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Basel III:Implementation, Challenges for the Indian Banking Sector

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Abstract

Basel III framework represents an effort of BCBS (Basel Committee on Banking Supervision) to fix the gaps and lacunae in Basel II that came to the light during the 2008 crisis. It is aimed at improving the banking sector's ability to absorb the shocks arising from financial and economic stress,risk management and governance and strengthen bank's transparency and disclosures by eliminating the weaknesses which were present in Basel II that were revealed during the crisis. It is also designed to strengthen the resolution of systemically significant cross border banks. This article highlights the key elements of Basel III framework, its implementation timeline and challenges of Basel III for Indian Banks.

Keywords: Basel Accord, Framework, Resilient, Banks

Introduction

The Bank for International Settlements (BIS), an organization of Central Banks introduced an Accord popularly called Basel-I Accord in 1988 to strengthen the risk management practices among the banks across the member countries. The two important purposes of Basel-I were to ensure adequate level of capital for all the international banks, building societies and other deposit taking institutions also to create a more level playing field in competitive terms for them. The adoption of Basel I standards was seen by large investment banks as a sign of regulatory strength and financial stability in emerging markets. However Basel 1 Accord was criticized due to focus primarily on credit risk and its risk weighting system. It had a one size fits all approach and did not cover the operational risk.

With the rapid transformation in the nature of banking business the need for a more comprehensive capital adequacy accord was feltwhich led to the introduction of Basel II norms. Basel II Accord proposed in 1999 but released in 2004 and asper RBI banks;in India implemented Basel II norms in 2009, provided a sound framework for risk determination and

quantification of creditrisk, market risk and operational risk faced by banks (Roy G.D., Kohli B. & Khatkale. S, 2013). Basel II approach is based on three socalled pillars:

First Pillar: Minimum capital requirements for credit risk, market risk and operational risk.

Second Pillar: Supervisory review of financial institutions capital adequacy.

Third Pillar: Market discipline to enhance transparency and information disclosure.

Limitations of Basel II:

Although Basel IIwas acomplete regulation framework based on advanced risk management models,it failed to address certain problems which came up duringthe financial crisis of 2007-08. Itsrisk sensitivity made itblatantly procyclical. It did not impose the significant additional capital requirement on banks, though made the capital regulation more risk sensitive but corresponding changes was not brought in definition and composition of regulatory capital to reflect the changing market dynamics. Basel II was apparently risk sensitive; it did not promote modeling frameworks for accurate measurement of risk and also failed to demand sufficient loss absorbing capital to mitigate that risk (Roy G. D., Kohli B. & Khatkale. S, 2013). Basel II did not have precise regulation governing leverage similarly it did not precisely cover liquidity risk which became the major causes of crisis. Also it focused exclusively on individual financial institutions ignoring the systemic risk arising from interconnectedness across institutions.

Basel III

The Basel III framework on strengthening the global capital framework and new regulatory requirements onbank liquidity and leverage was proposed in December 2010.This new Accord Basel III hasbeen termed asasetof new standards to gear up the international banks to overcome the crisis in a troubled condition by infusing extra capital and reserves during good times (Cha.bane!E.P., 2011). It is aimed to enhance the individual banking institutions ability to deal with financial and economic stress, risk management and strengthen the transparency and disclosures. Basel III norms consist of:

Pillar I-Enhanced Minimum Capital & Liquidity Requirements

Pillar 11- Enhanced Supervisory Review Process for Firm-wide Risk Management and Capital Planning

Pillar III-Enhanced Risk Disclosure & Market Discipline.

Table-1
The Basel III reform programme- implementation:
Enhanced Basel II + Macro prudential Overlay = Basel III

Micro prudential Framework (Enhanced Basel II)	MllCl'O prudential Framework
Increase quality and quantity of capital	**Address stability over time (procylicality)**
Adequate risk coverage (for trading book, counterparty credit risk, securitization	**Countercyclical capital charges** **Capital Conservation Buffer** **Dynamic Provisioning**
Enhanced risk management and disclosure	**Address stability at each point in time (system wide approach)**
Global liquidity standards	**Specific treatment for systemically important banks : systemic capital charge**
	Levera Ratio

Source: www.bis.org

Key Elements of Basel III Framework

For a strong and resilient banking system Basel Committee has introduced Basel III framework. The key elements of this framework are as follows:

- Increased Capital Requirements:

  Under Basel II the banks had to maintain 8% capital to Risk Weighted Assets out of which 4.5% was to be kept as Tier-1 capital and minimum 3.5% to be kept in equity. The required ratio of Common Equity Tier 1 capital to risk-weighted assets has been increased from 2% to 4.5% of RWA's under Basel III (Balasubramaniam C.S., 2013). The overall Tier- 1 capital requirements comprising of common equity and other qualifying financial instruments will increase from 4% to 6%. Although the minimum capital requirements will remain at the current 8% level, the total capital requirements will increase to 10.5% when it will combined with conservation buffer. Capital instruments that do not meet the norms for inclusion in common equity Tier 1 will be excluded from common equity Tier 1 as of 1 Jan, 2013. Instruments fulfilling these essentials will be phased out over the same horizon period provided:

- They are issued by Joint Stock Company.
- They are treated as equity under the prevailing accounting standards.
- They receive the unlimited recognition as part of Tier 1 capital under current banking law.

These new capital requirements will be progressively phased in between 1 January 2013 and 1 January 2015. Under Basel III the Tier-1 Capital requirement has been raised from 4 percent to 6 percent and the core Tier-1 capital (which includes only common equity component) has been increased from 2 percent to 4.5 percent. Difference of 2 percent between the total capital requirements can be met with Tier 2 capital.

- **Leverage Ratio**

To restrain the building of excessive on and off balance sheet leverage in banking system Basel III introduces a non-risk based leverage ratio (Lyngen N., 2012). The purpose of this ratio is to put a cap on excessive leverage in banking sector on global basis. This ratio aims to achieve the following objectives:

- To avoid destabilizing, deleveraging processes which can harm the financial system and the economy.
- To reinforce the risk based requirements with a simple, non-risk based "backstop" measure.

At this time 3% leverage ratio of Tier 1 is proposed which will be tested before a mandatory leverage ratio is introduced in 2018.

$$\text{Leverage ratio} = \frac{\text{Tier 1 Capital}}{\text{Total Exposure}} > 3\%$$

- **Global liquidity standards:**

The Basel committee has introduced two international minimum standards for liquidity risk supervision with the purpose of ensuring that banks have an adequate liquidity buffer to absorb liquidity shocks:

(i) Liquidity Coverage Ratio:

This is a test to promote short term resilience of the bank's liquidity risk profile by making it ensure that it has sufficient high-quality liquid assets to survive a significant stress scenario lasting for 30 days.

$$LCR = \frac{\text{High quality liquid assets}}{\text{Total net liquidity outflows Over a 30 day time period}} \geq 100\%$$

(ii) Net Stable Funding Ratio

The NFSR requires that long term assets should be funded with at least a minimum amount of stable liabilities in relation to their liquidity risk profiles (Schwerter S., 2011). The NSFR aims to encourage better assessment of liquidity risk across all on- and off-balancesheet items.

$$NFSR = \frac{\text{Available stable funding}}{\text{Required stable funding}} \geq 100\%$$

Available sable funding instruments consist of Tier 1& 2 capital instruments,preferred stock in excess of Tier 2 with maturity of :i!:one year (100%), stable deposits of retail (non-maturity) and small business customers (85%), less stable deposits of retail and small business customers (70%), wholesale funding(50%), all other liabilities and equity (100%). The required stable funding for assets and off balance sheet exposures consist of cash,loan to financial firms < 1year (0%), debt issued or guaranteed by sovereigns,central banks, BIS,IMF,EC etc (5%) ,unencumbered non-financial senior unsecured corporate bonds AA or higher :.!: 1year (20%) ,unencumbered listed equity securities A- or higher <!: 1year, gold, Loans to non financial corporate clients< 1year(50%), loans to retail clients< 1year (85%), all other assets (100%), undrawn amount of committed credit and liquidity facilities (10%).

- **Capital Conservation Buffer:**

  Basel III has introduced a capital conservation buffer 2.5% of risk weighted assets. The aim to build his buffer is to bring total common equity standard to 7% and intends to be available to be drawn down during periods of economic and financial stress. This buffer in the form of common equity will be phased in over a period of four years in a uniform manner of 0.625% per year commencing from January 1 2016, becoming fully effective on 1January 2019.

- **Countercyclical buffer:**

  A separate counter-cyclical buffer has been introduced to ensure that bank's capital requirements take account of macro-economic environment in which bank's operate. The buffer will range between 0 to 2.5% of a bank's risk weighted assets. The major objective of this buffer is to achieve the broader macro prudential goal of protecting

the banking system from the excessive credit growth stemming from boom- bust evolution resulting in aggravation of system wide risk. (Chabanel E. P,2011). This buffer will be required during periods of excessive credit growth and it will be released in an economic downturn.

- Counterparty Credit Risk:

Basel III enhances the Counterparty credit risk capital framework in market risk instruments to ensure that banking institutions hold sufficient capital against losses associated with the risk of default or variation in the credit quality of counterparties (King P. & Tarbert H., 2011). For determining the default risk capital charge for counterparty credit risk banks must use the greater of the portfolio level capital charge based on effective EPE using stressed variables. Also the banks have to add a capital charge to cover the risk of mark- to- market losses on the expected counterparty risk (such losses known as credit value adjustments, CVA) to OTC derivatives.

Basel III implementation Timeline

Since Basel III introduces critical buffers and significant capital outlays, guidelines of Basel III are to be implemented in phases from January 2013 through 2018 globally. The Reserve Bank of India has rescheduled the start date for implementation of Basel III to 1 April 2013 from 1 January 2013. This will give the additional time to some banks to enhance their capital base in line with the new norms for strengthening the resilience of the global banking system.

Impacts of Basel III Guidelines

Implementation of Basel III may result in higher borrowing from government, fiscal deficit, inflation and pressure on GDP. Banks with low profitability margin will be affected most as they will require more capital as conversion from profit to capital will be less (Aathira.K & Shanthi. R, 2013). Increased capital requirements, increased funding and to deal with regulatory reforms will put pressure on margins and operating capacity. Investor returns will decrease at a time when firms need to raise investment to rebuild and restore buffers. The introduction of two liquidity ratios will likely drive firms away from sourcing shorter-term funding arrangements and more towards longer-term funding arrangements with the impact on pricing and margins. The enhanced capital and liquidity buffers would reduce the risk of individual bank failures and reduce interconnectivity between banking institutions. Significant increase in capital and liquidity requirements may lead to reduction in capacity for banking activity. Investors may be less attracted by bank debt and equity also ROE and profitability of banks will decrease significantly Oayadev.M, 2013).

Table 2
Phase- in Arrangements

	2011	2012	2013	2014	2015	2016	2017	2018	As on 1 Jan2019
Leverage Ratio	Supervisc>ry manllorlng		Parallel run 1Jan2013 -1Jan 2017 D!sclosureS!arb 1Jan2015					Mlgmli on ID Pillar 1	
Minimum Common Equity C&p!talRatio			3.5%	4.0%	4.5%	4.5%	4.5%	4.5%	4.5%
C&p!tal Conservation Buffer						0.625	1.25%	1.875%	2.50%
MINmwn commonequity pluscapital conoervalion buffer			3.5%	4.0%	4.5%	5.125	5.75%	6.375%	7.0%
Phase - inof deductionfrom CET1 (including amounts exceedingthe llmltfmDTAs. MSRa andfinmciala)				20%	40%	60%	80%	100%	100%
Minimum Tier 1Capital			4.5%	5.5%	6.0%	6.0%	6.0%	6.0%	6.0%
MINmwn Total C&p!tal			8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%
Minimum Total plus ronservatiDn buffer			8.0%	8.0%	8.0%	8.625	9.125%	9.875%	10.5%
Cap!tal lnstrumen13 that "" longerqualify asnon-<:0re Tier 1capital or Tier 2cap!tal			Phasedout over 10year horiz.onbeginning 2013						
Uquldlty coverageratio	Oboervali onperiod begins				Inirod uce minim um 8landa rd				
Net stable funding ratio		valion Obser period					Introduce minimum standard		

Source: Bank for International Settlements-http://www.bis.org/bcbs/basel3.htm

Challenges of Basel III for Indian Banks

Basel IIInorms which will come into effect this April are likely to increase pressure on Indian banks to raise capital and can lead to some changes in bankingindustry. Someof the keychallengesare as follows:

- According to Crisil Indian banks will need to raise Rs 2.7lakh crore by March 2018 to meet Tier 1capital requirements under Basel III capital guidelines which mandates tier-1capital of 8% for all the banks.

1. Of these banks will be required to raise 1.3 lakh crore as equity Tier-I Capital and up to Rs 1.4 lakh crore as non-equity Tier-I Capital, raising the non-equity Tier 1capital will be challenging as these instruments will carry higher risk than those under Basel II (Balasubramaniam C.S,2013).

- The biggest challenge for Indian banking sector is the state of Indian public finances. The Government large fiscal deficit will limit its ability to inject capital into government-owned banks as presently the capital adequacy of public sector banks is less than the private and foreign banks operating in India.
- Every bank has to invest lot of time, manpower and energy in the implementations of Basel III.
- The techniques and methods provided inthe new accord would also pose considerable challenges for the banks in a developing country like India some of them areasfollows:
  - Implementation of the new framework will require substantial resources and commitment onboth banks and supervisors.
  - For successful implementation of Basel III banks will need to improve their data quality.
  - *As* Basel III has enhanced the capital and liquidity requirements so banks needs to find the innovative ways to reduce the Risk Weighted Assets (RWA).

Capital Adequacy status of Public Sector and Private Sector Banks

Since capital adequacy requirement of banks in India are revised by the RBI to tune with new Basel – III norms. Both public and private sector banks have to comply with the new requirements that come into force from March 2013 onwards. The following Table 3 and 4 presents the capital adequacy ratio of Public Sector and Private Sector Banks as on 31 March 2012.

The capital adequacy position of public and private sector banks with regard to their Tier I and Tier II capital has been presented in the above table. The existing Capital Adequacy Norm applicable for public as well as private sector banks is 9% which includes minimum 6% under Tier- I Capital and balance in Tier-II category. Most of the private sector banks have maintained a healthy Tier I capital structure more than 9% but it is not the same in public sector banks. The Central Bank of India (7.79%), UCO Bank (8.09%), Bank of Maharashtra (8.13%), Corporation Bank (8.33%), and Indian Overseas Bank (8.35%) are some of the public sector banks whose Tier I Capital is less than 9%. Bank of Baroda (14.67%), IDBI Bank Ltd (14.58%), Indian Bank (14.37%) have recorded a very good CRAR position in case of public sector banks and Ratnakar Bank (22.83%), Federal Bank

Table-3
Capital Adequacy of Public Sector Banks

S.no	Hanle Name	Tier I Capital	Tier II Capital	Capital Adequacy Ratio as per Basel II
	SBI and is associates			
1.	State Bank of India	9.79	4.07	13.86
2.	State Bank of Bikaner and Jaipur	9.76	4.00	13.76
3.	State Bank of Hyderabad and Jaipur	9.62	3.9	13.56
4.	State Bank of Mysore	9.18	3.37	12.55
5.	State Bank of Patiala	8.60	3.70	12.30
6.	State Bank of Travancore	9.35	4.20	13.55
7.	Allahabad Bank	9.13	3.70	12.83
8.	Andhra Bank	9.03	4.13	13.18
9.	Bank Of Baroda	10.83	3.84	14.67
10.	Bank of India	8.59	3.36	11.95
11.	Bank of Maharashtra	8.13	4.12	12.43
12.	Canara Bank	10.35	3.41	13.76
13.	Central Bank of India	7.79	4.61	12.40
14.	Corporation Bank	8.33	4.67	13.00
15.	Dena Bank	8.86	2.65	11.51
16.	IDBI Bank Ld	8.38	6.20	14.58
17.	Indian Bank	11.13	2.34	14.37
18.	Indian Overseas Bank	8.35	4.97	13.32
19.	Oriental Bank of Commerce	10.12	2.57	12.69
20.	Punjab and Sind Bank	8.55	4.71	13.26
21.	Punjab National Bank	9.28	3.35	12.63
22.	Syndicate Bank	8.94	3.30	12.24
23.	UCO Bank	8.09	4.26	12.35
24.	Union Bank of India	8.37	3.48	11.85
25.	United Bank of India	8.79	3.90	12.69
26.	Vijaya Bank	9.68	3.38	13.06
	Old Private Sector Banks			
27.	Catholic Syrian Bank	8.83	2.25	11.08
28.	City Union Bank	11.69	0.88	12.57

Source: Annual accounts of Banks-http://www.rbi.org.in

Table-4
Capital Adequacy of Private Sector Banks

S.No	Private Sedor Banks	Tier1 Capital	Tier II Capital	Capital Adequacy Ratio as per Basel II
1.	Dhanlaxmi Bank	7.42	2.07	9.49
2.	Federal Bank	15.86	0.78	16.64
3.	ING Vysya Bank	11.23	2.'77	14.00
4.	Jammu and Kashmir Bank	11.12	2.24	13.36
5.	Kamataka Bank	10.86	1.98	12.24
6.	Karur Vysya Bank	13.12	1.21	14.33
7.	Lakshmi Vilas Bank	8.86	4.24	13.10
8.	Nainital Bank	14.62	0.47	15.09
9.	Ratnakax Bank	22.83	0.37	23.20
10.	SBI Comm. & Intl. Bank			
11.	South Indian Bank	11.54	2.46	14.00
12.	Tamilnad Mercantile Bank	13.98	0.71	14.69
	New Private Sector Banks			
13.	Axis Bank	9.45	4.21	13.66
14.	Development Cedi Bank	13.81	1.60	15.41
15.	HDC Bank	11.60	4.92	16.52
16.	ICICI Bank	12.68	5.84	18.52
17.	Induslnd Bank	11.37	2.48	13.85
18.	Kotak Mahindra Bank	15.74	1.78	17.52
19.	Yes Bank	9.90	8.00	17.90

Source: Annual accounts of Banks- http//www.rbi.org.in

(15.86%), Kotak Mahindra Bank (15.74%) incase of private sector banks. Some Indian banks have already met the minimum capital requirements of Basel III at an aggregate level even though some individual banks may have to top up in terms of capital adequacy ratio.

According to RBI banks have to maintain a Minimum Total Capital of 9% against 8% of RWA's of which common equity Tier I Capital must be atleast 5.5% of RWA's.

(Roy G. D, Kohli B. & Khatkale S. 2013). The total Tier- I Capital has been raised to 7% from 6% under Basel III. For the implementation of Basel III the government will meet some of the recapitalization burden of the PSB's to fulfill the additional capital requirements. Moreover the Cash Reserve Ratio (C.R.R), Statutory Liquidity Ratio (S.L.R) and Liquidity Adjushnent Facilities (L.A.R) provided by RBI to ensure liquidity in banking system. It

has also enforced certam disclosures to be made by banks for ensuring marketdiscipline:

- If capital funds > 500 crorebanks have to update Tier capital and total capital adequacy ratios ontheir websites quarterly.
- They have to enunciate their top five measures to control liquidity risks.
- Concentration risks: Banks have to disclose deposits from top twenty largestdepositors.

Conclusions

In nutshell we can say that Basel III is a global regulatory standard on bank capital adequacy, stress testing and market liquidity risk. Basel III are a new set of banking rules developed by the Basel Committee on Banking Supervision with an objective to strengthen the regulation, supervision and risk management of the banking sector. Basel III guidelines are aimed to enhance the ability of banks to face the periods of economic and financial stress and strengthen the global capital and liquidity regulations with the objective of promoting a more resilient banking sector. The Basel III which is to be implemented by banks in India as per the guidelines issued by RBI will be a challenging task not only for the banks but also for the Government of India. It is estimated that Indian banks will be required to raise Rs 6, 00,000 crores in external capital by 2020. Expansion of capital to this extent will affect the returns on the equity of these banks specially the public sector banks. Banks around the world must alter their business models to varying degrees in order to thrive under Basel III.

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