A Study of CAMEL Analysis of Three of India's Top ten Banks from 2012-13 to 2016-17

[1]Shubham D. Meshram Student, and [2]Dr. Swarnalata Philip
[1]MBA Final Year, JD College of Engineering and Management,
[2] Associate Professor, JD College of Engineering and Management

Abstract
A sound banking system is vital for the economy to sustain and to make progress. Various regulatory authorities assess the soundness of banks based on various parameters such as CAMELS CAMEL ranking is awarded by the supervising team on the basis of evaluation of the bank's performance based on five major criteria. In the acronym CAMEL, C stands for the capital adequacy; A stands for the assets quality of banks; E stands for the earning and L stands for the liquidity indicators. The study goes through the CAMEL format and attempts to rank three of the top ten banks in India from the year 2012-13 to 2016-17

Keywords: capital adequacy, asset quality, earnings and liquidity

Introduction

CAMEL S rating is a supervisory rating of the bank's overall condition. During an on-site bank visit for examination, supervisors gather private information, such as details on problem loans, with which to evaluate a bank's financial condition and to monitor its compliance with laws and regulatory policies. The acronym "CAMEL" refers to the five components of a bank's condition that are assessed: Capital adequacy, Asset quality, Management, Earnings, and Liquidity. A sixth component, a bank's Sensitivity to market risk was added in 1997; hence the acronym was changed to CAMELS.CAMELS is basically a ratio-based model for evaluating the performance of banks. Three of India's top ten banks have been selected to carry out this study.

Selected Banks:

SBI

The bank descends from the Bank of Calcutta, founded in 1806, via the Imperial Bank of India, making it the oldest commercial bank in the Indian subcontinent. State Bank of India (SBI) is an Indian multinational, public sector banking and financial services company. It is a government-owned corporation with its headquarters in Mumbai, Maharashtra. On April 1, 2017, the State Bank of India, which was India's largest bank, merged with five of its associate banks. This was the first ever large scale consolidation in the Indian banking industry. With the merger, SBI became one of the 50 largest banks in the world (balance sheet size of ₹33 trillion, 278,000 employees, 420 million customers, and more than 24,000 branches and 59,000 ATMs). SBI's market share was projected to increase to 22 percent from 17 per cent. It has 198 offices in 37 countries; 301 correspondents in 72 countries.

ICICI

The bank has subsidiaries in the United Kingdom and Canada; branches in United States, Singapore, Bahrain, Hong Kong, Sri Lanka, Qatar, Oman, Dubai International Finance Centre, China and South Africa; and representative offices in United Arab Emirates, Bangladesh, Malaysia and Indonesia. The company's UK subsidiary has also established branches in Belgium and Germany. ICICI Bank, stands for Industrial Credit and Investment Corporation of India, is an Indian multinational banking and financial services company headquarter in Mumbai, Maharashtra, India, with its registered office in Vadodara. The bank has a vast network of 4,850 branches and 14,404 ATMs in India, and has a presence in 19 countries including India

PNB

Punjab National Bank (PNB) is an Indian multinational banking and financial services company. The bank was registered on 19 May 1894 under the Indian Companies Act. The bank opened for business on 12 April 1895 in Lahore. PNB has the distinction of being the first Indian bank to have been started solely with Indian capital that has survived to the present. It is a state-owned corporation based in New Delhi, India.. As of 31 March 2017 the bank has over 80 million customers, 6,937 branches, and 10681 ATMs across 764 cities.

Literature Review

Rostami (2015) finds that an important aspect of CAMELS is to compare an organization with the others in internal and external industry concludes that the model can help managers to control and analyze financial data and organizational position in an industry.

. **CA. Ruchi Gupta (2014 found** that there is a statistically significant difference between the CAMEL ratios of all the Public Sector Banks in India, thus, signifying that the overall performance of Public Sector Banks is different. **Dang, Uyen (2011)** found CAMEL is a useful tool to examine the safety and soundness of banks, and help mitigate the potential risks which may lead to bank failures. The research has been conducted as a case study of American International Assurance Vietnam (AIA. Ahmad Dahiyat, suggested an improved framework for Supervisory bodies, especially Jordan securities commission for better assessment of the banks.

Data Analysis

C- Capital Adequacy:

Capital Adequacy indicates the bank's ability to absorb shocks, i.e., losses..The most widely used indicator of capital adequacy is capital to risk-weighted assets ratio (CRWA). According to Bank Supervision Regulation Committee (The Basle Committee) of Bank for International Settlements, a minimum 9 percent CRWA is required. Capital adequacy ultimately determines how well financial institutions can cope with shocks to their balance sheets.

TABLE 1.1 CAPITAL ADEQUACY RATIOS (IN %)

Ratio	Banks		
	SBI	ICICI	PNB
CRAR	13	17.6	12.2
Debt Equity Ratio	161.95	197.21	125.07
Total Advance to Total Asset	64.12	58.31	62.20

TABLE 1.2 BASIS FORCALCULATING RANKS RANKS

Ratio	Marks									
	1	2	3	4	5	6	7	8	9	10
CRAR	< 10	10 - 11	11 - 12	12 - 13	13 - 14	14 - 15	15 - 16	16 - 17	17 - 18	>18
Debt Equity Ratio	< 100	100 - 130	130 - 160	160 - 190	190 - 220	220 - 250	250 - 280	280 - 310	310-340	>340
Total Advance to Total Asset	<40	40-45	45-50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	> 80

TABLE 1.3 RANKS OF THE BANKS BASED ON CAPITAL ADEQUACY RATIOS

Ratio	Banks		
	SBI	ICICI	PNB
CRAR	4	9	4
Debt Equity Ratio	4	5	1
Total Advance to Total Asset	6	5	6

Total	**14**	**19**	**11**

A – ASSET QUALITY:

Loss of value in the assets is a prime concern for banks , as losses are eventually written-off against capital, which impact the earning capacity of the institution in the first place while bearing heavily on soundness of the bank. The asset quality is evaluated in relation to the quantum and severity of non-performing assets, adequacy of provisions, recoveries, distribution of assets etc .Table below shows the ranking of the banks on the basis of asset quality in terms of Gross NPA ratio and Net NPA ratio

TABLE 2.1 ASSET QUALITY RATIOS

Ratio	Banks		
	SBI	**ICICI**	**PNB**
Gross NPA Ratio (Gross NPA/Total Advances)	5.60	5.126	8.4
Net NPA Ratio (Net NPA/Total Advances)	3.00	2..08	5.2

TABLE 2.2 BASIS FOR RANKS OF THE BANKS BASED ON ASSET QUALITY

Ratio	Marks									
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
Gross NPA Ratio	< 2	2 - 4	4 - 6	6 - 8	8 - 10	10 - 12	12 - 14	14 -16	16 -18	>18
NET NPA RATIO	< 1	1 - 2	2 - 3	3 -4	4 - 5	5 - 6	6 - 7	7 - 8	8 -9	> 9

TABLE 2.3 RANKS OF THE BANKS BASED ON ASSET QUALITY

Ratio	Banks		
	SBI	**ICICI**	**PNB**
Gross NPA Ratio	3	2	5
Net NPA Ratio	3	3	6
Total	**6**	**5**	**11**

M – MANAGEMENT EFFICIENCY

Management of financial institution is generally evaluated in terms of capital adequacy, asset quality, earnings and profitability, liquidity and risk sensitivity ratings. In addition, performance evaluation includes compliance with set norms, ability to plan and react to changing circumstances, technical competence, leadership and administrative ability. Sound management is one of the most important factors behind financial institutions' performance. Indicators of quality of management, however, are primarily applicable to individual institutions, and cannot be easily aggregated across the sector. Furthermore, given the qualitative nature of management, it is difficult to judge its soundness just by looking at financial accounts of the banks. Nevertheless, total advance to total deposit, business per employee and profit per employee helps in gauging the management quality of the banking institutions.

TABLE 3 RATIOS DEPICTING MANAGEMENT EFFICIENCY

Ratio	Banks		
	SBI	**ICICI**	**PNB**
Total Advance to Total Deposit Ratio (%)	83	101	75
Business Per Employee (%)	81	86	0

Profit Per Employee (%)	5	14	3

TABLE 3 1 BASIS FOR RANKS OF THE BANKS BASED ON MANAGEMENT EFFICIENCY

Ratio	Marks					
	1	2	3	4	5	6
Total Advance /Total Deposit Ratio	< 60	60 - 70	70 - 80	80 - 90	90 - 100	>100
Business /Employee	< 70	70 - 75	75 - 80	80 - 85	85 - 90	>90
Profit /Employee	< 3	3 - 6	6 - 9	9 - 12	12 - 15	>15

TABLE 3 RANKS OF THE BANKS BASED ON MANAGEMENT EFFICIENCY

Ratio	Banks		
	SBI	ICICI	PNB
Total Advance to Total Deposit Ratio	4	6	3
Business Per Employee	4	5	2
Profit Per Employee	2	5	1
Total	**10**	**16**	**6**

E – EARNINGS

Earnings the prime source of increase in capital base, is examined with regards to interest rate policies and adequacy of provisioning. In addition, it also helps to support present and future operations of the institutions. The single best indicator used to gauge earning is the Return on Assets (ROA), which is net income after taxes to total asset ratio. Strong earnings and profitability profile of banks reflects the ability to support present and future operations. More specifically, this determines the capacity to absorb losses, finance its expansion, pay dividends to its shareholders, and build up an adequate level of capital. Being front line of defense against erosion of capital base from losses, the need for high earnings and profitability can hardly be overemphasized. Although different indicators are used to serve the purpose, the best and most widely used indicator is Return on Assets (ROA).However, for in-depth analysis, another indicator Interest Income to Total Income and other income to Total Income is also in used.

TABLE 4.1 : EARNINGS RATIOS (%)

Ratio	Banks		
	SBI	ICICI	PNB
Dividend Payout Ratio	20	22	10
Return on Assets	0.5	1.5	0.3
Net Profit to Average Assets	0.56	1.49	0.5
Interest Income to Total Income	86	79	88
Other Income to Total Income	13.63	21.04	11.

TABLE 4.2 : BASIS FOR RANKS OF THE BANKS BASED ON EARNINGS

Ratio	Marks					
	1	2	3	4	5	6

Dividend Payout Ratio	< 10	10 13	13 - 16	16 - 19	19 to 22	>22
Return on Assets	<0.50	0.50 - 1.00	1.00 - 1.50	1.50 - 2.00	2.00 -2.50	>2.50
Net Profit /Average Assets	< 0.50	0.50 -1.00	1.00 -1.50	1.50 - 2.00	2.00 - 2.50	>2.50
Interest Income / Total Income	< 75	75 - 78	78 - 81	81 - 84	84- 87	>87
Other Income / Total Income	< 10	10 - 13	13 - 16	16 -19	19 - 22	>22

TABLE 4.3 : RANKS OF THE BANKS BASED ON EARNINGS

Ratio	Banks		
	SBI	ICICI	PNB
Dividend Payout Ratio	5	6	2
Return on Assets	2	4	1
Net Profit to Average Assets	2	3	2
Interest Income to Total Income	5	3	6
Other Income to Total Income	3	5	2
Total	**17**	**21**	**13**

L – LIQUIDITY

An adequate liquidity position refers to a situation, where institution can obtain sufficient funds, either by increasing liabilities or by converting its assets quickly at a reasonable cost. It is, therefore, generally assessed in terms of overall assets and liability management, as mismatching gives rise to liquidity risk. Efficient fund management refers to a situation where a spread between rate sensitive assets (RSA) and rate sensitive liabilities (RSL) is maintained. The most commonly used tool to evaluate interest rate exposure is the Gap between RSA and RSL, while liquidity is gauged by liquid to total asset ratio.

TABLE 5.1 : RANKS OF THE BANKS BASED ON LIQUIDITY

Ratio	Banks		
	SBI	ICICI	PNB
Liquidity Assets to Total Assets	25.10	34.62	35.82
Liquidity Assets to Demand Deposits	34.12	65.34	35.82
Liquidity Assets to Total Deposit	28.33	48.26	32.32

\ TABLE 5.2 : BASIS FOR RANKS OF THE BANKS BASED ON LIQUIDITY

Ratio	Marks					
	1	2	3	4	5	6
Liquidity Assets to Total Assets	<30	30 - 32.75	32.75 - 34.75	34.75 - 36.75	36.75 - 38.75	>38.75
Liquidity Assets to Demand Deposits	< 30	30 -34	34 - 38	38 -42	42 - 46	>46
Liquidity Assets to Total Deposit	<35	35 - 45	45 - 55	55 - 65	65 - 75	>75

TABLE 5.3 : RANKS OF THE BANKS BASED ON LIQUIDITY

Ratio	Banks		
	SBI	**ICICI**	**PNB**
Liquidity Assets to Total Assets	2	3	4
Liquidity Assets to Demand Deposits	1	6	2
Liquidity Assets to Total Deposit	1	5	2
Total	**4**	**14**	**8**

TABLE 6. OVERALL RANKING TO THE BANKS:

Parameters	Banks		
	SBI	**ICICI**	**PNB**
Capital Adequacy	14	19	11
Asset Quality	6	5	11
Management	10	16	6
Earnings	17	21	13
Liquidity	4	14	8
Total	**51**	**75**	**49**
Rank	**2**	**1**	**3**

Based on the analysis, ICICI bank is found to be on the top of the table among the three banks studied. SBI comes to a second place but the difference in rank is substantial. PNB is found to be bank with the lowest rank amongst the three banks.

CONCLUSION

- All the banks have succeeded in maintaining CRAR at a higher level than the prescribed level, 9%. But the ICICI has maintained highest across the duration of last five years i.e. more than 15%. It is very good sign for the bank to survive and to expand in future.

- Gross NPA ratio has registered declining trend for all the three banks during the last five years. But the ICICI bank have been successful during the last five years in managing the level of NPA. Whereas the PNB has 13% of Gross NPA in 2017 and it is highest NPA compare at the end of the year 2013. The end of the year 2016-17 ICICI has 5% Net NPA whereas SBI and PNB have 4% to 8%. Thus, it indicates for improvement in the asset quality position of all the three banks.

- In Management Quality, we have found that Business per Employee Ratio is increased during the last five years in all three banks. But Profit per Employee Ratio is decreased in current year of all banks. The improvement shows the growth of the bank as well as efficiency of the employee, which is very good for all banks and they will help to the bank to grow in future.

- In Earnings Quality, the major part of income of banks is from Interest income. Because their large part of capital invest is in other investment. A little change in Interest Rate will effect on it more. Dividend Payout Ratio has 0% of ICICI and PNB bank is in current year. But at the end of the year 2016-17 ICICI has 1% Return on Asset whereas SBI and PNB have 0%.

- The Liquidity ratios indicate better liquidity of all the banks. However, ICICI Bank has performed throughout well, and PNB is also performed slightly well as compare to SBI Bank. SBI is top in bank list but its liquidity less than other banks so they increase our liquidity for maintain their top position.

Suggestions

- In ICICI bank, debt equity ratio is continuously rising over the years which are not good so they have to increase equity or reduce debts in their capital structure.

- ICICI has comparatively less total advance to total asset ratio. So, bank has to give more advances in order to earn more interest. But they should have to also keep in mind the credit worthiness of the customers.

- PNB has highest Gross and Net NPA Ratios which are not good for the bank. They should give loans to the customers, whose credit worthiness is good.

- PNB has less Profit per Employee Ratio which is affect their profit. They should increase the work efficiency of the employees.

- In ICICI Bank Interest Income to Total Income Ratio is less. Because they are giving less advances. So, in order to earn more interest income they should invest more in government approved securities and give more advances to their customers.

References

Ahmad Dahiyat, The Application of CAMELS rating system to Jordanian brokerage firms

Jagjeet Kaur (July, 2016): Camel analysis of selected public sector banks. 13th National Conference on Management, Information Technology and Engineering (GJ-NatConMITE 2016)

Mishra Aswini Kumar, G. Sri Harsha (October 2012): Analyzing Soundness in Indian Banking: A CAMEL Approach. *Research Journal of Management Sciences*

Rostami., 2(11): [November, 2015]: CAMELS' ANALYSIS IN BANKING INDUSTRY (Global Journal of Engineering Science and Research Management)

Ruchi Gupta. Faculty, Delhi Institute of Advanced Studies (Jan 2014) An Analysis of Indian Public Sector Banks Using Camel Approach. IOSR Journal of Business and Management (IOSR-JBM) e-ISSN: 2278-487X, p-ISSN: 2319-7668. Volume 16, Issue 1. Ver. IV (Jan. 2014), PP 94-102

Sushendra Kumar Misra (July 2013): A Camel Model Analysis of State Bank Group. *World Journal of Social Sciences.*

Uyen Dang (2011): The camel rating system in banking supervision a case study. Arcada University of Applied Sciences International Business

https://www.researchgate.net/publication/298693979_The_Application_of_CAMELS_rating_system_to_Jordanian_brokerage_firms, Research Gate publication

https://www.icicibank.com/managed-assets/docs/investor/quarterly-financial-results/2017/2017_Q4-2017_Investor_presentation.pdf