Performance Evaluation of Indian Commercial Bank through - A CAMEL Approach (With Special Reference to Selected Private and Public)

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Abstract

CAMEL Parameters are Operational efficiency of an indicator, which will help not only the public save for to the management, regulators, and supervisors to the relative efficiency of the players competing in the banking sector. Therefore, this study attempts to apply CAMEL Capital ratios, Assets ratios, Management efficiency and liquidity ratios on elected Commercial banks in India.

Key words: CAMEL Capital Ratios- Assets Ratios- Management Efficiency and Liquidity Ratios

Introduction

Banking sector is backbone of economy in the country. The finance collected from this sector works in economy as blood works in the body. In India the banking sector is witnessed various changes after liberalization and globalization. These changes mould and change the structure of banking system. After globalization many banks has entered in India and has gave tough competition to the existing banks in India. Few public and few private sector banks were operating since conceptualization of this sector except now they have to face severe competition from the foreign banks to sustain in the market and consequently many amendments were made by these domestic players to attract customers. Though the 'own country' factor has played important role in the sustainment of these domestic banks because customers can easily rely on these banks and undoubtedly want to transact and make relation with domestic banks. Due to this reason presently as well many foreign banks has stepped into our country but still not well established. The new generation is open minded in terms of new change and want to avail new facilities offered by

foreign banks therefore preferring the foreign banks over domestic banks and now gradually the way of foreign bank is becoming easier in India. But the present study is focusing on the domestic banks and tries to study the financial performance of domestic pans to present the picture before the masses by comparing the public and private sector banks.

Statement of the Problem

Performance and efficiency of commercial banks are the key elements of efficiency and value of countries' financial system. The main objective of the banking sector reforms in India has been to increase efficiency and profitability of the commercial banks. Prior to banking reforms, the industry was a near monopoly dominated by public sector banks. However, the banking reforms a number of public and private banks extend the market armed with greater autonomy. CAMEL Parameters are Operational efficiency is an indicator, which will help not only the public but to the management, regulators, and supervisors to understand and judge the relative efficiency of the players competing in the banking sector. Therefore, this study attempts to apply CAMEL Capital ratios, Assets ratios, and Management efficiency and liquidity ratios on elected Commercial banks in India.

Significance of the Study

The purpose of this study would contribute to the body of knowledge by in-depth analysis of different aspect of the profitability and liquidity and growth performance of selected Indian commercial banks. The study has both academic and practical significance. It helps the academicians and researchers to develop new idea for further study. The study particularly useful to banking customers, various financial institutions and the study would act as a guide to banking investors and stakeholders.

Objectives of the Study

➢ To compare profit earnings of selected private sector banks and public sector banks from the year 2016 to 2020.

➢ To study financial performance of the selected public sector banks and private sector banks.

➢ To examine the sector wise lending and to evaluate the performance of bank.

➢ To offer findings and suggestions to enhance the financial performance of private banks and public bank.

Research Hypothesis

The following hypothesis to be framed as per the objectives of the study

H_0: There is no significant difference among the selected commercial banks in terms of Capital Adequacy Ratio

H_0: There is no significant difference among the selected commercial banks in terms of Debt Equity Ratio

H_0: There is no significant difference among the selected commercial banks in terms of Total Advance to Assets Ratio

H_0: There is no significant difference among the selected commercial banks in terms of NPA/ Net Advances Ratio

H_0: There is no significant difference among the selected commercial banks in terms of NPA/ Net Assets Ratio

Research Methodology

Research Design:

The study has been conducted with reference to the data related to private sector banks and public sector banks. These banks have been studies with the belief that they hold the largest market share of banking business in India, in their respective sector.The study examines the financial performance of Indian banks based on the CAMEL variables and compares the performance of private sector banks and public sector banks for the period of 2016 to 2020 has been collected by using a Software Prowess Software. For evaluate the recital of the banks, the world renowned CAMEL model is adopted

The sample size of selected public sector and private sector banks are

Public Sector Banks
- ❖ Canara bank
- ❖ State Bank of India
- ❖ Indian Bank
- ❖ Bank of Baroda
- ❖ Bank of India

Private Sector Bank
- ❖ HDFC
- ❖ Axis
- ❖ Yes Bank

❖ City Union Bank

❖ Indusind Bank

Sample Design

Sampling Technique: The study is done with special reference to top 5 public sector banks and 5 private sector banks.

Sample size

For the in-depth analysis of the profitability, five major public sector banks and five private sector banks are selected on the basis of their total asset from year 2016 to 2020.

Source of data and Period of the Study

Secondary data is used for the study. The required data for the study is collected and compiled from "**PROWESS**" database of Centre for Monitoring Indian Economy (**CMIE**) for the period from 2016 to 2020 which is a reliable and empowered corporate database. In addition to this, supportive data is collected from Reserve Bank of India Bulletins, annual report of the respective bank website, Indian Banking Association, various banking journals and news papers. The study covers a period of five financial years from 2016 to 2020 the financial year of the banking consists of twelve months from 1st April of a calendar year to 31st March of subsequent year.

Data Collection

Data was collected through money control of India monthly bulletins, annual reports; money control banks websites, Prowess Software etc. five public sector banks and five private sector banks were selected on the bases of their total asset.

Data analysis

In the study, the performance evaluation of selected commercial banks has been done by using various Descriptive Statistical, Analysis of Variance (ANOVA), Correlation co-efficient, etc. In order to test the hypotheses already framed, suitable tools have been applied and the validity of the study has been measured.

Statistical Tools

The following statistical tools are to be applied

❖ Mean

❖ ANOVA

❖ Correlation

Limitation of the Study

➢ The present study is confined to secondary data only and limited to financial figures

➢ This study does not consider non-financial facts and figures.

➢ The secondary data was taken from various annual reports of the private sector banks and public sector banks therefore it may be possible that the data shown in the annual reports may be window dressed which does not show the actual position of the banks.

Review of Literature

Dr. Rajesh Kr. Vishwakarma, Dr Dinesh Kumar Sharma (2014) in this study they found that overall operating performance of the nationalized banks in India may be regarded as good. In public sector banks at present loan rates are too high; it should be lowered down to reach all income level people. In this study they found that Indian public banks are hesitating to accept the changed behavior of customers. The modern bank customers are more aware, more timer saver, more conscious, more educated, and finally choosy.

Abdulazeez Yousef Hazzaa Saif (2014) made study on financial performance of the commercial banks in the kingdom of Saudi Arabia: An Empirical Insight the purpose of this study is to investigate the performance of Saudi commercial banks during the period 2000-2013. The study found that at the pool level, that CAR, OE, SIZE, LIQR-1 LIQR-2 have positive and significant relationship with ROA but AQ has negative and significant relationship with ROA.

Khushboo Bhatia, naveena chouhan, neha joshi (2015) has made study on performance of public and private sector banks they concluded that the penetration of private sector banks is increasing rapidly. The present research is conducted keeping in review the sharp differences between public and private sector banks at the district level. In this study more number of people having a/c public sector bank than private sector banks. No. of problems found by the people is more in private sector banks than public sector. People are more satisfied from the private sector banks due to their better services provided by them in terms of speedy transactions, fully computerized facilities, more working hours (in case of ICICI bank the no. of working hours is 12), good investment advisory services, efficient and co-operative staff, better approach to customer relationship management than public bank

Gajera Alpeshkumar Chanudulal (2016) he concluded his study that new private sector banks are the best in terms of efficiency under all selected parameters, which lead to involvement of more no. of employees for providing banking services and because of which employees efficiency is lower compare to other sector banks.

A.Jaiswal, C. Jain (2016) they made study on financial performance of SBI and ICICI bank in this study they conclude that market expansion of SBI is more than ICICI bank. From this analysis we can say that financial performance of SBI is more sound than that of ICICI bank. The ICICI bank is also leading in private sector but SBI is performing better because the trustworthiness of people are more towards SBI than ICICI bank.

Ch. Balaji, Dr. G. Praveen Kumar (2016) they made study on financial performance of selected public and private sector banks in India they found that there is increase in profitability for both sectors but the growth of rate is higher for private sector banks. Public sector banks must redefine their strategies by considering their strengths and weakness.

Dr. V. R. Nedunchezhian and Ms. K. Permalatha, (2016) they both study on comparison of financial performance in the banking sector they made this study by comparing different banks loan, deposit, assets in this canara bank assets and deposits are well during the selected period. The share holder funds and capital shows that union bank of India has more compare to other banks from 524.33 to 635.78 during 2011 to 2015. ROA of India bank shows better compare to other banks it has 0.52 NPM has been reduced for all the banks.

Pawan, Gorav, and Bhanwar Singh (2016) they concluded their study that return on net worth ratio that Yes bank, HDFC bank, and Axis bank generated more return on net worth compare to ICICI and Indusind bank. Capital Adequacy Ratio shows that ICICI Bank, HDFC Bank and Yes bank enjoy the high Capital Adequacy than Axis Bank and Indusind Bank. From this study that Mean LATA ratio of Indusind Bank is highest during the period of study which indicates that Indusind Bank is capable to tackle short term liabilities.

G.L. Meena (2016) has made study on financial analysis of selected banks using camel approach she found that profit per employee is found highly correlated with the return on assets of the bank and causes a variance of 39.30% in the return on assets of the banks.in this study banks has to

maintain capital adequacy the least ratio banks wants to maintain a high capital and safety assets to minimizing of risk weighted assets.

Ramya s, Narmadha NKB, lekhas, Nandhitha Bagyam VR, and Keerthana A (2017), conducted study on "Analysis of financial performance of state bank of India using CAMEL approach they all conclude the study that state bank of India maintained more than the minimum requirement of CAR during the last five years. It has raised its capital. In 2013-2014 the shareholders of the bank are benefited with more earnings due to less debt. Due to radical changes in the banking sectors in the recent years, the central banks all around the world have improved their supervision quality and techniques.

Dr. Mohammad Miyan (2017) made study on comparative statisitical approach towards NPA of PSU and private sector banks in India, the result and trends shows that NPAs are having a downward trend. The returns on the assets have also the downward trends but this is much lower in PSU banks as compared to private banks

Habiba Abbasi (2017) he concluded his study that private sector banks profitability is much higher than that of public sector banks. It is clear from the analysis all these development in Indian banking are says that, the Indian banks are moving towards modern banking changing a face of traditional banking of Indian economy. It is grate change of banking industry.

Jaimin Patel, Dr. Kishor Bhanushali (2017) this study says that relationship among the profitability of Indian nationalized banks and private sector banks. This study reveals that it control over expenses and also the resources should be utilized in a more different manner.

Capital Adequacy Ratio

BANKS	CAPITAL ADEQUACY RATIO (Rs. Cr)						MEAN	RANK
	Year	2016	2017	2018	2019	2020		
Public Banks	SBI	10.88	12.34	13.47	14.25	13.39	12.866	6
	Canara Bank	13.35	11.69	13.97	15.53	19.41	14.79	1
	BOB	11.08	11.57	13.73	13.69	15.08	13.03	4
	BOI	12.16	11.41	13.08	13.06	15.69	13.08	3
	Indian Bank	10.75	11.75	12.04	13.01	12.94	12.098	10
Private Banks	AXIS	11.95	12.39	13.46	14.03	14.16	13.198	2
	HDFC	14.08	13.54	11.09	11.57	11.31	12.318	9
	City Union Bank	11.41	12.08	12.51	13.27	12.51	12.356	8
	Indusind Bank	13.65	11.5	12.91	12.88	12.84	12.756	7
	Yes Bank	11.22	13.05	13.25	14.01	13.34	12.974	5

Source of Data: Dion Global Solutions Limited

From the above table shows that Capital Adequacy ratio during the study period from 2016- to 2020. The selected public sector commercial banks the mean value had been fluctuating from bank to bank. The Canara bank highest mean value of (14.79), AXIS (13.19), and followed by BIO (13.08) where as BOB (13.03) had the lowest mean value. In the private sector commercial banks, Axis bank (13.19), Yes Bank (12.97) and Indusind bank (12.75) had highest mean value in the study period. In the private sector commercial banks the lowest mean value of City union bank (12.35) and followed by HDFC (12.31) . Thus, the Capital Adequacy ratio refers to highly Capital Adequacy assets held by bank   to meet short-term obligations. The ratio is a generic stress test that aims to anticipate market-wide shocks. The   private sector commercial bank Canara bank has good performance of liquid position b and followed by Axis bank and Indian bank.

NPA to Total Assets Ratio

BANKS	NPA/TOTAL ASSETS (Rs. Cr)						MEAN	RANK
	Year	2016	2017	2018	2019	2020		
Public Banks	SBI	0.0140	0.0147	0.0235	0.0247	0.0218	0.0121	5
	Canara Bank	0.0129	0.0123	0.0161	0.0381	0.0374	0.0233	2
	BOB	0.0077	0.0092	0.0113	0.0284	0.0260	0.0165	4
	BOI	0.0131	0.0129	0.0218	0.0459	0.0404	0.0268	1
	Indian Bank	0.0053	0.0048	0.0051	0.0089	0.0896	0.0227	3
Private Banks	AXIS	0.0021	0.0027	0.0029	0.0048	0.0143	0.0053	7
	HDFC	0.0012	0.0017	0.0015	0.0019	0.0021	0.0017	9
	City Union Bank	0.0042	0.0079	0.0083	0.0103	0.0116	0.0085	6
	Indusind Bank	0.0019	0.0021	0.0019	0.0023	0.0025	0.0021	8
	Yes Bank	0.0001	0.0002	0.0026	0.0017	0.0048	0.0014	10

Source of Data: Dion Global Solutions Limited

From the above table shows that NPA/Total Assets ratio during the study period from 2016- to 2020. The selected public sector commercial banks the mean value had been fluctuating from bank to bank. The Bank of India highest mean value of (0.026), Canara Bank (0.023), and followed by Indian Bank (0.022) where as Bank of Baroda (0.016) had the lowest mean value. In the private sector commercial banks, City Union Bank (0.0085), Axis Bank (0.0053), and Indusind bank (0.0021) had highest mean value in the study period. In the private sector commercial banks the lowest mean value of HDFC (0.001) and followed by Yes bank (0.0014). Thus, as a NPA bank Matrix indicate that lower the of the ratio value has been enhanced performance of operation efficiency. In the private sector commercial bank Yes bank, HDFC, Indusind Bank and Axis banks has better operating efficiency during the study period.

Total Investment to Total Assets

BANKS	Year	TOTAL INVESTMENT TO TOTAL ASSETS (Rs. Cr)					MEAN	RANK
		2016	2017	2018	2019	2020		
Public Banks	SBI	0.2241	0.2222	0.2417	0.2112	0.2864	0.2371	5
	Canara Bank	0.2952	0.2607	0.2679	0.2599	0.2599	0.2687	3
	BOB	0.2219	0.1761	0.1711	0.1794	0.1866	0.1870	9
	BOI	0.2090	0.1992	0.1936	0.1949	0.2041	0.2002	8
	Indian Bank	0.0924	0.0818	0.0742	0.0870	0.1079	0.0887	10
Private Banks	AXIS	0.3340	0.2963	0.2865	0.2322	0.2141	0.2726	2
	HDFC	0.2788	0.2460	0.2819	0.2312	0.2483	0.2572	4
	City Union Bank	0.2292	0.2382	0.2284	0.2024	0.1994	0.2195	7
	Indusind Bank	0.2689	0.2489	0.2286	0.2235	0.2059	0.2352	6
	Yes Bank	0.4336	0.3756	0.3423	0.2955	0.2326	0.3359	1

Source of Data: Dion Global Solutions Limited

From the above table declared that Total Investment to Total Assets during the study period from 2016- to 2020. The selected public sector commercial banks the mean value had been fluctuating from bank to bank. The Canara bank highest mean value of (0.268), State bank of India (0.237), and followed by bank of India (0.200) where as Indian Bank (0.088) had the lowest mean value. In the private sector commercial banks, yes bank (0.335), Axis Bank (0.272) and HDFC (0.257) had highest mean value in the study period. In the private sector commercial banks the lowest mean value of Indusind bank (0.235) and followed by City Union bank (0.219).Therefore, the performance of asset quality lower ratio of the better performance of banks to kept a low cushion of investment to NPA for the period of the study Indian b, bank of Baroda and Bank of India bank performance are the effective market investment.

ANOVA Results of Capital Adequacy Ratio of Selected Commercial Banks in India for the Period of 2016 to 2020

H_o: There is no significant difference among the selected commercial banks in terms of Capital Adequacy Ratio

Source of Variation	SS	df	MS	F-Value
Between Groups	0.511664	1	0.511664	
Within Groups	4.482056	8	0.560257	0.913267
Total	4.99372	9		

 *Significance at 5 per cent level

It is evident from the table confirm that the calculated F value is 0.91. The F table value of $df_1=1$, $df_2 =8$ and $\alpha=5$ per cent level of significance is 5.32 since calculated value of F is less than its

critical value. Hence, the null hypothesis is accepted which concluded that there is no a significant difference among the banks during the study period in terms of to capital adequacy ratio. Therefore, it is inferred that the ratios of capital adequacy ratio have same compositions for public, private banks during the study period.

ANOVA Results of Debt Equity Ratio of Selected Commercial Banks in India for the Period of 2016 to 2020

H_o: There is no significant difference among the selected commercial banks in terms of Debt Equity Ratio

Source of Variation	SS	df	MS	F-Value
Between Groups	181.3179	1	181.3179	
Within Groups	602.8999	8	75.36248	2.405943
Total	784.2177	9		

*Significance at 5 per cent leve

It is evident from the table observed that the calculated F value is 2.40. The F table value of $df_1=1$, $df_2 =8$ and $\alpha=5$ per cent level of significance is 5.32 since calculated value of F is less than its critical value. Hence, the null hypothesis is accepted which concluded that there is no a significant difference among the banks during the study period in terms of debt equity ratio. Therefore, it is inferred that the ratios of debt equity ratio have same compositions for   public, private banks during the study period.

ANOVA Results of Total Advance to Assets Ratio of Selected Commercial Banks in India for the Period of 2016 to 2020

H_o: There is no significant difference among the selected commercial banks in terms of Total Advance to Assets Ratio

Source of Variation	SS	df	MS	F-Value
Between Groups	10.55115	1	10.55115	
Within Groups	5.178174	8	0.647272	16.30097
Total	15.72933	9		

*Significance at 5 per cent level

It is evident from the table shows that the calculated F value is 16.30. The F table value of $df_1=1$, $df_2 =8$ and $\alpha=5$ per cent level of significance is 5.32 since calculated value of F is more than its critical value. Hence, the null hypothesis is rejected which concluded that there is a significant difference among the banks during the study period in terms of total advance to assets ratio.

Therefore, it is inferred that the ratios of total advance to assets ratio have same compositions for public, private banks during the study period.

ANOVA Results of Npa/ Net Advances Ratio of Selected Commercial Banks in India for the Period of 2016 to 2020

H_o: There is no significant difference among the selected commercial banks in terms of NPA/ Net Advances Ratio

Source of Variation	SS	df	MS	F-Value
Between Groups	0.004488	1	0.004488	
Within Groups	0.005257	8	0.000657	6.829556
Total	0.009744	9		

*Significance at 5 per cent level

It is evident from the table 5.10 it is observed that the calculated F value is 6.82. The F table value of $df_1=1$, $df_2 =8$ and $α=5$ per cent level of significance is 5.32 since calculated value of F is more than its critical value. Hence, the null hypothesis is rejected which concluded that there is a significant difference among the banks during the study period in terms of NPA/ Net advances ratio. Therefore, it is inferred that the ratios of NPA/ Net Advances ratio have same compositions for   public, private banks during the study period.

ANOVA Results of NPA/ Net Assets Ratio of Selected Commercial Banks in India for the Period of 2016 to 2020

H_o: There is no significant difference among the selected commercial banks in terms of NPA/ Net Assets Ratio

Source of Variation	SS	df	MS	F-Value
Between Groups	0.000681	1	0.000681	
Within Groups	0.000177	8	2.21E-05	30.77038
Total	0.000858	9		

*Significance at 5 per cent level

It is evident from the table realistic that the calculated F value is 30.77. The F table value of $df_1=1$, $df_2 =8$ and $α=5$ per cent level of significance is 5.32 since calculated value of F is more than its critical value. Hence, the null hypothesis is rejected which concluded that there is a significant difference among the banks during the study period in terms of NPA/ Net assets ratio. Therefore, it is inferred that the ratios of NPA/ Net Assets ratio have same compositions for   public, private banks during the study period.

Conclusion

The present study entitled "A Study on Financial Performance of Indian Commercial Bank- A CAMEL Approach with Special Reference to Selected Private and Public," was purely based on assessing the performance evaluation of growth, profitability and liquidity of selected public and private commercial banks in India had been examined. The various statistical analyses had been used to test and bring out the variables which directly contribute to the profitability considering the selected sample of commercial banks, which enriches the scope of the study. This study is especially useful for bankers, shareholders, stake holders, investors, customers, policy makers and financial researchers as it provides adequate information about determinations of commercial banks' performance.

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