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## Adoption of Basel I, II and III Norms by Indian Commercial Banks

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### Abstract

Risk and returns are core pillars of Financial System and Banking Industry. Due to basic business of lending & borrowing, banks have credit risk. Similarly due to treasury & investment operations, market risk is inevitable. Basel Norms were seen as blessing in overcoming said risks. Present study is undertaken with an objective of analyzing to what extent Indian Commercial Banks have adopted Basel Norms I, II and III. Almost all banks have adhered strictly to Basel I Norms. With respect to Basel II, all selected Nationalised and private banks have fared well. HSBC has maintained maximum tier I and tier II capital accounting to 17.38 in contrast to 10.26 of Allahabad bank, which is lowest.

**Keywords:** Commercial Banks, Basel Norms and CRAR

### Introduction

Banks by their very nature of their business attracts several types of risks, viz., credit risk, market risk, operational risk, reputational risk, business risk, strategic risk, systemic risk to cite a few. This is primarily due to the role defined to Banks in Banking Regulation Act, 1949 where Banks are given the role of accepting, for the purpose of lending or investment, of deposits of money from the public, repayable on demand or otherwise, and withdrawal by cheque, draft, order or otherwise, definition of 'banking company' as any company which transacts the business of banking in India. This is also called the process of intermediation.

The Basel Banking Accords are norms issued by the Basel Committee on Banking Supervision (BCBS), formed under the auspices of the Bank of International Settlements (BIS), located in Basel, Switzerland. The committee formulates guidelines and makes recommendations on best practices in the banking industry. The Committee formulates guidelines and provides recommendations on banking regulation based on capital risk, market risk and operational risk. The Committee was formed in response to the chaotic liquidation of Herstatt Bank, based in Cologne, Germany in 1974. The incident illustrated the presence of settlement risk in international finance. The Committee acts as a forum where regular cooperation between the member countries takes place regarding banking regulations and supervisory practices. The Committee aims at improving supervisory knowhow and the quality of banking supervision quality worldwide. Currently there are 27 member countries in the Committee since 2009. Apart from banking regulations and supervisory practices, the Committee also focuses on closing the gaps in international supervisory coverage.

In 1987, the Committee introduced capital measurement system which focused on the credit risk and risk-weighting of assets. This system is commonly known as the Basel Capital Accord or the Basel I norms as approved by the Governors of G-10 countries which were released to the banks in July 1988. The Committee, by the end of 1992, had implemented the minimum requirement ratio of capital to be fixed at 8 percent of risk-weighted assets not only in the G-10 countries but also other non-member countries with active international banks. Apart from focusing on the credit risk, the committee also issued *Market Risk Amendment to the capital accord* in January 1996 which came into effect at the end of 1997. The reason for such an amendment arose from banks' market risk exposures to foreign exchange, debt securities, equities, commodities and options. An important characteristic of this amendment was banks' convenience of measuring their market risk capital requirement with the help of internal value-at-risk models, which were subject to strict quantitative and qualitative standards.

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The Basel I Accord attempted to create a cushion against credit risk. The norm comprised of four pillars, namely Constituents of Capital, Risk Weighting, Target Standard Ratio, and Transitional and implementing arrangements. The Basel I Accord focused on reducing credit risk, prescribing a minimum capital risk adjusted ratio (CRAR) of 8percent of the risk weighted assets. Although it was originally meant for banks in G10 countries, more more than 100 countries claimed to adhere to it, and India began implementing the Basel I in April 1994. Basel I mainly incorporated credit risk in calculating the capital adequacy norms of banks. It recommended a bank’s regulatory capital at 8 per cent of its risk-weighted asset, where assets were risk-weighted according to their credit risk called ‘Capital to Risk-weighted Asset Ratio’ (CRAR). It defines a bank’s capital as two types: core (or tier I) capital comprising equity capital and disclosed reserves; and supplementary (or tier II) capital comprising items such as undisclosed reserves, revaluation reserves, general provisions/general loan-loss reserves, hybrid debt capital instruments and subordinated term debt. Under Basel I, at least 50 per cent of a bank’s capital base should consist of core capital. In order to calculate CRAR, the bank’s assets should be weighted by five categories of credit risk – 0, 10, 20, 50 and 100 per cent. Lesser is the risk lesser is the weight and vice versa (Table 1).

**Table1:** Asset Classes and Weights

Weight	Asset
0 percent	Cash held Claims on OECD central governments Claims on central governments in national currency
20 percent	Cash to be received Claims on OECD banks and regulated securities firms Claims on non-OECD banks below 1 year Claims on multilateral development banks Claims on foreign OECD public-sector entities
50 percent	Residential mortgage loans
100 percent	Claims on the private sector (corporate debt, equity, etc.) Claims on non-OECD banks above 1 year Real estate Plant and Equipment

**Source:** Basel Committee on Banking Supervision (2005), An Explanatory Note on the Basel II Internal Rating Based Risk Weight Functions, BIS, Bank for International Settlements.

Basel I is arguably the most successful of all recent financial standards (Powell 2002). In the 1990s, the rapid transformation in risk management techniques, exponential growth in use of information technology in the banking sector far outpaced Basel-I’s straightforward approach. So banks shifted their higher-risk loan portfolio to off-balance sheet accounts and yet remained compliant with the Accord. In 1996, an amendment was made to Basel I to incorporate market risk, in addition to credit risk, in the calculation of CRAR. To measure market risk, banks were given the choice of two options:

1. A standardized approach using a building block methodology
2. An ‘in-house’ approach allowing banks to develop their own proprietary models to calculate capital charge for market risk by using the notion of Value-at-Risk (VaR).

Despite the minimum requirement of 8 percent, many banks actually retain a capital higher than that as a buffer. The need for this arises from the inability to anticipate unexpected losses from deterioration of asset quality (Jackson, 1999).

**Basel II:** Eventually in 2004, the more sophisticated Basel II replaced the risk insensitive Basel I aiming at ensuring

capital allocation, credit risk, operational risk and market risk. Basel II: Basel II is a much more comprehensive framework of banking supervision. It not only deals with CRAR calculation, but has also got provisions for supervisory review and market discipline. Thus, Basel II stands on three pillars:

1. *Minimum regulatory capital (Pillar 1):* This is a revised and extensive framework for capital adequacy standards, where CRAR is calculated by incorporating credit, market and operational risks.
2. *Supervisory review (Pillar 2):* This provides key principles for supervisory review, risk management guidance and supervisory transparency and accountability.
3. *Market discipline (Pillar 3):* This pillar encourages market discipline by developing a set of disclosure requirements that will allow market participants to assess key pieces of information on risk exposure, risk assessment process and capital adequacy of a bank.

**Adoption and Implementation of Basel Norms by RBI:**

Recognizing the importance of Basel Norms and Narasimham Committee recommendations, RBI initiated reforming Indian banking Sector through adopting Basel I norms for Scheduled commercial Banks in 1992, and its implementation spread over the next three years. However, there is a ‘three track’ approach for Basel compliance – the commercial banks are Basel I compliant with respect to credit and market risks; the urban cooperative banks maintain capital for credit risk as per Basel I and market risk through surrogate charges; and the rural banks have capital adequacy norms that are not on par with the Basel norms (Leeladhar 2006, Reddy 2006). The three track approach is justified by the necessity to maintain varying degree of stringency across different types of banks in India reflecting different levels of operational complexity and risk appetite. The three track approach is also justified in order to ensure greater financial inclusion and for an efficient credit delivery mechanism (Reddy 2006).

It was stipulated that foreign banks operating in India should achieve a CRAR of 8 per cent by March 1993, while Indian banks with branches abroad should achieve the 8 per cent norm by March 1995. All other banks were to achieve a capital adequacy norm of 4 per cent by March 1993 and the 8 per cent norm by March 1996. In its mid-term review of Monetary and Credit Policy in October 1998, the Reserve Bank of India (RBI) raised the minimum regulatory CRAR requirement to 9 per cent, and banks were advised to achieve this 9 per cent CRAR level by March 31, 2000. Thus, the capital adequacy norm for India’s commercial banks is higher than the internationally accepted level of 8 per cent. The RBI announced in May 2004 that banks in India should examine the options available under Basel II for revised capital adequacy framework. In February 2005, RBI issued the first draft guidelines on Basel II implementations in which an initial target date for Basel II compliance was set for March 2007 for all commercial banks, excluding Local Area Banks (LABs) and Regional Rural Banks (RRBs). This deadline was, however, postponed to March 2008 for internationally active banks and March 2009 for domestic commercial banks in RBI’s mid-year policy announcement of October 30, 2006. The final RBI guidelines on Basel II implementation were released on April 27, 2007.

Studies found that Indian Banks have successfully adopted by Indian banks. However, Some of the banks have not fully adhered to Basel II Norms

and Basel III is already adopted in few banks following RBI guidelines. Present study would analyse how far Indian banks (by ownership) have adopted and adhered to Basel Norms would be analysed using Secondary data collected from Reserve Bank of India.

### Basel Norms III and Indian Commercial Banks

The impact of global financial crisis coupled with domestic policy paralysis has dented India's economic growth. In this regard implementation of Basel Norms has considerable impact on enhancing capital requirements of banks by rigorous monitoring. Drawing from Basel II framework Basel III aims to build robust capital base for banks and ensure liquidity and leverage ratios in order to weather away any banking crisis in the future and thereby ensure financial stability. Basel-III is a comprehensive set of reform measures to strengthen the regulation, supervision and risk management of the banking sector. These measures aim to:

- Improve the banking sector's ability to absorb shocks arising from financial and economic stress, whatever the source,
- Improve risk management and governance, and

- Strengthen banks' transparency and disclosures.

### The reforms target

- Bank-level, or micro-prudential regulation, which will help raise the resilience of individual banking institutions to periods of stress,
- Macro-prudential, system wide risks that can build up across the banking sector as well as the pro-cyclical amplification of these risks over time.

These two approaches to supervision are complementary as greater resilience at the individual bank level reduces the risk of system-wide shocks. The main requirements of Basel III are

- (i) Banks to maintain a minimum 5.5% in common equity (as against 3.6% now) by March 31, 2015.
- (ii) Banks must create a capital conservation buffer (consisting of common equity) of 2.5% by March 31, 2018.
- (iii) Banks should maintain a minimum overall capital adequacy ratio of 11.5% (against the current 9%) by March 31, 2018.

**Table 2:** Bank-Wise Capital Adequacy Ratio (CRAR) Of Scheduled Commercial Banks (as on March 31<sup>st</sup>, 2014)

Bank Name	Basel-I			Basel-II			Basel-III		
	Tier-I	Tier-II	Total	Tier-I	Tier-II	Total	Tier-I	Tier-II	Total
<b>SBI AND ITS ASSOCIATES</b>									
State Bank Of India	..	..	..	9.98	2.98	12.96	9.72	2.72	12.44
State Bank Of Hyderabad	..	..	..	..	..	..	9.32	2.68	12.00
State Bank Of Travancore	..	..	..	..	..	..	8.46	2.33	10.79
State Bank Of Bikaner & Jaipur	..	..	..	9.19	2.52	11.71	9.04	2.51	11.55
State Bank Of Mysore	..	..	..	8.81	2.69	11.50	8.65	2.43	11.08
<b>NATIONALISED BANKS</b>									
Allahabad Bank	..	..	..	7.67	2.59	10.26	7.51	2.45	9.96
Andhra Bank	..	..	..	8.25	2.93	11.18	8.09	2.69	10.78
Bank Of Baroda	..	..	..	9.54	3.33	12.87	9.28	3.00	12.28
Bank Of India	..	..	..	7.57	3.19	10.76	7.24	2.73	9.97
Canara Bank	..	..	..	8.00	3.14	11.14	7.68	2.95	10.63
Corporation Bank	..	..	..	8.37	3.84	12.21	8.14	3.51	11.65
Punjab National Bank	..	..	..	..	..	..	8.87	2.65	11.52
Syndicate Bank	..	..	..	8.99	3.02	12.01	8.68	2.73	11.41
Vijaya Bank	..	..	..	8.30	2.67	10.97	8.12	2.44	10.56
<b>PRIVATE SECTOR BANKS</b>									
Axis Bank	..	..	..	12.75	4.22	16.97	12.62	3.45	16.07
HDFC Bank	..	..	..	..	..	..	11.77	4.30	16.07
ICICI Bank	..	..	..	13.65	5.43	19.08	12.78	4.92	17.70
Karnataka Bank Ltd	..	..	..	10.82	2.48	13.30	10.73	2.47	13.20
<b>FOREIGN BANKS</b>									
Barclays Bank Plc	..	..	..	..	..	..	18.99	0.73	19.72
BNP Paribas	..	..	..	12.14	1.75	13.89	12.14	1.75	13.89
Citibank N.A.	..	..	..	13.38	1.00	14.38	15.35	1.14	16.49
DBS Bank Ltd.	..	..	..	..	..	..	11.77	2.04	13.81
Deutsche Bank Ag	..	..	..	..	..	..	14.23	0.61	14.84
HSBC	..	..	..	15.91	1.47	17.38	15.89	1.47	17.36
Standard Chartered Bank	..	..	..	..	..	..	10.52	1.96	12.48
State Bank Of Mauritius Ltd	..	..	..	..	..	..	38.45	1.02	39.47

Source: Reserve Bank of India

Table 2 shows how Indian banks have adhered to Basel norms by 31<sup>st</sup> March, 2015. Almost all banks have adhered strictly to Basel I Norms. With respect to Basel II, all selected Nationalised and private banks have fared well. HSBC has maintained maximum tier I and tier II capital accounting to 17.38 in contrast to 10.26 of Allahabad bank, which is lowest. Private and Foreign banks have injected funds and maintained higher level of Tier I & II capital compared to public sector banks including SBI Group.

Therefore public sector banks need huge capital to be infused although they have low risk advances and NPAs and strictly well capital requirements.

### Conclusion

The experience of two decades banking regulations based on Basel Accord is acknowledged for their making Indian Banks efficient and competitive on par with best banks of the world. Indian banks have complied *ipso facto* with CRAR of

above 9% to ensure a better safety cushion. In fact most of the banks have maintained their CAR at various levels over the years depending on the risk weight assigned to each type of loan. Since all the commercial banks in India have ensured a CAR which is above the minimum set by the regulator, they are in a position to comfortably withstand the shock arising from a possible emergency. Basel I and II are asset side regulations while Basel III is liabilities side regulation. As Indian Banks have successfully met Basel I & II norms, stage is set for Basel III. In recent government said that it will infuse Rs. 20,088 crores in public sector banks in 2015 and Rs. 70,000 crores in next four years. The study has found that all commercial banks held CRAR above 10% and above safety zone. With increasing globalization, liberalization, diversification and increasing global financial crisis banks have to be extra alert and contribute towards economic growth. Basel III provides foundation for strong financial foundation and it is both a challenge and an opportunity in redesigning risk management by acquiring additional new capital and reaping technology and knowledge benefits. Banks take this challenge and win stakeholders by strictly adhering to targets in stipulated time.

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