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RESEARCH ARTICLE

BASEL III: A FRAMEWORK FOR STRONG AND RESILIENT INDIAN BANKING SYSTEM.

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Abstract

In the last two decades there has been a remarkable change in the functioning of the banks. Technological changes, Liberalization since 1990 have introduced contemporary and complex financial instruments. Due to this the sales has raised in the financial markets and has resulted in the different types of risks in the banking sector. In the recent years many financial crisis have raised a particular challenge for the central banks in different countries. Basel Committee of Banking Supervision has taken various steps to face these challenges by introducing Basel I and Basel by making the global banking sector more resilient. But the late 2000 financial crisis in US highlighted the loopholes in the Basel II framework in making the banking sector more stable and sound. Therefore the Basel III norms were introduced by the Bank for International Settlements. The Basel guidelines has been drafted by the Bank for International Settlements in agreement with the regulatory authorities of the global banking sector in fifteen developing countries with the main aim of prescribing codes of banking supervision and enhancing financial stability.

This research paper analyzes whether Basel III norms are required for the strong and stable resilient banking sector in India. For this purpose some of the important facts have been examined like the significant elements of the Basel III norms, time-line for the implementation of these norms in India, Basel III banking norms in the Indian Banking System with the Implications of these norms on the Indian Banking System.

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Literature Review:

1. In this speech, Mr Jaime Caruana, General Manager of the BIS, at the 3rd Santander, International Banking Conference, Madrid, 15 September 2010 (subject: Basel III: towards a safer financial system) observed that:
2. Basel III is the highlight of the financial reform programme related by the Financial Stability Board. This endorsement shows a crucial step in a process to enhance the rules by which functions are required to function”.
3. Nout Wellink, Chairman of the Basel Committee of the Banking Supervision and President of the Netherlands Bank defined Basel III frameworks a “Historical Achievement that will help to safeguard financial stability and encourage sustainable economic growth. The higher levels of capital linked with a global liquidity framework will highly decrease the probability and severity of the banking crisis in the future.” (Bank for International Settlements, 2010)
4. Mahapatra (2012) has noticed that “ Learning the lessons from the crisis, Basel III aims to enhance the ability of every single bank to face the financial and economic stress and ensure that Basel III has proper measures that banking system as a whole does not collapse and its overflow impact on the entire economy is reduced.

Objectives of the Study:

1. The primary objective of this paper is to explore the elements of the Basel III framework, the need to implement the Basel III norms and to examine how far it can help in making a resilient banking sector.
2. To assess the implications of Basel III framework on the Indian Banking System.
3. To investigate the guidelines issued by RBI based on the Basel III reforms.

Research Methodology:-

The current study is based on the information collected from the different secondary sources such as Research papers, published reports, published articles, newspapers, conference proceedings, publications and notifications of RBI, Basel Committee of Banking Supervision, Circulars of RBI, Reports of Credit Rating Agencies like S&P, CRISIL, ICRA and personal interaction with the banking experts and others.

Introduction:-

Banks play a significant role in the credit intermediation process between the investors and savers. Therefore a sustainable system of banking is required for considerable growth in the economy. Banks also provide important services to the consumers, small and medium sized enterprises, and large companies and to the government locally and worldwide (Bank for International Settlements, 2011). The Basel Committee has taken various steps to strengthen the global banking sector by introducing Basel I and Basel II. But the late 2000 financial crisis in US has reflected weaknesses in the Basel II framework which got failed in making the banking sector more stable and sound. The crisis occurred due to the inadequate quality and quantity of capital, inadequate liquidity standards, extremely leveraged financial institutions, insufficient inclusion of particular risks, lack of proper regulatory guidelines to handle systemic risks in the banking sector and insufficient supervision. Basel III has been introduced by the Basel Committee of Banking Supervision in 2010 in response to the late 2000 financial turbulence by eliminating the shortcomings of the Basel II that were displayed during the crisis (KPMG, 2011). It aims to enhance the shock absorbing capacity of the banks to face the financial and economic shocks (BCBS, 2010).

These new guidelines are expected to strengthen the micro-prudential regulation which will assist in raising the ability of each and every single bank to face the situation of financial and economic stress. This Accord also focuses upon the macro prudential aspect, addressing system wide risks that develop across the entire banking sector and procyclical augmentation of these risks after a span of time. Both these approaches are correlated as higher resilience at each single bank decreases the chances of system wide shocks (Bank for International Settlements, 2011). Basel III is an improvement over Basel II in terms of enhancement in the level and quality of capital, new liquidity standards, addition of leverage ratio, and changes in the provisioning norms (Bhusnurmath, 2010).

Key Elements of Basel III:-

For a strong and resilient banking system the Basel Committee has introduced the Basel III framework. The key elements of the Basel III framework include:

1. Global Liquidity Standards:-

The Basel Committee has proposed two minimum standards to enhance the liquidity profile of the banks. It aims to ensure that banks have sufficient liquidity buffer to face the liquidity stress:

Liquidity Coverage Ratio:-

This is a test to improve the short term resilience of the bank's liquidity risk profile by ensuring that it has sufficient high-quality liquid assets to recover from a severe stress scenario lasting for 30 days. (Swamy, 2014).

$$LCR = \frac{\text{High quality Liquid Assets}}{\text{Total net liquidity outflows over a 30 day time period}} \geq 100\%$$

Net Stable Funding Ratio:-

This is a test to enhance the resilience of the banks to face the long term liquidity crisis (Swamy, 2014). 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. The NFSR aims to strengthen the evaluation of liquidity risk across all on and off balance sheet items.

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

2. Enhanced 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 raised from 2% to 4.5% of RWAs under Basel III (Vishwanathan, 2015). 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 is combined with conservation buffer.

3. Enhanced Risk Coverage:-

Basel III focusses on enhancing the risk coverage in response to the weaknesses of the Basel II Accord. Basel III Accord covers various types of risks which are fully addressed or partially addressed under Basel II. Higher capital requirements are prescribed for trading and securitization activities and proposed new risk weights to properly hold risk in trading portfolios. It is also specified that improved on Pillar 2's supervisory process and Pillar 3's and Pillar 3's market discipline specifically for trading and securitization activities.

4. 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 credit quality of counterparties. For determining 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 are known as credit value adjustments, CVA) to OTC derivatives (RBI Master Circular, 2011).

5. Capital Conservation Buffer:-

A Capital Conservation Buffer of 2.5% of the risk weighted assets has been introduced under Basel III which brings the total common equity standard to 7%. This buffer will be drawn down during the periods of economic and financial stress. It will be phased in between 1 January 2016 and year end 2018 in a uniform manner at 0.625% of Risk Weighted Assets which will increase per year by extra 0.625% points commencing from January 1, 2016 to reach its ultimate level on January 1, 2019.

6. Countercyclical Capital Buffer:-

A Countercyclical capital buffer has been introduced to ensure that the bank's capital requirements takes account of macro-economic environment in which the bank's operate. The buffer will range between 0 to 2.5% of a bank's risk weighted assets (RBI Master Circular, 2011). The main purpose of this buffer is to attain the macro prudential goal of protecting the banking sector from the excessive credit growth stemming from boom-bust evolution resulting in aggravation of system wide risk.

7. Leverage Ratio:\

To prevent the building of excessive on and off balance sheet leverage in the banking sector, Basel III introduced a non-risk based leverage ratio (Swamy, 2014). The main aim of this ratio is to put a cap on excessive leverage in the banking sector internationally. This will help in avoiding destabilizing which can harm the banking sector and the economy. At present this ratio has been set at 3% which will be tested before a mandatory leverage ratio is introduced in 2018.

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

8. Additional interconnectedness:

Interconnectedness among the large banks is expected to be addressed by different measures such as improved supervisory guidelines for global systemic important banks (G-SIBs). Higher asset value correlation is prescribed for exposures to large financial institutions with assets of US \$ 100 billion under the Internal Ratings Based Approach.

Basel III Implementation Timeline:-

In order to implement the Regulatory Capital Norms of Basel III banks are required to enhance their capital planning process. Banks need to properly evaluate the quantity and quality of capital required to support their business plans of action over the medium-term.

During the initial years the capital requirements will be considerably lower as compared to later years of complete implementation of the Basel III norms.

The increased capital requirements may create an impact on the asset quality and subsequently on the profitability/performance of the banks. So the banks will require some extra time to raise the additional capital for the complete implementation of Basel III Capital norms. Accordingly the period for the complete implementation of Capital Guidelines of Basel III in India has been extended up to March 31, 2019 in place of March 31, 2018 (RBI Master Circular, 2013-14). Starting date of implementation of Basel III has been rescheduled by RBI from January 1 2013 to April 1 2013. Therefore Indian banks will get the additional time to enhance their capital base in line with the new norms for increasing the resilience of the global banking system. The transitional arrangements are as follows:

(% of RWAs)							
Minimum Capital Ratios	April 1,2013	March 31, 2014	March 31, 2015	March 31, 2016	March 31, 2017	March 31, 2018	March 31, 2019
Minimum Common Equity Tie 1 (CET 1)	4.5	5	5.5	5.5	5.5	5.5	5.5
Capital Conservation Buffer (CCB)	-	-	-	0.625	1.25	1.875	2.5
Minimum CET1+CCB	4.5	5	5.5	6.125	6.75	7.375	8
Minimum Tier 1 Capital	6	6.5	7	7	7	7	7
Minimum Total Capital	9	9	9	9	9	9	9
Minimum Total Capital + CCB	9	9	9	9.625	10.25	10.875	11.5
Phase-in all deductions from CET 1 (in %)	20	40	60	80	100	100	100

Source: RBI Master Circular RBI/2013-14/538 DBOD.No.BP.BC.102/21.06.201/2013-14

Common Equity Tier 1 Ratio after including the current periods retained earnings			Minimum Capital Conservation Ratios (expressed as % of earnings)
As on March 31,2016	As on March 31,2017	As on March 31,2018	
5.5%-5.6525%	5.5%-5.8125%	5.5%-5.96875%	100%
>5.6525%-5.8125%	>5.8125%-6.125%	>5.96875%-6.4375%	80%
>5.8125%-5.96875%	>6.125%-6.4375%	>6.4375%-6.90625%	60%
>5.96875%-6.125%	>6.4375%-6.75%	>6.90625%-7.375%	40%
>6.125%	>6.75%	>7.375%	0%

Source: : RBI Master Circular RBI/2013-14/538 DBOD.No.BP.BC.102/21.06.201/2013-14

Basel III Banking Norms in the Indian Banking System:-

RBI released the Basel III Capital Guidelines for the Indian banks on December 30, 2011 to ensure that Indian banks follow the global regulatory standards. By shifting to advanced risk management systems stipulated in Basel III norms will prepare the banks to bear the shocks from the external systems. In India the banks started implementing the guidelines of Basel III from April 1, 2013 in phases and it will be become fully effective on March 31, 2019 (RBI Master Circular, 2013-14) Whereas Basel III Liquidity Coverage Ratio will be implemented by the Indian banks from January 1, 2015 with full implementation from March 31,2019.

Key Highlights of RBI Basel III Guidelines are as follows:-

- Banks are required to maintain minimum CRAR of 9% of Risk Weighted Assets.
- Banks are required to maintain minimum Common Equity Tier 1 Capital (CET1) of 10.5% (8% excluding Counter Cyclical Buffer) by the end of Financial Year 2018 v/s current minimum requirement of 3.6%.

- Banks who will not fulfill the CET1 and Capital Conservation Buffer requirement and has higher AT1 and T2 will not be permitted to categorize them as capital funds.
- Banks are required to maintain Basel III leverage ratio at 4.5% (3% globally).
- Banks will start implementing Capital Conservation Buffer at 0.625% of Risk Weighted Assets from Financial Year 2015.
- Shortage of provisions to reach expected loss levels will be deducted from CET1 under IRB Approach.
- Shortage under Defined Benefit Pension Fund will be deducted from CET1.
- Any regulatory capital shortage for unconsolidated entity will be deducted from CET1.

Implications of Basel III Norms on Indian Banks:-

1. Additional Capital required:-

Indian banks are required to deploy additional capital to fulfill the norms of Basel III (Mohan, 2012). Most of the private and foreign banks have Tier 1 capital more than 9% whereas many public sector banks may face problems in fulfilling this criterion. So the public sector banks have to take help from the government for raising the capital and raise some amount of capital from the market. Indian banks are likely to incur the extra expenditure to develop the capital buffers to fulfill the norms of Basel III. In terms of capital adequacy banks are placed comfortably as Average Tier 1 Capital Ratio of the private and public sector banks is around 10%. As per the 2014 Fitch Report Indian banking sector will be required to raise \$200 billion to fulfill the norms of Basel III. Public sector banks will be required to raise Rs 4.60 lakh crore capital within the next four years out of which 2.39 lakh crore is the equity capital in the form of Tier 1 Capital. To raise the additional capital from the market will be a challenge for the Indian banks. Basel III aims to reduce the loss in the adverse period and enhance the quality and quantity of capital.

2. Data Issues:-

For the proper risk management accurate, reliable and timely availability of data is required. Historical data will be required to forecast and timely build the models in respect of various activities. To fulfill the norms of Basel III, the risk and finance teams of all the banks must have quick and easy access to centralized, clean and accurate data which must display their credit, market, operational and liquidity risk. All the Indian banks are required to increase their capital to fulfill the norms of Basel III (Dasgupta, 2012) and should disclose the capital required for credit risk, market risk and operational risk under the disclosures of Basel III on their website. Moreover the data must be properly defined and managed so that it helps in computing the correct ratios for capital adequacy, leverage and liquidity at every point of time.

3. Impact on the Return on Equity:-

Under Basel III Return on Equity is expected to decline as the upper limit of leverage ratio has been set at 3% due to which leverage multiplier will come down. The improved capital requirements under this new accord may also affect the ROE of the banks and the shareholder expectations on the minimum required rate of return (Roy, 2013).

4. High Compliance Cost:-

Basel III involves heavy external cost and compliance cost. High amount of expenditure would be there in maintaining the required data and system infrastructure regardless of the data efficiencies attained from reengineering from risk and finance functions (Tandulwadikar, 2013). As per the new capital and liquidity requirements, investment in Technology and infrastructure will be expensive. Implementation cost will vary from institution to institution. The cost and effort required to implement the norms of Basel III will depend on the business model of the banks.

5. Liquidity Issues:-

Indian banks are required to maintain minimum reserves of high quality liquid assets in the form of SLR (Statutory Liquidity Ratio) which is 24% of net demand and time liabilities. At present Reserve Bank is looking upon the amount of reserves which can be kept towards compliance with LCR (Liquidity Coverage Ratio). In case reserves are not used for compliance with LCR and banks have to use the additional liquid assets to fulfill the entire LCR then the proportion of the liquid assets in the total assets of the banks will rise at a considerable rate resulting in the reduction of income significantly.

6. Macroeconomic Costs:-

The different components of Basel III framework are related with the macroeconomic costs which will affect the growth of the economy and profitability of the banks. Weighted average cost of capital is expected to rise with the enhanced capital requirement. As a result banks will shift the increased cost of capital to the borrowers in the form of higher lending rates and therefore the amount of the loans will decrease (Roy, 2013).

7. Sound Risk Architecture:-

Under Basel III Indian banks have to shift to the advanced risk management systems. Banks and the financial institutions have to adopt the sound risk management systems for the proper implementation of Basel III (Vishwanathan, 2015). But still the sound and stable banks may suffer the risk of mis-pricing, mis-selling and other unfamiliar components. But the Indian banks may face a problem in performing its operations by developing a strong risk management system.

Conclusion:-

Under Basel III global banking sector will become more secure and stable. Basel III is different from the previous accords in terms of structurally enhancing the balance sheets of the financial institutions to improve the financial system. Implementation of Basel III will enhance the competitiveness of the banks in every aspect but integrating would be a challenging task. Indian banks will face major challenges to fulfill the capital and liquidity requirements and transition to new techniques of risk management under Basel III. The primary challenges Indian banks will face to develop stronger quantity and quality capital and risk management systems. Therefore there is a requirement to implement various measures to prepare the banks for its proper application. Basel III is an opportunity for the banks which will make the banking sector more resilient by adopting world class risk management practices. But it will be a crucial issue to draft the cost effective model for the individual bank for the implementation of the norms of Basel III.

Banks should create the data systems on the basis of common data inputs to determine the credit, market and operational risk. A consolidated reporting approach should be there so as to provide a consistent view to the managers and investors about the effect of these different risk. The guidelines of Basel III are required from the view of risk sensitivity and thus complicated measurement techniques and sound regulatory framework to form a resilient banking sector.

References:-

1. Bank for International Settlements (2010). Basel III: International Framework for Liquidity Risk Measurement Standards and Monitoring. Retrieved From <http://www.bis.org/publ/bebs188.pdf>
2. BCBS (2010). Basel – III: A global regulatory framework for more resilient banks and banking system. Retrieved from <http://www.bis.org/bcbs/basel3.htm>.
3. Bhusnurmath, M. (2010). Goodbye Basel II: Hello Basel III. Economic Times, India. Retrieved from <http://blogs.economictimes.indiatimes.com/Myth-n-Reality/goodbye-basel-ii-hello-basel/>.
4. Bureau, E.T (2010). What are the Basel III norms? The Economic Times, Retrieved from http://articles.economictimes.indiatimes.com/2010-09-14/news/27567170_1_tier-i-capital-indian-banks-basel-iii.
5. Dasgupta, K. (2012). Basel norms: Surely not just an Exercise in Compliance? Economic Times. Retrieved from http://articles.economictimes.indiatimes.com/2012-04-25/news/31398858_1_advanced-approaches-basel-norms-basel-iii.
6. K.P.M.G (2011). Basel – III – Issues and Implications. International USA Retrieved from: <http://www.kpmg.com/global/en/issuesandinsights/articlespublications/documents/basel-iii-issues-implications.pdf>
7. Mahapatra, B (2012). Implications of Basel III for Capital, Liquidity and Profitability of the Banks. National Conference on Emerging Macro-Environment, Regulatory Changes and Bank Competitiveness, organized by the National Institute of Bank Management at Pune, 3-4.
8. Mohan, T.T (2012). Basel 3 Implementation: Indian Banks to plan more capital. The Economic Times. Retrieved from http://articles.economictimes.indiatimes.com/2012-01-19/news/30642954_1_indian-banks-public-sector-banks-tier

9. Reporter, B.S. (2012). RBI may tighten Shadow Banking Rules, Business Standard. Retrieved from http://www.business-standard.com/article/finance/rbi-may-tighten-shadow-banking-rules-112050100022_1.html.
10. Roy, S. (2013). Basel III Implementation: A New Challenge for Indian Banks. Retrieved from <http://www.businesstoday.in/opinion/columns/basel-iii-implementation-indian-banks/story/192162.html>
11. R.B.I. Master Circular D3OD No. BPBC 11/21-06-2001/ 2011-12, (2011). Prudential Guidelines on capital Adequacy and Market Discipline – New Capital Adequacy Framework (NCAF) – will remain unchanged under Basel – III Framework. RBI. Retrieved from <https://www.rbi.org.in/>.
12. R.B.I. Master Circular DBOD. NO.BP.BC.102/21.06.201/2013-14. Implementation of Basel III Capital Regulations in India- Capital Planning. Retrieved from <https://rbi.org.in/scripts/NotificationUser.aspx?Id=8806&Mode=0>
13. Swamy, V. (2014). Basel–III and Its implications on Indian Banking. IBS Publishing India, 148-307 Retrieved from <http://www.iibf.org.in/documents/reseach-report/Report-25.pdf>.
14. Tandulwadikar, A. (2013). Gearing Up For Basel III. Cognizant Reports, 1-9. Retrieved from <http://www.cognizant.com/InsightsWhitepapers/Gearing-Up-For-Basel-III.pdf>.
15. Vishwanathan, N.S. (2015). Basel III Implementation: Challenges for the Indian Banking System. BIS Central Banker Speeches, 1-8. Retrieved from www.bis.org/review/r150917a.pdf.