III - FRAMEWORK ON LIQUIDITY STANDARDS

RISK MANAGEMENT



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INTRODUCTION

The decade of the nineties and thereafter have witnessed vast changes in the global regulatory framework. The 9/11 (September 11, 2001) episode hastened the passage of the USA Patriot Act (United and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act.) while Enron debacle led the way to the passing of Sarbanes Oxley Act in the USA. The former expands the scope and coverage of BSA (Bank Secrecy Act) of 1970 whereas the latter puts specific responsibilities on issuers in terms of corporate governance to boost stakeholders' confidence, The Bank for International Settlement (BIS) came out with Basel I, Basel II and Basel III accord so far. We give below the history of how these accords were announced by Basel Committee on Basel Supervision (BCBS), one of the arms of BIS.

Basel 1: The Basel Capital Accord:

With the foundations for supervision of internationally active banks laid, capital adequacy soon became the main focus of the Committee's activities. In the early 1980s, the onset of the Latin American debt crisis heightened the Committee's concerns that the capital ratios of the main international banks were deteriorating at a time of growing international risks. Backed by the G10 Governors, Committee members resolved to halt the corrosion of capital standards in their banking systems and to work towards greater convergence in the measurement of capital adequacy. This resulted in a broad consensus on a weighted approach to the measurement of risk, both on and off banks' balance sheets.

There was strong recognition within the Committee of the overriding need for a multinational accord to strengthen the stability of the international banking system and to remove a source of competitive inequality arising from differences in national capital requirements. Following comments on a consultative paper published in December 1987, a capital measurement system commonly referred to as the Basel Capital Accord was approved the G10 Governors and released to banks in July 1988.

Basel II: The New Capital Framework:

In June 1999, the Committee issued a proposal for a new capital adequacy framework to replace the 1988 Accord. This led to the release of a revised capital framework in June 2004. Generally known as “Basel II”, the revised framework comprised three pillars:

1. minimum capital requirements, which sought to develop and expand the standardised rules set out in the 1988 Accord
2. supervisory review of an institution's capital adequacy and internal assessment process.
3. effective use of disclosure as a lever to strengthen market discipline and encourage sound banking practices.

The new framework was designed to improve the way regulatory capital requirements reflect underlying risks and to better address the financial innovation that had occurred in recent years. The changes aimed at rewarding and encouraging continued improvements in risk measurement and control.

Towards Basel III:

Even before Lehman Brothers collapsed in September 2008, the need for a fundamental strengthening of the Basel II framework had become apparent. The banking sector entered the financial crisis with too much

leverage and inadequate liquidity buffers. These weaknesses were accompanied by poor governance and risk management, as well as inappropriate incentive structures. The dangerous combination of these factors was demonstrated by the mispricing of credit and liquidity risks, and excess credit growth.

Responding to these risk factors, the Basel Committee issued Principles for sound liquidity risk management and supervision in the same month that Lehman Brothers failed. In July 2009, the Committee issued a further package of documents to strengthen the Basel II capital framework, notably with regard to the treatment of certain complex securitisation positions, off-balance sheet vehicles and trading book exposures. These enhancements were part of a broader effort to strengthen the regulation and supervision of internationally active banks, in the light of weaknesses revealed by the financial market crisis.

In September 2010, the Group of Governors and Heads of Supervision (GHOS) announced higher global minimum capital standards for commercial banks. This followed an agreement reached in July regarding the overall design of the capital and liquidity reform package, now referred to as «Basel

In November 2010, the new capital and liquidity standards (Basel III) were endorsed at the G20 Leaders' Summit in Seoul and subsequently agreed at the December 2010 Basel Committee meeting.

Both Basel I (1988) and II (1999) Accords have in their core, the concept of capital adequacy for financial institutions like banks. Capital Adequacy, as the literally implies, is about having adequate capital, Capital adequacy is a common measure of the strength of a financial institution, such as a bank. Measure of the financial strength of a bank or securities firm, is usually expressed as a ratio of its capital to its assets. To put it quantitatively, the ratio of the capital of a firm to its assets is its capital adequacy ratio. Higher the capital adequacy, the stronger the firm. The higher the capital adequacy, the less leveraged the firm.

A bank should always have enough capital so that, if some of the risks the bank has taken are realized, the bank can remain in business without jeopardizing its depositors. The minimum level of capital recommended by Basel I and subsequently adopted by regulators was 8%. Banks therefore maintain the following risk asset ratio at or above that level:

Own funds (i.e., available capital and reserves) Risk-weighted assets (i.e., the amount of money the bank has put at risk in the course of its business)

The capital adequacy ratio of a bank's capital its total assets required by regulators to be above a minimum ('adequate') level so that there is little risk of the bank going bust. How high this minimum level is may vary according to how risky a bank's activities are.

In Retrospect

The Bank of International Settlement (BIS) was established in 1974 by a group of countries which include Belgium, Canada, France, Germany, Italy, Japan, Luxembourg, the Netherlands, Spain, Sweden.

Switzerland, United Kingdom and United States. As cited above, BIS has established a Committee BCBS. This committee undertakes the following tasks,

- Formulates broad supervisory standards and guidelines
- Recommends statements of best practice
- Encourages convergence, towards common approaches and common standards, without attempting detailed harmonization of member countries' supervisory techniques.

The primary objectives are twofold, ensuring the safety and soundness of banks and creating a level playing field through market competition driven by each bank's strengths, rather than by differences in each country's rules. BIS is not a supernational authority nor is it a regulatory, global forum. But countries involved have agreed to apply the set standards to major international trading banks. Eventually, the same are being used by rest of the world as standard. The first accord was established in 1988 and implemented by 1992. It was the maiden attempt to introduce the concept of capital adequacy in balance sheet by prescribing minimum standards of capital adequacy. The second accord, Basel II was proposed in 1999 followed by the final directive in

October 2003 for implementation by 2006, as Basle II accord, which is discussed already.

The areas of improvement of Basel II over the 1988 Accord include:

1. Removal of the worst incentives of old system: The earlier accord did not differentiate the quality of credit exposures. The risk weight accorded to a triple-A rated corporate and a retail loan was similar although the risk associated with the exposures varied substantially.
2. Recognizing the advances made in risk measurement technologies: Over the years, there have been improvements in the risk measurement technologies. Through such advancement, it is possible to assess the default probability or the amount of loss in the event of default. Banks have been given choice to have a methodology for risk assessment based on their inferences through historical time series analysis.
3. Providing incentives for improvement in Risk measurement and Management: As a bank goes along from standardized to internal rating-based foundation to advanced management approach, the sophistication in the risk assessment process increases. Internal ratings system developed by the bank is acceptable to the supervisory authorities, subject to its validation. Earlier practice of accepting external rating as given has been provided an alternative. This should pave way for improved risk measurement/management techniques.

4. Acknowledging the expanded role of market: The 1988 accord had, initially, considered only credit risk. The market risk was appended thereto in mid-nineties subsequent to the happening of Nick Leeson Fraud leading to the collapse of Barings Bank in Singapore and London. The addition of operational risk in Basel II recognizes the whole of business gamut, internally and externally, particularly by addressing to market risk. The role of market in impacting risk profile gets acknowledged in the process.

5. Risk mitigation: The first accord did not consider the role of risk mitigation measures like insurance or asset securitization. As per the recent guidelines, an appropriate amount can be netted out from the gross value of assets while working out the risk weighted assets. This measure gives incentive to banks to securitize the assets as a fall back mechanism in case of asset quality going down.

6. Affording the required flexibility of supervision: The earlier prescriptions provided a one size rule that was required to be fitted to all. With the new accord, the regulators have been provided some flexibility whereby they can take a view on the methodology-related issues while assessing the capital requirements based on internal rating-based approaches.

All in all, Basel II can be regarded as a welcome improvement over the Basel I accord as it recognizes the realities of banking business in a more explicit way.

Basel II Accord - The Three Pillars

Basel II accord is primarily based on three pillars, namely, minimum capital requirement, supervisory review and market discipline. Minimum capital requirement sets out the minimum acceptable level of capital. It improves the erstwhile approach to credit rating based either on public rating agencies or through internal rating mechanism for individual bank. It extends explicit treatment to operational risk.

ALM risk is not treated separately but it has been included in supervisory review under Pillar 2. Supervisory Review is based on four basic principles:

1. Banks must assess solvency relative to their risk profile
2. Supervisors should review bank's own risk assessment as also the capital strategies
3. Banks should have capital in excess of minimum capital requirements,
4. Regulators would intervene at an early stage

The third pillar is referred to as market discipline. Through this measure, banks are called upon to enhance the disclosures in respect of capital structure, risk measurement and management practices, risk profile and capital adequacy. The emphasis is on sharing with stakeholders in general and shareholders in particular, the types of businesses the bank is doing, the amount of risk involved in such businesses, the manner the bank is measuring and managing the risk,

whereby the risk profile of the bank is generated. The computation of capital adequacy has also been included as an important disclosure.

Computation of Risk Weighted Assets

Capital adequacy is a ratio calculated, broadly with owned funds as the numerator and risk weighted assets as the denominator. Arithmetically, maximizing the ratio is possible either by increasing the numerator or decreasing the denominator or both. Basel II provides the methods to compute the risk weighted assets under three approaches.

Under the standardized approach, the computation is more or less like that prescribed under Basel 1. The regulators provide the risk weights and banks were asked to follow the given weights per class of assets.

These weights could be easily applied and changes made thereto are for aligning risk weights to market economics for sovereigns, banks, and publicly rated borrowers.

As regards the Foundation approach under Internal Rating category (IRB), banks can develop and adopt their own formulas. These formulas are to be based on default probability (PD) predicted on the historical time series analysis. These internal ratings adopted by banks are subjected to supervisory approval.

The Advanced approach of IRB category requires the banks to undertake a rigorous analysis of facility level risk factors with due consideration to collateral, covenants and maturity. Based on the same,

the internal ratings can be developed by the banks. The weights can be adjusted on the basis of loss given default (LGD) and other exposure factors, Again the banks shall have to convince the regulators about the adopted methodology,

Implications of Basel II Accord

The impact of Credit Risk may be, as stated earlier, the Basel II accord has three pillars, minimum capital requirement, supervisory review and market discipline. Each one of these would have different implications for banks in terms of preparing for adopting the guidelines.

Minimum Capital Requirements (Pillar 1)

Banks have to prepare an inventory of internal and external rating system: Individual bank may be following a particular rating system over years. It needs to have detailed listing of such systems with necessary assumptions and the rationale for using the selected system.

The asset classes may have to be determined on an accurate basis. All business lines in treasury and banking business shall have to be covered by the exercise. Accuracy would play a major role, as the risk weights for the asset classes would vary and be dissimilar to each other.

For the purpose of assessing the minimum capital requirement, the banks have to undertake a stress rest of entire balance sheet.

At its simplest, a stress test is a way of revaluing a portfolio using a different set of assumptions. The results of a stress test show the sensitivity of the portfolio to a particular shock. Stress tests can be useful because for most asset markets, the history of returns does not provide sufficient information about the behaviour of markets under extreme events. Stress tests complement traditional models with estimates of how the value of a portfolio changes in response to exceptional but plausible changes in the underlying risk factors.

Banks are required to create data series for regulatory approval. In technology terms, data series are the selected range in a worksheet that EXCEL converts into a graphic and displays as a chart in spreadsheet applications). It is an administrative technique for logical analysis, investigation and handling of good or poor areas.

After completing the aforesaid exercise, banks may compare internal output with the model formats given by BIS (Bank for International Settlement). A comparison can facilitate the validation of the approach adopted by the bank.

It is at the core of banking business that there has to be a direct relationship between risk and return--higher the risk; more should be the prices. Analysis of the kind discussed above should pave way for the

bank to have a re-look at the product pricing as also the methods followed for the determination of prices.

More often than not exercises of this kind are conducted at higher level of management and the counter staff is kept uninformed of the same. In fact, these are the people who are in a continuous contact with customers. It is necessary that they must know what amount of risk or at least the level of risk for a particular client is perceived by the bank. Educating the counter staff on rating is also an important step the bank has to take.

As regards the market risk, the banks would have to initiate the following measures:

- Banks would be required to identify a trading book and hold capital for trading book market risks and organization-wide foreign exchange exposures. Capital charges for the trading book would be based upon a crude Value at Risk (VaR) measure. This would call for the re-examination of trading book in terms of revised definition.
- The risk return relationship should prompt the banks to look into the products offered. It would be useful to examine the potential to include new products to reduce capital charge. The emphasis would be on developing products that have better security orientation as a measure to minimize the capital charge. The endeavour has to be on expanding credit portfolio with the minimal capital requirement.

- For addressing the market risk, documentation of trading book strategies is another measure that the banks have to adopt. What are the currencies to be traded and in what measure? What should be the concentration ceilings and dealer wise exposure limits, etc. - all these would cover the trading book strategies.
- One of the ways to manage risk is hedging. Hedging can be seen as the purchase or sale of a derivative security (such as options or futures) in order to reduce or neutralize all or some portion of the risk of holding another security. It is a means of reducing exposure to risk of loss resulting from fluctuations in exchange rates, commodity prices, and interest rates. Banks have to examine hedging of credit exposures through derivatives,

The tasks ahead for banks for operational risk management in terms of Pillar 1 are as under:

BIS requires banks to categorize the business under broad lines like, corporate finance, trading and sales, retail banking, commercial banking payment and settlement, agency services, asset management, retail brokerage and insurance. Classification of the existing business on this pattern to obtain business line wise loss data is the primary task for banks. The banks have been allowed to treat the exposures in various

lines of business from different risk perspectives, which should be possible through such classification.

There is no clearly established, single way to measure operational risk on a firm-wide basis. Instead, several approaches have been developed. An example is the "matrix" approach in which losses are categorized according to the type of event and the business line in which the event occurred.

In this way, a bank can identify which events have the greatest impact across the entire firm and which business practices are most susceptible to operational risk. Individual bank has to finalize measurement approach. Detailed regulatory guidance is provided by periodical publications of BIS. Having finalized the measurement approach, it is necessary to check its consistency with regulatory guidance,

The implementation of the chosen methodology would facilitate the computation of risk-weighted assets as well as capital charge. The capital charge so worked out is to be compared with the prevalent capital situation. A review of asset allocation and attendant charge per portfolio would be the next step. This would call for an examination of potential to reduce the capital charge by asset reallocation exercise.

Supervisory Review (Pillar 2)

The supervisory review squarely places specific responsibility on the directors and senior management.

They must plan outlining:

1. Economic and regulatory capital requirements
2. Anticipated capital expenditure
3. Required capital level
4. Sources of capital

Economic capital is based on calculations that are specific to the bank's risks, while regulatory capital formulas are based on industry average that may or may not be suitable to any particular bank. The bank has to ensure that as a measure of prudence both the capital adequacy requirements are met. A view is necessary on the capital expenditure plans including spending on technology. These are fixed assets with a risk weight of one hundred per cent without an immediate visible return.

Based on the estimated capital requirements, the directors and senior management shall have to take a view on the required capital level for, say, a period of three to five years. The phasing out of the requirement and the phase wise sources to be explored would also be a part of the

exercise. The board and senior management cannot plead ignorance as was possible under the Basel I.

It would be the practice that whatever methods the bank chooses to assess the capital requirement would be subject of regulatory review. This should call for putting in place the documentation in this regard. The bank as a whole may have to address the following issues as a part of this documentation process.

The bank can develop its own formulas for capital adequacy computation based on the additional risk profile examined by the internal team. The system followed, procedures adopted and the assumptions made shall form an important part of the documentation. The risk profile in particular shall have to be justified with the help of underlying assumptions.

While developing the risk profile, external aspects should not be overlooked. The trends observed in the market place shall have to be recognized as input. The levels and trends in risk-industry wise/ borrower wise /geography wise and their impact need to be recorded to justify the assumptions made. In fact, the whole attempt of risk management process is lent credibility by the validity of assumptions and the monitoring thereof.

Based on the analysis of the historical information, projected business, visualized composition of the asset expansion and other similar considerations, the generation of capital requirements is possible.

Estimating the futuristic capital requirements and the measures to meet them should also form a part of the preparation for supervisory review.

The number of occasions that banks will communicate with the regulators would be on rise with the new accord as banks have been given more discretion to take view on the capital adequacy requirement subject to regulatory approval. The means of communication with regulators shall be documented and followed so as to remain consistent while dealing with the regulators. These channels of communication shall be developed by the senior management and approved by the Board. This would be useful for seeking regulatory approval for techniques for risk management. Documenting compliance with operational manuals would be a part of supervisory review process. The regulators would examine whether the bank had been complying with the laid down procedures throughout the period under examination.

Market Discipline (Pillar 3)

The implications of market discipline are varied and have more to do with the stakeholders that are outside the bank. Obviously, most significant amongst the stakeholders are the regulators. The discussions with them about the disclosures to be made, along with their contents and frequency should be the first step. Having a clear idea of the disclosures should facilitate the generation of required information flows as also equipping the staff to comply with the requirements. Either technological or manual preparations for compilation of the disclosures would be necessary. Developing procedures for meeting the disclosure prescriptions should be a focused task.

Basel II is not the first time the banks would be making disclosures. Banks do have statutory and traditional forms of disclosures. Basel II calls for different types of disclosures like risk philosophy, risk profile, exposure classification, etc. It is likely that the existing processes would need certain modifications and action to meet with these emerging data requirements. Identifying the data gaps between present and proposed disclosures should be important task.

Formally and informally, it is necessary to assess the impact of new disclosure on business and public. The customers and shareholders are generally more interested in the disclosures as these disclosures provide information normally not available in financial statements.

Shareholders asking questions these disclosures are good feedback and an indication that the disclosures made are being reviewed. The sensitivity of disclosures is also another area to be looked into. For multi-national banks, the disclosure requirements could be contradictory and the bank would have to find a way to address such a situation.

Decision Areas for Banks

First and foremost, each bank shall have to review its asset portfolio with risk/return considerations, there may be assets with higher risk weights but the return from there may not be higher than average.

There could be excessive holding in assets with low risk for safety consideration. There may be in-built conservatism leading to aversion to take risks. While on one side, the bank would examine the risk mitigation opportunities, it will be necessary to see that a right balance of the asset portfolio is maintained so that the average return on assets is optimal.

Basel II has changed the very focus of banks lending and risk management systems. A variety of decisions shall have to be taken by the banks to comply with the expectations of Basel II. An important issue would be choosing a methodology to assess the risk involved in various exposures, both in banking and trading books. The historical information on these exposures and documentation for convincing the

regulators about the validity of the accepted approach should be the focus of the effort.

Many of the banks have acquired core banking solutions that afford vast and timely transaction data, Converting the data into required information necessary for Basel II compliance should need information technology supports. There are a variety of products available in the market to meet with the Basel II requirements. Taking a decision on technology issue is significant as the data requirements can be hardly met by manual processing of data. The assessment of technology requirement would include both, hardware and software.

The staff at all levels is involved in transactions and each transaction carries a risk on one type or the other. Compliance of the Basel II requirements is not a task of only a few individuals. Training the staff about the significance of Basel II and the responsibility of staff members in compliance is a measure the bank has to take. The level and content of training for staff at various hierarchical levels is a decision the bank shall have to take.

The challenges posed by compliance requirements are stupendous and this would be the first time the banks are addressing to this new challenge. The knowledge and skill capabilities required for the task may not be readily available with the banks. Recruitment of staff for

these tasks could be an issue. Also, a decision on examining the consultancy requirements and engaging the right type of organization or individual as consultant would be another decision area for banks.

Closely related to the issues of technology and appointment of consultant is examination of outsourcing possibilities. This would call for a thorough working out of implementation costs under various options. Outsourcing policy may be the guiding factor. Consideration to core competencies, cost aspects, dependability of the outsourcing agency, the view of the bank on adoption of particular approach to Basel II compliance and the like would be governing factors in making such a decision.

Basel II and Role of Information Technology

Information technology has multi-faceted role in Basel II compliance. Basel II promises significant business benefits to those who have systems in place to access and utilize far more detailed and precise information. It calls for integration of data on finance, operations and risk management. The exercise lends an opportunity to get out of legacy systems and procedures including IT system. What is needed is fundamental rethinking on how a bank's data and information is provided and controlled. Three pillars of Basel II are interdependent, mutually reinforcing and must be addressed to concurrently.

The technology part becomes more prominent when the bank decides to accept internal rating-based approach. Internal Rating based approaches revolve around, probability of default, loss given default, exposure at default and other parameters. To meet this end, what is needed is defining and capturing loss data, capturing and extracting exposure data and identifying and capturing risk mitigation data.

Data issues would revolve around sources, data types, quality and granularity of data. More particularly, operational risk management pre-supposes:

Framework and systems in data integration as the banking activities are to be categorized in nine different segments.

Taking a view on low frequency-high severity occurrences so as to make judgements about the future.

A well-designed organization structure for risk management to facilitate interaction amongst functionaries.

Examination of the potential for risk mitigation, outsourcing and alike issues. Attainment of more synergy and little overlap.

Banking had been traditionally defined as acceptance of deposits for the purpose of lending and investments. The new definition of banking is trading on information relating to money, market, customer and risks. There is direct relationship between risk and technology. Risk is a

function of uncertainty, which varies according to the quality of information. The components of information quality are accuracy, timeliness, relevance and adequacy. Both accuracy and timeliness are a function of information technology while relevance and adequacy can be determined through information technology as well as management science or statistical/mathematical models. In the final analysis, the entire risk concept and its management thus hovers around information technology.

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 result of debt than 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 (1 trillion dollars is approximately equal to Rs. 45 lakh crores). 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, a new capital rules as agreed by the global regulators. The new requirement is 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 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.

Requirements of Basel III

As per existing Basel II guidelines, banks need to maintain minimum regulatory capital at 8% of the risk weighted assets (RWA). In India, RBI has made this 9%. Out of this, not less than 50% (4.50%) should be Tier 1 capital. In our country, this is made as 6% by RBI. To counter the likelihood of another financial crisis, BCBS is suggesting banks to keep additional capital buffers under the so-called Basel III guidelines:

A minimum common-equity of 4.50% of Risk Weighted Assets, called as Common Capital. Banks have to raise this capital in phases starting from January 2013 to be completed by January 2015.

In addition to the above, a 2.50% of Risk Weighted assets as Capital Conservation buffer as a contingency for future stress. Banks have to start creating this capital from 19 January 2016 and create 2.50% on or before 1st January 2019 ($4.50\% + 2.50\% = 7\%$). This capital conservation buffer can be drawn up by the banks with certain restrictions during the periods of financial and economic stress.

Counter cyclical buffer dial 2306 as imposed by the National Supervisor These capitals not applicable to all the countries all the times. This capital is required only when excessive credit growth is this built up leading to systemic risk. Rat is yet to introduce this buffer.

An additional capital surcharge for the Systematically important financial institutions SIFU which come under the 'Too big to fail theory and explained below:

Basel III urges that SIFIs should have less absorbing capacity beyond the existing Basel standards to ensure financial stability.

This extra loss absorbency' capacity could comprise of hybrid debts such as bail-in contingent capital (Cool which convert into equity and boost a bank's capital when it gets into trouble. More intensive supervision of Sils by the Supervisors Regulators.

Use of central counterparties (CCP) such as CCIL instead of exchange trading for the derivative transactions of SIFIs.

RBI would select the Domestic SIFIs based of the financial parameters of the Banks. In fact, RBI has already short-listed the following the Banks as D-SIBs:

Two Banks in August, 2015. Le State Bank of India and ICICI Bank DSB.

HDFC Bank Lad from September, 2017.

These too-big-to-call banks have to aside more capital than the peers purely because of the sheer of the balance sheets.

Financial Stability Board (FSB), an International Body would be selecting the Global SIFIs. FSB was established in April 2009 as the successor to the Financial Stability Forum (FSF). At the Pittsburgh Summit, the Heads of State and Government of the Group of Twenty endorsed the FSB's original Charter of 25th September 2009 which set out the FSB's objectives and mandate, and organizational structure. The FSB has assumed a key role in promoting the reform of international financial regulation (Source: Web Site of FSB).

Why Basel III?

According to BCBS, the Basel III guidelines suggested 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 banks to hold Common Equity Tier 1 Capital (top quality capital) totaling 7% of the risk weighted assets (including CCB of 2.50%).

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.

Basel III just like Basel II continues to rely on 3-Pillar approach but with stronger reinforcements

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.

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:

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.

Revaluation Reserve (only in India).

Less Intangible assets if any.

Additional Tier 1 Capital, which would broadly consist of Perpetual Non-Cumulative Preference Shares. Stock Surplus arising out of issue of instruments included in ATI.

Debt instrument 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 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 such as PCPS, RNCPS, RCPS issued by the Bank.
- Premium receipt on account of issued above debt instruments.
- Revaluation reserves at a discount of 55% (Other than India).

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.

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.

Further a downtime in the economy generally leads to deterioration of asset quality of the Banks, which causes increase in the NPA levels of the Bank. To overcome this only, RBI had come out with the special dispensation of restructuring of the loans for the sectors, which suffered due to macroeconomic fundamental, which is outside the control of the borrowers.

Higher the NPA leads to creation of increased provision by the banks. To avoid this, Banks would slow down their lending In fact, the higher provisioning for NPA has led to several PSD showing loss on 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 make 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. For example, in our country, Railways, whose first aim is to contribute to the social responsibilities of the country (and then comes the business proposition), could make profit during the boom period of 2007 & 2008.

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 last-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 slowdown. This is more of common

sense. The ants are very busy in summer season, ie, their boom period and gather food not only for the present but for the future also. When rainy season comes, they know, they cannot come out and use the food which was saved in good times.

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.
- Moreover, 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.
- IASB (International Accounting Standards Board) is also supporting this expected loss 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 the 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:

Constrain the build-up of leverage in the banking sector to avoid destabilizing 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.

Leverage Ratio = (Capital Measure) / Exposure Measure

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%. (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: the Liquidity Coverage Ratio (LCR) and the Net Stable Funding Ratio (NSFR).

The then RBI Governor opined that his speech dated September 7, 2010) the Indian Banks are not likely to be significantly impacted by the proposed new capital Basel III rules. He gave the further details on the subject:

Indian Banks are already making most of the deductions from capital that is now being proposed under Basel III. However, RBI cautioned that there could be some negative impact arising from shifting some deductions from Tier I and Tier II capital to common equity.

The Proposed changes relating to the counterparty credit risk framework are likely to have capital adequacy implications for some Indian Banks having large OTC (over the counter) bilateral derivatives positions.

Finally, RBI summed up stating that the impact would quite moderate for the Indian banking system.

ASSOCHAM & National Institute of Bank Management conducted study on Basel III, which was released in August, 2015. As per this study;

The capital requirements of Indian Banks would be around Rs. 5 lakh crores for meeting the Basel III norms by March, 2019.

PSBs may find it very challenging to meet the Basel III requirements as a big chunk of funds is required to be infused by the Government of India, which owns a majority stake in them.

For infusing Capital in the PSBs, Government of India has already come out with an ambitious plan by name 'Indra-dhanush' as PSBs play a vital role in India's economy. This plan has put in place a comprehensive framework for improving the PSBs and also capital allocation by Government for PSBs in the next four years.

September, 2017 estimate by Fitch Ratings:

Fitch Ratings in September, 2017 said capital needs of Indian banks have fallen from its previous estimate of \$90 billion to \$65 billion, largely as a result of asset rationalisation and weaker-than-expected loan growth.

According to the credit rating agency's latest estimates, Indian banks are likely to require around \$65 billion of additional capital to meet new Basel III capital standards that will be fully implemented by the financial year ending March 2019.

Fitch said though capital needs have fallen, state-run banks, which account for 95 per cent of the estimated shortage, have limited options to raise the capital they still require. Prospects for internal capital generation are weak and low investor confidence impedes access to the equity capital market, it added.

State support:

The agency observed that access to the Additional Tier 1 (ATI) capital market has improved in recent months, reflecting state support to help state banks avoid missing coupon payments, but around two-thirds of capital shortage is in the form of common equity Tier 1 (CET1).

However, weak capital positions have a major negative influence on Indian banks' Viability Ratings, which will come under more pressure if the problem is not addressed.

"State banks are likely to be dependent on the state to meet core capital requirements. The government is committed to investing only another \$3 billion in fresh equity for 21 state banks over FY18 and FY19, having already provided most of the originally budgeted \$11 billion," said the agency.

Fitch believes the government will have to pump in more than double, even on a bare minimum basis (excluding buffers), if it is to raise loan growth, address weak provision cover, and aid in effective non-performing loan (NPL) resolution -- the gross NPL ratio reached 9.7 per cent in FY17, up from 7.8 per cent in FY16.

REGULATORY PRESCRIPTIONS ON RISK MANAGEMENT

Master Direction - Risk Management and Inter-Bank Dealings (Updated as on February 28, 2018) RBLFMRD/2016-17/31 FMRD Master Direction No. 1/2016-17 dated July 05, 2016 (Updated as on February 28, 2018)

Facilities for Persons Resident in India other than Authorised Dealers Category-1

The facilities for persons resident in India (other than AD Category I banks) are elaborated under paragraphs A and B. Paragraph A describes the products and operational guidelines for the respective product. In addition to the operational guidelines under A, the general instructions that are applicable across all products for residents (other than AD Category 1 banks) are detailed under Paragraph B.

A. Products and Operational Guidelines

The product purpose-wise facilities for persons resident in India (other than AD Category I banks) are detailed under the following subheads:

1. Contracted Exposure
2. Probable Exposure
3. Special Dispensation

1. Contracted Exposures

AD Category 1 banks have to evidence the underlying documents so that the existence of underlying foreign currency exposure can be clearly established. AD Category I banks, through verification of documentary evidence, should be satisfied about the genuineness of the underlying exposure, irrespective of the transaction being a current or a capital account. Full particulars of the contracts should be marked on the original documents under proper authentication and retained for verification. However, in cases where the submission of original documents is not possible, a copy of the original documents, duly certified by an authorized official of the user, may be obtained. In either of the cases, before offering the contract, the AD Category I banks should obtain an undertaking from the customer and also certificates from the statutory auditor (for details refer para-B (b) for General Instructions). While details of the underlying have to be recorded at the time of booking within 15 days on more than three occasions in a financial year, booking of permissible derivative contracts in future may be allowed only against production of the underlying documents, at the time of booking the contract. The products available under this facility are as follows:

i. Forward Foreign Exchange Contracts

Participants Market-makers - AD Category I banks

Users - Person's resident in India

Purpose

- a. To hedge exchange rate risk in respect of transactions for which sale and/or purchase of foreign exchange is permitted under the FEMA 1999, or in terms of the rules/regulations/directions/orders made or issued there under
- b. To hedge exchange rate risk in respect of the market value of overseas direct investments in equity and loan).
 - i. Contracts covering overseas direct investment (ODI) can be cancelled or rolled over on due dates. If a hedge becomes naked in part or full owing to contraction (due to price movement impairment) of the market value of the ODI, the hedge may be allowed to continue until maturity, if the customer so desires. Rollovers on due date shall be permitted up to the extent of the market value as on that date.
- c. To hedge exchange rate risk of transactions denominated in foreign currency but settled in INR, including hedging the economic (currency indexed) exposure of importers in respect of customs duty payable on imports.
 - i. Forward foreign exchange contracts covering such transactions will be settled in cash on maturity.
 - ii. These contracts once cancelled, are not eligible to be rebooked.
 - iii. In the event of any change in the rate(s) of customs duties, due to Government notifications subsequent to the date of the forward

contracts, importers may be allowed to cancel and/or rebook the contracts before maturity.

Operational Guidelines, Terms and Conditions

General principles to be observed for forward foreign exchange contracts.

- a. The maturity of the hedge should not exceed the maturity of the underlying transaction. The currency of hedge and tenor, subject to the above restrictions, are left to the customer. Where the currency of hedge is different from the currency of the underlying exposure, the risk management policy of the corporate, approved by the Board of the Directors, should permit such type of hedging.
- b. Where the exact amount of the underlying transaction is not ascertainable, the contract may be booked on the basis of reasonable estimates. However, there should be periodical review of the estimates.
- c. Foreign currency loans/bonds will be eligible for hedge only after final approval is accorded by the Reserve Bank, where such approval is necessary or Loan Registration Number is allotted by the Reserve Bank.

d. Global Depository Receipts (GDR) American Depository Receipts (ADR) will be eligible for hedge only after the issue price has been finalized

e. Balances in the Exchange Eamer's Foreign Currency (EEFC) accounts sold forward by the account holders shall remain earmarked for delivery and such contracts shall not be cancelled. They are, however, eligible for rollover, on maturity

f. In case of contracted exposures, forward contracts, involving Rupee as one of the currencies, in respect of all current account transactions as well as capital account transactions with a residual maturity of one year or less may be freely cancelled and rebooked.

g. In case of forward contracts involving Rupee as one of the currencies, booked by residents in respect of all hedge transactions, if cancelled with one AD Category I bank can be rebooked with another AD Category I bank subject to the following conditions:

i the switch is warranted by competitive rates on offer, termination of banking relationship with the AD Category I bank with whom the contract was originally booked.

ii. the cancellation and rebooking are done simultaneously on the maturity date of the contract: and

iii. the responsibility of ensuring that the original contract has been cancelled rests with the AD Category I bank who undertakes rebooking of the contract

h. Forward contracts can be rebooked on cancellation subject to condition (1) below

i. The facility of rebooking should not be permitted unless the corporate has submitted the exposure information as prescribed in Annex V.

j. Substitution of contracts for hedging trade transactions may be permitted by an AD Category I bank on being satisfied with the circumstances under which such substitution has become necessary.

The AD Category I bank may also verify the amount and tenor of the underlying substituted.

ii. Cross Currency Options (not involving Rupee)

Participants

Market-makers - AD Category I banks as approved for this purpose by the Reserve Bank

Users - Persons resident in India

Purpose

- a. To hedge exchange rate risk arising out of trade transactions
- b. To hedge the contingent foreign exchange exposure arising out of submission of a tender bid in foreign exchange.

Operational Guidelines, Terms and Conditions

- a. AD Category I banks can only offer plain vanilla European options
- b. Customers can buy call or put options.
- c. These transactions may be freely booked and/or cancelled subject to verification of the underlying
- d. All guidelines applicable for cross currency forward contracts are applicable to cross currency option contracts also.
- e. Cross currency options should be written by AD Category I banks on a fully covered back-to-ben basis. The cover transaction may be undertaken with a bank outside India, an Off-shore Banking Unit situated in a Special Economic Zone or an internationally recognized option exchange another AD Category I bank in India. AD Category I banks desirous of writing options, should obtain a one-time approval from the RBI before undertaking the business.

iii. Foreign Currency - INR Options

Participants

Market-makers - AD Category I banks, as approved for this purpose by the Reserve Bank.

Users - Persons resident in India

Purpose

- a. To hedge foreign currency exposures in accordance with Schedule I of Notification No. FEMA 25/2000-RB dated May 3, 2000, as amended from time to time.
- b. To hedge the contingent foreign exchange exposure arising out of submission of a tender bid in foreign exchange.

Operational Guidelines, Terms and Conditions

- a. AD Category I banks having a minimum CRAR of 9 per cent, can offer foreign currency – INR options on a back-to-back basis.
- b. For the present, AD category I banks can offer only plain vanilla European options.

- c. Customers can buy call or put options.
- d. All guidelines applicable for foreign currency-INR foreign exchange forward contracts are applicable to foreign currency-INR option contracts also.
- e. AD Category I banks having adequate internal control, risk monitoring/management systems, mark to market mechanism, etc. are permitted to run a foreign currency - INR options book on prior approval from the Reserve Bank, subject to conditions. AD Category I banks desirous of running a foreign currency - INR options book and fulfilling minimum eligibility criteria listed below, may apply to the Reserve Bank with copies of approval from the competent authority (Board/Risk Committee ALCO), detailed memorandum in this regard, specific approval of the Board for the type of option writing and permissible limits. The memorandum put up to the Board should clearly mention the downside risks, among other matters.

Minimum Eligibility Criteria:

- i. Net worth not less than Rs. 300 crores
- ii. CRAR of 10 per cent
- iii. Net NPAs not exceeding 3 per cent of the net advances
- iv. Continuous profitability for at least three years The Reserve Bank will consider the application and accord a one-time approval at its

discretion. A Category I banks are expected to manage the option portfolio within the Reserve Bank approved 1155 management limits.

f. AD banks may quote the option premium in Rupees or as a percentage of the Rupee/foreign currency national.

g. Option contracts may be settled on maturity either by delivery on spot basis or by net cash settlement in Rupees on spot basis as specified in the contract. In case of unwinding of a transaction prior to the maturity, the contract may be cash settled based on market value of an identical off-setting option.

h. Market makers are allowed to hedge the Delta' of their option portfolio by accessing the spot and forward markets. Other Greeks' may be hedged by entering into option transactions in the inter- bank market.

i. The Delta' of the option contract would form part of the over right open position.

j. The Delta' equivalent as at the end of each maturity shall be taken into account for the purpose of AGL. The residual maturity (life) of each outstanding option contract can be taken as the basis for the purpose of grouping under various maturity buckets.

k. AD banks running an option book are permitted to initiate plain vanilla cross currency option positions to cover risks arising out of market making in foreign currency-INR options.

l. Banks should put in place necessary systems for marking to market the portfolio on a daily basis. FEDAI will publish daily a matrix of polled implied volatility estimates, which market participants can use for marking to market their portfolio.

m. The accounting framework for option contracts will be as per FEDAI circular No SPL-24/FC- Rupee Options/2003 dated May 29, 2003.

iv. Foreign Currency-INR Swaps

Participants

Market-makers - AD Category I banks in India. For entering into swaps with Multilateral (MFI) or International Financial Institutions (IFIS) in which Government of India is a shareholder, refer to para. (g) under operational guidelines, terms and conditions.

Users

i. Residents having a foreign currency liability and undertaking a foreign currency-INR swap to move from a foreign currency liability to a Rupee liability.

ii. Incorporated resident entities having a rupee liability and undertaking an INR - foreign currency swap (INR-FCY) to move from rupee liability to a foreign currency liability, subject to certain minimum prudential requirements, such as risk management systems and natural hedges or economic exposures. In the absence of natural hedges or

economic exposures, the INR-foreign currency swap (to move from rupee liability to a foreign currency liability) may be restricted to listed companies or unlisted companies with a minimum net worth of Rs. 200 crores. Further, the AD Category I bank is required to examine the suitability and appropriateness of the swap and be satisfied about the financial soundness of the corporate.

Purpose

To hedge exchange rate and/or interest rate risk exposure for those having long-term foreign currency borrowing or to transform long-term INR borrowing into foreign currency liability.

Operational Guidelines, Terms and Conditions

- a. No swap transactions involving upfront payment of Rupees or its equivalent in any form shall be undertaken.
- b. The term "long-term exposure" means exposures with residual maturity of one year or more.
- c. The swap transactions, once cancelled, shall not be rebooked or re-entered, by whichever mechanism or by whatever name called. In case of FCY-INR swaps however, where the underlying is still surviving the client, on cancellation of the swap contract, may be permitted to re-enter into a fresh swap, to hedge the underlying but only after the expiry of the tenor of the original swap contract that had been cancelled. This flexibility is not permitted for INR-FCY swaps.

- d. AD Category 1 banks should not offer leveraged swap structures. Typically, in leveraged swap structures, a multiplicative factor other than unity is attached to the benchmark rate(s), which alters the payables or receivables vis-à-vis the situation in the absence of such a factor.
- e. The notional principal amount of the swap should not exceed the outstanding amount of the underlying loan
- f. The maturity of the swap should not exceed the remaining maturity of the underlying loan.
- g. For hedging their long-term foreign currency borrowings residents may enter in to FCY-INR swaps with Multilateral or International Financial Institutions (MFI/IFI) in which Government of India is a shareholding member subject to the following terms and conditions in addition to (a) to

(f) above:

- i. Such swap transactions shall be undertaken by the MFI/IFI concerned on a back-to-back basis with an AD Category-I bank in India.
- ii. AD Category-I banks shall face, for the purpose of the swap, only those Multilateral Financial Institutions (MFI) and International Financial Institutions (IFIs) in which Government of India is a shareholding member.
- ii. The FCY-INR swaps shall have a minimum tenor of three years.

iii. In the event of a default by the resident borrower on its swap obligations, the MFI/IFI concerned shall bring in foreign currency funds to meet its corresponding liabilities to the counterparty AD Cat-I bank in India.

iv. Cost Reduction Structures, the cross currency option cost reduction structures and foreign currency INR option cost reduction structures.

Participants

Market makers --AD Category I banks

Users-Listed companies and their subsidiaries/joint ventures/associates having common treasury and consolidated balance sheet or unlisted companies with a minimum net worth of Rs. 200 crores provided

a. All such products are fair valued on each reporting date.

b. The companies follow the Accounting Standards notified under section 211 of the Companies Act, 1956 and other applicable Guidance of the Institute of Chartered Accountants of India (ICAI) for such products/contracts as also the principle of prudence which requires recognition of expected losses and non-recognition of unrealized gains,

c Disclosures are made in the financial statements as prescribed in ICAI press release dated 2nd December 2005: and

d. The companies have a risk management policy with a specific clause in the policy that allows using the types of cost reduction structures,

(Note: The above accounting treatment is a transitional arrangement till AS 30/32 or equivalent standards are notified.)"

Purpose

To hedge exchange rate risk arising out of trade transactions, External Commercial Borrowings (ECBS) and foreign currency loans availed of domestically against FCNR (B) deposits.

Operational Guidelines, Terms and Conditions

a. Writing of options by the users, on a standalone basis, is not permitted.

b. Users can enter into option strategies of simultaneous buy and sell of plain vanilla European options, provided there is no net receipt of premium

c. Leveraged structures, digital options, barrier options, range accruals and any other exotic products are not permitted

- d. The portion of the structure with the largest notional, computed over the tenor of the structure, should be reckoned for the purpose of underlying
- e. The delta of the options should be explicitly indicated in the term sheet
- f. AD Category I banks may, stipulate additional safeguards, such as, continuous profitability, higher net worth, turnover, etc. depending on the scale of forex operations and risk profile of the users.
- g. The maturity of the hedge should not exceed the maturity of the underlying transaction and subject to the same the users may choose the tenor of the hedge. In case of trade transactions being the underlying, the tenor of the structure shall not exceed two years.
- h. The MTM position should be intimated to the users on a periodical basis.
- vi. Hedging of Borrowings in foreign exchange, which are in accordance with the provisions of Foreign Exchange Management (Borrowing and Lending in Foreign Exchange) Regulations, 2000.

Products - Interest rate swap. Cross currency swap, Coupon swap. Cross currency option, Interest rate cap or collar (purchases), Forward rate agreement (FRA).

Market-makers -

- a. AD Category I banks in India
- b. Branch outside India of an Indian bank authorized to deal in foreign exchange in India
- c. Offshore banking unit in a SEZ in India.

Users -

Person's resident in India who have borrowed foreign exchange in accordance with the provisions of Foreign Exchange Management (Borrowing and Lending in Foreign Exchange) Regulations, 2000.

Purpose

For hedging interest rate risk and currency risk on loan exposure and unwinding from such hedges

Operational Guidelines, Terms and Conditions

- a. The products, as detailed above should not involve the rupee under any circumstances.
- b. Final approval has been accorded or Loan Registration Number allotted by the Reserve Bank for borrowing in foreign currency
- c. The notional principal amount of the product should not exceed the outstanding amount of the foreign currency loan

d. The maturity of the product should not exceed the unexpired maturity of the underlying loan.

e. The contracts may be cancelled and rebooked freely.

PROBABLE EXPOSURES BASED ON PAST PERFORMANCE

Participants

Market-makers - AD Category I banks in India.

Users - Importers and exporters of goods and services.

Purpose

To hedge currency risk on the basis of a declaration of an exposure and based on past performance up to the average of the previous three financial years' (April to March) actual import/export turnover or the previous year's actual import/export turnover, whichever is higher. Probable exposure based on past performance can be hedged only in respect of trades in merchandise goods as well as services.

Products

Forward foreign exchange contracts, cross currency options (not involving the rupee), foreign currency INR options and cost reduction structures (as mentioned in section B para I 1(v)].

Operational Guidelines, Terms and Conditions

a. Corporates having a minimum net worth of Rs 200 crores and an annual export and import turnover exceeding Rs 1000 crores and satisfying all other conditions as stipulated in section B para 11(v) may be allowed to use cost reduction structures.

b. The contracts booked during the current financial year (April-March) and the outstanding contract at any point of time should not exceed

i the eligible limit i.e., the average of the previous three financial years' actual export turn or the previous year's actual export turnover, whichever is higher for exports.

ii. Hundred percent of the eligible limit i.e., the average of the previous three financial years actual import turnover or the previous year's actual import turnover, whichever is higher for imports. Importers, who have already booked contracts up to previous limit of fifty percent in the current financial year, shall be eligible for difference arising out of the enhanced limit.

c. Contracts booked up to 75 percent of the eligible limit mentioned at paragraph (b) (i) and (b) (11) above may be cancelled with the exporter/importer bearing/being entitled to the loss or gain as the case may be. Contracts booked in excess of 75 percent of the eligible limit mentioned at paragraph

(b) (i) and (b)(ii) above shall be on a deliverable basis and cannot be cancelled, implying that in the event of cancellation, the

exporter/importer shall have to bear the loss but will not be entitled to receive the gain.

d. These limits shall be computed separately for import/export transactions.

e. Higher limits will be permitted on a case-by-case basis by RBL. The additional limits, if sanctioned, shall be on a deliverable basis.

f. Any contract booked without producing documentary evidence will be marked off against this limit. These contracts once cancelled, are not eligible to be rebooked. Rollovers are also not permitted.

g. AD banks should permit their clients to use the past performance facility only after satisfying themselves that the following conditions are complied with:

i. An undertaking may be taken from the customer that supporting documentary evidence will be produced before the maturity of all the contracts booked.

ii. Importers and exporters should furnish a quarterly declaration to the AD Category I banks, signed by the Chief Financial Officer (CFO) and the Company Secretary (CS), regarding amounts booked with other AD Category 1 banks under this facility, as per Annex VI of the RBI circular under reference. In the absence of a CS, the Chief Executive Officer (CEO) or the Chief Operating Officer (COO) shall co-sign the undertaking along with the CFO.

iii. For an exporter customer to be eligible for this facility, the aggregate of overdue bills shall not exceed 10 per cent of the turnover.

iv. Aggregate outstanding contracts in excess of 50 per cent of the eligible limit may be permitted by the AD Category I bank on being satisfied about the genuine requirements of their customers after examination of a document as per the format in Annex VII of the RBI circular under reference, signed by the CFO and CS, containing the following:

a. A declaration that all guidelines have been adhered to while utilizing this facility, and.

b. A certificate of import/export turnover of the customer during the past three years.

In the absence of a CS, the CEO or the CFO shall co-sign the undertaking along with the CFO.

h. The past performance limits once utilised are not to be reinstated either on cancellation or on maturity of the contracts.

i. AD Category I banks must arrive at the past performance limits at the beginning of every financial year. The drawing up of the audited figures (previous year) may require some time at the commencement of the financial year. However, if the statements are not submitted within three months from the last date of the financial year, the facility should not be provided until submission of the audited figures.

J. As part of the annual audit exercise, the Statutory Auditor shall certify the following:

i The amounts booked with AD Category-I banks under this facility, and

ii. All guidelines have been adhered to while utilizing this facility over the past financial year.

k. AD Category I banks must institute appropriate systems for validating the past performance limits at pre-deal stage. In addition to the customer declarations, AD Category I banks should also assess the past transactions with the customers, turnover, etc.

l. AD Category 1 banks are required to submit a monthly report (as on the last Friday of every month) on the limits granted and utilised by their constituents under this facility as prescribed in Annex X

3. SPECIAL DISPENSATION

i. Small and Medium Enterprises (SMEs)

Participants

Market-makers - AD Category I.

Users - Small and Medium Enterprises (SMEs)

Purpose

- To hedge direct and/or indirect exposures of SMEs to foreign exchange risk Product
- Forward foreign exchange contracts

Operational Guidelines: Small and Medium Enterprises (SMEs) having direct and/or indirect exposure to foreign exchange risk are permitted to book/cancel/roll over forward contracts without production of underlying documents to manage their exposures effectively, subject to the following conditions.

- a. Such contracts may be booked through AD Category I banks with whom the SMEs have credit facilities and the total forward contracts booked should be in alignment with the credit facilities availed by them for their foreign exchange requirements or their working capital requirements or capital expenditure.
- b. AD Category I bank should carry out due diligence regarding "user appropriateness" and "suitability of the forward contracts to the SME customers as per Para 8.3 of 'Comprehensive Guidelines on Derivatives' issued vide DBOD.No.BP.BC. 44/21.04.157/2011-12 dated November 2, 2011.

c. The SMEs availing this facility should furnish a declaration to the AD Category I bank regarding the amounts of forward contracts already booked, if any, with other AD Category I banks under this facility.

ii. Resident Individuals, Firms and Companies

Participants

Market-makers - AD Category I banks

Users: Resident Individuals, Firms and Companies

Purpose

To hedge their foreign exchange exposures arising out of actual or anticipated remittances, both inward and outward, can book forward contracts, without production of underlying documents, up to a limit of USD 1,000,000 (USD one million), based on self-declaration.

Product

Forward foreign exchange contracts and FC Y-INR options

Operational Guidelines, Terms and Conditions

a While the contracts booked under this facility would normally be on a deliverable basis, cancellation and rebooking of contracts are permitted. Based on the track record of the entity, the concerned AD Cat-I bank may, however, call for underlying documents, if considered

necessary, at the time of rebooking of cancelled contracts. The notional value of the outstanding contracts should not exceed USD 1,000,000 at any time.

b. The contracts may be permitted to be booked up to tenors of one year only.

c. Such contracts may be booked through AD Category I banks with whom the resident individual firm/company has banking relationship, on the basis of an application-cum-declaration in the format given in Annex XV. The AD Category I banks should satisfy themselves that the hedging entities understand the nature of risk inherent in booking of forward contracts or FCY-INR options and should carry out due diligence regarding "user appropriateness" and "suitability" of the forward contracts/FCY-INR options to such customer.

iii. Simplified Hedging Facility

Users: Resident and non-resident entities, other than individuals.

Purpose: To hedge exchange rate risk on transactions, contracted or anticipated, permissible under Foreign Exchange Management Act (FEMA), 1999.

Products: Any Over the Counter (OTC) derivative or Exchange Traded Currency Derivative (ETCD) permitted under FEMA, 1999.

Cap on Outstanding Contracts: USD 30 million, or its equivalent, on a gross basis.

Designated Bank: Any Authorised Dealer Category-I (AD Cat-I) bank designated as such by the user.

Operational Guidelines, Terms and Conditions

- i. The user shall appoint an AD Cat-I bank as its "Designated Bank". The designated bank will assess the hedging requirement of the user and set a limit up to the stipulated cap on the outstanding contracts
- ii. If hedging requirement of the user exceeds the limit in course of time, the designated bank may re-assess and, at its discretion, extend the limit up to 150% of the stipulated cap.
- iii. Hedge contracts in OTC market can be booked with any AD Cat-I bank, provided the underlying cash flow takes place with the same bank.
- iv. Cost reduction structures can be booked by users provided that resident unlisted companies can use such structures only if they have a minimum net worth of Rs. 200 crores.
- v. Users are not required to furnish any documentary evidence for establishing underlying exposure under this facility. Users may, however, provide basic details of the underlying transaction in a standardised format, only in the case of OTC hedge contracts.
- vi. Cancelled contracts may be freely rebooked with the same bank.

vii. In case of hedge contracts booked in OTC market, while losses will be recovered from the user, net gains i.e., gains in excess of cumulative losses, if any, will be transferred at the time of delivery of the underlying cash flow. In case of part delivery, net gains will be transferred on a pro-rata basis.

viii. For hedge contracts on underlying capital account transactions, gains/losses may be transferred to the user as and when they accrue if the underlying asset/liability is already in existence

ix. On full utilisation of the limit or in case of breach of limit, user shall not book new contracts under this facility. In such a case, contracts booked earlier under this facility will be allowed to continue till they expire or are closed. Any further hedging requirements thereafter may be booked under other available hedging facilities.

X. Users booking contracts under this facility shall not book contracts under any other facility an OTC or ETCD market except as provided in para (ix).

xi. At the end of each financial year, the user will provide the designated bank with a statement signed by the head of finance or the head of the entity, to the effect that.

a. Hedge contracts booked in both OTC and ETCD market, under this facility, are backed by underlying exchange rate exposures, either contracted or anticipated

b. The exposures underlying the hedge contracts booked under this facility are not hedged under any other facility.

xii. On being appointed, the designated bank shall report the details of the users and limits granted to the Trade Repository (TR). On a request by the TR, the exchanges shall report all contracts booked by such users to the TR on a daily basis.

xiii. The TR will compute user wise outstanding position (across OTC and ETCD market) and provide this information to the designated bank for monitoring. If the outstanding contracts of a user exceeds the limit (or the extended limit, if applicable) the designated bank shall advise the user to stop booking new contracts under this facility.

xiv. When user migrates to other available facilities, the designated bank shall report this information to the TR. The TR shall update this information in its records and notify the recognized stock exchanges to stop reporting data for the user concerned.

xv. Banks shall have an internal policy regarding the time limit up to which a hedge contract for a given underlying can be rolled-over or rebooked by the user.

B. General Instructions for OTC forex derivative contracts entered by Residents in India.

While the guidelines indicated above govern specific foreign exchange derivatives, certain general principles and safeguards for prudential considerations that are applicable across the OTC foreign exchange derivatives, are detailed below. In addition to the guidelines under the specific foreign exchange derivative product, the general instructions should be followed scrupulously by the users (residents India the than AD Category 1 banks) and the market makers (AD Category I banks) For Simplified Hedging Facility, para (a) and (b) below will not be applicable.

a. In case of all forex derivative transactions (except INR- foreign currency swaps, moving from INR liability to foreign currency liability as in section B para I(1X(iv)] is undertaken, AD Category I banks must take a declaration from the clients that the exposure is unbadged and has not been hedged with another AD Category 1 bank. The corporates should provide an annual certificate