A Perspective of Basel Committee-II Recommendation on Indian Banking Sector

***Dr. Ratna Sinha**

*** Associate Professor, City College, Bangalore, Karnataka, India.**

ABSTRACT

The wave of globalization appeared on India's shores in 1991 and to get their banking systems at par with the global standards in terms of financial health, safety and transparency, implement the Basel Norms by 1992.The Basel Committee on Banking Supervision provides a forum for regular cooperation on banking supervisory matters. Its objective is to enhance understanding of key supervisory issues and improve the quality of banking supervision worldwide. Basel I which focuses more on credit risks not on the Operational Risk, which banks have face day-to-day problems to conduct their Business. In this regard Basel -II is to create an international standard that banking regulators can use when creating regulations about how much capital banks need to put aside to guard against the types of financial and operational risks banks face. Commercial banks in India will start implementing Basel II with effect from March 31, 2007. They will initially adopt the Standardised Approach for credit risk and the Basic Indicator Approach for operational risk.The Present Study track the Basel –II accreditation under which Banks have to aside some capital charges for the Operational Risk. The Author also highlighted the Lapses of Basel II and Suggested need of Basel III in Indian Banking System.

Keywords: Operational Risk, credit Risk, Capital Charge.

1. Introduction:

Globalization and financial innovation have over the last two decades or more multiplied and diversified the risks carried by the banking system. In response, the regulation of banking in the developed industrial countries has increasingly focused on ensuring financial stability, at the expense of regulation geared to realizing growth and equity objectives. Banks are required to hold capital in proportion to their perceived credit risks. In June 2006 Basel Committee on Banking Supervision issued a comprehensive document on New Capital Adequacy Framework to replace the 1988 Basel Accord and to foster a strong emphasis on risk management and to encourage ongoing improvements in banks' risk assessment capabilities.

The BCBS[1] released the "International Convergence of Capital measurement and Capital standard. The purpose of Basel II is to create an international standard that banking regulators can use when creating regulations about how much capital banks need to put aside to guard against the types of financial and operational risks banks face. Indian banking industry believes that Basel II can help protect the international financial system from the types of problems that might arise should a major bank or a series of banks collapse. Basel II attempts to accomplish this by setting up rigorous risk and capital management requirements designed to ensure that a bank holds capital reserves appropriate to the risk the bank exposes itself to through its lending and investment practices.

2. Objectives of the Study:

A.) The Aim of study the basic three pillar approach of Basel Accreditations

B.) To Study the Impact of Basel II on Indian Banks

C.) To Study the Lop holes and provide corrective suggestion for Basel II.

[1] Basel committee on Banking super vision

3. Limitation of the Study

The study will be basically focusing on the analysis the importance of the Basel II impact on Indian Banking System, and how it is providing new options to Basel III. But restricted to the comparative study with Basel II and Basel III.

4. Methodology

This Research Paper is done mainly by collecting and analyzing secondary data. The major sources of these data are websites of Reserve Bank of India. A fair amount of information is collected from magazines and other academic publications to obtain Knowledge working procedure regarding in this field.

5. Review of literature

There have been many research works were done on Process and performance of Basel Committee-II Recommendation on Banking Sector, Hugh Thoms and Zhigiang Wang(2005), has describes the theoretical and institutional background to the formula specified by the Bank for International Settlements Basel Committee on Banking's internal-ratings based (IRB) approach to Pillar 1 of Basel II: minimum capital requirements. The IRB formula is based on the Vasicek formula and is the conditional probability of default of a single borrower with normally distributed asset returns. The authors discuss the assumptions of the Vasicek formula and the adjustments made to it in the IRB formula. Rahul Sharma

Abhishek Tulsyan, Sikha Kedia, Gourav Modi ,Praveen Didwania (2008), through the light on Basel II framework provides significant incentives to banks to sharpen their risk management expertise to enable more efficient risk-return tradeoffs, it also presents a valuable opportunity to gear up their internal processes to the international best standards.

Hari Mishra (2004) has emphasized that (Basel II) attempt to strive for more accurate measure of risks in banks, the simplicity of the present Capital Accord is proposed to be replaced, with a highly complex methodology which needs the support of highly sophisticated MIS / data processing capabilities. The complexity and sophistication essential for banks for implementing the new capital accord restricts its universal application in the emerging markets.

Managing risk is increasingly becoming the single most important issue for the regulators and financial institutions. These institutions have over the years recognized the cost of ignoring risk. However, growing research and improvements in information technology have improved the measurement and management of risk. It's but natural therefore, capital adequacy of a bank has become an important benchmark to assess its financial soundness and strength. The idea is that banks should be free to engage in their asset-liability management as long as they are backed by a level of capital sufficient to cushion their potential losses. In other words, capital requirement should be determined by the risk profile of a bank.

The initial capital accord of 1988 was hugely successful with more than 100 countries accepting it as a benchmark. One of the major reasons for the success of this framework was its being simple. It brought in uniformity and attempted to make regulatory capital requirement consistent with the economic capital. Reserve Bank of India introduced risk assets ratio system as a capital adequacy measure in 1992, in line with the Basel accord of 1988, which takes into account the risk element in various types of funded balance sheet items as well as non-funded off balance sheet exposures. In fact, RBI norms on capital adequacy at 9% are more stringent than Basel Committee stipulation of 8%.

The Basel I accord has been criticized as being inflexible due to its focus on primarily credit risk and treating all types of borrowers under one risk category regardless of credit worthiness. As time passed, some of the major international banks began using sophisticated models to measure risk. This was when a need was felt to upgrade the Basel framework. Therefore, the Basel Committee on Banking Supervision thought it desirable that the present accord is replaced by a more risk-sensitive framework.

6. The Basel II Accord

The Basel II Accord has its foundation on three mutually reinforcing pillars that allow banks and bank supervisors to evaluate properly the various risks that banks face and realign regulatory capital more closely with underlying risks. The first pillar is compatible with the credit risk, market risk and operational risk. The regulatory capital will be focused on these three risks. The second pillar gives the bank responsibility to exercise the best ways to manage the risk specific to that bank. Concurrently, it also casts responsibility on the supervisors to review and validate banks' risk measurement models.

The third pillar on market discipline is used to leverage the influence that other market players can bring. This is aimed at improving the transparency in banks and improves reporting.

The Basel Committee on Banking Supervision has come up with three pillars

A) Minimum Capital Requirements: - which tries to ensure that capital allocation is more risk sensitive.

B) Supervisory Review Process: - tries to separate the operational risk from credit risk

C) Market Discipline: - Economic and Regulatory Capital more closely to reduce the scope for regulatory arbitrage.

A) **The First Pillar:** Its sets out minimum Capital Requirement. The Basel II framework maintains minimum Capital requirement of 8% of risk assets. As per the RBI guidelines, Indian banks required to achieve Capital adequacy ratio of 9% as against the Basel Committee Stipulation.

$$\text{Capital Ratio} = \frac{\text{Total capital (Tier I+ Tier II+ Tier III)}}{\text{Risk Weighted Assets =Credit Risk +Market Risk+ Operational risk}}$$

Where

Tier I =Ordering Capital + Retained Earnings & share premiums- Intangible Assets

Tier II=Undisclosed Reserves + General bad debt provision +Revaluation Reserve+ Subordinate Debt+ Redeemable Preference Shares

Tier III=Subordinates debt with a maturity of least 2 years

Credit Risk=It is an Investors Risk of loss arising from a borrower who does not make Payment as Promised.

Market Risk= It is the risk that the value of a portfolio, either an investment or a trading portfolio will decrease due to the change in value of the market risk factors.

Operational Risk= It is the risk of loss resulting from inadequate or failed internal process, people and system or from External events.

B) The Second Pillar: it gives the bank responsibility to exercise the best ways to manage the risk specific to that bank. It also casts the responsibility on the supervisor to review and validate banks risk measurement models. Pillar 2 also seeks to ensure that internal risk management process in the banks is robust enough.

C) The third pillar: The main aim of the new accord is to establish a market discipline with triple sources (Customers, regulatory bodies and the Banks). Monitoring of risk is shared among the official authorities, as well as independent audit firms. The third pillar on market discipline is used to leverage the influence that other market players can bring. It structure must be in place for supporting data collection and generating MIS[2].This is aimed at improving the transparency in banks and improve reporting for such regulations.

6.1 Process of Computation of Capital Requirements:

Credit Risk: The risk that a borrower (debtor) or an organisation will be unable to make payment of money of interest or principal in a timely manner. That they owe according to the terms on which it was borrowed Basel II approaches three alternatives to measure the credit risk. These are Standardized Approach; Internal Rating based Foundation (IRB foundation) and Securitization Approach

1. **Standardized Approach**: It is the more Risk Sensitive than Basel I. the Bank allocates a risk weight to each of its assets and off balance sheet positions and produced a sum of risk weighted assets values. A risk weight of 100% means that an exposures is included in the

[2] Management information system

calculation of risk weighted assets value which translate into a capital charge equal to 9% of that value.

Banks may use external credit ratings by institutions recognized for the purpose by the central bank for determining the risk weight. Exposure on sovereigns and their central banks could vary from zero percent to 150 percent depending on credit assessment from 'AAA' to below B-. Similarly, exposure on public sector entities, multilateral development banks, other banks, securities firms and corporate also may have risk weights from 20 percent to 150 percent. Exposure on retail portfolio may carry risk weight of 75 percent.

2. **Internal Rating Based approach (IRB foundation):** Under the IRB approach banks will be allowed by the supervisor to use their internal estimates of risk components to assess credit risk in their portfolios. Banks must categories banking book exposure into broad classes of assets i.e. Corporate, Sovereign, Banks, Retail and Equity exposures.
3. **Securitization Frame work:** Under this approach Banks have to apply the securitization framework for determining regulatory capital requirement on exposure arising from securitization. securitization exposure resulting from a securitization of retail or wholesale exposures will not be analyzed under the capital rules for retail or wholesale exposures. Instead, a separate securitization framework will apply.

Market Risk: it is the risk inherent in securities market or economy investment risk that is attributable to the performance of the stock market or of the economy and cannot be removed by diversification. Market Risk approach measure by Value at Risk (VaR).

Value at Risk: Value at Risk covers a technical subject in an accessible way, providing insight into risk management, as well as the potential downside of complex derivatives. It details how VAR has evolved over the past two decades, and examines how different risk have been assumed, new risk management techniques have been developed, new regulation has come into being, and how the approach has expanded beyond finance. Value at Risk is the maximum loss not exceeded with a given probability defined as the confidence level, over a given period of time. It is commonly used by security houses or investment banks to measure the market risk of their asset portfolios (market value applications. VaR is widely applied in finance for quantitative risk management for many types of risks. VaR does not give any information about the severity of loss by which it is exceeded.

Operational Risk: It is the loss occurring from the internal inadequacies of a firm or a breakdown in its control, operations or procedures. The RBI major includes the legal risk. The Basel II includes three basic approaches to calculate Operational risk and its basic objectives is measure and control risk on continuous basis.

1. **Basic Indicator Approaches**: In this Approach banks are required to hold capital for operational risk equal to the average over the previous three years of a fixed percentage 15% of annual gross income[3].
2. **Standardized Approaches**: Under this approach, banks activities are divided into eight business

Lines. Each business lines, gross income is considered as a broad indicator for the likely scale of operational risk. The values of betas[4] prescribed for each business line as under:

BUSINES LINE	BETA FACTOR
Corporate Finance	18%
Trading and sales	18%
Retail Banking	12%
Commercial Banking	15%
Payment Settlement	18%
Agency Services	15%
Assets management	12%
Retail Brokerage	12%

3. **Advance Measure Approach**: Under this approach the regulatory capital will be equal to the measure generated by the banks internal risk measurement System.

[3] Net interest income book and extraordinary and income plus net non-interest income, excluding realized profit/losses from the sale of securities in the banking book and extraordinary irregular items
[4] A measure of the volatility, or systematic risk, of a security or a portfolio in comparison to the market as a whole.

7. Impact of Basel II on Indian Banking system

The followings are the major area which affects the banking regulatory in India;

- Basel II allows national regulators to specify risk weights different from the internationally recommended ones for retail exposures.
- In the context of Retail exposures, which is the growth segment in the assets structure of most Indian banks post liberalization, The RBI has gone with the lower 75 percent risk weight prescribed under Basel II norms.
- The net result is that the implementation of Basel II does provide Indian banks the opportunity to significantly reduce their credit risk weights and reduce their required regulatory capital.
- The Basel II explores how to work on other area of Risk .under these Indian banks can exploit the fact that they have a large short-term portfolio in the form of cash credit, overdraft and working capital demand loans, which are currently UN[5] –ratted.

8. Issues with Basel II Accord

In Basel II there are the some major issues that concern on Indian Banking System and that issues should not be ignored by the banking industries.

- **Negative impact on NPAs Accord:** Most of the Indian banks have improved on their capital adequacy ratio in line with the global Basel II norms but need to do more on international risk management practices in the wake of increasing pressure of non-performing assets, according to an ASSOCHAM[6].
- **Problems to lend Small Scale industries:** Implementation of Basel II norms by the banking sector will reduce credit availability to small scale industries (SSIs), besides adding to their cost of fund. Under Basel II norms, banks would be discouraged to lend to SSI that is not rated because a loan to an unrated entity will attract 100 per cent risk-weight.

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[5] United Nation rating Agencies

[6] The Associated Chambers of Commerce and Industry of India

- **Unavailable for Data**: Absence of Historical Database has also the one major factor for concern Computation of probability of default, loss given default, migration mapping and supervisory validation require creation of historical database, which is a time consuming process and may require initial support from the supervisor.
- **Credit Risk Concern:** Under the area of unrated sovereigns, banks and corporate, the prescribed risk weight is 100%, whereas in case of those entities with lowest ratting, the risk weight is 150%. This may create incentive for the category of counterparties, which anticipate lower rating to remain unrated.
- **The Basel II is very complex and difficult to understand:** It calls for revamping the entire management information system and allocation of substantial resources. Therefore, it may be out of reach for many smaller banks. As Moody's Investors Services puts it, "It is unlikely that these banks will have the financial resources, intellectual capital, skills and large scale commitment that larger competitors have to build sophisticated systems to allocate regulatory capital optimally for both credit and operational risks."

9. Suggestion for Implication of Basel III

There are many possible negative impacts of an implementation of Basel II. The Basel II Accord includes operational risk into the capital adequacy ratio which significantly changes credit risk measurement and create the confusion to understand the framework. By adopting specific risk measurement, Basel II has critical effects on market risk management, and changes in the risk calculation methods. The Basel II creates a self-discipline and supervisory review only for the large banks that have better risk management and measurement expertise, also have better capital adequacy ratios and geographically diversified portfolios. Its create the disadvantage for the smaller banks, who hurt by the rise in weightage of inter-bank loans that will effectively price them out of the market. Thus, banks will have to re-structure and adopt if they are to survive in the new environment. The biggest challenge is the re-structuring of the assets of some of the banks as it would be a tedious process, since most of the banks have poor asset quality leading to significant proportion of NPA. This also may lead to Mergers & Acquisitions, which itself would be loss of capital to entire system.

Keeping in view the cost of compliance for banks and supervisors, the regulatory challenge would be to migrate to Basel II in a non-disruptive manner. Developing Countries need to be prepared to adapt Basel III norms to their own advantage. lines are:

The key elements of the proposed Basel III guidelines are:

1. Simplifying the structure of bank capital
2. Expanding the risk coverage of the capital base
3. Increase the capital requirement and Counterparty credit risk Stress tests, which effects on deteriorating credit quality
4. Market discipline Increased transparency
5. Enhanced bank supervisory coordination and cooperation during periods of stress

Basel III Norms Impact the Banking Industry, Risk management practices and the Role of Risk Manager. Its Reduces the disruptive and devastating crises occur in the future Monitor the health of individual banks and Coordinate the interlinked network of international banks. Basel III Act decisively performs when weaknesses potentially threaten the health of the system.

10. Findings and Conclusion

Basel II framework provides significant incentives to banks to sharpen their risk management expertise to enable more efficient risk-return tradeoffs; it also presents a valuable opportunity to gear up their internal processes. Enumerated below, are the conclusions of the paper:-

- Using the standardized approach, un-rated corporate borrowers attract less risk weight (100 per cent) than the lowest rated borrower (150 per cent) giving incentives to high-risk borrowers to remain un-rated.
- Another argument against Basel II is that it does not resort to full credit risk modeling--it fails to take into account portfolio effects of risk mitigation through diversification.
- Pillar 3 purports to enforce market discipline through stricter disclosure requirement while admitting that such disclosure may be useful for supervisory authorities and rating agencies – the expertise and ability of the general public to comprehend and interpret disclosed information is open to question. Moreover, too much disclosure may cause information overload and may even damage financial position of bank.

- To adopt Basel II norms, banks have to change their IT systems, data models and business models. Instead of traditional data models, they are converting their data warehouses into entity-relationship data models or object oriented models, which create the additional cost burden on the banks.
- The new norm Basel III is based on renewed focus on the bank responsibility to exercise the best ways to manage the risk specific to that bank. Concurrently, it also casts responsibility on the supervisors to review and validate banks' risk measurement models.

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