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PERFORMANCE EVALUATION OF THE SELECTED PUBLIC AND PRIVATE SECTOR BANKS - A CAMEL MODEL APPROACH

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Abstract
Economic development of a country depends significantly on banking services. Banks play a crucial role in the capital formation of an Economy. Hence, an evaluation of financial performance of the banking sector is an effective measure and indicator to check the soundness of economic activities of an economy. The performance of the banking sector is perceived as the replica of economic activities of the economy. The development of the banking industry is considered as a good reflection of the development of the economy. In this paper the authors have made an earnest attempt to evaluate the performance of selected public and private sector banks using CAMEL approach and conduct a comparison on the basis of ranking method. The data required for the study are mainly secondary in nature. The data relating to the period of 2010-2014 have been collected for the purpose. For this purpose, State Bank of India from the public sector, Federal bank from private sector and ICICI bank from new generation sector have been selected as sample Banks.

Key Words: CAMEL model, Public sector banks, Private sector banks and New Generation Banks.

1.Introduction

The bank becomes a part and parcel of everyone’s day to day life. It plays a vital role in the economic development of a country. Banking Industry has revolutionized the transaction and financial services system worldwide. Through the development in technology banking services has been availed to the customers at all times, even after the normal banking hours, on a 24x7 basis. Banks provided funds to allow businesses to purchase inventory, and collected those funds back with interest when the goods were sold. Banks act as payment agents by conducting checking or current accounts for customers, paying cheques drawn by customers on the bank, and collecting cheques deposited to customers' current accounts.

The economic development of a modern society depends on industrial growth and modernization of agriculture. The banks promote both these activities; they mobilize small deposits from the public and provide financial resource to big industries. Thus the banks perform the major task of capital formation. They motivate and lure the common people to save money and earn interest.The banking sector reforms formed the objective for improving efficiency, productivity and profitability of banks. The main goal of banks today is to maintain stability and make sure they are impervious to external shocks. Hence, it is important to measure soundness across various banks in the country and identify the weaker sections of the banking sector. So they make appropriate strategies and policies to lift weaker sections and eventually create an environment which leads banks to converge in soundness. The above strategies and policies result in a consistently stable banking system within the country.

The Indian banking sector has undergone significant transformation from local branch banking to anywhere-anytime banking, with the adoption of technology. The key challenge for the Indian banking system continues in improving their operational efficiency and implement prudent risk management practices. However, the outlook for the Indian banking sector is stable backed by considerably sound financial position of its banks

2.Review of Related Literature on the Subject

The main aim of the study is to analyse the performance of selected public and private sector banks using CAMEL approach. The following are the few related studies conducted so far.

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Santosh Kumar and Dr (Mrs.) Roopali Sharma (2014) in their study "Performance analysis of top Indian banks through CAMEL approach" analyse the performance and soundness of banking sector using CAMEL model. The study concluded that in overall performance SBI occupies top position followed by PNB and HDFC bank.

Dhaval Sureshbhai Desai (2013) in his study "Performance Evaluation of Indian Banking Analysis" examines the relationship between financial positions of banks in Indian economy. The main purpose of the study was to analyse and compare the performance of banks using CAMEL approach. It reveals that SBI stands first position, HDFC bank hold second position and AXIS bank stands last.

Sushendra Kumar Misra and Parvesh Kumar Aspal (2013) in their paper "A Camel Model Analysis of State Bank Group" evaluated the performance and financial soundness of SBI group with the use of CAMEL model. There is no statistically significant difference between the CAMEL ratios. It signifies that the overall performance of State Bank group is same due to the adoption of modern technology, banking reforms and recovery mechanism. It is also found that there is no significant difference in performance of SBI and its subsidiaries assessed by CAMEL model.

Mishra Aswini Kumar, G. Sri Harsha, Shivi Anand and Neil Rajesh Dhruva (2012) in their research work "Analyzing Soundness in Indian Banking: A CAMEL Approach" analyzed the performance of 12 public and private sector banks over a period of eleven years (2000-2011) in the Indian banking sector. CAMEL approach has been used for this purpose. It was found that private sector banks are at the top among other banks with their performance.

3. Objectives of the Paper

The specific objectives are as follows,

1. To evaluate the performance of selected public, Private and new generation banks using CAMEL approach and
2. To make a comparative analysis of banks on the basis of ranking method.

4. Methodology and Data Base

This is a descriptive study in nature. The relevant data for the preparation of this paper are collected from the secondary sources. CAMEL model is used for the purpose of this study. The data of the sample banks for a period of 2010-2014 have been collected from the published statistical tables related to banks in India, RBI reports and annual reports of respective banks. Ten financial ratios have been used to assess the performance of banks. Five years average has been calculated for ranking the banks. Finally composite ranking has applied for comparing the overall performance of banks. The banks selected for the study are shown in the following Table.

Table 1, Selection of Sample Banks

Sl.No.	Sector	Sample Bank
1.	Public	State Bank of India
2.	Private	Federal Bank Ltd
3.	New Generation	ICICI Bank

CAMEL is a ratio-based model to evaluate the performance of banks. It represents Capital Adequacy, Asset Quality, Management Efficiency, Earning Quality and Liquidity. This model identifies the strength and weakness of banks and helps in improving future development of banking.

5. Results and Discussion

Capital adequacy ratio reflects the overall financial condition of the banks. It also has the ability of the management to meet the need for additional capital. It also shows the bank's ability to meet financial instability. It is very useful for a bank to conserve & protect stakeholders' confidence and preventing the bank from being

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bankrupt. CAR and Advances to Assets are the parameters calculated for this purpose. These ratios are discussed below.

5.1 Capital Adequacy Ratios

a) Capital Adequacy Ratio (CAR)

This ratio indicates the capacity of bank to meet its time liabilities and other risks. The higher CAR ratio indicates stronger the bank and the more will be the protection of investors. It offers good cushion for further expansion and growth in asset portfolio. Tier 1 capital means permanent shareholders' equity; perpetual non-cumulative preference shares, Disclosed reserves and Innovative capital instruments. Tier 2 Capital includes undisclosed reserves, Revaluation reserves of fixed assets and long-term holdings of equity securities, General provisions/general loan-loss reserves; Hybrid debt capital instruments and subordinated debt.
CAR = (Tier 1 Capital + Tier 2 Capital) / Risk weighted Assets. The Capital Adequacy Ratio of the Sample banks is given in Table 2.

b) Advance to Assets

This ratio indicates the relationship between the total advances and total assets. It indicates a bank's aggressiveness in lending which ultimately produces better profitability. Higher ratio leads to better profitability and vice versa. The ratio of advance to assets of the Sample banks is calculated and is shown in Table 2.

Table 2, Capital Adequacy Ratios of the Banks (2010-2014)

	State Bank of India	Federal Bank	ICICI Bank
Capital Adequacy Ratio	12.92	16.33	18.78
Advances to Assets	6.44	6.13	5.32
Average	9.68	11.23	12.05
Rank	3	2	1

Source: Computed from Financial Statements of Banks.

Table 1 indicates the total of capital adequacy and advances to assets ratio of of the Sample banks during the period 2010-2014. It has been found that ICICI bank has highest CAR with (18.78) followed by Federal bank (16.33) and SBI (12.92). In the case of Advances to Assets ratio, SBI stood first with (6.44) followed by Federal (6.13) and ICICI bank (5.32). The combined average of ICICI ranked first with 12.05 followed by Federal (11.23) and SBI (9.68). On the basis of ranking method ICICI occupies first, Federal second and SBI ranks the third in this respect.

5.2. Asset Quality Ratios

Assets Quality is an important tool to judge the degree of financial strength of Banks. It is a measure to assess the current condition and future viability of the bank. The ratios to assess the asset quality are as follows:

a) Net NPA to Net Advance

It is the most standard measure to judge the assets quality, measuring the net nonperforming
assets as a percentage of net advances. Net NPAs = Gross NPAs - Net of provisions on NPAs - interest in suspense account. It is calculated as follows:

$$\text{Net NPA to Net Advance Ratio} = \frac{\text{Net NPA}}{\text{Net Advances}}$$

The ratio of Net NPA to Net Advance of the Sample banks is calculated and is presented in Table 3.

b) Return on Assets

Return on average assets is the ratio of net profit after tax to average assets. The average balances are the averages of daily balances, except averages of foreign branches which are calculated on a fortnightly basis.

$$\text{ROA} = \frac{\text{Net profit after tax}}{\text{Average assets}}$$

The ratio of Return on average assets of the Sample banks is calculated and is given in Table 3.

Table 3, Asset Quality Ratios of the Banks (2010-2014)

	State bank of India	Federal bank	ICICI bank
Net NPA to Net Advance	1.97	.67	1.14
Return on Assets	.81	1.29	1.47
Combined Average	1.39	.98	1.31
Rank	1	3	2

Source: Computed from Financial Statements of Banks.

Table 3 indicates that the total of Net NPA to Net Advance and Return to Assets ratio of of the sample banks during the period of 2010-2014. The SBI has highest position with respect to Net NPA to Net Advance (1.97) followed by ICICI bank (1.14) and Federal (.67). In Return on Assets ratio, ICICI bank has occupied the highest rank (1.47) followed by Federal bank (1.29) and SBI bank (.81). In combined average, SBI has the highest position with (1.39) followed by ICICI (1.31) and Federal with (.98). On the basis of ranking method, SBI has top position, ICICI and Federal Bank occupied second and third positions respectively.

5.3. Management Efficiency Ratios

Management efficiency means set norms, ability to plan and respond to changing environment, leadership and administrative capability of the bank. It ensures the growth and survival of a bank. It shows capability of the management to assign premium to better quality bank and also highlight inefficiency. The two ratios of management efficiency are as follows:

a). Business per Employee

Business per employee means the efficiency and productivity of human resources of bank. It is a tool to measure the efficiency of employees of a bank. Higher the ratio, the better it is for the bank and vice versa. The Business per employee of the Sample banks is calculated and is given in Table 4.

b). Profit per Employee

It measures the overall efficiency of employees of banks. It indicates that higher the ratio, higher is the efficiency of the management or employees.

$$\text{Profit per employee} = \frac{\text{Net profit after tax}}{\text{Number of employees}}$$

The Profit per employee of the Sample banks is calculated and is given in Table 4.

Table 4, Management Efficiency of the Banks (2010-2014)

	State Bank of India	Federal Bank	ICICI Bank
Business per employee	8.29	9.64	7.38
Profit per employee	.50	.80	1.16
Combined Average	4.40	5.22	3.75
Rank	2	1	3

Source: Computed from Financial Statements of Banks.

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Table 4 shows that the Business per employee and Profit per employee of the sample banks during the period of 2010-2014. The Federal bank has highest position of Business per employee (9.64) followed by SBI bank (8.29) and ICICI with (7.38). In the case of Profit per employee, ICICI bank enjoyed the highest rank (1.16) followed by Federal bank (.80) and SBI bank (.50). In the combined average, Federal bank has the highest position with 5.22 followed by SBI (4.40) and ICICI with (3.75). On the basis of ranking method, Federal bank stands highest position, SBI occupies the second and ICICI the third.

5.4. Earnings Quality Ratios

Earning Quality shows the ability of a bank to earn regularly and determines the profitability of bank. It also explains the sustainability and growth in the future earnings. Two ratios of earning quality are:

a). Interest Income to Total Income

Interest income is considered as prime source of revenue for banks. The interest income to total income reflects the capability of the bank in generating income from its lending business.

$$\text{Interest Income to Total Income} = \frac{\text{Income earned}}{\text{Total income}}$$

The ratio of Interest Income to Total Income of the Sample banks is calculated and is presented in Table 5.

b). Non-Interest Income to Total Income

Non-interest income includes fee and commission income, income from treasury-related activities, dividend from subsidiaries and other income including lease income.

$$\text{Non- interest income to total income} = \frac{\text{other income}}{\text{Total income}}$$

The ratio of Non-Interest Income to Total Income of the Sample banks is calculated and is given in Table 5.

Table 5, Earning Quality Ratios of the Banks (2010-2014)

	State Bank of India	Federal Bank	ICICI Bank
Interest Income to Total Income	7.32	8.69	7.04
Non-Interest Income to Total Income	1.17	1.01	1.71
Combined Average	4.25	4.85	4.38
Rank	3	1	2

Source: Computed from Financial Statements of Banks

The above table shows that the Federal bank has highest position of Interest Income to Total Income (8.69) followed by SBI (7.32) and ICICI bank (7.04). In the case of Non Interest Income to Total Income, ICICI bank has the highest rank with (1.71) followed by SBI (1.17) and ICICI bank (1.01). In combined average, Federal bank stands the first with 4.85 followed by ICICI bank (4.38) and SBI (4.25). According to ranking method, Federal bank stands the highest position, ICICI second and SBI the third position.

5.5. Liquidity Performance Ratios

Liquidity means ability of the banks to meet its financial obligations. An adequate liquidity position means banks can obtain sufficient liquid funds, either by increasing liabilities or by converting its assets quickly into cash. The impact of liquidity crisis in the banks can adversely impact the financial performance of the banks. Inability of the banks to manage its short term liquidity liabilities and loan commitments can adversely impact the performance of the banks by substantially increasing its cost of fund and over exposure to unrated asset category. Two parameters of liquidity are:

a). Cash Deposit Ratio (CD)

It shows cash in hand and deposit with RBI with proportion of total deposit in a Bank.

$$\text{CD ratio} = \frac{\text{Cash in hand and deposit with RBI}}{\text{Total deposit}}$$

The CD ratio of the Sample banks is calculated and is shown in Table 6.

b). Investment to Deposit (ITD)

This ratio calculates the Total investment in security (approved/non-approved) with respect to Total deposit.

$$\text{ITD} = \frac{\text{Total Investment}}{\text{Total deposit}}$$

The ITD ratio of the Sample banks is calculated and is given in Table 6.

Table 6,Liquidity Performance Ratios of the Banks (2010-2014)

	State bank of India	Federal bank	ICICI bank
Cash Deposit Ratio	6.89	5.63	8.80
Investment Deposit Ratio	15.61	18.27	29.39
Combined Average	11.25	11.95	19.10
Rank	3	2	1

Source: Computed from Financial Statements of Banks

Table 6 indicates the total of Cash Deposit Ratio and Investment Deposit ratio of the sample banks during the period of 2010-2014. Here, the ICICI bank has highest position of Cash Deposit Ratio (8.80) followed by SBI (6.89) and Federal bank (5.63). In the case of Investment Deposit Ratio, ICICI bank has found the highest ratio (829.39) followed by Federal bank (18.27) and SBI (15.61). In combined average, ICICI bank stands first with 19.10followed by the Federal bank (11.95) and SBI (11.25). According to ranking method, ICICI holds first position, federal bank occupied the second and the SBI the last.

Table 6 Composite Ranking of the Banks

Bank	C	A	M	E	L	Average	Rank
State bank of India	3	1	2	3	3	2.4	3
Federal bank	2	3	1	1	2	1.8	1
ICICI bank	1	2	3	2	1	1.8	1

Table 6 depicts the composite ranking of CAMEL model. In capital adequacy ICICI bank stands the top rank and SBI least. Under Asset quality SBI occupies highest rank and Federal bank the lowest one. In Management efficiency Federal bank holds highest position and ICICI bank got lowest position. Under earning capacity Federal bank ranks top and SBI got last rank only. In terms of liquidity ICICI bank occupies top position and SBI holds the last position only.

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6. Conclusion

Banks are public service institutions dealing with public funds. Indian banking industry has witnessed a metamorphosis in both structural and functional terms with an effective instrument of social and economic transformation. Performance evaluation is an important indicator for the development of banking industry. This study has attempted to evaluate the performance of banks using CAMEL approach. From the analysis it is found that in terms of capital adequacy ICICI bank ranks the first. SBI has got top rank in the case of asset quality and in management efficiency Federal Bank bagged first. In terms of earning quality and liquidity, Federal Bank and ICICI bank secured first and second ranks respectively. Thus it can be concluded that the overall performance of ICICI bank and Federal bank is comparatively better.

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