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Risk Analysis of Select Public and Private Sector Banks Operating in India

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Abstract: This paper evaluates the changes in the capital structure and solvency position of banks by using various risk indicators for highlighting risk profile of Indian Banking entities. The Paper evaluates in detail the risk profile of top ten public sector banks and top ten private sector banks.
Key Words: Balance Sheet, Stress, Solvency, Leverage, Capital Structure, Risk

1. Introduction:

Financial system is the backbone of any economy as it has direct bearing on the economic growth of a country and thereby prosperity and welfare of the populace. The financial system services other sectors of the economy viz., the real economy. Stability of the financial system is critical to the stability of the economy itself. The banking sector is the principal constituent of the financial system. Banking sector is directly linked to the country's economy; each compliments the other for growth, strength and status. A strong and resilient banking system is the foundation for sustainable economic growth.

The basis for efficient banking is simplicity in operations based on effective risk management, transparency and accountability. Trust and confidence are the bedrock of banking. Hence, transparent pricing of product and services, and, adequate and timely delivery of the same are paramount for trust and confidence in banking. The management prudence decides the operational focus of the bank between the two extremes of 'Utility Banking' and 'Casino Banking'. A major challenge for Regulators in administering the regulatory restrictions on 'exuberance' and 'excesses' in financial markets is to make a distinction between 'growth enhancing' credit and finance, and 'speculation enhancing' ones. Hence, Risk Management is a major issue and concern for both, the banks and the regulators.

2. Review of Literature

A working paper of ECB (European Central Bank) titled 'Balance Sheet Interlinkages and Macro-financial risk Analysis in the Euro Area' (Castern&Kavonius, 2009) highlighted the use of Balance Sheet Approach model to identify the counterparty risk exposures and shock transmission processes at the systemic level. The paper concludes that high financial leverage and high asset volatility may increase a sector's vulnerability to shock and contagion.

Yair Haim and Roee Levy in their paper 'Using Balance Sheet Approach in Financial Stability Surveillance' (Haim & levy, 2002) analysed Israel's economic resilience to exchange rate risk by using balance sheet approach. The analysis using balance sheet approach shows that Israel's economy was highly vulnerable to a depreciation of the Shekel (currency) in 1997. From then until the year 2005 Israeli economy became more resilient. The improvement was mainly due to the lowering of the business sector's high level of exposure to depreciation and its greater financial strength. This together with higher capital adequacy ratio in the banking system, made latter more resilient to indirect damage that could be caused by depreciation.

Another study (Kumar, 2011) indicates that exclusion of off-balance sheet activities not only understates the profit efficiency of individual banks but also affects the ranking of ownership groups in the industry. In particular when a proxy for off balance sheet activities is accounted for in the output specification, the foreign banks appear to be more efficient then public and private banking sector.

An article by David Xiao Chen analyses the balance sheet ratios of Canadian financial institutions. Article states that understanding different risks faced by various types of financial institutions improves the framework of banks and can be used to monitor developments of potential risks in banking sector. As per the article banks in Canada over the last few years have exhibited higher resilience on account of lower leverage and higher capital ratios.

Study by Mitrica, Moga and Stanculescu (2010) has presented a risk analysis for the Romanian Banking system. The analysis was conducted from the point of prudential rules and also from the point of view of Romanian Banking system's exposure to foreign funds. The study concluded that foreign funds were important source of risk for the banking system in Romania.

3. Current Risk Status of Banks in India:

Indian banks as a matter of fact do not suffer from situation/position of dangerous capital structure. The Basel III norms have stipulated minimum leverage ratio (percentage of minimum of 'Tier I' capital to 'Total Assets' ratio) of 4.5%. Based on the Basel III norms following are indicators of the current leverage position of all scheduled commercial banks operating in India;

Table 1: Leverage Position of Indian Banks (Amount in INR Billion)

Head	2011-12	2012-13
% of Tier I Capital to Total Capital	72.8	74.1
Total Capital and Reserves of all SCB's	6085.62	7089.30
Estimated Amount of Tier I Capital (All SCB's)	4430.33	5253.17
Total Asset Base of all SCB's	83,209	95,733
Leverage Ratio [Tier I Capital to Total Asset Ratio] (As per Basel III)	5.30%	5.48%

Source: (1) Trends and Progress of Banking, 2013 (2) Profile of Banks – 2012-13 [Reports of RBI]

However, in reference to the above what needs to be kept in mind is that above given leverage ratio is that of all scheduled commercial banks taken together. If these figures are broken group wise then it emerges that public sector banks need to further build up their Tier I capital position in comparison to leading private sector banks like ICICI, HDFC etc.

Another parameter of financial soundness is CRAR (a balance sheet risk indicator) and non-performing assets of banks. For this a comparative picture of CRAR and NPA's of Indian Banks is drawn along with select global economies;

Table 2: Indicators of Financial Soundness – 2012

Country	Gross NPA as % of Gross	CRAR%

	Advances	
Select Advanced Economies		
Germany	3.0	17.9
Japan	2.4	14.2
UK	4.0	15.7
USA	3.9	15.3
BRICS		
Brazil	3.5	16.7
Russia	6.0	13.7
India	3.6	13.6
China	1.0	12.9
South Africa	4.0	15.8
Other Emerging Market Economies		
Indonesia	1.8	17.3
Mexico	2.4	16.0
Turkey	2.7	17.9

Source: RBI, IMF – Financial Soundness Indicators

Above table indicates that though it may seem that Indian Banking system is sound there is considerable chance to improve the soundness when the Indian banking data is compared with that of countries like Germany, Brazil, China, Indonesia, Mexico, Turkey etc.

4. Solvency Problem of Indian Banks

International Monetary Fund and world bank conducted a study 'Financial Stability Assessment Programme (FSAP)' during 2011-12 in which it found that India was non-compliant with Basel Core Principle 10 related to 'large exposure limits'. The report said that large exposure limit of 40% (which can be further increased to 50% for infrastructure exposure) for a group borrower is significantly higher than the large exposure limit of 25% that is considered as good international practice. Currently banks in India can lend up to 25% of total capital to a single lender and 55% to a group borrower.

Latest 'Financial Stability Report' of RBI also agrees with observation of FSAP and states that 'Failure of a major corporate group could trigger a contagion in the banking system due to large exposure of number of banks to the corporate'. Report further states that, 'Stress scenario indicates that failure of large corporate group could result in a total loss of over 60% of banking system capital when the loss given default is 100% and the total loss could be over 50% of the banking system's capital when the loss given default is 60%'.As per the report the share of loans to 'Medium and Large' segment is maximum among total loans given out by banks and so is their share in the stressed advance ratio. Five sectors namely; Infrastructure, Iron & Steel, Textiles, Aviation and Mining have highest level of stressed advances. At the system level these five sectors together contribute around 24% of total advances of scheduled commercial banks and account for 51% of total stressed advances.

Table 3: Loss to the Banking System under Stress Scenario – September 2013 (% of total capital)

Credit Shock	Initial Loss	Additional Loss due to Contagion	Total Loss
NPAs increase by 100%	14.3	26.8	40.1
30% of restructured standard advances become NPAs	2.9	0.0	2.9
30% of restructured standard advances are written off	10.7	24.1	34.8

Source: Financial Stability Report - December 2013

This is a worrying observation by banking regulator of the country and indicates that all in not well with the Banking System of the Country and solvency of banking entities is under pressure.

5. Risk Analysis of Select Banks Public sector and Private Sector Banks in India:

For the study top ten private sector banks (in terms of revenue) were selected along with top ten (again in terms of revenue) public sector banks were selected and were evaluated on the basis of various risk parameters like Gross NPA's to Gross Advances, Net NPA's to Net Advances, CAR (BASEL II), Tier I Ratio, Credit Risk, Market Risk, Operational Risk and Lending to sensitive sectors.

Top ten private sector banks selected for the study are ICICI Bank, HDFC, Axis Bank, Yes Bank, Federal Bank, Jammu & Kashmir Bank, IndusInd Bank, IngVysya Bank, Yes Bank, South Indian bank and Kotak Mahindra Bank

Top ten public sector banks selected for the study are SBI, Bank of Baroda, Canara Bank, Oriental Bank of Commerce, Punjab National Bank, Union Bank of India, Central Bank of India, IDBI Bank, Indian Overseas Bank and Bank of India

(i) Risk Analysis of Private Sector Banks:

Risk analysis of private sector bank on risk parameters like Gross NPA's to Gross Advances, Net NPA's to Net Advances, CAR (BASEL II), Tier I Ratio, Credit Risk, Market Risk, Operational Risk and Lending to sensitive sectors is as follows;

Table 4: Gross NPA to Gross Advances:

Bank Name	**2013**	**2012**	Year on Year Change
The South Indian Bank	1.36	0.97	0.39
Axis Bank	1.20	1.06	0.14
Kotak Mahindra Bank	1.30	1.20	0.10
The Federal Bank	3.44	3.35	0.09
The Jammu & Kashmir Bank	1.62	1.54	0.08
IndusInd Bank	1.03	0.98	0.05
ING Vysya Bank	0.52	0.52	0.00
Yes Bank	0.20	0.22	-0.02
HDFC Bank	0.97	1.02	-0.05
ICICI Bank	3.22	4.83	-1.61

Source: Ace Equity

Above table indicates that on the basis of Gross NPA position to Gross Advances it can be stated that Federal Bank has highest NPA's among the top ten private sector banks followed by ICICI Bank. However the rate of change in Gross NPA's to Gross Advances is highest for the South Indian Bank. Banking entity with least ratio of Gross NPA's to Gross Advances is Yes Bank

Table 5: Net NPA to Net Advances

Bank Name	**2013**	**2012**	**Year on Year Change**
The South Indian Bank	0.78	0.28	0.50
The Federal Bank	0.98	0.53	0.45

Axis Bank	0.36	0.27	0.09
ICICI Bank	0.77	0.73	0.04
IndusInd Bank	0.31	0.27	0.04
Kotak Mahindra Bank	0.64	0.61	0.03
HDFC Bank	0.20	0.18	0.02
ING Vysya Bank	0.18	0.18	0.00
The Jammu & Kashmir Bank	0.14	0.15	-0.01
Yes Bank	0.01	0.05	-0.04

Source: Ace Equity

Above table indicates that on the basis of Net NPA position to Net Advances it can be stated that Federal Bank has highest NPA's among the top ten private sector banks (2013) followed by South Indian Bank and then ICICI Bank. However, the rate of change in Net NPA's to Net Advances is highest for the South Indian Bank. Banking entity with least ratio of Gross NPA's to Gross Advances is Yes Bank.

Table 6: Total CAR (Basel II)

Bank Name	**2013**	**2012**	Year on Year Change
Axis Bank	17.00	13.66	3.34
IndusInd Bank	15.36	13.85	1.51
Yes Bank	18.30	17.90	0.40
HDFC Bank	16.80	16.52	0.28
ICICI Bank	18.74	18.52	0.22
The South Indian Bank	13.91	14.00	-0.09
The Jammu & Kashmir Bank	12.83	13.36	-0.53
ING Vysya Bank	13.24	14.00	-0.76
Kotak Mahindra Bank	16.05	17.52	-1.47
The Federal Bank	14.73	16.64	-1.91

Source: Ace Equity

Above table indicates that the CAR (Capital Adequacy Ratio) that ICICI Bank is maintaining is highest among all the top ten private sector banks followed by Yes Bank. Least ratio is that Jammu & Kashmir Bank. The maximum negative change or fall in the CAR is reported by the Federal Bank and maximum positive change in the CAR (indicating rise/increase in CAR) is reported by the Axis Bank.

Table 7: Tier I Capital Ratio

Bank Name	**2013**	**2012**	Year on Year Change
Axis Bank	12.23	9.45	2.78
IndusInd Bank	13.78	11.37	2.41
The South Indian Bank	12.05	11.54	0.51
ICICI Bank	12.80	12.68	0.12
The Jammu & Kashmir Bank	10.86	11.12	-0.26
Yes Bank	9.50	9.90	-0.40
HDFC Bank	11.08	11.60	-0.52
ING Vysya Bank	10.49	11.23	-0.74
Kotak Mahindra Bank	14.71	15.74	-1.03

The Federal Bank	14.09	15.86	-1.77

Source: Ace Equity

Above table indicates that the Tier I Ratio that Kotak Mahindra Bank is maintaining is highest among all the top ten private sector banks followed by Federal bank. The least ratio is that Yes Bank. Maximum negative change or fall in the Tier I is reported by the Federal Bank and maximum positive change in the Tier I ratio (indicating rise/increase in CAR) is again reported by the Axis Bank.

Table 8: Credit Risk – Risk Weighted Assets

Bank Name	**2013**	**2012**	Year on Year Change
HDFC Bank Ltd.	24681.82	19760.36	4921.46
ICICI Bank Ltd.	37718.00	33919.00	3799.00
Axis Bank Ltd	19785.25	17815.22	1970.03
Kotak Mahindra Bank Ltd.	7328.74	6101.46	1227.28
Yes Bank Ltd.	5534.70	4414.25	1120.45
IndusInd Bank Ltd. Banks	4164.34	3146.66	1017.68
The Federal Bank Ltd	3371.49	2737.85	633.64
ING Vysya Bank Ltd.	3363.89	2753.89	610.00
The Jammu & Kashmir Bank Ltd.	3382.84	2798.72	584.12
The South Indian Bank Ltd. Banks	1855.14	1359.44	495.70

Source: Ace Equity

Above table indicates that the Credit Risk is highest in case of ICICI Bank followed by HDFC Bank and Axis Bank. This can be understood that these banks have huge asset base. However at the same time the latest 'Financial Stability Report' of RBI needs to be recalled which states that 'Failure of a major corporate group could trigger a contagion in the banking system due to large exposure of number of banks to the corporate'.

Table 9: Market Risk – RWA (standardized duration approach)

Bank Name	**2013**	**2012**	Year on Year Change
HDFC Bank	1373.29	459.56	913.73
Kotak Mahindra Bank	948.04	599.24	348.80
Yes Bank	878.30	563.24	315.06
IndusInd Bank	211.09	71.76	139.33
Axis Bank	1841.51	1749.29	92.22
ING Vysya Bank	207.60	117.95	89.65
The Federal Bank	233.73	166.34	67.39
The Jammu & Kashmir Bank	269.95	208.11	61.84
ICICI Bank	3246.00	3196.00	50.00
The South Indian Bank	63.75	44.33	19.42

Source: Ace Equity

Above table indicates that Market risk is highest in case of ICICI Bank followed by Axis bank and then HDFC Bank. Highest change (that is increase) in market risk is reported by HDFC Bank. Least Market risk is being indicated by the South Indian Bank

Table 10: Operational Risk - (Basic Indicator Approach)

Bank Name	**2013**	**2012**	Year on Year Change
HDFC Bank	2256.46	1892.68	363.78
Axis Bank	1625.23	1289.52	335.71
ICICI Bank	2749.00	2619.00	130.00
IndusInd Bank	420.29	309.86	110.43
Kotak Mahindra Bank	823.03	727.24	95.79
Yes Bank	310.24	220.77	89.46
The Jammu & Kashmir Bank	339.38	276.51	62.87
The Federal Bank	315.15	277.59	37.56
ING Vysya Bank	246.44	212.21	34.23
The South Indian Bank	154.01	125.14	28.87

Above table indicates that highest operational risk is in case of ICICI Bank followed by HDFC Bank and then Axis Bank. Least operational risk is in case of South Indian Bank. The reason for low Operational Risk in case of South Indian Bank may also be on account of lower scale of its operations.

Table 11: Lending to Sensitive Sectors

Bank Name	**2013**	**2012**	Year on Year Change
ICICI Bank	115676.72	101762.60	13914.12
Axis Bank	68385.53	57477.24	10908.29
Yes Bank	9859.91	4320.02	5539.89
HDFC Bank.	37631.27	32327.78	5303.49
IndusInd Bank	5954.15	2924.60	3029.55
Kotak Mahindra Bank	13596.89	10884.45	2712.44
ING Vysya Bank	7712.37	6424.37	1288.01
The Federal Bank	8120.14	7231.43	888.71
The South Indian Bank	1937.59	1820.54	117.05
The Jammu & Kashmir Bank Ltd.	4854.28	4812.77	41.51

Source: Ace Equity

ICICI is leading lender to sensitive sector followed by Axis Bank and then HDFC Bank. Maximum change (that is increase) in the lending to sensitive sectors is also reported by ICICI Bank followed by Axis Bank. Lending by Kotak Mahindra Bank to the sensitive sector is also high. Least lending to sensitive sectors is by South Indian Bank.

(ii) Overall Risk Analysis of the Selected Private Sector Banks –

Among the private sector bank it appears that Federal Bank is holding high risk in spite of its not so large scale of operations. This is being stated on account of its high Gross NPA's to Gross Advances and Net NPA's to Net Advances. Federal Bank is also reporting very steep decline in its CAR ratio and Tier I ratio. On the parameters like Market Risk, Operational Risk and Credit Risk the Federal bank seems to be safer. However at the same time it must be remembered that Market risk, Credit risk and Operational risk is also linked to the scale of operations.

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It also appears that there is substantial risk associated with ICICI Bank on account of its Gross NPA's to Gross Advances, Credit Risk, Operational Risk, Market Risk and its lending to sensitive sectors. Such risk is also high in case of HDFC Bank and Axis Bank. However at the same times it appears that ICICI Bank also has high CAR (Capital Adequacy Ratio). This ration is highest among all the public sector and private sector banks selected for the study. Axis Bank is also building up its Capital Adequacy ratio and Tier I ratio.

(iii) Public Sector Banks –

Table 12: Gross NPA's to Gross Advances

Bank Name	**2013**	**2012**	Year on Year Change
Punjab National Bank	4.27	2.93	1.34
Indian Overseas Bank	4.02	2.74	1.28
Bank Of Baroda	2.40	1.53	0.87
Canara Bank	2.57	1.73	0.84
IDBI Bank Ltd	3.22	2.49	0.73
Bank Of India	2.99	2.34	0.65
State Bank Of India	4.75	4.44	0.31
Oriental Bank Of Commerce	3.21	3.17	0.04
Central Bank Of India	4.80	4.83	-0.03
Union Bank Of India	2.98	3.01	-0.03

Source: Ace Equity

Among the public sector banks highest Gross NPA's to Gross Advances is being reported by Central Bank of India followed by State Bank of India and then by the Punjab National Bank. Least Gross NPA's to Gross Advances is being reported by Bank of Baroda. Highest change (increase) in Gross NPA's to Gross Advances ratio is reported by Punjab National Bank followed by Indian Overseas Bank.

Table 13: Net NPA's to Net Advances

Bank Name	**2013**	**2012**	Year on Year Change
Indian Overseas Bank	2.50	1.35	1.15
Punjab National Bank	2.35	1.52	0.83
Bank Of Baroda	1.28	0.54	0.74
Canara Bank	2.18	1.46	0.72
Bank Of India	2.06	1.47	0.59
State Bank Of India	2.10	1.82	0.28
Oriental Bank Of Commerce	2.27	2.21	0.06
IDBI Bank Ltd	1.58	1.61	-0.03
Union Bank Of India	1.61	1.70	-0.09
Central Bank Of India	2.90	3.09	-0.19

Source: Ace Equity

Among the public sector banks highest Net NPA's to Net Advances is being reported by Indian Overseas Bank followed by Punjab National Bank. Least Net NPA's to Net Advances is being reported by Bank of Baroda. Highest change (increase) in Net NPA's to Net Advances is being reported by Indian Overseas Bank and followed by Punjab National Bank.

Table 14: Total CAR (Basel II)

Bank Name	**2013**	**2012**	Year on Year Change
Punjab National Bank	12.72	12.63	0.09
Union Bank Of India	11.45	11.85	-0.40
Central Bank Of India	11.33	11.96	-0.63
Oriental Bank Of Commerce	12.04	12.69	-0.65
Bank Of India	11.02	11.95	-0.93
State Bank Of India	12.92	13.86	-0.94
Canara Bank	12.40	13.76	-1.36
Bank Of Baroda	13.30	14.67	-1.37
IDBI Bank Ltd	13.13	14.58	-1.45
Indian Overseas Bank	11.85	13.32	-1.47

Source: Ace Equity

Among the public sector banks highest CAR (Capital Adequacy Ratio) is being reported by Bank of Baroda followed by IDBI Bank and then State Bank of India. Least CAR (Capital Adequacy Ratio) is being reported by Bank of India and then Central Bank of India. **All public sector banks except for Punjab National Bank have reported fall in the Capital Adequacy Ratio.** Maximum decline is being reported by Indian Overseas Bank followed by IDBI Bank and then Bank of Baroda. This is surely a matter of concern.

Table 15:Tier I (Basel II)

Bank Name	**2013**	**2012**	Year on Year Change
Central Bank Of India	8.09	7.79	0.30
Union Bank Of India	8.23	8.37	-0.14
State Bank Of India	9.49	9.79	-0.30
Bank Of India	8.20	8.59	-0.39
Punjab National Bank	9.76	9.28	0.48
Indian Overseas Bank	7.80	8.35	-0.55
Canara Bank	9.77	10.35	-0.58
IDBI Bank Ltd	7.68	8.38	-0.70
Bank Of Baroda	10.13	10.83	-0.70
Oriental Bank Of Commerce	9.18	10.12	-0.94

Source: Ace Equity

Among the top ten public sector banks highest Tier I Ratio is being reported by Bank of Baroda followed by Canara Bank and then Punjab National Bank. Least Tier I Ratio is being reported by IDBI Bank followed by Indian Overseas Bank. **All public sector banks except for Central Bank of India and Punjab National Bank have reported fall in the Tier I Ratio.** This is surely a matter of concern. Maximum fall in the Tier I ratio is being reported by IDBI bank followed by Canara Bank.

Table 16: Credit Risk (Risk weighted Assets)

Bank Name	**2013**	**2012**	Year on Year Change
Bank Of Baroda	266758.43	227133.40	39625.03
IDBI Bank Ltd	20774.47	17416.45	3358.02
Central Bank Of India	13855.44	11284.21	2571.23
Union Bank Of India	16203.06	13492.62	2710.44
Punjab National Bank	25102.24	22805.17	2297.07
Canara Bank	18557.45	16623.40	1934.05

Indian Overseas Bank	12412.54	10588.56	1823.98
Oriental Bank Of Commerce	10944.60	9262.69	1681.91
State Bank Of India	88074.34 (2012)	83877.64 (2011)	4196.70
Bank Of India	21325.59 (2012)	18532.29(2011)	2793.30

Source: Ace Equity

Credit Risk is very high in case of Bank of Baroda followed by Oriental Bank of Commerce. Maximum change in the Credit risk (increase) is being reported by Bank of Baroda. Least credit risk is in the case of Oriental Bank of Commerce.

Table 17: Market Risk - RWA (Standardized Duration Approach)

Bank Name	**2013**	**2012**	Year on Year Change
Bank Of Baroda	19795.32	12203.91	7591.41
Canara Bank	1937.34	1153.94	783.40
Central Bank Of India	1274.66	704.51	570.15
IDBI Bank Ltd	1764.58	1243.63	520.95
Punjab National Bank	1760.06	1400.00	360.06
Union Bank Of India	992.14	688.92	303.22
Indian Overseas Bank	728.03	637.34	90.69
Oriental Bank Of Commerce	581.48	595.84	-14.36
State Bank Of India	1237.32	1571.77	-334.45
Bank Of India	4377.00	5185.51	-808.51

Source: Ace Equity

Above table indicates that Market risk is highest in case of Bank of Baroda followed by IDBI Bank. Highest change (that is increase) in market risk is also being reported by Bank of Baroda

Table 18: Operational Risk - RWA (Basic indicator approach)

Bank Name	**2013**	**2012**	
Bank Of Baroda	18203.00	14396.44	Year on Year Change
Canara Bank	2421.93	2064.27	3806.56
Central Bank Of India	1406.52	1201.45	357.66
IDBI Bank Ltd	1158.12	954.45	205.07
Punjab National Bank	887.45	686.37	203.67
Union Bank Of India	859.13	685.35	201.08
Indian Overseas Bank	810.88	670.67	173.78
Oriental Bank Of Commerce	844.73	717.82	140.21
State Bank Of India	7918.10	6451.90	1466.20
Bank Of India	1496.52	1318.73	177.79

Source: Ace Equity

Above table indicates that Operational risk is highest in case of Bank of Baroda followed by State Bank of India. Highest change (that is increase) in market risk is also being reported by Bank of Baroda

Table 19: Lending to Sensitive Sectors

Bank Name	**2013**	**2012**	Year on Year Change

Bank Of Baroda	190810.81	148238.62	42572.19
Canara Bank	28078.69	22969.32	5109.37
Central Bank Of India	34744.30	30096.79	4647.51
IDBI Bank Ltd	25543.13	20946.84	4596.29
Punjab National Bank	56134.04	52517.30	3616.74
Union Bank Of India	18925.41	15849.83	3075.58
Indian Overseas Bank	29949.22	27391.67	2557.55
Oriental Bank Of Commerce	42033.19	40662.03	1371.16
State Bank Of India	20433.36	19651.56	781.80
Bank Of India	19161.68	21463.13	-2301.45

Source: Ace Equity

Bank of Baroda is leading lender to sensitive sectors followed by Punjab National Bank followed by Oriental Bank of Commerce. Maximum change (that is increase) in the lending to sensitive sectors is also reported by Bank of Baroda followed by Canara Bank. Lending by Union Bank of India sensitive sectors is least.

(iv) Overall Risk Analysis of the Selected Public Sector Banks –

Among the top ten Public sector Banks, Bank of Baroda at the moment appears to hold maximum risk. The reason is its substantial Credit Risk, Market Risk, and Operational Risk. It is also lending large amount to the sensitive sectors. The CAR (Capital Adequacy Ratio) and the Tier I ratio has also declined substantially for the Bank of Baroda. Though the Gross NPA's to Gross Advances as reported by Bank of Baroda is low but it is also increasing rapidly year on year basis. State Bank of India in spite of its substantial scale appears to be quiet sound and it exhibits low credit risk, operational risk as well as market risk. However it needs to build up its Capital Adequacy Ratio and control its NPA's.

(v) **Key Findings:**

- Risk in public sector banks is higher than that of private sector banks
- Most of public sector banks have indicated reduction/fall in their CAR (capital Adequacy Ratio) and Tier I ratio in the last one year
- Most of the public sector banks are reporting increase in the Non-Performing Assets (Both Gross as well as Net) in the last one year
- CAR is higher in case of private sector banks. ICICI in the year 2013 reported highest CAR among all the private as well as public sector banks that are part of this study.
- CAR of other top private sector banks like Axis Bank, HDFC Bank, Yes Bank is also higher than the average CAR reported by the public sector banks
- Among the public sector banks Bank of Baroda has worst risk profile
- Among the private sector banks Federal bank indicates higher risk
- All public sector banks have to work on enhancing their CAR
- Even the large private sector banks need to further build up their capital base to face any eventuality of solvency risk

6. Conclusion:

The moot objective of capital requirement by banks is to absorb shocks. Hence, based on the risk management policy, the bank needs to decide the quantum and quality of capital. The regulatory norms on Capital Adequacy are the minimum norms from the Regulator's perspective, taking the Banking system as a whole. However, each bank is the best judge for deciding its capital requirement. There is cost attached to the capital held by a bank. Prudence demands that in the economic decision making by the management of the bank, due consideration is given to the objective of survival in worst case scenario.Leverage decision by the banks adequately linked to both quantity and quality of the capital will be in the long-term interest of the banks.

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