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ANALYSIS OF BANKS FINANCIAL PERFORMANCE USING CAMEL RATING MODEL

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Abstract

Banks are the financial institutions which is the backbone of every country's economy. Substantively each bank is supporting countries' economic growth by lending to various sectors like industry, healthcare and education. Analysing the Indian banking industry is a difficult task. When separating reputable banks from poor ones, numerous considerations must be made. An efficient measure and indicator to evaluate the sustainability of a country's economic activity is the performance evaluation of the banking sector. Even if a complete reversal in the performance of the banking industry is not envisaged until the reforms are finished, there are hints of improvement in some CAMEL framework indicators. The bank must expand capital adequacy, strengthen asset quality, improve management, improve earnings, and lower sensitivity to various financial risks under this requirement. The present study is conducted to analyse the bank's performance using the CAMEL model and the study considered four private banks that are Axis, HDFC, ICICI and YES bank. The result of the study shows that HDFC banks perform outstandingly when compared to other banks.

Keywords: Economic, Evaluation, Financial Risk.

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Introduction

An economy is not sustainable without banks, especially in developing countries, and India is no different. Banks play a critical role in achieving sustained economic growth. Banks have undergone a paradigm shift as a result of the adoption of technology. Fundamentals of banking should include the trust and confidence of the people in the system. While the number of Indians utilizing banking services is continuously increasing, the level of services is also increasing due to the adoption of technology. This has led banks to place an increased emphasis on meeting the needs of their customers (Suvarchala 2018). The transformation of the Indian economy from developing to developed has allowed the finance system, notably the banking industry, to thrive, but it has also exposed them to a plethora of risks, necessitating risk management (Anubhav Kumar 2020). In addition to playing a key role in the economic development of countries, the banking sector represents the building blocks of capital formation, innovation, and monetization (Tumin 2011).

Public sector banks have seen declines in both asset quality and efficiency measures, whereas private sector banks have seen improvements in these performance measures (Baru 2010). A bank's strong financial condition and performance evaluation are crucial for customers, stockholders, staff, and the entire economy of a country. In response to this assertion, attempts have been made occasionally to assess each bank's economic position and manage it efficiently (Mohiudin 2014). Studies have stressed the role of the financial sector in economic development and have shown that there is a direct link between financial system development and economic growth (Wirnkar 2008). When resources are transferred from conventional, low-growth sectors to high-growth sectors, the financial sector plays a key supply role and encourages

entrepreneurship in the strong potential sectors (Dudhe 2018).

It is crucial to develop a regulatory framework for banking supervision in order to evaluate the entire bank's overall performance. The CAMEL rating system is one of these supervisory information metrics and it is an effective tool for analysing the bank's performance (Dang 2011). The banking system plays an essential and significant role in the nation's capital formation, necessitating increased investigation of banks' economic performance and effectiveness. Bank supervision using the CAMELS rating model to evaluate and assess the productivity and financial stability of the bank has recently been advocated by banking supervisors and strategy makers (Dudhe 2018).

In terms of regularity, verification spread over, and intensity, the CAMEL supervisory evaluation in the banking sector represents a major improvement over the previous criterion. The Reserve Bank of India approved the CAMELS (Capital Adequacy, Assets quality management, Earning, Liquidity, systems and controls) supervisory rating model for rating Indian banks and foreign banks that operate in India (Hiral 2018). In light of the shifting demands of this industry, one rating system that has proven to be more effective for performance measurement, evaluation, and long-term planning for the future development and expansion of Indian banks is the CAMEL Model (Lavanya 2018).

Review of Literature

Ramachandran (2009) study found that nationalised banks displayed a proportion of provisions and contingencies to total costs. The term "other interest expenditures ratio" has been replaced by "capital adequacy ratio" with reference to the private bank's group. Mathuva (2009) studied the correlation between profitability, capital adequacy ratio and

cost-income ratio. The research revealed that capital adequacy had multiple implications for the bank's profitability. Doonger (2011) attempted to evaluate the profitability of various bank categories. The findings indicate that private and foreign banks have high returns on capital and advances, whereas public sector banks have higher interest income than their competitors. Anita (2013) Comparative analysis of Indian commercial banks' financial performances was conducted. The analysis revealed that although there are no significant statistical differences between the financial performance of Indian public and private banks, there is still an opportunity for betterment in the public sector banks in order to strengthen their position in the highly competitive environment. Misra (2013) The CAMEL technique was used to evaluate the State Bank Group's performance and financial stability. Based on the study's findings, the banks have to strengthen their position in terms of asset quality and capital sufficiency. Erol (2013) The study revealed that Islamic banks outperformed traditional banks in terms of profitability and asset management ratios, but fell behind in regard to their sensitivity to market risk criteria.

Karthikeyan (2014) adopted the CAMEL model to identify the bank's soundness in the form of financial and performance. The result shows that the net profit and equity of the private banks were performing well. Rostami (2015) Each CAMELS model parameter's effect on the effectiveness of Iranian banks was examined. In this study, the Q-Tobin's ratio functioned as a performance measure. The Q-Tobin's ratio which serves as a measure of a bank's performance was found to have a significant relationship with each area of the camel model. Majumdar (2016) CAMEL model was used to assess the financial stability of a few banks. The data had undergone an ANOVA test, average, and composite ranking. The investigation found that the performance of a few

selected institutions varied significantly. The study recommended that banks should take the necessary action to fix these flaws. Majumdar (2016) used the CAMEL Model to analyse the financial performance of 15 Bangladeshi banks. Research work came to the conclusion that there had been a substantial difference in the performance of the chosen banks using Composite Ranking, average, and ANOVA. The research recommended that banks take the necessary action to fix these flaws.

Ramya (2017) used the CAMEL technique to analyse the State Bank of India's financial performance. based on the study it was concluded that banks must take necessary steps to strengthen their position in view of a few parameters such as non-interest income, and debt-equity to total income. Singh (2017) analysed the performance of the capital adequacy ratio of India's public and private banks. the outcome of the study identified that the majority of the banks were determined to have strong capital adequacy positions.

Research Methods

The main aim of the study is to know the profitability of Indian private banks using the CAMEL model. The study used descriptive and analytical. The present study considered four private banks that are Axis, HDFC, ICICI and YES bank. The sample period covered for the study was 2020 to 2021. The data was collected through secondary data source which includes banks' annual report and RBI data. The ratio is used for analysing the data collected and ranks are allotted based on ratios. The study considered financial performance as the dependent variable and capital adequacy, assets quality, management efficiency, earning quality, and liquidity assets as independent variables.

Results and Discussion

The CAMEL model was utilized to assess the factors and the economic financial performance of particular banks. ROA and ROE in this case depict the financial performances. Banks are ranked based on the ratios.

Capital adequacy – A bank's capital position is considered to be a crucial

indicator of its financial stability. It is essential to preserve shareholder confidence and avoid insolvency if the business is to survive. The total financial condition of a bank is represented by capital adequacy. It shows if the bank has enough capital to absorb future unforeseen losses as well as bank leverage.

Table 1: Banks' Capital Adequacy Ratios

Banks	Capital Adequacy Ratio				Debt Equity Ratio				Total Advance to Total Asset Ratio			
	2021	Rank	2020	Rank	2021	Rank	2020	Rank	2021	Rank	2020	Rank
Axis	19.2	1	17.6	2	8.37	1	9.28	1	0.63	2	0.62	3
HDFC	18.9	3	18.7	1	7.22	3	7.56	3	0.65	1	0.63	2
ICICI	19.1	2	16.1	4	7.09	4	8.24	2	0.50	4	0.51	4
YES	17.4	4	17.5	3	7.98	2	6.83	4	0.61	3	0.66	1

Source: Secondary Data

The table shows the banks capital adequacy ratios of four private banks. Axis and HDFC banks are showing comparatively good capital adequacy, debt-equity and total advance to total asset ratio. It shows that both ICICI and YES banks have to improve their capital adequacy ratios effectively.

Asset quality – A key factor in determining a bank's level of financial strength is the quality of its assets. Determining the composition of non-performing assets (NPAs) as a percentage of all assets is the main goal of asset quality measurement. The strength of a bank's credit portfolio reflects its financial condition.

Table 2: Banks Asset Quality

Banks	Net NPA to Net Advance Ratio				Net NPA to Total Assets Ratio				Gross NPA to Net advance Ratio			
	2021	Rank	2020	Rank	2021	Rank	2020	Rank	2021	Rank	2020	Rank
Axis	1.12	2	1.64	3	0.70	2	1.02	3	4.1	2	5.3	2
HDFC	0.40	1	0.35	1	0.26	1	0.23	1	1.3	1	1.3	1
ICICI	1.24	3	1.54	2	0.74	3	0.90	2	5.6	3	6.3	3
YES	5.88	4	5.03	4	3.58	4	3.34	4	17.1	4	19.1	4

Source: Secondary Data

The above table shows the banks asset quality of private banks. HDFC and Axis banks are having effective net NPA to net advance ratios, net profit to total assets ratios and gross NPA to net advance ratios. YES bank need to improve in managing credit lending and recovery ratios.

Management Soundness – Another key component of the CAMELS model that ensures the survival and growth of a bank is management efficiency. Management efficiency is a measure of a bank's adherence to established standards, ability to adapt to changing circumstances, and leadership and administrative skills.

Table 3: Banks Management Soundness

Banks	Total Advance to Total Deposit Ratio				Return on Net worth			
	2021	Rank	2020	Rank	2021	Rank	2020	Rank
Axis	0.88	3	0.89	3	6.5	3	1.9	3
HDFC	0.85	2	0.86	2	15.8	1	15.4	1
ICICI	0.78	1	0.84	1	11.2	2	6.4	2
YES	1.02	4	1.62	4	-10.4	4	-15.5	4

Source: Secondary Data

The above table shows the bank's management soundness. HDFC and ICICI banks maintained healthy total advance to total deposit and return on net worth compared to Axis and YES banks. YES bank needs to improve management soundness by improving net worth and advance to deposits.

Earnings – A bank's current operating performance should be reflected in its high earnings quality, which should also be a reliable predictor of future operating performance. The level of profitability and a bank's ability to maintain level and earnings over time are both expressed by the quality of earnings, which is an extremely important parameter. It highlights the stability of future earnings and mostly reflects the bank's profitability.

Table 4: Banks Earnings and Profitability

Banks	Return on Assets Ratio				Net Income Margin Ratio			
	2021	Rank	2020	Rank	2021	Rank	2020	Rank
Axis	331.6	2	301.0	2	2.93	3	2.75	3
HDFC	433	1	369.5	1	3.85	1	3.79	1
ICICI	208.8	3	175.1	3	3.16	2	3.02	2
YES	13.47	4	13.52	4	2.71	4	2.63	4

Source: Secondary Data

The above table shows the bank's earnings and profitability of four private banks.

HDFC bank stands first and shows outstanding ROA and NIM compared to

other banks. YES bank needs to improve its performance in both ROA and NIM.

Liquidity – Excessive liquidity has a negative impact on financial firms because it makes it more difficult for management to commit credibly to an investment

strategy that would safeguard investors, even when it improves the ability to raise money quickly. Another important factor that indicates the financial performance of banks is liquidity. A bank can maintain a sufficient level of liquidity by either raising its current obligations or fast turning its assets into cash.

Table 5: Banks Liquidity Position

Banks	Current ratio				Cash ratio			
	2021	Rank	2020	Rank	2021	Rank	2020	Rank
Axis	0.11	2	0.13	2	1.35	4	2.21	1
HDFC	0.05	4	0.03	4	1.56	2	1.24	4
ICICI	0.07	3	0.09	3	1.43	3	1.41	3
YES	0.17	1	0.18	1	2.14	1	1.49	2

Source: Secondary Data

The above table shows the bank's liquidity position. YES bank maintains a sufficient liquid position when compared to other banks.

Overall ranking – To measure the year-wise overall performance of selected private banks, composite ratings and results are calculated and depicted in Tables 6 and 7.

Table 6: Overall ranking for the year 2020

	C	A	M	E	L	Average	Rank
Axis	1	2	3	2	2	2	2
HDFC	2	1	1	1	4	1.8	1
ICICI	4	3	2	3	3	3	3
YES	3	4	4	4	1	3.2	4

Source: Author calculated data

The above table shows the overall ranking for the year 2020. In view of Capital adequacy, asset quality, management, earning and liquidity the HDFC (1.8) and Axis (2) banks stand first and second respectively. Both banks are performing

outstandingly in all aspects as its shows the overall composite ranking average, whereas YES bank needs to improve its performance in capital adequacy, asset quality, management, and earnings.

Table 7: Overall ranking for the year 2021

	C	A	M	E	L	Average	Rank
Axis	1	2	3	2	2	2	2
HDFC	2	1	1	1	4	1.8	1
ICICI	3	3	2	3	3	2.8	3
YES	4	4	4	4	1	3.4	4

Source: Author calculated data

The above table shows the overall ranking for the year 2021. In view of Capital adequacy, asset quality, management, earning and liquidity HDFC banks stand first with a composite ranking average of 1.8 and YES bank holds the bottom rank with an overall composite ranking average of 3.4. YES bank needs to improve its performance in capital adequacy, asset quality, management, and earnings.

Conclusion

The CAMELS model is a key assessment tool for determining the relative financial viability of a banking system and for proposing relevant remedies for any faults. A ratio-based model to evaluate the performance of banks is called the CAMELS model. The worldwide central banks have enhanced the quality and methods of their supervision due to the significant developments in the banking industry over the past few years. Many developed nations presently used this CAMEL RATING, in addition to other practices and techniques already in use, to evaluate the performance of banks. Several researchers use the ratios identified in the present study to assess the efficacy of banks in their studies. The rankings of various banks are determined by their scores on the five criteria. In the current study, we used five key metrics Capital Adequacy, Asset Quality, Management Efficiency, Earning Quality, and Liquidity to assess the financial performance of the chosen private sector banks in India and identify the main influences on that performance. These

measurements allowed us to accurately and efficiently identify the factors that have the greatest impact on the Indian banking sector's financial performance. Based on the CAMEL approach, HDFC bank stands in the first position followed by Axis bank. In terms of assets quality, management, and earnings HDFC bank performs outstanding performance. Still, both private and public sector banks need to improve their performance in the overall CAMEL approach.

Reference

- Ad. Wirnkar, M. Tanko (2008)** Camels and banks performance evaluation: the way forward. Available at SSRN. 2008;1150968.
- Anita Makkar (2013)** A CAMEL approach towards the overall financial performance of new private sector banks during pre and post-financial crisis. Vol - 3 issue-2
- Anubhav Kumar (2020)** "Risk in Indian Banking Sectors and role of RBI: an Analysis using CAMELS Model", IOSR Journal of Business and Management, Volume 22, Issue 4. Ser. III (April 2020), PP 12-18.
- Baru, (2014)** Indian banks: Five years after global financial crises, Business standard Retrieved from <http://www.business-standard.com>
- C Dudhe, (2018)** "A selective Study: Camels analysis of Indian Private Sector Banks", International journal of

- engineering and management sciences, Volume.3., No.5, pp 277-283
- Dang U. (2011).** The CAMEL rating system in banking supervision: A case study of Arcada. University of Applied Sciences.
- Doonger Singh KheeChee (2011).** A Comparative study of profitability of different groups of scheduled commercial banks in India. Vol.19, No (1).
- Erol, C., F. Baklaci, H., Aydođan, B., & Tunç, G. (2014).** Performance comparison of Islamic (participation) banks and commercial banks in Turkish banking sector. EuroMed Journal of Business, 9(2), 114-128.
- Hiral Parikh, (2018)** “Camels Framework as a Tool to Measure Performance of Public Sector and Private Sector Banks”, IOSR Journal of Business and Management (IOSR-JBM), Volume 20, Issue 9. Ver. II, PP 52-60
- Lavanya B, T Srinivas, (2018)** “Performance Analysis Using Camel Model- A Study of Select Private Banks”, JETIR, Volume 5, Issue 6, PP. 214-223.
- Majumder, M. T. H., & Rahman, M. M. (2016).** A CAMEL Model Analysis of Selected Banks in Bangladesh. International Journal of Business and Technopreneurship, 6(2), 233-266.
- Mathuva, D. M. (2009).** Capital adequacy, cost-income ratio and the performance of commercial banks: The Kenyan Scenario. The International journal of applied economics and Finance, 3(2), 35-47.
- Mishra, S. K., & Aspal, P. K. (2012).** A camel model analysis of state bank group.
- Mohiuddin, G. (2014).** Use of CAMEL Model: A Study on Financial Performance of Selected Commercial Banks in Bangladesh. Universal journal of accounting and finance, 2(5), 151-160.
- Ramachandran and Kavitha (2009)** Profitability of the Indian Scheduled Commercial Banks: A case analysis. IUP Journal of Bank Management, Vol. VIII, issue – 3 &4. pp 129-139
- Ramya, S., Narmadha, N. K. B., Lekha, S., Nandhitha Bagyam, V. R., & Keerthana, A. (2017).** Analysis of the financial performance of the state bank of India using the camels approach. IJAR, 3(2), 449-452.
- Rostami, M. (2015).** Determination of CAMELS model on bank’s performance. International journal of multidisciplinary research and development, e-ISSN, 2349-4182.
- Said, R. M., & Tumin, M. H. (2011).** Performance and financial ratios of commercial banks in Malaysia and China. International Review of Business Research Papers, 7(2), 157-169.
- Singh, J. P., & Seth, M. (2017).** An Inclusive Study on Capital Adequacy performance of Selected Public Sector and Private Sector Banks in India. International Journal of Multifaceted and Multilingual Studies, 3(10).
- Suvarchala, Narasimha Rao (2018)** “An Empirical Study of Customer Experience Management in State Bank of India and Housing Development Finance Corporation Bank”, IOSR Journal of Business and Management, Volume 20, Issue 9. Ver. I (September. 2018), PP 01-07.