

How Adequate is Capital Adequacy of Indian Banks

Mohd. Sajid¹, Dr Harish Handa²

¹Assistant Professor, Delhi University, Delhi, India

²Associate Professor, Delhi University, Delhi, India

Abstract- Basel norms are a set of international banking regulations formulated by the Basel committee on bank supervision, which set out the minimum capital requirements to sustain banks the world over. The committee operates from Basel in Switzerland. The changes in the rules for raising Basel III-compliant capital announced by India's central bank in September 2014 are "credit positive" as they make it easier for banks to raise funds and attract more investors, The Reserve Bank of India on Sept. 1, 2014 cut the minimum maturity for Tier 2 capital that banks can issue to five years from 10 years. It also allowed retail investors to buy Tier 1 capital. This regulation ensures the soundness of the banks by focusing on the need, genesis and development of the concept of capital adequacy ratio (CAR) in banking and are discussed and linked up to BASEL III norms. The paper provides an outline of the basics of BASEL III norms and its impact on CAR. This newest accord seeks to improve the banking sector's ability to deal with financial and economic stress, build up risk management and the bank's transparency. The BASEL III is to be implemented by banks in India as per the guidelines issued by RBI from time to time. This paper has briefly described the impact of BASEL III on the capital adequacy ratio of banks.

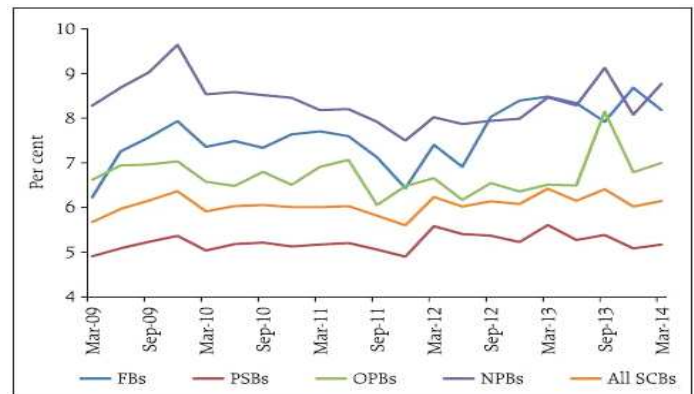
Keywords—BASEL-III, capital adequacy ratio, norms, subsidiaries, collapse, tier 1st and tier 2nd, pillars and regulations.

I. PROLOGUE

BASEL III (or the third Basel accord) is a global, voluntary regulatory standard on bank capital adequacy, Capital adequacy is the amount of capital a bank or other financial institution has to hold as required by its financial regulator. This is usually expressed as a capital adequacy ratio. It was agreed upon by the members of the Basel committee on banking supervision in 2010-11, and was scheduled to be introduced from 2013 until 2015, however, changes from 1

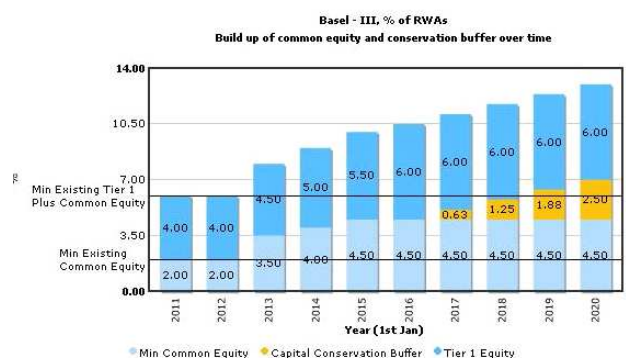
April 2013 until 2013 extended implementation until 31 march 2018 and again extended to 31 march 2019. The third installment of the BASEL accords was developed in response to the deficiencies in financial regulation revealed by the late-2000 financial crisis. The table below gives the leverage ratio of schedule commercial banks.

Table 1 Leverage Ratio of Scheduled Commercial Banks



Source: RBI Supervisory Returns.

Table 2 Estimated Risk Weighted Assets for next six years



BASEL III was supposed to strengthen bank capital requirements by increasing bank liquidity and decreasing bank leverage.

- Originally BASEL committee was formed in 1974 by a group of central bank governors from 10 countries. The G-10 committee consists of members from Belgium, Canada, France, Germany, Italy, Japan, Luxembourg, Netherlands, Spain, Sweden, Switzerland, UK and US. BASEL is a city in Switzerland which is also the headquarters of Bureau of international settlement (BIS). BIS endorse support among central banks with a common goal of financial stability and common standards of banking sector has implemented BASEL which are followed by banks all over the country. Earlier guidelines were known as BASEL 1st and BASEL II accords. Later on the committee was expanded to include members from nearly 30 countries, including India. In spite of implementation of BASEL 1st.
- Guidelines, the financial world saw the worst crisis in early 2008 and whole financial markets tumbled. The financial guidelines have been issued by reserve bank of India for implementation of BASEL III guidelines on 2nd may, 2012.
- These guidelines would become effective from January 1st, 2013 in a phased manner. This means that as at the close of business on January 1st, 2013 banks must be able to declare or disclose capital ratios computed under the amended guidelines the BASEL III capital ratios will be fully implemented as on March 31st, 2018.
- The capital requirements for the implementation of BASEL III guidelines may be lower during the initial periods and higher during the later years. Banks need to keep this in view while capital planning.
- Guidelines on operational aspects of implementation of the countercyclical capital buffer. Guidance to banks on this will be issued in due course as RBI is still working on these. Moreover, some other proposals viz. definition of capital disclosure requirements'. Capitalization of bank exposures to central counterparties' etc., are also engaging the attention of the BASEL committee at present. Therefore, the final proposals of the BASEL committee on these aspects will be considered for implementation, to the extent applicable, in future.

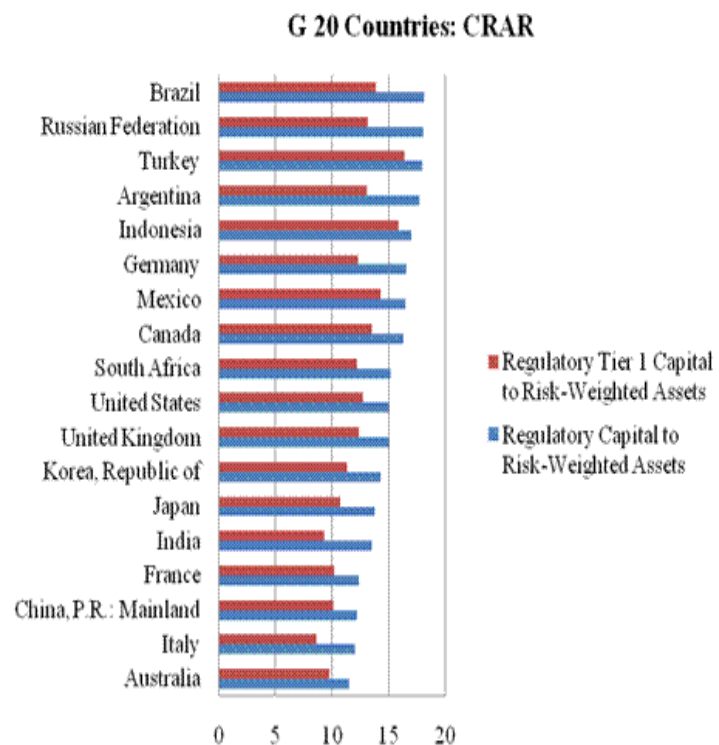
- For the financial year ending March 31st, 2013, banks will have to disclose the capital ratios computed under the existing guidelines (BASEL III) on capital adequacy as well as those computed under the BASEL III capital adequacy framework. The table below gives the capital norms for banks in India.

Table 3 Capital Norms for Banks in India

BASEL III CAPITAL NORMS FOR BANKS IN INDIA	
Regulatory capital	Minimum requirement (as % of risk-weighted assets)
Common equity in Tier-I	5.5
Additional Tier-I	1.5
Tier I	7.0
Tier II	2.0
Total capital ratio	9.0
Capital conservation buffer	2.5
Total ratio	11.5

Source: RBI

Table 4 Capital to Risk (Weighted) Assets Ratio



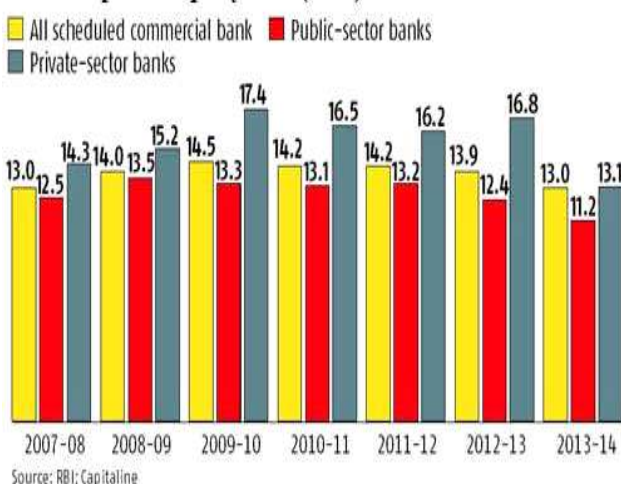
NEW RBI NORMS ON BASEL-III A PLUS FOR BANKS, SAYS MOODY'S

- Moody's says the amended rules will also allow banks to have a higher proportion of AT-1 in their tier-1 capital. The major benefit is expected to accrue to public sector banks which have about 70 percent share in the Indian banking business.
- On September 1, the reserve bank of India (RBI) revised some of its rules governing instruments that qualify as bank capital under BASEL-III. the key change is the removal of certain limits on the amount of AT-1. That a bank can use for calculating its Tier-1st capital, which effectively limited AT-1 issuance to 1.5 per cent of risk-weighted assets.
- From 2019, Indian banks CET 1 trigger point for loss absorption will be 6.125 per cent, compared to the BASEL committee on banking supervision's recommendation of 5.125 per cent.
- With the option of a temporary write down, RBI might be looking to partially mitigate investor concerns about this relatively high trigger.
- Banks are also no longer required to pay all coupons out of current-year profits. They may now also use revenue reserves which are not earmarked and/or credit balances in the profit and loss account, said Moody's. The risk which is increasing for Indian banks is given below in Table 5

Table 5 Banks CAR in percentage

INCREASING RISK

Banks' capital adequacy ratio (in %)



BASEL III norms with special emphasis on capital adequacy ratio of Indian Banks.

Capital adequacy ratio (CAR), also known as capital to risk (weighted) assets ratio (CRAR), is the ratio of a bank's capital to its risk.

$$CAR = \frac{\text{Tier 1}^{\text{st}} \text{ capital} + \text{Tier 2}^{\text{nd}} \text{ capital}}{\text{risk weighted assets}}$$

Tier 1st capital = (paid up capital + statutory reserves + disclosed free reserves) – (equity investments in subsidiary + intangible assets + current & b/f losses)

Tier 2nd capital = A) undisclosed reserves + B) General loss reserves + C) Hybrid debt capital instruments and subordinated debts.

A bank's real capital worth is evaluated after taking into account the riskiness of its assets.

It defines a bank's capital as two types: core (or tier 1st) capital comprising equity capital and disclosed reserves: and supplementary (or tier 2nd) capital comprising items such as undisclosed reserves, revaluation reserves, general provisions/general loan-loss reserves, hybrid debt capital instruments and subordinated term debt.

The proposed support system is given below

Table 6 Proposed Support System

SUPPORT SYSTEM	
Proposed minimum capital ratio for banks	
REGULATORY CAPITAL	MINIMUM REQUIREMENT (as % of risk weighted assets)
Common equity in Tier-I	5.5
Additional Tier-I	1.5
Tier-I	7.0
Tier-II	2.0
Total capital ratio	9.0
Capital conservation buffer	2.5
Total ratio	11.5

Source: RBI

The BASEL III guidelines are based upon 3 very important aspects which are called 3 pillars of the BASEL III.

These 3 pillars are as follows.

- Minimum capital requirement.
- Supervisory review process.
- Market discipline.

First pillar: - minimum capital requirement. This mainly for total risk including the credit risk, market risk as well as operational risk.

The second pillar: - i.e. supervisory review process is basically intended to ensure that the banks have adequate capital to support all the risks associated in their business. In India, the RBI has issued the guidelines to the banks that they should have an internal supervisory process which is called ICAAP or internal capital adequacy assessment process. With this tool the banks can assess the capital adequacy in relation to their risk profiles as well as adopt strategies for maintaining the capital levels. Apart from that, there is another process stipulated by RBI which is actually the independent assessment of the ICAAP of the banks. This is called SREP or supervisory review and evaluation process.

The independent review and evaluation may suggest prudent measures and supervisory actions whatever is needed. ICAAP is conducted by banks themselves and SREP is conducted RBI which is along with the RBI's annual financial inspection (AFI) of the bank.

Third pillar: - market discipline.

The idea of the third pillar is to complement the first and second pillar. This is basically a discipline followed by the bank such as disclosing its capital structure, tier-1st and tier-2nd capital and approaches to assess the capital adequacy.

In the above discussion, we could understand that the BASEL II and forthcoming BASEL III are basically guidelines which focus upon adequate capital in the banks and minimize the risk to the customers or depositors. The idea is to make a sound financial system which not only helps the banks and but the entire economy of the country to maintain the trust and faith, as transparency in the business. The centerpieces are "capital adequacy" and "risks".

II. BASEL 1st

BASEL 1st, that is, the 1988, BASEL accord, is primarily focused on credit risk and appropriate risk-weighting of assets. Assets of banks were classified and grouped in five categories according to credit risk, carrying risk weights of 0% (for example, most corporate debt), and some assets given no rating. Banks with an international presence are required to hold capital equal to 8% of their risk-weighted assets (RWA). The tier 1 capital ratio = tier 1 capital/all RWA. The total capital ratio=(tier 1 + tier 2 + tier 3 capital) / all RWA. Leverage ratio= total capital/average total assets.

Banks are also required to report off-balance-sheet items such as letters of credit, unused commitments, and derivatives. These all factor into the risk weighted assets. The report is typically submitted to the Federal Reserve Bank as HC-r for the bank-holding company and submitted to the office of the comptroller of the currency (OCC) as RC-R for just the bank.

From 1988 this framework was progressively introduced in member countries of G-10, comprising 13 countries as of 2013: Belgium, Canada, France, Germany, Italy, Japan, United Kingdom and the United States of America.

III. BASEL II.

- Ensuring that capital allocation is more risk sensitive.
- Enhance disclosure requirements which would allow market participants to assess the capital adequacy of an institution.
- Ensuring that credit risk, operational risk and market risk are quantified Basel on data and formal techniques.
- Attempting to align economic and regulatory capital more closely to reduce the scope for regulatory arbitrage.

THE NEW REGULATORY FRAMEWORK:- DODD-FRANK AND BASEL III.

The recognition of the tsunami-like economic cost of the financial crisis of 2008 has led to a complete rethinking of the role of financial regulation. In particular, we have shifted from a system of micro prudential regulation to a macro prudential one, with an explicit recognition of systemic risk (Pak Ravan 2011).

This was reflected in the most ambitious rewrite of banking legislation since the great depression, with the passage of the "wall street reform and consumer protection act". The conventional response was an effort to preserve the system through massive financial support, consolidation and further regulation. A complex regulatory system would be needed in an ideal world to capture all the aspects of risk and its management. In practice, however, such a system is unworkable.

IV. BASEL III: LENDERS NOT WORRIED, SAY CAPITAL CONSERVATION IS KEY.

Mumbai: the domestic banks will not be affected, as their developed world peers by the BASEL-III guidelines and conserving capital will be the crucial issue as they look

forward to implement the rules meant for a stronger financial system, bankers and analysts said after the RBI released its draft guidelines “capital conservation, good plough Bach of profits and better dividend management will be the key to strengthen the core capital”.

STATE-RUN BANKS NEED \$ 37 BILLION IN FRESH CAPITAL TO MEET BASEL III NORMS: MOODY’S.

Mumbai: Rating Company Moody’s has said that capital requirement for government owned Indian banks may rise to 8% to \$ 37 billion as the economic recovery could raise the demand for loans. It would be difficult for banks to raise the needed capital if the economic refers do not lead to lower government’s holdings in banks.

RBI REVISES BASEL III CAPITAL NORMS, HALVES MATURITY TO 5 YEARS:

Mumbai: The reserve bank today issued revised and final guidelines for raising non-equity regulatory capital

instruments by banks under the stringent Basel III framework under which lenders can issue tier 2 capital with a minimum original maturity of 5 years as against 10 years now. “ banks can also issue tier 2nd capital instruments with a minimum maturity of at least 5 years compared to 10 years at present” the central bank said late this.

BASEL III: banks may raise RS 3 trillion in non-core capital by FY 17.

Mumbai: Rating agency ICRA on Tuesday said banks would have to map up RS 3 trillion (RS 3 lakh crore) in non-equity debt over the next three years as they migrate to the capital intensive BASEL-III framework. “Banks both public and private sector ones, are expected to issue non-equity capital bonds of RS 2.5-3 trillion over the next three years till FY 17”.

Table 7 Bank wise Capital Adequacy Ratio of schedule commercial Banks

BANK-WISE CAPITAL ADEQUACY RATIO (CRAR) OF SCHEDULED COMMERCIAL BANKS - 2012 AND 2013												
(Per cent)												
CRAR (as on March 31)												
Bank Name	2012			2013			2012			2013		
	Tier-I	Tier-II	Total	Tier-I	Tier-II	Total	Tier-I	Tier-II	Total	Tier-I	Tier-II	Total
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
SBI and its Associates												
State Bank of India	8.50	3.55	12.05	9.79	4.07	13.86	8.23	2.99	11.22	9.49	3.43	12.92
State Bank of Bikaner & Jaipur	9.09	3.72	12.81	9.76	4.00	13.76	8.85	2.96	11.81	9.11	3.05	12.16
State Bank of Hyderabad	8.79	3.60	12.39	9.62	3.94	13.56	8.88	3.00	11.88	9.25	3.11	12.36
State Bank of Mysore	8.17	3.05	11.22	9.18	3.37	12.55	8.41	2.78	11.19	8.87	2.92	11.79
State Bank of Patiala	7.54	3.25	10.79	8.60	3.70	12.30	7.15	2.77	9.92	8.02	3.10	11.12
State Bank of Travancore	7.72	3.46	11.18	9.35	4.20	13.55	6.83	2.61	9.44	8.46	3.24	11.70
Nationalised Banks \$												
Allahabad Bank	..	..	..	9.13	3.70	12.83	..	..	..	8.05	2.98	11.03
Andhra Bank	8.45	3.89	12.34	9.03	4.15	13.18	8.16	3.10	11.26	8.52	3.24	11.76
Bank of Baroda	..	..	..	10.83	3.84	14.67	..	..	..	10.13	3.17	13.30
Bank of India	8.29	3.28	11.57	8.59	3.36	11.95	8.42	2.93	11.35	8.20	2.82	11.02
Bank of Maharashtra	7.50	3.75	11.25	8.31	4.12	12.43	7.03	4.69	11.72	7.57	5.02	12.59
Canara Bank	..	..	..	10.35	3.41	13.76	..	..	..	9.77	2.63	12.40
Central Bank of India	7.50	4.46	11.96	7.79	4.61	12.40	7.95	3.38	11.33	8.09	3.40	11.49
Corporation Bank	7.65	4.29	11.94	8.33	4.67	13.00	7.69	3.69	11.38	8.33	4.00	12.33
Dena Bank	..	..	..	8.86	2.65	11.51	..	..	..	7.26	3.77	11.03
IDBI Bank Ltd.	7.37	5.47	12.84	8.38	6.20	14.58	7.06	5.03	12.09	7.68	5.45	13.13
Indian Bank	10.47	2.20	12.67	11.13	2.34	13.47	9.64	1.95	11.59	10.88	2.20	13.08
Indian Overseas Bank	7.49	4.46	11.95	8.35	4.97	13.32	7.07	3.67	10.74	7.80	4.05	11.85
Oriental Bank of Commerce	8.78	2.23	11.01	10.12	2.57	12.69	8.20	2.55	10.75	9.18	2.86	12.04
Punjab and Sind Bank	8.26	4.55	12.81	8.55	4.71	13.26	8.25	4.46	12.71	8.38	4.53	12.91
Punjab National Bank	8.52	3.07	11.59	9.28	3.35	12.63	9.42	2.86	12.28	9.76	2.96	12.72
Syndicate Bank	..	..	10.81	8.94	3.30	12.24	..	..	11.12	8.96	3.63	12.59
UCO Bank	7.23	3.80	11.03	8.09	4.26	12.35	7.96	4.47	12.43	9.06	5.09	14.15

Union Bank of India	..	..	..	8.37	3.48	11.85	..	..	..	8.23	3.22	11.45
United Bank of India	7.26	3.22	10.48	8.79	3.90	12.69	7.04	2.73	9.77	8.40	3.26	11.66
Vijaya Bank	8.13	2.83	10.96	9.68	3.38	13.06	7.23	2.35	9.58	8.54	2.78	11.32
Old Private Sector Banks												
Catholic Syrian Bank	..	..	..	8.83	2.25	11.08	..	..	..	9.62	2.67	12.29
City Union Bank	10.06	0.75	10.81	11.69	0.88	12.57	10.88	0.58	11.46	13.27	0.71	13.98
Dhanlaxmi Bank	6.88	1.91	8.79	7.42	2.07	9.49	7.20	2.69	9.89	8.05	3.01	11.06
Federal Bank	12.74	1.09	13.83	15.86	0.78	16.64	12.13	0.96	13.09	14.09	0.64	14.73
ING Vysya Bank	..	..	..	11.23	2.77	14.00	..	..	..	10.49	2.75	13.24
Jammu & Kashmir Bank	10.43	2.10	12.53	11.12	2.24	13.36	10.44	1.90	12.34	10.86	1.97	12.83
Karnataka Bank	..	..	..	10.86	1.98	12.84	..	..	..	10.51	2.71	13.22
Karur Vysya Bank	..	..	11.64	13.12	1.21	14.33	..	..	..	13.10	1.31	14.41
Lakshmi Vilas Bank	8.17	3.91	12.08	8.86	4.24	13.10	7.75	2.68	10.43	9.15	3.17	12.32
Nainital Bank	13.79	0.44	14.23	14.62	0.47	15.09	13.90	0.44	14.34	13.99	0.44	14.43
Ratnakar Bank	22.33	0.36	22.69	22.83	0.37	23.20	16.13	0.29	16.42	16.82	0.29	17.11
South Indian Bank	9.60	2.04	11.64	11.54	2.46	14.00	9.94	1.52	11.46	12.05	1.86	13.91
Tamilnad Mercantile Bank	12.13	0.62	12.75	13.98	0.71	14.69	12.94	0.61	13.55	14.33	0.68	15.01
New Private Sector Banks												
Axis Bank	..	..	..	9.45	4.21	13.66	..	..	..	12.23	4.77	17.00
Development Credit Bank	13.27	1.53	14.80	13.81	1.60	15.41	12.14	0.95	13.09	12.62	0.99	13.61
HDFC Bank	11.04	4.67	15.71	11.60	4.92	16.52	10.51	5.43	15.94	11.08	5.72	16.80
ICICI Bank	11.09	5.17	16.26	12.68	5.84	18.52	11.50	5.40	16.90	12.80	5.94	18.74
IndusInd Bank	..	..	..	11.37	2.48	13.85	..	..	13.00	13.78	1.58	15.36
Kotak Mahindra Bank	14.84	1.67	16.51	15.74	1.78	17.52	13.90	1.26	15.16	14.71	1.34	16.05
Yes Bank	..	..	..	9.90	8.00	17.90	..	..	..	9.50	8.80	18.30
Foreign Banks												
AB Bank	46.27	1.05	47.32	33.60	0.76	34.36	37.84	0.32	38.16	18.94	0.16	19.10
Abu Dhabi Commercial Bank	..	..	..	80.00	0.88	80.88	..	..	..	65.91	0.91	66.82
American Express Banking Corp.	..	..	..	18.70	0.60	19.30	..	..	..	17.61	0.56	18.17
Antwerp Diamond Bank	20.71	9.64	30.35	17.47	8.13	25.60	26.41	10.93	37.34	23.14	9.58	32.72
Australia and New	28.20	0.37	28.57	25.17	0.33	25.50	27.72	0.40	28.12	26.02	0.37	26.39

Zealand Banking Group												
Bank Internasional Indonesia	457.82	..	457.82	..	..	..	439.31	..	439.31	..	..	..
Bank of America	18.71	0.41	19.12	17.21	0.38	17.59	19.53	0.42	19.95	18.02	0.38	18.40
Bank of Bahrain & Kuwait	..	..	..	38.18	0.42	38.60	..	..	..	34.25	0.45	34.70
Bank of Ceylon	..	..	..	95.31	1.27	96.58	..	..	..	70.20	1.25	71.45
Bank of Nova Scotia	16.44	7.56	24.00	10.23	4.70	14.93	16.40	5.00	21.40	9.16	2.79	11.95
Bank of Tokyo-Mitsubishi UFJ	..	..	..	44.83	6.77	51.60	..	..	..	33.76	10.77	44.53
BNP Paribas	11.91	3.87	15.78	11.09	3.61	14.70	12.43	3.27	15.70	10.94	2.88	13.82
Barclays Bank	..	..	..	14.45	0.54	14.99	..	..	..	18.44	0.65	19.09
Chinatrust Commercial Bank	53.05	0.52	53.57	44.34	0.44	44.78	40.26	0.45	40.71	34.74	0.38	35.12
Citibank	..	..	16.58	15.15	0.88	16.03	..	..	16.10	14.81	1.09	15.90
Commonwealth Bank of Australia	86.76	0.21	86.97	78.10	0.19	78.29	68.68	0.33	69.01	63.47	0.30	63.77
Credit Agricole	..	..	17.82	10.48	3.86	14.34	..	..	21.94	13.06	4.21	17.27
Credit Suisse AG	157.65	0.71	158.36	117.49	0.53	118.02	65.39	0.47	65.86	59.64	0.43	60.07
DBS Bank	8.43	4.58	13.01	9.32	5.06	14.38	8.57	3.47	12.04	9.25	3.74	12.99
Deutsche Bank	..	..	15.10	13.27	0.85	14.12	..	..	15.33	13.39	0.69	14.08
FirstRand Bank	..	..	..	61.22	0.25	61.47	..	..	..	47.50	0.34	47.84
Hongkong & Shanghai Banking Corporation	..	..	..	14.83	1.21	16.04	..	..	..	15.70	1.40	17.10
HSBC Bank Oman S.A.O.G	..	..	..	37.23	14.78	52.01	..	..	..	44.49	11.27	55.76
Industrial and Commercial Bank of China	240.92	0.09	241.01	240.92	0.09	241.01	80.31	0.23	80.54	69.24	0.19	69.43
JPMorgan Chase Bank	..	..	..	23.41	0.55	23.96	..	..	..	26.32	0.57	26.89
JSC VTB Bank	..	..	..	86.52	0.44	86.96	..	..	..	65.97	0.48	66.45
Krung Thai Bank	76.42	5.19	81.61	61.32	1.25	62.57	58.40	4.26	62.66	53.32	1.25	54.57
Mashreqbank	..	..	..	54.81	0.56	55.37	..	..	..	49.20	0.42	49.62
Mizuho Corporate Bank	66.63	0.37	67.00	59.94	0.33	60.27	..	..	..	47.68	0.43	48.11
National Australia Bank	..	..	..	423.74	..	423.74	..	..	..	95.57	0.51	96.08
Rabobank International	116.92	0.37	117.29	123.47	0.39	123.86	65.49	0.34	65.83	69.97	0.37	70.34
Royal Bank of	..	..	..	9.38	3.08	12.46	..	..	..	10.99	3.51	14.50

Scotland												
Sberbank	..	..	..	329.86	0.00	329.86	..	..	..	193.98	..	193.98
Shinhan Bank	55.73	1.25	56.98	39.35	0.91	40.26	47.82	1.25	49.07	33.52	0.96	34.48
Societe Generale	39.69	0.88	40.57	35.82	0.79	36.61	30.17	0.90	31.07	28.50	0.85	29.35
Sonali Bank	..	..	..	16.50	0.31	16.81	..	..	..	12.69	0.22	12.91
Standard Chartered Bank	9.48	3.33	12.81	8.19	2.86	11.05	12.88	3.17	16.05	10.45	2.55	13.00
State Bank of Mauritius	35.06	1.43	36.49	37.52	1.50	39.02	52.14	1.28	53.42	53.71	1.30	55.01
Sumitomo Mitsui Banking Corporation	..	..	..	..	..	..	..	..	..	625.69	..	625.69
UBS AG	49.70	0.13	49.83	53.61	0.14	53.75	48.71	0.31	49.02	52.53	0.33	52.86
United Overseas Bank	..	..	..	205.80	..	205.80	..	..	..	154.60	0.16	154.76
Westpac Banking Corporation	..	..	..	..	..	..	..	..	..	280.02	0.04	280.06
Woori Bank	..	..	..	421.70	..	421.70	..	..	..	163.28	..	163.28
Note : \$ includes IDBI Bank Ltd.												
<i>Source: Annual Accounts of banks.</i>												

Table 8 Calculation of NPA of various banks March 2014

	Advances	Deposits	CASA	Provs	EPS	Revenues	Net Profit	CAR	NIM	Net NPA	Gross NPA
Allahabad Bank	1,38,961	1,83,270	31.80%	852	2.07	5,518	113	9.90%	3.25%	3.88%	5.48%
Andhra Bank	3,81,772	1,47,519	23.53%	414	1.81	4,205	107	10.26%	2.14%	3.89%	5.98%
Axis Bank	2,30,535	2,72,004	40.00%	387	35.30	9,980	1667	15.53%	3.88%	0.44%	1.34%
Bank of Baroda	3,81,772	5,51,649	25.13%	1,118	31.71	11,683	1362	11.91%	2.35%	1.58%	3.11%
Bank of India	3,81,566	5,00,875	28.40%	1,255	12.53	11,329	806	9.98%	2.16%	2.14%	3.28%
Canara Bank	3,02,964	4,28,976	24.15%	988	17.49	11,728	807	10.23%	2.36%	2.03%	2.67%
Central Bank of India	1,86,047	2,40,782	33.01%	782	1.11	6,928	192	9.62%	2.87%	3.62%	6.15%
City Union Bank	16,153	22,383	18.14%	73	1.82	754	99	14.51%	3.32%	1.28%	1.91%
Corporation Bank	1,36,294	1,89,718	18.39%	466	13.82	5,215	231	11.21%	1.93%	2.71%	3.96%
DCB Bank	8,291	10,552	25.38%	37	1.76	143	45	13.63%	3.71%	0.97%	1.78%
Federal Bank	45,012	61,815	30.75%	131	2.57	1,928	220	15.16%	3.25%	0.68%	2.22%
HDFC Bank	3,12,109	3,72,074	43.00%	483	9.20	13,071	2233	15.10%	4.40%	0.30%	1.07%
ICICI Bank	3,47,067	3,35,767	39.50%	726	24.29	20,098	2832	17.39%	3.40%	0.99%	3.05%
IDBI Bank	1,84,581	2,10,343	20.97%	822	0.66	7,233	106	11.78%	1.70%	2.87%	5.64%
Indian Bank	1,17,653	1,55,336	29.18%	430	4.46	4,144	207	13.28%	2.44%	2.48%	4.01%
Indian Overseas Bank	1,77,309	2,21,879	24.50%	415	2.20	6,285	272	10.61%	2.24%	3.85%	5.84%
IndusInd Bank	58,664	63,893	33.30%	110	7.88	2,874	421	13.11%	3.66%	0.33%	1.11%
ING Vysya	38,813	42,269	30.00%	101	7.47	1,627	143	15.19%	3.52%	0.87%	2.39%
Karnataka Bank	28,837	42,783	24.98%	116	6.45	1,254	122	12.97%	2.33%	2.37%	3.43%
Kotak Bank	77,076	59,693	31.00%	27	9.05	5,007	698	18.13%	5.00%	0.81%	1.56%
Lakshmi Vilas Bank	13,422	18,758	15.45%	33	2.89	587	28	10.49%	2.47%	3.19%	3.96%
Punjab National Bank	3,47,485	4,44,920	36.78%	1,720	38.81	12,825	1405	11.52%	3.42%	3.02%	5.48%
South Indian Bank	34,255	46,489	22.07%	138	0.93	1,466	127	12.19%	2.72%	0.91%	1.50%
State Bank Mysore	48,564	61,702	34.88%	198	15.57	1,868	75	11.16%	3.08%	2.72%	5.13%
State Bank of India	11,98,903	14,18,915	40.82%	5,439	44.86	40,739	3349	12.33%	3.13%	2.66%	4.90%
Syndicate Bank	1,76,442	2,14,863	29.55%	529	7.77	5,523	485	10.80%	2.47%	1.88%	2.97%
UCO Bank	1,47,101	2,01,814	32.30%	681	5.14	5,395	521	12.30%	2.56%	2.33%	4.31%
Union Bank of India	2,33,932	2,97,420	29.11%	708	42.15	8,548	664	10.41%	2.60%	2.46%	4.27%
Vijaya Bank	77,091	1,18,677	19.15%	129	1.88	3,190	161	10.46%	1.87%	1.77%	2.68%
Yes Bank	58,989	76,103	22.30%	237	11.50	3,105	439	17.60%	3.00%	0.07%	0.33%
Grand Total	58,87,660	70,13,242	28.58%	19,543	12.17	2,14,249	19939	12.63%	2.91%	1.97%	3.38%

V. REGULATIONS ON CAPITAL ADEQUACY

As is widely accepted bank capital facilitates as a buffer against losses and hence failure. Conventional approaches to bank regulation underscore the positive feature of capital adequacy requirements (Dewatri pont and tirole, 1994). Proclivity for banks to engage in risk taking is curtailed with limited liability as against the higher levels of capital at risk. In this back drop, capital adequacy obligations assume critical role in aligning the incentives for depositors, bondholders and other creditors (bergeretal, 1995, and

Keeley and furlong, 1990). However, on the contrary, Kohen and santomero (1980), Kim and santomero (1988), besanko and Kanata's (1996), and Blum (1999) contended that increases in capital requirements could escalate the banks risk-taking behavior and would have perverse effects on banking.

IMPLEMENTATION OF BASEL-III.

Under the framework, the quality and composition of capital are expected to be increased in a phased manner spanning up to year 2019. While tier-1st capital has to be

increased from 4.5% in 2013 to 6% by 2019, the overall capital, including capital conservation buffers and counter-cyclical buffers, is required to be increased from 8% in 2013 to 10.5% in 2019. Liquidity ratios are envisaged to be initiated in a phased manner beginning with an observation period that commenced in 2011. The introduction of minimum standards for liquidity ratios are expected to be between 2014 and 2018. The most discussed leverage ratio is expected to be monitored from 2011.

LOOKING BEYOND BASEL III.

Increasing global regulation will impact the structure, profitability and management of the banking and financial industry by.

- Reducing the risk of another systemic global financial crisis.
- The impact of systemic crisis.
- Systemically important institutions.
- Higher capital and liquidity requirements reduce leverage and earnings.
- Lower risk premium.
- Capital costs.
- Increased demands on risk management and risk-adjusted pricing.
- Complex risk management mandates and.
- Deployment of capital, employees and business infrastructure.

VI. CONCLUSION

The given points explain that top Indian banks are maintaining adequate level of CRAR. It has been found out that ICICI bank has maintained highest level of CAR followed by HDFC and Axis bank while Bank of India has the lowest. This made us conclude that private sector banks are in good position as compare to public banks in maintaining higher capital adequacy ratio. On an average basis all the banks have CAR between 12.22% to 18.35%, which is an indicator that even implementation of Basel III norms will not pose much difficulty for Indian banks at least initially. Financial crisis in the world has increased the importance of capital adequacy requirements. In India, the impact of financial crises was low due to strong capital structure regulatory environment. However there are still many questions which needs to be explored e.g

- Are Indian banks successful due to BASEL III?
- How much role of Indian banks at global level?

- Should we mandate foreign banks to come in only as subsidiaries?
- Where do Indian banks stand on efficiency parameters?
- 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. In the hypothetical case of a bank having a CAR lower than the prescribed minimum, it will be exposed to greater financial risk which can lead to its collapse.

REFERENCES

- [1] Reserve Bank of India. (2013). Master Circular - Prudential Norms on Capital Adequacy - Basel I Framework. July 1.
- [2] Ghosh, S., & Das, A. (2005). Market discipline, capital adequacy and bank behaviour: Theory and Indian evidence. MPRA paper no. 17398, Reserve Bank of India, March.
- [3] Sharma, G. (2009). Indian banking sector: Capital Adequacy under Basel II. Assocham Financial Pulse Study, June.
- [4] Singh, M., & Vyas, R.K. (2009). Capital adequacy and scheduled commercial banks in India. BAUDDHIK, I (1), May-Aug, 1-13.
- [5] V.K. Narasimhan, V.K., & Goel, M. (2013). Capital adequacy and its relevance to the Indian banking sector: A study of four Indian banks. International Research Journal of Social Sciences, 2(11), International Science Congress Association Nov.
- [6] Soni, R. (2012). Managerial efficiency- Key driver towards the profitability of Indian commercial banks in turbulent time. Int. Jn. of Applied Research & Studies, I (II), Sept-Nov.
- [7] <http://www.iibf.org.in/documents/BASEL-III.pdf>
- [8] http://shodhganga.inflibnet.ac.in/bitstream/10603/2875/14/14_chapter%206.pdf
- [9] <http://www.fibac.in/hm/CRangarajan.pdf>
- [10] http://www.bis.org/publ/qtrpdf/r_qt1309e.pdf
- [11] "Business standard, Friday, October 17,2014" India's daily E-magazine of GK & current affairs.
- [12] "pasha mohammed arif and T.Srivenkatramana, K SWAMY",BASEL II norms with special emphasis on capital adequacy ratio of Indian banks. 2012, a journal of MP birla institute of management, associate bhartiya vidya bhavan, Bangalore.

- [13] Karim pakravan, (2014), "banks capital',the case against baseI",journal of financial regulation and compliance, vol 22ISS3PP.208-218.
- [14] Basel committee on banking supervision (2013b), regulatory consistency assessment program (RCAP)-analysis of risk-weighted assets for credit risk in the bank book, bank for international settlements (BIS).