BASEL III NORMS AND INDIAN BANKING: ASSESSMENT AND EMERGING CHALLENGES

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ABSTRACT

Banking operations worldwide have undergone phenomenal changes in the last two decades since 1990s. Financial liberalization and technological innovations have created new and complex financial instruments/products have increased their role and turnover in financial markets and have rendered banking operations vulnerable to a variety of risks. The financial crisis episodes surfaced since 2006 have highlighted this paradox to a number of central banks operating in different countries and RBI and Indian banking sector is no exception to this phenomenon. Basel framework has been drawn by Bank for International Settlements (BIS) in consultation with supervisory authorities of banking sector in fifteen emerging market countries with the basic objective of advocating codes of bank supervision and promoting financial stability amidst economic crises.

This research paper is divided in three parts .The opening part attempts to briefly describe the changes in the banking scenario since 1991 reforms and the necessity of introducing Basel III to the Indian Banking sector. Part II presents the Basel standards framework and explains why the transition from Basel II to Basel III norms has become necessary to bring in measures and safety standards which would equip the banks to become more resilient during the financial crises and prevent the banks being subject to liquidations /closures. Part III brings out a discussion on the compliance process by the Indian banks to Basel standards in recent period and finally, the issues and challenges faced by the Indian Banking sector are posed in the conclusion.

Keywords: Basel III guidelines, New Capital Adequacy requirement, Regulatory Capital, Macro financial stability, Compliance process, Risk Management in banks

INTRODUCTION

Brief scenario of changes since the banking sector reforms

The foundation for banking sector growth and resilience was laid with the introduction of the financial sector reforms as early as 1991, when M.Narasimham made the path breaking recommendations with focus on increased competition and prudential regulations. These

reforms resulted in comprehensive transformation of the banking sector in the economy. The reforms had a major impact on the overall efficiency and stability of the banking system. The outreach of banks increased in terms of branch /ATM presence geographically across the country and segments of the population. The balance sheets and the overall banking activities combined with financial and investment banking services grew in size and scope. The financial performance and efficiency of Indian banks improved dramatically with increased competition between public sector banks and new generation technology oriented private banks. This could be observed in the profitability, net interest margins, return on assets (ROA) and return on equities. (ROE) The capital position improved significantly and the banks were able to bring down their non performing assets (NPA) sharply. This reform phase also revealed increased use of technology which in turn helped improve customer service.

While financial stability is not explicitly stated objective under the Reserve Bank Act 1934, various measures were undertaken from time to time to strengthen the financial stability in the system which covered a wide arena. The approach has evolved from past experiences and a constant interaction between the micro level supervisory processes and macroeconomic assessments. In the Indian context, the multiple indicator approach to monetary policy as well as prudent financial sector management together with a synergetic approach though close Coordination between RBI and other financial sector regulators has ensured financial stability. Some of the other policy measures include capital account management, management of systemic interconnectedness, strengthening the prudential framework, initiatives for improving and broadening the financial marketing infrastructure and a host of other measures. Systemic issues arising out of interconnectedness among banks and between banks and non banking financial companies (NBFCs) and from common exposures were addressed by prudential limits on aggregate interbank liabilities as a proportion of banks' net worth, restricting access to uncollateralized funding market to banks and primary dealers with caps on both borrowing and lending, increasingly subjecting NBFCs to contain regulatory arbitrage. The other noticeable aspect regarding policy measures has been the innovative use of countercyclical policies to address the pro-cyclicality issues. The counter cyclical policies were introduced as early as 2004 by using time varying sectoral risk weights and provisioning, though RBI had used them sporadically even earlier. These unconventional measures taken in response to emerging risks are now widely acknowledged to have played a significant role in protecting the Indian Financial system from key vulnerabilities.

Basel standards Framework

Generally, the adoption of Basel standards is to be viewed in the context of regulatory approach to bank supervision by the central bank of the country and the incentives system for the banks to improve their risk measurement procedures. It also takes cognizance of the fact that the new technological innovations in information technology have revolutionized the banking operations and the market practices have altered substantially since the introductory period of Basel standards .Consequently, Basel standards envisage a change in the oversight function of the central bank as a regulatory body over the commercial banks operating in the country and the capital adequacy requirements of the banks.

Rapid transformation of financial system around the globe has brought sweeping changes in the banking sector across the countries. Though new avenues and opportunities have been opened up for augmenting the revenue generation for banks, yet new processes and technological progress has exposed the banks to higher risk. Therefore, the need was felt for strengthening the soundness and stability of banks and to protect the depositors and the financial system from disastrous developments which could threaten the banks solvency. Basel Committee on Banking Supervision (BCBS) under the auspices of Bank for International Settlements (BIS) took initiative putting in place adequate safeguards against bank failure with central banks across the globe.

The first initiative from BIS can be identified with Basel I Accord with over 100 central banks in different countries accepting the framework stipulated by agreement. The accord provided a framework for fair and reasonable degree of consistency in the capital standards in different countries, on a shared definition of capital. Although these standards were not legally binding, they have made substantial and significant impact on banking supervision in general, and bank capital provisioning and adequacy in particular. However, Basel I comprised of some rigidities, as it did not discriminate between different levels of risks. As a result, a loan to an established corporate borrower was considered as risky as a loan to a new business. .So all loans given to corporate borrowers were subject to the same capital requirements, without taking into account the ability of the counterparties to repay. It also did not take cognizance of the credit rating, credit history and corporate governance structure of all corporate borrowers. Moreover, it did not adequately address the risk involved in increasing the use of financial innovations like securitization of assets and derivatives and credit risk inherent in these developments. The important category of risk i.e., operational risk also was not given the attention it deserved.

Basel II-The New Capital Adequacy Framework

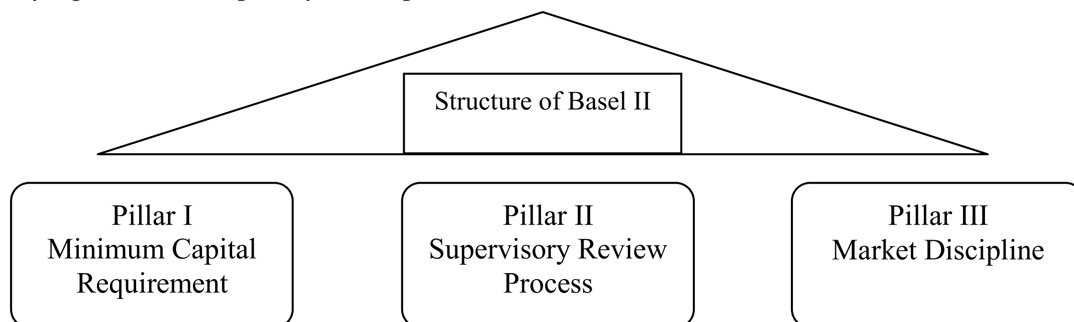
Recognizing the need for a more comprehensive, broad based and flexible framework , Basel committee proposed an improved version in 1999, which provides for better alignment of regulatory capital with underlying risk and also addresses the risk arising from financial innovation thereby contributing to enhanced risk management and control. This sophisticated and superior framework was formally endorsed by central bank governors and heads of banking supervisory authorities of various countries on June 26, 2004 under the name "International Convergence of Capital Measurement and Capital Standards "popularly known as Basel II or New Basel Capital Accord. This new set of international standards requires banks to maintain minimum level of capital, to ensure that they can meet their obligations, cover unexpected losses and improve public confidence. Basel II captures the risk on a consolidated basis for internationally active banks and attempts to ensure that capital recognized, set aside in capital adequacy measures and provide adequate protection to depositors. It brings into focus the contemporary risk management techniques and seeks to establish a more risk responsive linkage between the bank operations and their capital requirements. It also provides strong incentive to banks to upgrade their risk management standards. The accord is a cornerstone of the current international financial architecture. Its overriding goal is to promote safety and soundness in the international financial system. The provisioning of adequate capital cushion is central to this goal and the committee ensures that new framework maintains the overall level of capital currently in the banking system.

The advocates of Basel II believe that creating such an international standard can help to protect the international financial system from various types of financial and operational risks that banks may encounter. It also attempts to set up such rigorous risk and capital management requirements to ensure that banks hold sufficient capital reserves appropriate to the risk the bank exposes itself through its lending and investment activities.

The objectives of the new Basel accord as enunciated by BIS are fivefold:

1. Promoting safety and soundness of financial system
2. Enhance competitive equality
3. Greater sensitivity to the degree of risk involved in banking positions ,activities
4. Constitute a more comprehensive approach to addressing risk and

Focus on internationally active banks, with capability of being applicable the banks with varying level of complexity and supervision.



The structure of Basel II framework has its foundation on three mutually reinforcing pillars (as shown in the above diagram) that allow banks and bank supervisors to evaluate properly the various risks that banks face and realign regulatory capital more closely with inherent risks . These three pillars are discussed as under:

Pillar I: Minimum Capital requirement

The first pillar of Basel II deals with maintenance of regulatory capital, i.e. minimum capital required by banks as per their risk profile. As in Basel I, Basel II also has same provisions relating to regulatory capital requirements i.e. 8 % Capital Adequacy Ratio (CAR). CAR under Basel II is the ratio of Regulatory Capital to risk weighted assets which signifies the amount of regulatory capital to be maintained by banks to guard against various risks inherent in banking system.

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

The risks covered under CAR in Basel II are credit risk, market risk and operational risk .Pillar I focuses on new approaches for calculating minimum capital requirements under credit risk, market risk and operational risk vary from simple to sophisticated and allow bank supervisors to choose an approach that seems most appropriate according to their risk profile, activities and internal control.

Pillar II: Supervisory Review

The Second Pillar of Basel II provides key principles for supervisory review, risk management guidance and supervisory transparency and accountability as under:

- Banks should have a process for assessing their overall capital adequacy in relation to their risk profile and a strategy for maintaining their capital levels.
- Supervisors should review and evaluate banks' internal capital adequacy assessments and strategies, as well as their ability to monitor and ensure their compliance with regulatory capital ratios and should take appropriate action if they are not satisfied with the result of this process.
- Supervisors should expect banks to operate above the minimum regulatory capital ratios.
- Supervisors should intervene at an early stage to prevent capital from declining below benchmark level.

Pillar II cast responsibility on the supervisors to exercise best ways to manage the risks specific to that bank and also to review and validate banks risk measurement modes.

All the supervisors should evaluate the activities and risk profiles of individual banks to determine whether those organizations should hold higher levels of capital than the minimum requirements and to see whether is any need for remedial action to ensure that each financial institution adopts effective internal processing for risk management.

Pillar III: Market Discipline

The objective of Pillar III is to improve market discipline through effective public disclosure to complement requirements under Pillar I and Pillar II. Pillar III relates to periodical disclosures to regulators, board of bank and market about various parameters which indicate risk profile of the bank. It introduces substantial new public disclosure requirements and allows market participants to analyze key pieces of information on the scope of application, risk exposures, risk assessment and management processes and hence the capital adequacy of the institution. The disclosures provided under Pillar III must fulfill the criteria of comprehensiveness, relevance, timeliness, reliability, comparability and materiality of disclosure to enable the interested parties to make informed decision about the bank.

The Three pillars of Basel II framework provides a kind of "triple protection " by encompassing three complementary approaches that work together towards ensuring the capital adequacy of institutional practices prevalent in the banks .Taken individually each pillar has its merits ,but they are even more efficient when they are synergized in a common framework.

Transition from Basel II to Basel III in a global perspective

Basel III is the regulatory response to the causes and consequences of global financial crisis. From the macroeconomic perspective, the global financial crisis has been attributed to the persistence of global imbalances. It is often said that the solution to a previous crisis becomes the cause for the next crisis. The previous crisis was the Asian crisis of 1997-98 and one of the important lessons learnt by Asian countries was to build a war chest of foreign

exchange reserves to fight against the attack of the country's currency. Therefore ,Asia and in particular ,China and some other emerging economies produced goods at a cheaper rate and pursued a policy of export- led growth and accumulated huge foreign exchange reserves. As a corollary, the USA and Europe consumed that produce and became net importers .The foreign exchange reserves accumulated by Asian and other emerging economies were necessarily to be invested in advanced economies which have deep markets. The huge amount of capital that flowed from the emerging economies, depressed yields in the financial markets of advanced economies. In the 'search of yield' to improve returns on investment market players indulged in financial innovation and engineering. They developed structured financial products like securitization and re-securitization based on sub-prime mortgage backed securities (MBS), collateralized debt obligations (CDOs) and CDO squared etc. Credit default swaps (CDS) were also used to create synthetic structures which increased their illiquidity and complexity. Without realizing the inherent risks created by these features, securitizations continued to grow leaps and bounds leading to the spiraling of sub-prime lending with impending disastrous consequences.

At the micro level, the business models of banks and financial institutions also were causal to the crisis. The over reliance on financial innovation /securitization type instruments did not create any incentive for banks to better appraisal and supervision of such mortgages. Their reliance on wholesale funding markets created gaps in liquidity risk management. Short term funds were used for creating long term assets. The availability of plenty and cheap funds encouraged banks to be highly leveraged, that too, by borrowing short term funds. The crisis has also been attributed to the inadequate corporate governance and inappropriate compensation system for senior management in the banks.

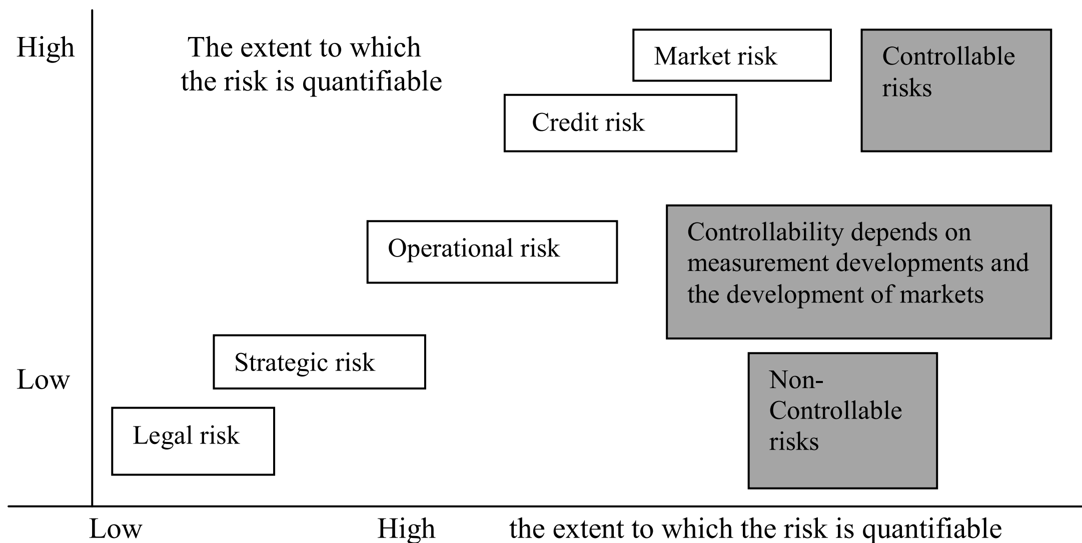
Basel III : Post crisis, the global initiatives to strengthen the financial regulatory system are driven by the leadership of G 20 under the auspices of Financial Stability Board (FSB) and the Basel Committee on Banking Supervision (BCBS) .Immediately after the crisis, the Basel Committee , in July 2009 came out with certain measures also called enhancement to Basel II or Basel II.5 to plug the loopholes in its capital rules ,which were exploited to arbitrage capital by parking certain banking book positions in the trading book which required less capital . The Basel committee published its Basel III rules in December 2010. Learning the lessons from the crisis, the objectives of Basel III have been to minimize the probability of recurrence of a crisis of such magnitude. Towards this end, the Basel III has set its objectives to improve the shock absorbing capacity of each and every individual bank as the first order of defence and in the worst case scenario, if it is inevitable that one or a few banks to fail . Basel III has measures to ensure that the banking system as a whole does not crumble and its spill-over impact on the real economy is minimized. Basel III has in effect, some micro –prudential elements so that risk is contained in each individual institution and macro prudential overlay that will 'lean against the wind 'to take care of issues relating to the systemic crisis. The Basel III framework sets out higher and better quality capital, enhanced risk coverage, the introduction of a leverage ratio as a back-stop to the risk-based requirement, measures to promote the buildup of capital that can be drawn down in times of stress and the introduction of compliance to global liquidity standards. The following charts explain the various components of Basel III:

Chart 1: The macrofinancial stability framework
Macroeconomic policies
Prudential policies
Enforcement and monitoring
Monetary policy
• More symmetrical response
• Consider financial stability in setting monetary policy
Fiscal policy
• Sustainable fiscal positions
• Fiscal policy and credit cycles
Other policy areas
Consumer protection
Financial infrastructure
Macroprudential
• Reduce common exposures and interconnectedness
• Mitigate procyclicality
Microprudential
• Improve risk capture
• Strengthen capital and liquidity buffers
• Enhance transparency
Financial system stability
Risk-taking of institutions
Riskiness of instruments
Resilience of institutions, markets and infrastructure
Proactive supervision
• Pillar II
• Supervisory intensity and effectiveness
Market discipline
• Prevent moral hazard
• Transparency
• Accounting rules
• Market integrity
Monitoring systemic risks
• Macroprudential authorities
• Financial stability reports
Bank resolution
• Bankruptcy regimes
• "Living wills"
• Key attributes of effective resolution regimes
International cooperation
• G20
• Other standard setters
• BCBS capital surcharges
• FSB work on procyclicality
• BCBS capital and liquidity standards
• FSB/IMF Early Warnings Exercise
• FSB peer reviews
• Cross-border resolution

Chart 2: The Basel III reform programme – implementation
Enhanced Basel II + Macroprudential overlay = Basel III
Microprudential framework (Enhanced Basel II):
• Increase quantity and quality of capital
• Adequate risk coverage (for trading book, counterparty credit risk, securitisation)
• Enhanced risk management and disclosure
• Global liquidity standards
Macroprudential framework:
• Address stability over time (procyclicality)
• Countercyclical capital charges
• Capital conservation rules for stronger capital buffers
• Dynamic provisioning
• Address stability at each point in time (system-wide approach)
• Specific treatment for systemically important banks: systemic capital charge
• Leverage ratio

Chart 3: Implementation: from Basel II to Basel III

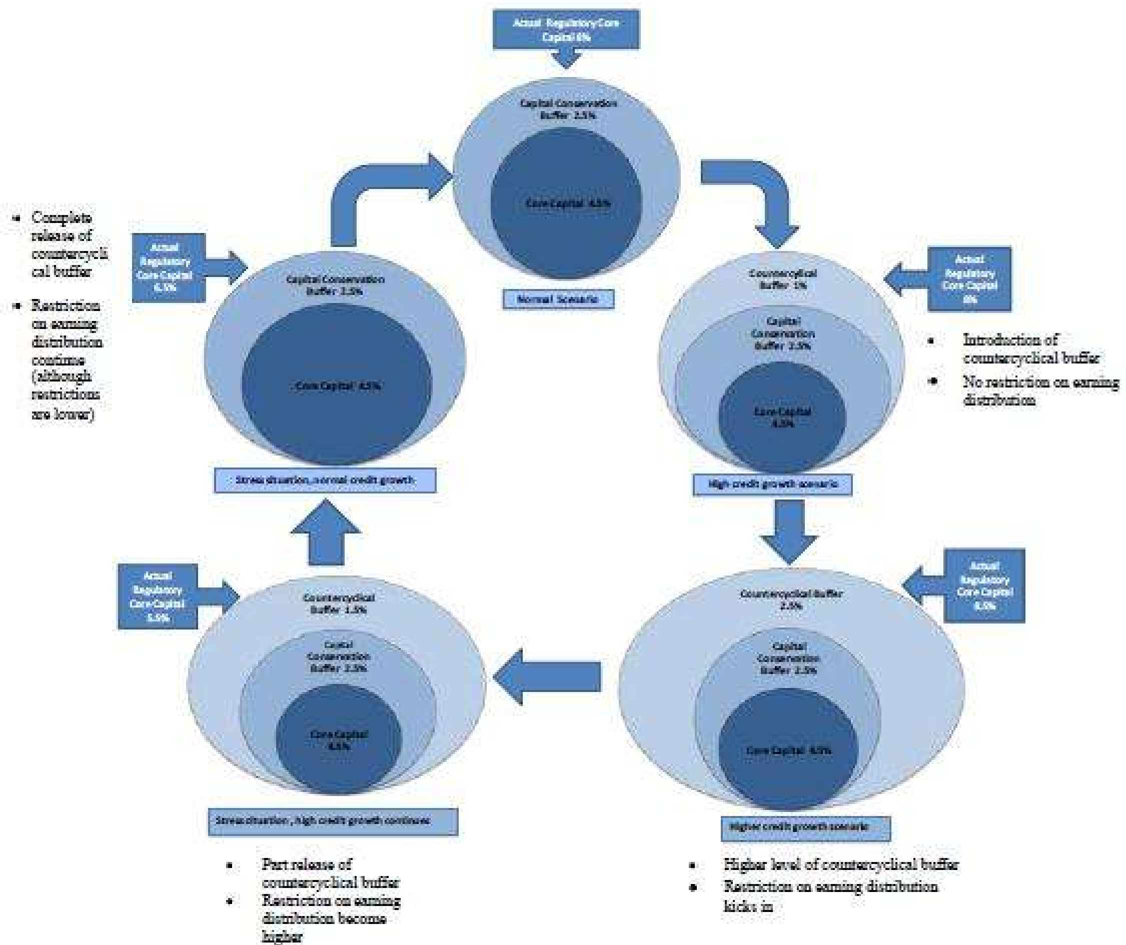
As a percentage of risk-weighted assets	Capital requirements							Additional macroprudential overlay	
	Common equity			Tier 1 capital		Total capital		Counter-cyclical buffer	Additional loss-absorbing capacity for SIFIs
	Minimum	Conservation buffer	Required	Minimum	Required	Minimum	Required	Range	
Basel II	2			4		8			
Memo:	*Equivalent to around 1% for an average international bank under the new definition*			*Equivalent to around 2% for an average international bank under the new definition*					
Basel III New definition and calibration	4.5	2.5	7.0	6	8.5	8	10.5	0–2.5	1–2.5%
								10.5% —	15.5%



A Cognitive Mapping of Risks can be drawn as above, to illustrate the extent to which the various risks which are faced by the banks can be classified. Risk management in banks has been gaining ground for last two decades and the financial crisis of 2008 has led to persistent calls for experienced full time oversight on enterprise wide risks as described. All banks are now required to have an internal department directly reporting to the Chief Executive officer and Managing Director for the Risk management activity.

An illustration on movement of capital requirement and triggers under various scenarios

Regulatory Capital = Core Capital + Capital Conservation Buffer + Countercyclical buffer (if any)



Note: Figures in circles represent the minimum regulatory requirement

As explained above, the key elements in Basel III include the following:

1. The definition of capital made more stringent, capital buffers introduced, and loss absorptive capacity of Tier I and Tier II capital instrument of internationally active banks proposed to be enhanced
2. Forward looking provisioning prescribed
3. Modifications made in counterparty credit risk weights
4. New parameter of leverage ratio introduced
5. Global liquidity standard prescribed

The proposed Basel III guidelines seek to enhance the minimum core capital (after stringent deductions) introduce a capital conservation buffer (with defined triggers) and prescribe a countercyclical buffer (to be built in times of excessive credit growth at the national level)

Capital Conservation buffer – The Basel Committee suggests that a new buffer of 2.5 % of risk weighted assets (RWA) over the minimum capital requirement of core capital requirement of 4.5 % be created by banks. Although the Committee does not view the capital conservation buffer as the new minimum standard , considering the restrictions imposed on banks and also because of the reputation issues, 7 % is likely become the new minimum capital requirement.

The main purpose of the proposed capital conservation buffer is two-fold:

1. It can be dipped into in times of stress to meet the minimum regulatory requirement on core capital
2. Once accessed, certain triggers would get activated ,conserving the internally generated capital .This would happen as in this scenario ,the bank would be restrained in using its earnings to make the discretionary payouts (e.g. dividends, share buybacks and discretionary bonus)

Countercyclical buffer – The Basel committee has suggested a countercyclical buffer constituting of equity or fully loss absorbing capital could be fixed by the Central bank upon the constituent commercial banks once a year , and the buffer could range from 0 to 2.5 % of RWA depending on the changes in credit to GDP ratio. The primary objective of having the Counter cyclical buffer is to protect the banking sector from system wide risks arising out of excessive aggregate credit growth. This could be achieved through a pro cyclical build up of the buffer in good times. Typically, excessive credit growth could lead to the requirement for building up a higher countercyclical buffer; however the requirement could reduce in times of stress, thereby releasing the capital for absorption of losses or for protection of banks against the impact of potential problems.

The Compliance process of Indian Banks to Basel III

The minimum capital for common equity, the highest form of loss absorbing capital, will be raised from the current 2% level, before the application of regulatory adjustments to 4.5%, after the application of regulatory adjustments. This increase will be phased in to apply from Jan 1, 2013. In addition to the above, the committee recommended a 2.5% of additional core equity capital as a conservation buffer above the regulatory minimum taking the aggregate minimum core equity required to 7%. The conservation buffer is also phased in to apply from Jan 1, 2016 and will come into full effect from Jan 1, 2017.

Certain regulatory deductions (material holdings, deferred tax assets, mortgage servicing rights etc) that are currently applied to tier 1 capital and/or tier 2 capital or treated as RWA will now be deducted from Core equity capital. This will also be progressively phased in over a five year period commencing 2014.

Phasing-in effect:

	2013	2014	2015	2016	2017	2018	2019
Minimum core equity	3.5%	4.0%	4.5%	4.5%	4.5%	4.5%	4.5%
Conservation buffer				.625%	1.25%	1.875%	2.5%
Total core equity	3.5%	4.0%	4.5%	5.125%	5.75%	6.375%	7.0%
Min. total capital incl. buffer	8.0%	8.0%	8.0%	8.625%	9.25%	9.875%	10.5%
Phasing in of other deductions from core T1		20%	40%	60%	80%	100%	100%
Counter cyclical buffer	In addition the regulator can specify a counter cyclical buffer of **up to 2.5%** of fully loss absorbing capital for macro prudential objectives						

Regulatory buffers, provisions, and cyclicality of the minimum

The capital conservation buffer should be available to absorb banking sector losses conditional on a plausibly severe stressed financial and economic environment. The countercyclical buffer would extend the capital conservation range during periods of excess credit growth, or other indicators deemed appropriate by supervisors for their national contexts. Both buffers could be run down to absorb losses during a period of stress.

Deductions from Core Tier 1

- Minority interest - The excess capital above the minimum of a subsidiary that is a bank will be deducted in proportion to the minority interest share.
- Investments in other financial institutions - The gross long positions may be deducted net of short and the proposals now include an underwriting exemption.

Minority interest in a banking subsidiary is strictly excluded from the parent bank's common equity if the parent bank or affiliate has entered into any arrangements to fund directly or indirectly minority investment in the subsidiary whether through an SPV or through another vehicle or arrangement.

Other deductions

The other deductions from Common Equity Tier 1 are: goodwill and other intangibles (excluding Mortgage Servicing Rights), Deferred Tax Assets, investments in own shares, other investments in financial institutions, shortfall of provision to expected losses, cash flow hedge reserve, cumulative changes in own credit risk and pension fund assets.

The following items may each receive limited recognition when calculating the common equity component of Tier 1, with recognition capped at 10% of the bank's common equity component:

- Significant investments in the common shares of unconsolidated financial institutions (banks, insurance and other financial entities). "Significant" means more than 10% of the issued share capital;
- Mortgage servicing rights (MSRs); and
- Deferred tax assets (DTAs) that arise from timing differences.

A bank must deduct the amount by which the aggregate of the three items above exceeds 15% of its common equity component of Tier 1.

With the RBI flagging off the implementation of Basel III guidelines, Indian banks have to plan for more capital in the years ahead. They are well placed to meet the higher capital requirements and can strengthen their competitive positions vis –a vis international banks – provided the government can deliver on its own responsibilities towards public sector banks. The RBI has set a more demanding schedule for Basel III implementation than the Bank for International Settlements. The BIS has set the deadline for the full implementation as 2019. The RBI would like the Indian banks to comply by 2017.

CONCLUSIONS

- Basel standards, by and large, were an outcome of international cooperation among central banks on the face of indiscriminate cross –border bank lending and debt repudiation from certain debtor countries. India had always set an example in implementing these standards, but the compliance was gradual and easy –paced, so as not to disrupt the banking system. The compliance levels were relaxed from time to time to accommodate even the weakest link in the banking chain. The idea was to enable the entire system to adapt these standards over a fixed time line in a way that the overall investor response and the capital market in the economy is ready for the huge resource mobilization requirements posed by the compliance by the Indian banks . However, the real issue is now whether the banks would be able to raise funds from the capital market when the investors are rather wary about the performance and returns from the banks /industries in general in the context of a general slowdown in industries coupled with inflation prevailing in the economy.
- Following the debacle of new and innovative instruments, there is a need to assimilation and watch than creating an overlay and urge by RBI to expect all the Indian Banks to comply with Basel III standards in hurry ,even before the full compliance with Basel II by some weak banks in the Indian economy. Before the onslaught of the global financial crisis originating from the west, even the US and Europe were not seriously concerned about compliance with Basel norms. Now, the US and Europe are forced to do so, due to the international pressure. Given the above background, it is rather surprising that RBI would expect the Indian banks to be ready to comply with Basel standards so early by March 2017, earlier than the 2019 time frame laid down in the original Basel III framework.
- Risk management in banks is abstract and analytical activity that draws heavily on advances in statistics and financial economics. But the professionalization of the field 'is at an early stage's to be emphasized here. Much of the risk management within banks is carried out using internally developed proprietary models. The data

on these aspects is not disclosed by the banks for reasons citing 'confidentiality' or 'competitiveness'.

- The link between nonperforming assets (NPA) capital adequacy and provisioning is well known to be highlighted here. The challenge is to provide incentives for banks /financial institutions to recognize losses on account of NPAs as per Basel norms. More than four years after the financial crisis began, it is so widely accepted that many of the world's banks are burying /hiding losses and overstating their asset values ,even the BIS is saying so- in writing. It fully expects the taxpayers to pick up the tab should the need arise, too.
- The lack of transparency, credibility in banks' balance sheet fuels a vicious circle. When investors cannot trust the books, lenders can't raise capital and may have to fall back on their home countries 'governments for help. This further pressures sovereign finances, which in turn, weaken the banks even more. The adage 'too big to fail 'does not easily become applicable to banks often as the size of the banks 'capital, operations, NPA, provisioning increases. This issue needs separate discussion as the challenge is greater and real.
- Finally, it is significant to note that new and private sector banks, with their high capital adequacy ratios, enhanced proportion of common equity and better IT and other modern financial skills of the personnel, are well placed to comply with Basel III norms in general. PSU banks although dominant banks in the Indian financial system may take more time and face challenges in following the Basel III guidelines.

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