

## Basel Accords & Their Implications on Indian Banks: An Evaluation

Dr. V.V. Barthwal

Lecturer in E.A.F.M  
Govt. Lohia College Churu -331001 (Raj.)

**Abstract:** The main objective of Basel Committee on Banking Supervision (BCBS) has been to close gaps in international supervisory coverage in pursuit of two basic classic principals: that no foreign banking establishment should escape banking supervision and that supervision should be adequate. The topic to which most of committees time has been devoted in recent years is capital adequacy. Till date, Basel – I, Basel – II and Basel – III Accords have been released. Most recent accord is Basel – III, which is third in series. This paper especially examines the implications of Basel Accords on Indian Banks, with special reference to Basel – III Accord. It discusses salient features of Basel – III Accords and its expected implication on Indian Banks. The paper depicts that effective implementation of Basel – III will make Indian banks stronger, stable and sound so that they could deliver value to the real sector of economy. By far, the most important reform is that there should be a radical change in banks approach to risk management.

**Key Words :** Basel – I, Basel – II, Basel – III, BCBS, BIS, LCRI, LCR, Tier – 1, Tier – 2, Capital, RWA, CET1, CRAR, CVA.

### Introduction

Banks play their important role in accelerating the pivot of economic growth of any country. Hence it is key for overall economic development. Existence of an effective and efficient banking system is considered as an engine of booster of economic activities of a country. The successful operation of

Banking sector further gives momentum to trade and commerce of a country, which ultimately assists in raising investment, savings and employment and improving the standard of living of people at large.

The banking sector in India has been an important booster of economic development. Indian banks have passed through various changes from private banking to public sector banking and today our country has following the path of liberalization, globalization & privatization. Since the introduction of New Economic Policies in 1991. However we have been making our efforts to make the banking sector vibrant and efficient. The transparency in the working of banks were also given top priority. Being a democratic country, India always attempted to make all norms regulations rules open to public. Specially after the nationalization 14 Private sector banks in 1969 in first phase six in second phase in 1980 and now in the era of Liberalization, Globalisation and Privatization, R.B.I. has been making her untired efforts to make our banking system more vibrant and internationally competitive. In this connection India introduced the prudential norms relating to the credit / advances and investment portfolios of banks, efficient management of non-performing assets, capital adequacy : Basel II framework and more recently Basel III framework & Risk management in banks. It is also relevant to mention salient features of Narisimham Committee (Committee on Financial Sector 1991) and Narsimham Committee -II (Committee on Banking

1998). The Narsimham Committee suggested a comprehensive framework for reorganization and reform of the systems. Specially norms related to capital adequacy norms, income recognition asset classification and provisioning norms, Transparency of financial statements. While the Narsimham Committee – II had examined the second generation of reforms in terms of their broad interrelated issues :

1. Action that should be taken to strengthen the foundation of the banking system.
2. Streamlining procedures updating technology and human resource development and
3. Structural change in the system.

#### **Basel Accords – Historical Background**

The implementation of the Basel – II framework effective April 2008 has added new dimensions to the prudential management of Bank funds in line with the international best practices. In this direction more recently the Basel Committee on Banking supervision (BCBS) has issued a comprehensive reform package entitled Basel – III Capital Regulation on May 2, 2012. These guidelines shall be implemented in phased manner commencing April 2013 till March 31, 2018 for Indian Scheduled commercial Banks.

This paper primarily examines the implication of Basel Accords on Indian Banks, Specially of Basel – III Accord.

The Basel Committee on banking supervision was established as the committee on Banking Regulations and supervisory practices by the central Bank governors of the group of ten countries at the end of 1974 in the aftermath of

serious disturbances in international currency and banking system. The first meeting took place in Feb. 1975 and meetings have been held regularly three or five times a year since. The committee members come from Argentina, Australia, Belgium, Brazil, Canada, China, French, Germany, Hong Kong, SAR, India, Indonesia, Italy, Japan, Korea, Luxembourg, Mexico, The Netherlands, Russia, Saudi Arabia, Singapore, South Africa, Spain, Sweden, Switzerland, Turkey, The United Kingdom and The United States. The countries are represented by their central bank and also by the authority with formal responsibility for the prudential supervision of banking business, where this is not the central bank. The committee provides a forum for regular cooperation between it's member countries on banking supervisory matters. It does not possess any formal supranational supervisory authority. Its conclusion do not have and were never intended to have legal force. One important objective of the committees work has been to close gaps in international supervisory coverage in pursuit of two basic classic principles : that no foreign banking establishment should escape banking supervision & that supervision should be adequate.

May 1983, the committee finalized a document principles for supervision of banks foreign establishments which set down the principles of sharing supervisory responsibility for banks foreign branches subsidiaries and joint ventures between host & parent (or home) supervisory authority. In April 1990 a supplement to the 1983 concordat was issued with the intention of improving the flow of prudential information between banking supervisors in different countries.

In June 1992 certain principles of concordat were reformulated as minimum standards were

communicated to other banking supervisory authorities who were invited to endorse them and in July 1992 the standards were published.

In April 1995, the committee issued an amendment to the capital accord to take effect at the end 1995, to recognize its effects of bilateral netting of bank's credit exposure in derivative products and to expand the matrix of add on factors.

In June 1999, the committee issued a proposal for a new capital adequacy framework to replace the 1988 accord and this has been refined in the intervening years culminating in the release of the New capitals framework on 26 June 2004.

The topic to which most of the committee's time has been devoted in recent years is capital adequacy till date, Basel – I, Basel –II and Basel – III Accords have been released most recent accord is Basel – III which is third in series.

#### **Basel – I**

The Basel Capital Accord in 1988 proposed by Basel committee of Bank supervision (BCBS) of the Bank for international Settlement (BIS) focused on reducing credit risk, prescribing a minimum capital risk adjusted ratio (CRAR) of 8% of risk weighted assets. Although it was originally meant for bank in G-10 countries, claimed to adhere to it and India began implementing the Base-I in April – 1994. It focused primarily on credit risk.

The 1988 accord can be summarized in the following equation:

$$\text{Total capital} = 0.8 \times \text{Risk Weighted Assets (RWA)}$$

The accord provided a detailed definition of capital. Tier – 1 or core capital, which includes equity and

disclosed reserves and Tier – 2 or supplementary capital which could include undisclosed reserves, asset revaluation reserves, general provisions & loan, loss reserves, hybrid (debt/equity) capital instruments and subordinated debt.

The 1988 Basel – I Accord has very limited risk sensitivity and lacks risk differentiation for measuring credit risk. The strict rule based approach of the 1988 accord has also been criticized for its one size fit's all prescription. In addition, it lacked proper recognition of credit risk mitigates such as credit derivatives, securitization and collaterals. The recent cases of frauds, acts of terrorism, hacking have brought into focus the operational risk that the banks and financial institutions are exposed to.

#### **Basel – II**

In June 1996 BCBS issued a proposal for a New Capital Adequacy framework to replace the 1988 Accord. Basel – II is a more comprehensive framework including the CRAR Computation and provision for supervisory review and market discipline. Basel – II stands on following three pillars

Minimum regulatory capital (Pillar-1): This is a revised and comprehensive framework for capital adequacy standards where CRAR is calculated by incorporating credit, market and operational risk.

Supervisory review (Pillar -2): This lays down the key principles for supervisory review risk management guidance and supervisory transparency and accountability

Market discipline (Pillar -3): This pillar instills market discipline through disclosure requirements for market participants to assess key information on

risk exposure ,risk assessment process and bank capital adequacy.

The Basel – II makes significant improvement in linking risk and regulatory capital for internationally active banks especially for their corporate loan book.

Following are the salient features of Basel – II

Allows banks to use proprietary in house models for measuring market risks.

Banks using proprietary models must compute VAR (Value at risk) daily, using 99<sup>th</sup> percentile, one tailed confidence interval with a time horizon of ten trading days using a historical observation period of at least one year.

The capital charge for a bank that uses a proprietary model will be the higher of the previous days VAR and three times the average of the daily VAR of the preceding sixty business days. Allows banks to issue short-term subordinated debt subject to a lock in clause (Tier – 3 capitals) to meet a part of their market risk.

Alternate standardized approach using the building block approach where general market risk and specific security risk are calculated separately and added up. Banks to segregate trading book and mark to market all portfolio / position in trading book. Applicable to both trading activities of banks and non banking securities firms. The Basel – II guidelines are criticized on following grounds:

Base – II is pro-cyclic, that means that banks governed by Base-II (Capital tied of Risk) will loosen credit in “Good Times” (When risk perception are low) and restricted it when times are bad (When risk rise again)

If most banks act in this fashion, having adopted the accord, they would acculturated the crisis in bad times, jeopardizing stability.

Basel – II implementation is a task of extreme complexity involving the intersection of computer science mathematics and finance.

It’s implementation is too costly. An estimate shows that financial institutes world wide will spend close to US\$4 billion over two years on upgrading databases and other system in order to comply with Basel – II.

Basel – II does not resort to full credit risk modeling – it fails to take into account portfolio effects of risk mitigation through diversification.

#### **Basel – III Accord**

The Basel Committee on Banking Supervision (BCBS) issued a comprehensive reform package entitled – “Basel – III: A global regulatory framework for more resilient banks and banking system” in December 2010 with following two principal objectives:

To strengthen global capital and liquidity regulations with the goal of promoting a more resilient banking sector. To improve the banking sectors stability to absorb shocks arising from financial and economic stress, which, in turn would reduce the risk of a spillover from the financial sector to the real economy.

To attain above objective the Basel –III proposals are broken down into three parts on the basis of the main areas they address as mentioned below:

- Increased quality of Capital
- Increased quantity of capital

- Reduced leverage through introduction of backstop leverage ratio
- Increased short term liquidity coverage.
- Increased stable long term balance sheet funding
- Strengthened risk capture notably counters party risk.

2. The ratio is supplemented the risk based measures of regulatory capital.
3. The leverage ratio is implemented on a gross and un-weighted basis not taking in to account the risks related to the assets.

#### Description of Above Key Areas:

##### I. Better Capital Quality :

Basel – III emphasizes on improving the quality of capital with the ultimate aim to improve loss – absorption capital in both going concern and liquidation scenarios.

##### II. Increased quality of capital :

Minimum common equity tier – I

- § Increased from 2.0 percentage to 4.5 percent
- § Plus capital conservation buffer of 2.5 percent
- § Bringing total common equity requirement to 7.00 percent
- § To be phased in from 2013 to 2019

Minimum total capital :

- § Increased from 8.00 percentage to 10.5 percent (Including conservation buffer)
- § To be phased in from 2013 to 2019

##### III. Leverage Ratio :

1. Leverage limit is set as 3% a bank's total assets (including both on and off balance sheet assets) should not be more than 33 times bank capital.

##### IV. Increased short term liquidity coverage :

1. The 30 day liquidity Coverage Ratio (LCRI) is intended to promote short-term resilience to potential liquidity disruptions. The LCR will help ensure that global banks have sufficient high-quality liquid assets to withstand a stressed funding scenario specified by supervisors.
2. For the LCR the stock of high quality liquid assets is compared with expected cash outflows over a 30 day stress scenario. The expected cash outflows are to be covered by sufficiently liquid, high quality assets.

##### V. Net Stable Funding Ratio (NSFR) :

1. The Net Stable Funding Ratio compares available funding sources with funding needs resulting from the assets on the B/S.
2. Required and available funding amounts are determined using weighted factors, reflecting the “stability” of the funding available and the duration of the asset.
3. The weighted factors for assets vary from 0% and 5% for cash and government bonds, respectively to 65% for mortgage, 85% for retail loans and 100% for other assets.

4. For determining stable funding available for liabilities the weighted factors vary from 100% for tier 1 capital to 90% for core retail deposits and 50% for unsecured wholesale funding ECB funding is weighted at 0%.

#### **VI. Strengthened risk capital notably counter party risk :**

1. Calibration of counter party credit risk modeling approaches such as Internal Model Methods (IMM) to stressed periods.
2. Increased correlation for certain financial institutions in the IRB for males to reflect experience of the recent crisis, new capital charges for credit/ valuation adjustment and wrong way risk.
3. Improved counter party risk management standards in the areas of collateral management and stress testing.

#### **Basel – Accords & India**

India has been a founder signatory of Basel Accord since its inception in 1974. India has been attempting to follow Basel Global norms for banking supervision, regulations and risk management. Basel – III Accord is the third in series of Basel Accords.

India is also prepared to implement Basel – III capital norms from April 1, 2013 in phased manner. In order to allow banks to prepare and plan themselves and also to minimize any unintended consequences arising out of higher capital requirements, banks have been given a long phase in period during which Basel – III guideline would be implemented. Capital Equity will be fully

phased in and implemented as on an March 3, 2018. R.B.I. released on its website, draft guidelines outlining proposed implementation of Basel – III capital regulation in India.

Following are the salient features of draft guidelines issued by R.B.I. :-

#### **I. Minimum Capital Requirements:**

1. Common Equity Tier 1 (CDT 1) Capital must be at least 5.5% of risk- weighted assets (RWA)
2. Tier 1 Capital must be at least 7% of RWAs and
3. Total capital must be at least 9% of RWAs

#### **II. Capital conservation buffer in the form of common equity of 2.5 of RWAs. It means they need to keep 25% extra capital to provide for any calamities during the period of financial or economic turbulence or disasters.**

#### **III. Credit Value Adjustments :**

Banks will be required to compute an additional credit value adjustments (CVA) risk capital change.

#### **IV. Leverage Ratio :**

The parallel run for the leverage ratio will be from January 1, 2013 to January 1, 2017, during which banks would be expected to strive to operate a minimum Tier 1 Leverage ratio of 5%. The leverage ratio requirement will be finalized taking in to account the final proposal of the Basel Committee.

#### **V. Definition of Regulatory Capital:**

1. Banks are required to maintain a minimum Pillar – I capital to Risk-weighted Assets Ratio (CRAR) of 9% on an ongoing basis (other than capital conservation buffer and countercyclical capital buffer). The Reserve Bank will take in to account the relevant risk factors and the internal capital adequacy assessment of each bank to ensure that the capital held by a bank commensurate with the banks overall risk profit.
2. The R.B.I. will consider prescribing a higher level of minimum capital ratio for

each bank under the pillar 2 frame on the basis of their respective risk profits and risk management system.

3. Minimum Common Equity Tier 1 capital of 5.5% of RWAs banks are also required to maintain a Capital Conservation Buffer (CCB) of 2.5% of RWA in the form of common equity Tier – 1 capital. The implementation of capital ratios and CCB the capital requirements are summarized as below :

Regulator Capital	A% to RWAs
Minimum Common Equity Tier 1 Ratios	5.5
Capital conservation buffer (Comprised to Common Equity)	2.5
Minimum Common Equity Tier 1 Ratio plus Capital Conservation buffer [(I) +(II)]	8.0
Additional Tier 1 Capital	1.5
Minimum Tier 1 Capital Ratio [(I) +(IV)]	7.0
Tier 2 capital	2.0
Minimum Total Capital Ratio (MTC) [(V)+(VI)]	9.0
Minimum Total Capital Ratio plus capital conservation buffer [(VII)+(VIII)]	11.5

### Conclusion & Policy Implications

Basel III is the improvement in Basel II norms. Comparison of capital Requirements under Basel – II and Basel – III is being summarized as below:

Requirements	Under Basel–II	Under Basel–III
Minimum Ratio of Total Capital To RWAs	8%	10.50%
Minimum Ratio of common Equity to RWAs	2%	4.5% to 7.00%
Tier – 1 Capital to RWAs	4%	6%
Capital Conservation Buffers to RWAs	None	2.5%
Core Tier – 1 Capital to RWAs	2%	5%
Leverage Ratio	None	3%
Countercyclical Buffer	None	0% to 2.5%
Minimum Liquidity Coverage Ratio	None	TBD (2015)

Minimum Net Stable Funding Ratio	None	TBD (2018)
Systemically Improvement Financial Institutions Change	None	TBD (2011)

The net impact of implementation of Basel – III Accords norms will be on capital requirements of Indian Banks. Needs additional capital requirements of Rs 5 Lakh Crore, of which non-equity capital will be of the order of Rs. 3.25 Lakh Crore. While equity capital will be Rs. 1.75 Lakh Crore. According to RBI Governor that amount the market would have to provided would depend on how much of the recapitalization burden of Public Sector Banks, the government meet. The amount that market would have to provide would be in the range of Rs 70000 Crore to 1 Lakh Crore depending on how much the government would provide over the last five years banks had revised equity capital to the tune of Rs. 52,000 Crore through primary market. Raising an additional Rs 70,000 Crore to Rs 1 Lakh Crore over the next five years from the market should therefore not be an instrumental trouble. The major challenge the Indian banks face is the deteriorating quality of assets and reduced profitability. Dr. D. Subha Rao, Governor R.B.I. has rightly opined that effective implementation of Basel –III was going to make Indian banks, stronger more stable and sound that they could deliver value to the real sectors of the economy. By far, the most important reform is that there should be a radical change in banks approach to risk management. Banks in India are currently operating on the standardized approaches of Basel – II. Since Basel III is a Universal compulsion, Indian Banks have no choice but to prepare themselves for achieving this Herculean task of capital augmentation. The large scale banks needed to migrate to the advanced approaches especially as

the expend their overseas presence. The adoption of advanced approaches to risk management, would enable banks to manage their capital more efficiently and improve their profitability.

#### References:

S. Srinivasraghvan– Basel–III and it’s implications to Indian Banks – Introspection–Banks Quest July–September 2012 Page 11-12

BCBS – Basel – III : A global regulatory framework for more resilient banks and banking systems, December 2010

R.B.I. Master Circular D3OD No. BPBC 11/21-06-2001/ 2011-12, July 1, 2011 on “Prudential Guidelines on capital Adequacy and Market Discipline – New Capital Adequacy Framework (NCAF) – will remain unchanged under Basel – III Framework.

Basel – III – Issues and implications : K.P.M.G. International USA

Basel and Basel – II Compliance : issues for Banks in India – Sreejata Banarjee – Madras School of Economics – Gandhi Mandapam Road, Chennai – 600025, India, May 2013

BCBS BIS- History of Basel Committee and its membership

Hari Mishra : Basel II framework and India – Compliance v/s opportunity, Indian Bank Association, June 2004