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USING CAMEL MODEL ANALYSIS OF BANKS FINANCIAL PERFORMANCE IN INDIA BY -WITH SPECIAL REFERENCE TO KOTAK MAHINDRA BANK- AN EMPIRICAL EVIDENCE

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ABSTRACT
These days, having an account with the top bank in India is a need for everyone with money. People are also less likely to be without a bank account now that the government of India has implemented the Pradhan Mantri Jan Dhan Yojna, a programme to increase access to banking services. But are you familiar with the largest banks in India, or with public sector banks in particular? If not, then you're in for a treat because we're about to spill the beans on some of India's finest banks, including the top 10 public and private institutions in the country, along with comprehensive information on the financial products they provide.Businesses in today's cutthroat global economy need to present themselves as models of social responsibility if they want to succeed. Companies actively seek expansion via globalisation, and they get a competitive edge by participating in socially good programmes. Government laws, environmental limits, labour exploitation difficulties, and other problems may cost multinational corporations millions of dollars if they do not actively participate in social issues in each country in which they operate. If you want to know how well banks and other financial institutions are doing and what steps they can take to improve, you should look into using the CAMEL model. This research looked at the total assets of 10 different banks in India, 5 of which were public and 5 of which were private. The five-year span from 2017 to 2022 is included in this research. The current research looks at how well the chosen banks have done financially. The CAMEL framework ranks financial institutions according to five criteria: factors such as sufficient money, high-quality assets, effective management, profitability potential, and liquidity. Kotak Mahindra outperformed all other banks and came out on top, while Punjab National Bank came in last, according to the survey. All things considered, private banks have done better than their public sector counterparts. This Paper is Identifying of ICICI Bank Performance using CAMEL Model.

KEYWORDS: *Financial Performance, CAMEL Model, Kotak Mahindra Bank, Profitability.*
JEL CODES: *G1, F21, F43, O43, O47.*

1. INTRODUCTION
There are certain rates set by the central bank which every bank has to follow and maintain. Interest rates charged by commercial banks to their most creditworthy clients are often referred to as BPLR, or Benchmark Prime Lending Rate. As per RBI rates earlier banks were free to fix their BPLR for their credit limits. But due to some circumstances and the consequences faced by the banks and public, to bring the transparency in the lending rates RBI has introduced modified rate called as base rate. A bank's ability to charge interest on loans is limited to the base rate. Banks cannot charge less than the base rate. On July 1, 2010 BPLR has been replaced by base rate. The base rate calculations were more transparent which were not with the case of benchmark prime lending rate.

It is mandatory for all banks in India to keep a certain amount of money in reserve with the Reserve Bank of India. The CRR limits the amount of money a bank may put into circulation. There is a current CRR rate of 4%. Some non-cash fluid resources, like valuable metals or other approved protections, must be on hand at all times for banks. To make sure banks can stay in business, the Statutory Liquidity limits how much credit they may provide.

There is a 19.5% SLR rate now. The repo rate, sometimes called the benchmark interest rate, is the momentary loaning rate set by the Reserve Bank of India (RBI) for all banks. The cost of borrowing money from the Reserve Bank of India will rise in tandem with this rate. Raising the repo rate is one way the Reserve Bank of India (RBI) may make banks pay more to borrow money. The repo rate remains at 6.25%. For short-term borrowings, the Reserve Bank of India (RBI) uses the Reverse Repo rate. In contrast to the Reverse Repo rate, which shows the rate at which the national bank pulls out assets from banks, the Repo rate demonstrates the rate at which the Reserve Bank of India (RBI) injects funds into the banking system.

The nation's monetary authority oversees the flow of money in the country via monetary policy. As a means of maintaining price stability and public faith in the currency, it entails regulating the cost of short-term borrowing with an eye towards inflation or interest rates. There are two main types of monetary policies: contractionary and expansionary. A number of factors are taken into account when making monetary policy decisions, including interest rates both short- and long-term, currency exchange rates, credit quality, the velocity of money through the economy, bonds and stocks, public and private sector expenditure and savings, financial derivatives such as contracts, futures, options, and swaps, and large-scale international capital flows.

The proportion of non-performing assets is a key metric for any financial system. Based on the NPA ratio and the rating methods used to rate the banks, the ones with the lowest proportion of nonperforming loans are the best performing banks. Loans that are not current or have not been paid as agreed upon are categorised as nonperforming assets (NPAs) in the accounts of financial institutions. Loans are often considered non-performing after payments have been late for at least 90 days; however, this period could be shorter or longer depending on the specifics of each loan.

2. REVIEW OF LITERATURE

- **Balaji (2022)** has determined that emerging private sector banks using cutting-edge technology, core banking, and aggressive marketing tactics pose a threat to established public sector banks.
- **Padma (2022)** has compared the efficiency and solvency of SBI and ICICI Bank using profitability, solvency, and management efficiency ratios. Based on the differences in deposits, advances, investments, net profits, and total assets, it was deduced that SBI has a more extensive operation.
- **Jagjeet Kaur (2020)** has handled an examination of bank performance and CSR initiatives, as well as analysed the market capitalization-based financial performance of India's public and private sector banks. He has suggested that below-average banks are closely to be monitored to ensure their viability.
- **Sri Hari (2020)** investigated the differences between public and private sector banks that provide fulfilling services to their clients or account holders; therefore, both clients and staff anticipate receiving high-quality assistance from these intermediaries, i.e., financial institutions.
- **Malihe Rostami (2018)** has considered the issue of bank solvency and bankruptcy, which has received considerable attention on a global and national scale, and has come to the conclusion that there is a substantial correlation between the two.
- **Harikrishna (2018)** employed confirmatory factor analysis to see whether a link exists between the variables being studied and their underlying latent constructs, and conjoint analysis to determine the relative importance of each component or attribute to the responding consumers.
- **KVN Prasad (2017)** examined fourteen Indian banks that were nationalised between 2005 and 2010. According to the subparameters of each parameter, each bank was the initial individual occurrence. After calculating the average of these group averages and using the CAMEL ratio to assess the banks' performance, the final composite rankings were reached.
- **Dr Jayasree Krishnan (2017)** has said that banks may enhance their performance by lowering their nonperforming assets (NPA) via good integrated risk management and compliance with international accounting standards. Moreover, it was determined that the asset portfolios of the picked public area banks in India essentially affected their performance.
- **Chanchal Chatterjee (2016)** examined EBT as a reliant variable and nine free factors traversing 2004-2013 at 26 public and 20 confidential area banks in India. To look at the connections between the banks' EBT, the author has used a regression model to identify correlations between the variables, and then utilised analysis of variance and the F-test to verify the hypothesis.
- **Dr SM Tariq Zafar (2014)** analysed the CAMEL model's overall ratings, determined if CAMELS were adequate, and assessed the quantitative and qualitative relevance of numerous aspects involved in assessing the monetary presentation of Indian business banks. After a smooth transition to Basel II standards, the author believes that banks are now more attentive to their customers' demands.

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3. STATEMENT OF THE PROBLEM

Using the CAMEL framework, this research looks at the four-year (2017–2022) financial performance of Afghanistan's public sector banks. The acronym CAMEL stands for Cash on Hand, Quality of Assets, Sound Management, Quality of Earnings, and Liquidity. Out of four public sector banks in Afghanistan, I have selected three to carry out the work. Then, using a few measures, we look at the chosen banks' financial statements from 2017 to 2022 and assess them. The ineffectiveness of the majority of Afghan banks has led to the current crisis of default culture poor the country's banking system. The capacity of bank management to develop and execute effective strategies is increasingly important to the success of the banks. Bank management may greatly benefit from this study's results in order to enhance their financial performance and develop

4. RESEARCH GAP

Receiving deposits and lending those funds to people and companies in need is the fundamental role of every bank, whether it is a public or private sector institution. All around the globe, people associate banks with trust. It makes no difference how little or large a deposit a person makes with one of India's nationalised banks; the depositor understands that their money is safer there than anyplace else. Your hard-earned money may be safely invested with the aid of top banks in India, and you can even earn interest on that investment. The time frame of this research is five years, from 2017 to 2022. Based on their total assets, the research selects the top public and confidential area banks for participation.

4. RESEARCH QUESTIONS

- ❖ How the public banks are competing with each other?
- ❖ How did the chosen banks do in the research?
- ❖ How effectively is it possible to enhance the performance of banks?
- ❖ Banks that are owned by the public in India

5. OBJECTIVES OF THE STUDY

- ❖ To investigate the effect of Kotak Mahindra Bank's financial performance in India.
- ❖ To evaluate and place Kotak Mahindra Bank in a ranking using the CAMEL Model.

6. HYPOTHESES OF THE STUDY

H0: There is no Impact of financial performance of Kotak Mahindra Bank in India.
H1: There is an Impact of financial performance of Kotak Mahindra Bank in India.

7. RESEARCH METHODOLOGY

- ❖ **Sources of Data:** The 10 public sector banks' annual reports provided the secondary data. We used ww.moneycontrol.com to get more data for our study and verification. Prior to being used for the research, the data underwent certain basic mathematical processes, such as calculating the ratios.
- ❖ **Timeframe for the Research:** The research will last for five years, from 2017 to 2022. That is why PSBs, or public sector banks, have always played a crucial role in India's economy. Ever since they were nationalised, PSBs have been at the vanguard of government programmes like Jan Dhan and zero balance accounts for the country's lower-middle class. Digital transactions were also made simpler during the COVID-19 epidemic by PSBs and the NPCI.

8. LIMITATIONS OF THE STUDY

- ❖ This research only includes five specific banks in India, two from the public and one from the private sector.
- ❖ This research just takes into account bank financial figures that may have been manipulated.
- ❖ This research will only last for a period of five years.

9. SCOPE OF THE STUDY

Examining how well the Indian banking sector is doing is the main goal of this research. Banks' performance is evaluated and studied via the use of CAMEL model ratios.

Sl No	Bank Name	Headquarter	Tag Line
1	Kotak Mahindra Bank Ltd	Mumbai	Let's make money simple.

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10. RESULT AND DISCUSSION

Adequacy of Capital (C): This term describes the minimal amount of capital that banks and other financial organisations are required by law to have on hand. The examination of capital trends is used to determine this. A better grade is contingent upon financial institutions' adherence to dividend and interest regulations.

Quality of Assets (A): This refers to an analysis of an asset's creditworthiness. The difference between the investments' book value and their fair market value serves as a check on this. A good indicator of this is how well the bank's investing strategies and policies work.

Management Efficiency (M): This metric measures how well a bank handles financial pressures. The capacity of the institution's management to identify, quantify, monitor, and control the risks associated with its day-to-day operations is indicative of this component.

Earnings Ability (E): This metric measures an organization's potential to generate sufficient profits to fund growth, maintain competitiveness, and attract new investors.

Liquidity (L): It measures the ability of the institution to convert assets to cash easily depending on short term financial resources.

Table 1. Description of CAMEL parameters

Category	Ratios	Formula	Significance	Evaluation Criteria
Capital Adequacy	CAR	Tier-1 and Tier-2 Capital/Aggregate of Risk Weighted Assets (RWA)	It measures the bank's ability in absorbing the losses arising from the risk assets	Higher the ratio Better is the financial condition of the bank
	Debt/Equity Ratio	(Deposits + Borrowings + Other liabilities)/ (Capital + Reserves)	It indicates the bank's financial leverage	Lower the ratio Better it is
	Coverage Ratio	(Net Worth-Net NPAs)/ Total Assets	It indicates the availability of capital to meet any incidence of loss assets in NPAs	Higher the ratio Better it is
Asset Quality	Net NPA/Net Advances Ratio	NPAs/Net Advances	It indicates the level of NPAs in the net advances	Lower the ratio Better it is

	Govt Securities/Investment Ratio	Government Securities/ Total Investments	It indicates the bank's strategy: High profits=High risk or Low profits=Low risk	Higher the ratio Safer it is
	Standard Advances/Total Advances Ratio	Standard Advances (Net of Total Assets and Gross NPAs)/ Total Advances	It indicates higher earnings if the bank assets are highly performing	Higher the ratio Better it is
Management Quality	Total Advances/Total Deposits Ratio	Total Advances/Total Deposits	It indicates the bank's ability to convert its deposits into higher earning advances	Higher the ratio Better it is
	Business per Employee	Total Advances and Total Deposits/No of Employees	It measures whether the bank is relatively over or under staffed	Higher the ratio Better it is
	Profit per Employee	Profit/No of Employees	It measures the efficiency of the bank's employees in maximizing the profits	Higher the ratio Better it is
Earnings Ability	Return on Assets	Net Profit after tax/Total Assets	It indicates the returns earned from the assets of the bank	Higher the ratio Better it is
	Income Spread/Total Assets Ratio	Interest Income Earned-Interest expended)/ Total Assets	It indicates how much a bank can earn for every rupee of investments made in assets	Higher the ratio Better it is
	Operating Profit/Total Assets Ratio	Operating Profit/Total Assets	It indicates the bank's ability to earn after meeting its operating expenses for the investments made in assets	Higher the ratio Better it is
	Cost/Income Ratio	Operating Expenses/Net Income	It indicates the bank's ability to meet its operating expenses from revenue generated	Lower the ratio Better it is
Liquidity	Cash Asset/Total Assets Ratio	Cash Asset/Total Assets	It measures cash in proportion to total assets	Higher the ratio Better it is
	Govt Securities/Total Assets Ratio	Govt Securities/Total Assets	It measures govt securities in proportion to total assets	Higher the ratio Better it is
	Liquid Assets/ Total Deposits Ratio	Liquid Assets/ Total Deposits	It indicates the bank's ability to meet its deposit obligations with available liquid funds	Higher the ratio Better it is

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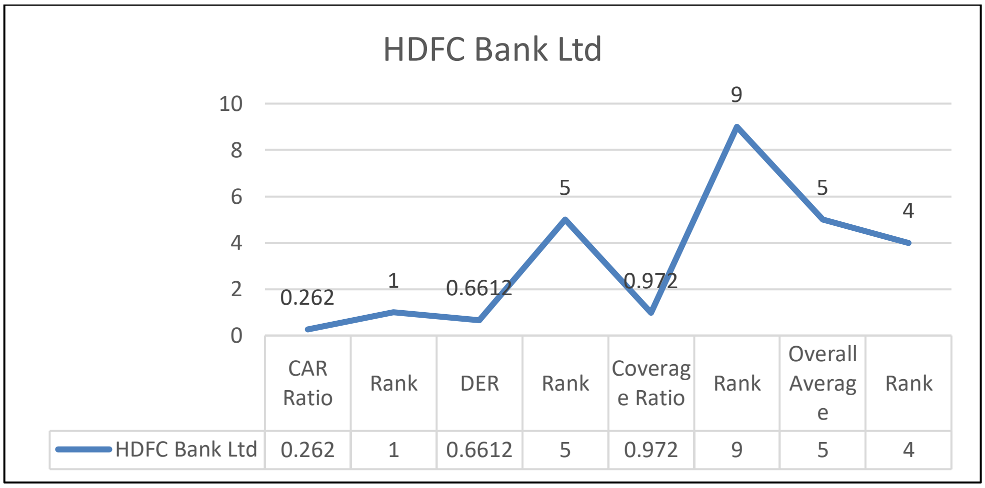
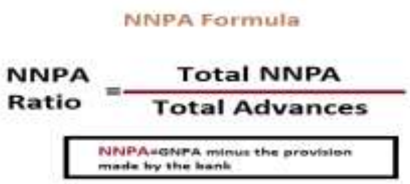
Table 2. Ranking under Capital Adequacy Parameter of ICICI Banak

Banks	CAR Ratio	Rank	DER	Rank	Coverage Ratio	Rank	Overall Average	Rank
Kotak Mahindra Bank Ltd	17.118	2	6.538	1	1.542	4	2.33	2

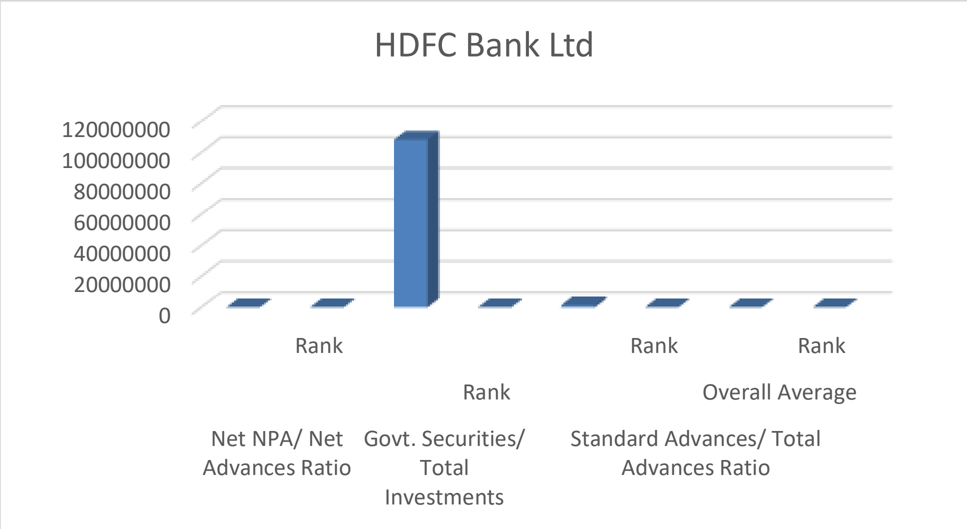


From the above table and graph, it is interpreted that Industrial housing development finance corporation (HDFC) shows the Capital Performance is 15.96 and the rank is 3. Overall Performance of the HDFCI Bank is good.

Table 3. Ranking under Asset Quality Parameter of HDFC Banak



Name of the Bank	Net NPA/ Net Advances Ratio	Rank	Govt. Securities/ Total Investments	Ra nk	Standard Advances/ Total Advances Ratio	Rank	Overall Average	Rank
Kotak Mahindra Bank Ltd	0.908	4	0.8904	1	1.882	8	4.33	1



From the above table and graph, it is interpreted that Industrial housing development finance corporation (HDFC) shows the Capital Performance is 15.96 and the rank is 3. Overall Performance of the ICICI Bank is good.

Table 4. Composite Ranking (CAMEL)

Bank Name	Rank (C)	Rank (A)	Rank (M)	Rank (E)	Rank (L)	Overall Average	Rank
Kotak Mahindra Bank Ltd	X`	1	7	2	3	3.00	1

According to the data shown in the table, home development finance corporation (HDFC) has a Capital Performance of 15.96 and ranks #4 out of all the banks when considering the five criteria. Overall Performance of the ICICI Bank is good.

Table 5. Ranking under Management Efficiency Parameter

Banks	Total Advances/ Total Deposit Ratio	Rank	Business per Employee	Rank	Profit per Employee	Rank	Overall Average	Rank
Kotak Mahindra Bank Ltd	0.8904	2	74,147,024.13	10	884,866.21	5	5.67	7

Based on the data in the table, it seems that Kotak Mahindra Bank had the best management efficiency of all the banks, including public and private sector.

Table 6. Ranking under Earnings Ability Parameter

Banks	Return on Asset	Rank	Income Spread / Total Assets Ratio	Rank	Opera -ting Profit/ Total Assets Ratio	Rank	Cost/ Income Ratio	Rank	Over-all Aver-age	Rank
Kotak Mahindra Bank Ltd	1.876	2	8.64	2	(0.02)	2	36.66	6	3.00	2

According to the data in the table, out of all the banks, was doing the best job with the greatest earnings ability ratio, while was in worst place.

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Table 7. Ranking under Liquidity Parameter

Banks	Cash Asset/ Total Asset Ratio	Rank	Government Securities/ Total Asset Ratio	Rank	Liquid Asset/ Total Deposit Ratio	Rank	Overall Average	Rank
Kotak Mahindra Bank	0.0664	6	0.2418	1	0.0956	6	4.33	3

From the above table, it is interpreted that among all the banks stood first in maintaining absolute liquidity every bank required to maintain to better respond immediately to the critical conditions at the time of huge withdrawals by the customers.

Table:8. CAMEL RATIONS.

Year	2017-18	2018-19	2019-20	2020-21	2021-22	Average
CAR Ratio	16.05	18.87	17.56	16.34	16.77	17.118
Debt/ Equity Ratio	7.56	5.86	6.15	6.66	6.46	6.538
Coverage Ratio	1.47	1.54	1.58	1.46	1.66	1.542
Net NPA/ Net Advances Ratio	0.55	0.88	0.79	1.06	1.26	0.908
Government Securities/ Total Investments Ratio	0.819	0.828	0.916	0.932	0.957	0.8904
Standard Advances/ Total Advances Ratio	1.27	1.63	1.56	2.36	2.59	1.882
Total Advances/ Total Deposit Ratio	0.95	0.898	0.884	0.856	0.864	0.8904
Business per Employee (in Cr.)	73,702,036.37	70,062,476.19	78,345,011.89	81,919,235.15	66,706,361.07	74,147,024.13
Profit per Employee (in Cr.)	1,007,938.67	939,074.38	1,036,654.78	665,322.83	775,340.41	884,866.21
Return on Asset	2.10	2.10	2.26	1.19	1.73	1.876
Income Spread/ Total Assets Ratio	9.82	9.52	8.38	7.86	7.64	8.64
Operating Profit/Total Assets Ratio	0.23	0.11	(0.15)	(0.27)	(0.03)	(0.02)
Cost/ Income Ratio	32.65	35.57	37.33	39.07	38.68	36.66
Cash Asset/ Total Asset Ratio	0.044	0.068	0.059	0.056	0.105	0.0664
Government Securities/ Total Asset Ratio	0.283	0.241	0.236	0.248	0.201	0.2418
Liquid Asset/ Total Deposit Ratio	0.072	0.101	0.084	0.078	0.143	0.0956

11. FINDINGS OF THE STUDY

- ❖ Among all the banks surveyed, Yes Bank and Kotak Mahindra Bank had the lowest net nonperforming asset ratio, according to the report. Among all banks, Punjab National Bank's net nonperforming asset ratio is the highest. (Table 4)
- ❖ According to the research, Canara Bank has used the most government securities, while Kotak Mahindra has used the most. Additional investments in government securities were not feasible for Kotak Mahindra Bank. (Table 4)

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- Out of all the banks that were chosen for the research, Punjab National Bank had the highest ratio of standard advances to total advances. Of all the institutions we looked at, Yes Bank was the worst. (Table 4)
- According to the research, Kotak Mahindra Bank is superior to other public sector banks, both overall and when contrasted with private area banks. The two banks with the worst managerial efficiency are Punjab National Bank and Canara Bank. In Table 8,
- According to the research, out of all the banks surveyed, Bank of Baroda had the least complete advances to add up to stores proportion, while Kotak Mahindra Bank had the highest.(Table 5)
- When compared to other banks, the analysis indicated that Bank of Baroda had the second-highest business per worker, after Bank of India. Among every one of the banks, Kotak Mahindra ranks worst. (Table 5)
- The study found that Yes bank is better among all banks in having highest profit per employee followed by HDFC.

12. SUGGESTIONS OF THE STUDY

An essential instrument for assessing a banking system's relative financial soundness and proposing appropriate solutions to address weaknesses is the CAMELS model. One way to evaluate a bank's efficiency is via the CAMELS model, which uses ratios. Global central banks have enhanced the quality and methods of supervision in response to significant developments in the financial business over the most recent couple of years. The industrialised world is increasingly using CAMEL RATING and other established methods and processes to survey the exhibition of banks.

13. CONCLUSION OF THE STUDY

The aforementioned research is an earnest attempt to detail the several ratios that are useful for evaluating the banking sector's financial performance. The current study's ratios are utilised by other researchers to evaluate the performance of banks in their own investigations. Based on their scores across all five criteria, various financial institutions are rated. Five main performance measures were used in this research to assess a company's financial health: capital adequacy, asset quality, management efficiency, earnings quality, and liquidity. Additionally, subset of India's private sector banks and identify the variables that have the greatest impact on these institutions' bottom lines.

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