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# **Financial Performance Of Axis Bank And Kotak Mahindra Bank In The Post Reform Era: Analysis On CAMEL Model**

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**FINANCIAL PERFORMANCE OF AXIS BANK AND KOTAK MAHINDRA BANK IN  
THE POST REFORM ERA: ANALYSIS ON CAMEL MODEL.**

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**Abstract:**

The objective of this study is to Analyze the Financial Position and Performance of the Axis and Kotak Mahindra Bank in India based on their financial characteristics. We have chosen the CAMEL model and t-test which measures the performance of bank from each of the important parameter like capital adequacy, asset quality, management efficiency, earning quality, liquidity and Sensitivity. The present study is conducted analyze the consistency of the profitability of the Axis and Kotak Mahindra bank's. It is analyses that the ratio of credit deposit is maximum of Kotak Mahindra Bank Ltd and it shows efficient management of the bank. The ratio of earning per share is maximum for Axis Bank Ltd i.e. 50.28 and the ratio of return on Assets is minimum for Axis Bank Ltd. The CAMELS' analysis and t-test concludes that there is no significance difference between the Axis and Kotak Mahindra bank's financial performance but the Kotak Mahindra bank performance is slightly less compared with Axis Bank.

**Keywords:** Elite Banks, CAMELS Model, Axis and Kotak Mahindra bank, financial performance

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## INTRODUCTION

***As soon the bottom lines of Domestic Banks come under increasing pressure and the options for organic growth exhaust themselves, Indian Banks will need to explore ways for inorganic expansion. This, in turn, is likely to unleash the forces of consolidation in Indian banking.***

**C. Rangarajan**

**EX-Chairman of Economic Advisory Council of the Prime Minister**

Banks are playing crucial and significant role in the economy in capital formation due to the inherent nature, therefore banks should be given more attention than any other type of economic unit in an economy. The banking sectors performance is perceived as economic activities of an economy. The banking sector reforms were aimed at making banks more efficient and viable as one who had a role initiating these reforms

After liberalization a small number of private sector banks came to be known as New Generation Technology.

Sevvy banks, which includes bank such as Axis Bank (earlier it was **UTI** Bank), Kotak Mahindra Bank, HDFC, ICICI.

## LITERATURE REVIEW

A study conducted by **Barr et al. (2002)** viewed that “CAMEL rating criteria has become a concise and indispensable tool for examiners and regulators”. This rating criterion ensures a bank’s healthy conditions by reviewing different aspects of a bank based on variety of information sources such as financial statement, funding sources, macroeconomic data, budget and cash flow.

**Said and Saucier (2003)** examined the liquidity, solvency and efficiency of Japanese Banks using CAMEL rating methodology, for a representative sample of Japanese banks for the period 1993- 1999, they evaluated capital adequacy, assets and management quality, earnings ability and liquidity position.

**Prasuna (2003)** analyzed the performance of Indian banks by adopting the CAMEL Model. The performance of 65 banks was studied for the period 2003-04. The author concluded that the competition was tough and consumers benefited from better services quality, innovative products and better bargains.

**Nurazi and Evans (2005)** investigated whether CAMEL(S) ratios could be used to predict bank failure. The results suggested that adequacy ratio, assets quality, management, earnings, liquidity and bank size are statistically significant in explaining bank failure.

**Bhayani (2006)** analyzed the performance of new private sector banks through the help of the CAMEL model. Four leading private sector banks – Industrial Credit & Investment Corporation of India, Housing Development Finance Corporation, Unit Trust of India and Industrial Development Bank of India - had been taken as a sample.

**Sanjay J. Bhayani (2006)** in his study, “Performance of the New Indian Private Banks: A Comparative study”. The study covered 4 leading private sector banks- ICICI, HDFC Bank, UTI and IDBI. The result showed that the aggregate performance of IDBI Bank is the best among all the banks.

**Gupta and Kaur (2008)** conducted the study with the main objective to assess the performance of Indian Private Sector Banks on the basis of Camel Model and gave rating to top five and bottom five banks. They ranked 20 old and 10 new private sector banks on the basis of CAMEL model. They considered the financial data for the period of five years i.e., from 2003-07.

**Sangmi and Nazir (2010)** opined that liquidity management is one of the most important functions of a bank. If funds tapped are not properly utilized, the institution will suffer loss.

**Siva and Natarajan (2011)** empirically tested the applicability of CAMEL and its consequential impact on the performance of SBI Groups. The study found that CAMEL scanning helps the bank to diagnose its financial health and alert the bank to take preventive steps for its sustainability.

**K.V.N.Prasad and Dr.A.A.Chari (2011)** conducted a study to evaluate financial performance of public and private sector banks in India. In this study they compared financial performance of top four banks in India viz., SBI, PNB, ICICI and HDFC and concluded that on overall basis HDFC rated top most position.

**Dr.K.Srinivas and L.Saroja (2013)** conducted a study to compare the financial performance of HDFC Bank and ICICI Bank. From the study it is clear that there is no significance difference between the ICICI and HDFC bank's financial performance but we conclude that the ICICI bank performance is slightly less compared with HDFC.

## **OBJECTIVES**

- 1) To Analyze the Financial Position and Performance of the Axis and Kotak Mahindra Bank by Applying CAMEL Modal.
- 2) To give recommendation and suggestion for improvement of efficiency in Axis and Kotak Mahindra Bank.

## **METHODOLOGY**

### **Sources of Data:**

The study is based on secondary data. The data were collected from the official directory, Indian Banking Association, RBI Bulletins, Dion Global Solutions Limited and data base of Centre for Monitoring Indian Economy ( CMIE ) namely PROWESS. The Published Annual Reports of Axis Bank and Kotak Mahindra Bank taken from their websites, Magzines and Journals on finance have also been used a sources of data

To evaluate the comparative financial performance of Axis Bank and Kotak Mahindra Bank, the study adopted the world-renowned: Capital Adequacy, Asset Quality, Management, Earning Quality and Liquidity (**CAMEL**) model (with minor modification) with **t test**.

### **Period of Study:**

The study covers a period of ten year from 2004-2013.

## Sampling:

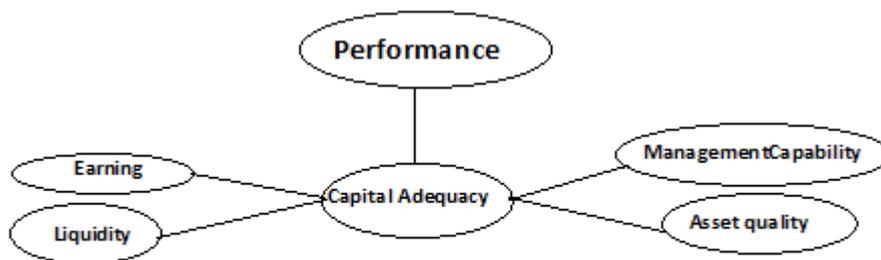
Two leading private sector banks- Axis Bank and Kotak Mahindra Bank- had been taken as a sample.

## Hypothesis:

From the above objectives of the following hypothesis is formulated to test the financial performance and efficiency of the Axis Bank and Kotak Mahindra Bank.

H0: There is no significant relationship between financial position and performance of Axis and Kotak Mahindra Bank.

## Research Modal:



**FIGURE1: RESEARCH MODEL BASED ON THE ARTICLE PRESENTED BY PROFESSOR SANGMI AND DOCTOR NAZIR (2011), CAMER MAGAZINE**

## I. CAPITAL ADEQUECY:

It is important for a bank to maintain depositors' confidence and preventing the bank from going bankrupt. It reflects the overall financial condition of banks and also the ability of management to meet the need of additional capital.

The following ratios measure capital adequacy:

### 1. Capital Adequacy Ratio (CAR):

Capital adequacy ratio is defined as:

$$\text{CAR} = (\text{Tier 1 Capital} + \text{Tier 2 Capital}) / \text{Risk weighted Assets}$$

TIER 1 CAPITAL - (paid up capital + statutory reserves + disclosed free reserves) - (equity investments in subsidiary + intangible assets + current and b/f losses)

TIER 2 CAPITAL – i. Undisclosed Reserves, ii. General Loss reserves, iii. hybrid debt capital instruments and subordinated debts where risk can either be weighted assets (a) or the respective national regulator's minimum total capital requirement.

If using risk weighted assets,

$$CAR = [(T1 + T2) / a] \_ 10\%$$

percent threshold varies from bank to bank (10% in this case, a common requirement for regulators conforming to the basel accords) is set by the national banking regulator of different countries. But As per the latest RBI norms, the banks should have a CAR of 9 per cent.

**TABLE – 1 CAPITAL ADEQUACY RATIO**

**Group Statistics**

BANKS		N	Mean	Std. Deviation	Std. Error Mean
CAPITAL_ADEQUACY_RATIO	AXIS BANK	10	13.3050	1.93011	.61035
	KOTAK MAHINDRA BANK	10	16.3280	3.07057	.97100

	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
CAPITAL ADEQUACY RATIO	3.444	.080	-2.636	18	.017	-3.02300	1.14690	-5.43254	-.61346
			-2.636	15.152	.019	-3.02300	1.14690	-5.46542	-.58058

**\*Findings:** The Significant p value is 0.080  $\geq$  0.05 than equal variance assumed is 0.017  $\leq$  0.05 than hypothesis is rejected.

## 2. Tier I Capital Ratio:

The Basel rules recognize that different types of equity are more important than others and to recognize i.e.,

Tier I Capital and Tier II Capital. Tier I Capital is actual contributed from equity plus retained earnings. The minimum CAR ratios as per Basel Accord norms: Tier I equity to risk weighted asset is 4 per cent, while minimum CAR including Tier II Capital is 8 per cent.

**TABLE – 2 TIER I CAPITAL RATIO**

### Group Statistics

BANKS	N	Mean	Std. Deviation	Std. Error Mean
CAPITAL_RATIO_TIER_I AXIS BANK	10	9.0690	1.92063	.60736
KOTAK MAHINDRA BANK	8	13.9188	3.54459	1.25320

### Independent Samples Test

	Levene's Test for Equality of Variances	t-test for Equality of Means								
		F	Sig.	t	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
CAPITAL_RATIO_TIER_I	Equal variances assumed	2.893	.108	-3.716	16	.002	-4.84975	1.30524	-7.61673	-2.08277
	Equal variances not assumed			-3.482	10.235	.006	-4.84975	1.39262	-7.94306	-1.75644

**\*Findings:** The Significant p value is 0.108 > 0.05 than equal variance assumed is 0.002 < 0.05 than hypothesis is rejected.

### 3. Tier II Capital Ratio:

Tier II capital includes preference shares plus 50% of subordinated debt. The minimum Tier II capital is 8 percent as per Basel norms.

**TABLE – 3 TIER II CAPITAL RATIO**

#### Group Statistics

BANKS	N	Mean	Std. Deviation	Std. Error Mean
CAPITAL_RATIO_TIER_II AXIS BANK	10	4.2360	.61576	.19472
KOTAK MAHINDRA BANK	5	2.6240	1.31077	.58620

#### Independent Samples Test

	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
CAPITAL_RATIO_TIER_II	12.754	.003	3.309	13	.006	1.61200	.48718	.55951	2.66449
Equal variances assumed									
Equal variances not assumed			2.610	4.905	.049	1.61200	.61769	.01487	3.20913

**\*Findings:** The Significant p value is  $0.003 < 0.05$  than equal variance not assumed is  $0.049 < 0.05$  than hypothesis is rejected.

## II. Asset Quality:

Banks determine how many of their assets are at financial risk and how much allowance for potential losses they must make.

### 1. Total Assets Turnover Ratio:

This ratio measures the efficiency in utilization of the assets. It is arrived at by dividing sales by total assets. Total Assets Turnover Ratio=Sales/Total Assets

**TABLE – 4 TOTAL ASSETS TURNOVER RATIO**

#### Group Statistics

BANKS		N	Mean	Std. Deviation	Std. Error Mean
TOTAL_ASSETS_TURNOVER_RATIO	AXIS BANK	10	.0910	.01197	.00379
	KOTAK BANK	10	.1040	.01265	.00400
	MAHINDRA BANK				

#### Independent Samples Test

	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
TOTAL_ASSETS_TURNOVER_RATIO	.162	.692	-2.360	18	.030	-.01300	.00551	-.02457	-.00143
			-2.360	17.946	.030	-.01300	.00551	-.02457	-.00143

**\*Findings:** The Significant p value is  $0.692 \geq 0.05$  than equal variance assumed is  $0.030 \leq 0.05$  than hypothesis is rejected.

## 2. Loan Ratio:

The ratio provides a general measure of the financial position of a bank, including its ability to meet financial requirements for outstanding loans.

Loan Ratio = Loans/Total Assets.

**TABLE – 5 LOAN RATIO**

### Group Statistics

BANKS		N	Mean	Std. Deviation	Std. Error Mean
LOANS_TURNOVER	AXIS BANK	10	.2130	.05539	.01752
	KOTAK MAHINDRA BANK	10	.2370	.08932	.02825

### Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
LOANS_TURNOVER	Equal variances assumed	1.206	.287	-.722	18	.480	-.02400	.03324	-.09383	.04583
	Equal variances not assumed			-.722	15.029	.481	-.02400	.03324	-.09483	.04683

**\*Findings:** The Significant p value is  $0.287 > 0.05$  than equal variance assumed is  $0.480 > 0.05$  than hypothesis  $H_0$  is accepted.

## III. Management Efficiency:

The bank management efficiency guarantees the growth and survival of a bank.

## 1. Credit Deposit Ratio:

It is the ratio of how much a bank lends out of the deposits it has mobilized.  
Credit Deposit Ratio=Total Advances/Customer Deposit.

**TABLE – 6 CREDIT DEPOSIT RATIO**

### Group Statistics

BANKS	N	Mean	Std. Deviation	Std. Error Mean
CREDIT_DEPOSIT_RATIO AXIS BANK	8	55.2425	13.94454	4.93014
KOTAK MAHINDRA BANK	8	83.1125	21.57835	7.62910

### Independent Samples Test

	Levene's Test for Equality of Variances	t-test for Equality of Means								
		F	Sig.	t	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
CREDIT_DEPOSIT_RATIO	Equal variances assumed	1.758	.206	-3.068	14	.008	-27.8700	9.08347	-47.3521	-8.38790
	Equal variances not assumed			-3.068	11.978	.010	-27.8700	9.08347	-47.6651	-8.07485

**\*Findings:** The Significant p value is 0.206 > 0.05 than equal variance assumed is 0.008 < 0.05 than hypothesis Ho is rejected.

## 2. Total Income/Capital employed Ratio:

This measure narrows the focus to gain a better understanding of a company's ability to generate returns from its available capital base.

$$\text{Return on capital employed ratio} = \frac{\text{Net income before interest and tax}}{\text{Capital employed}} \times 100$$

**TABLE – 7 TOTAL INCOME /CAPITAL EMPLOYED RATIO**

**Group Statistics**

BANKS	N	Mean	Std. Deviation	Std. Error Mean
TOTALINCOME_CAPITALEMPLOYED AXIS BANK	10	9.4560	1.02353	.32367
KOTAK MAHINDRA BANK	10	11.0450	1.08592	.34340

**Independent Samples Test**

	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
TOTALINCOME_CAPITALEMPLOYED Equal variances assumed	.038	.847	-3.367	18	.003	-1.58900	.47189	-2.58041	-.59759
Equal variances not assumed			-3.367	17.937	.003	-1.58900	.47189	-2.58066	-.59734

**\*Findings:** The Significant p value is 0.847 > 0.05 than equal variance assumed is 0.003 < 0.05 than hypothesis Ho is rejected.

**IV. Earning Quality:**

Earning quality represents the quality of a bank’s profitability and its capability to maintain quality and earn consistently. This ratio measures the profitability or the operational efficiency of the banks.

**1. Net Profit Ratio:**

Net profit ratio shows the operational efficiency of the business. Decreases in the ratio indicate managerial inefficiency and excessive selling and distribution expenses and Increase shows better performance.

Net Profit Ratio= (Net Profit/Total Income)\*100

**TABLE – 8 NET PROFIT RATIO**

**Group Statistics**

BANKS	N	Mean	Std. Deviation	Std. Error Mean
NET_PROFIT_RATIO_NETPROFITMARGIN	10	14.2520	1.70707	.53982
AXIS BANK KOTAK BANK MAHINDRA BANK	10	13.8070	3.75494	1.18742

**Independent Samples Test**

	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
NET_PROFIT_RATIO_NETPROFITMARGIN	4.459	.049	.341	18	.737	.44500	1.30436	-2.29537	3.18537
			.341	12.568	.739	.44500	1.30436	-2.38279	3.27279

**\*Findings:** The Significant p value is 0.049 < 0.05 than equal variance not assumed is 0.739 > 0.05 than hypothesis Ho is accepted.

**2. Dividend per Share (DPS):**

Dividend per share indicates the return earned per share. This ratio shows the amount payable per share to equity shareholders. Dividend per share ratio ignores earnings retained in the business. This ratio provides the better information about earning for equity shareholders.

**Dividend per Share = Dividend on Equity Share Capital / No. of Equity Shares**

**TABLE – 9 DIVIDENDS PER SHARE RATIO**

**Group Statistics**

BANKS	N	Mean	Std. Deviation	Std. Error Mean
DIVIDEND_PER_SHARE AXIS BANK	10	8.9300	5.82276	1.84132
KOTAK MAHINDRA BANK	10	.9100	.56164	.17761

**Independent Samples Test**

	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
DIVIDEND_PER_SHARE Equal variances assumed	40.158	.000	4.335	18	.000	8.02000	1.84986	4.13358	11.90642
Equal variances not assumed			4.335	9.167	.002	8.02000	1.84986	3.84694	12.19306

**\*Findings:** The Significant p value is  $0.000 < 0.05$  than equal variance not assumed is  $0.002 < 0.05$  than hypothesis  $H_0$  is rejected.

**3. Earnings per share: (EPS)**

Earnings per share indicate the return earned per share. This ratio measures the market worth of the shares of the company (Banks). Higher earning per share shows better future prospects of the Banks. EPS indicates whether the earning power of the bank has increased or not.

**Earnings per Share = Profit after tax-Preference Dividend / No. of Equity Shares**

**TABLE – 10 EARNING PER SHARE RATIO**

**Group Statistics**

BANKS		N	Mean	Std. Deviation	Std. Error Mean
EARNING_PER_SHARE	AXIS BANK	10	50.2820	37.64512	11.90443
	KOTAK MAHINDRA BANK	10	10.4890	4.96896	1.57132

**Independent Samples Test**

	Levene's Test for Equality of Variances	t-test for Equality of Means								
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
EARNING_PER_SHARE	Equal variances assumed	22.813	.000	3.314	18	.004	39.79300	12.00769	14.56578	65.02022
	Equal variances not assumed			3.314	9.314	.009	39.79300	12.00769	12.76847	66.81753

**\*Findings:** The Significant p value is  $0.000 < 0.05$  than equal variance not assumed is  $0.009 < 0.05$  than null hypothesis  $H_0$  is rejected.

**4. Return on Net worth (RON):**

This ratio measures the overall profitability, the operational efficiency and borrowing policy of the enterprise. It indicates the relationship of net profit with capital employed in the business. The primary objective of business is to maximize its earnings and this ratio indicates the extent to which this primary objective of business is being achieved.

**Return on Net Worth = Net Profit / Net-worth**

**TABLE – 11 RETURN ON NET WORTH RATIO**

**Group Statistics**

BANKS	N	Mean	Std. Deviation	Std. Error Mean
RETURN_ON_NETWORTH AXIS BANK	10	17.9940	3.61072	1.14181
KOTAK MAHINDRA BANK	10	11.9600	2.54156	.80371

**Independent Samples Test**

	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
RETURN_ON_NETWORTH	.075	.787	4.321	18	.000	6.03400	1.39631	3.10046	8.96754
			4.321	16.16	.001	6.03400	1.39631	3.07634	8.99166

**\*Findings:** The Significant p value is  $0.787 \geq 0.05$  greater than equal variance assumed is  $0.000 < 0.05$  than null hypothesis  $H_0$  is rejected.

**5. Return on Assets:**

This ratio measures the return on assets employed or efficiency in utilization of the assets.

**Return on Assets = Net Profit / Total Assets**

**TABLE – 12 RETURN ON ASSETS RATIO**

**Group Statistics**

BANKS		N	Mean	Std. Deviation	Std. Error Mean
RETURN_ON_ASSETS	AXIS BANK	10	300.8770	222.94281	70.50071
	KOTAK MAHINDRA BANK	10	91.5810	33.84809	10.70370

**Independent Samples Test**

	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
RETURN_ON_ASSETS	18.942	.000	2.935	18	.009	209.2960	71.30862	59.48215	359.1098
			2.935	9.415	.016	209.2960	71.30862	49.06133	369.5306

**\*Findings:** The Significant p value is 0.000 < 0.05 than equal variance not assumed is 0.016 < 0.05 than null hypothesis Ho is rejected.

**V. Liquidity Ratios:**

Liquidity is very important for any organization dealing with money. For a bank, Liquidity is a crucial aspect which represents its ability to meet its financial obligations. Liquidity ratios are calculated to measure the short term financial soundness of the bank. The ratio assesses the capacity of the bank to repay its short term liability. This ratio is also an effective source to ascertain, whether the working capital has been effectively utilised. Liquidity in the ratio means ability to repay loans. If a bank does not have sufficient liquidity, it may not be in a position to meet its commitments and thereby may lose its credit worthiness.

## 1. Current Ratio:

Current ratio judges whether current assets are sufficient to meet the current liabilities or not. It measures the liquidity position of the bank in terms of its short term working capital requirement.

$$\text{Current Ratio} = \text{Current Assets} / \text{Current Liabilities}$$

**TABLE – 13 CURRENT RATIO**

### Group Statistics

BANKS		N	Mean	Std. Deviation	Std. Error Mean
CURRENT_RATIO	AXIS BANK	10	.2540	.34939	.11049
	KOTAK MAHINDRA BANK	10	.3230	.44252	.13994

### Independent Samples Test

	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
CURRENT_RATIO	1.262	.276	-.387	18	.703	-.06900	.17830	-.44359	.30559
			-.387	17.08	.704	-.06900	.17830	-.44504	.30704

**\*Findings:** The Significant p value is 0.276 > 0.05 than equal variance assumed is 0.703 > 0.05 than null hypothesis Ho is accepted.

## 2. Liquidity / Quick Ratio:

Liquid assets are current assets less stock and prepaid expenses. Liquid assets include cash in hand, balance with RBI, balance with other banks (both in India and abroad) and money at call and short notice. Current liabilities include short-term borrowings, short-term deposits, bills payables and outstanding expenses.

**TABLE – 14 QUICK RATIOS**

**Group Statistics**

BANKS		N	Mean	Std. Deviation	Std. Error Mean
QUICK_RATIO	AXIS BANK	10	13.3900	5.97959	1.89091
	KOTAK MAHINDRA BANK	10	9.7750	4.67751	1.47916

**Independent Samples Test**

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
QUICK_RATIO	Equal variances assumed	3.094	.096	1.506	18	.149	3.61500	2.40072	-1.42873	8.65873
	Equal variances not assumed			1.506	17.014	.150	3.61500	2.40072	-1.44977	8.67977

**\*Findings:** The Significant p value is 0.096 > 0.05 than equal variance assumed is 0.150 > 0.05 than null hypothesis Ho is accepted.

**3. Debt-Equity Ratio:**

This ratio is calculated to judge the long term financial policy of the bank. A higher debt to equity ratio is not considered good for the bank. This ratio is calculated to measure the relative claims of outsiders and the owners against the bank's assets.

**Debt-Equity Ratio = Long-term Liabilities / Shareholders Funds**

**TABLE – 15 DEBT-EQUITY RATIO**

**Group Statistics**

BANKS		N	Mean	Std. Deviation	Std. Error Mean
DEBT_EQUITY_RATIO	AXIS BANK	10	12.0390	3.61853	1.14428
	KOTAK MAHINDRA BANK	10	5.5640	1.24845	.39479

**Independent Samples Test**

	Levene's Test for Equality of Variances	t-test for Equality of Means								
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
DEBT_EQUITY_RATIO	Equal variances assumed	9.594	.006	5.349	18	.000	6.47500	1.21047	3.93190	9.01810
	Equal variances not assumed			5.349	11.11	.000	6.47500	1.21047	3.81407	9.13593

**\*Findings:** The Significant p value is 0.006 < 0.05 than equal variance not assumed is 0.000 < 0.05 than null hypothesis Ho is rejected.

**VI. Sensitivity to Market Risk:**

Sensitivity focuses on an institution's ability to identify, monitor, manage and control its market risk, and provides institution management with a clear and focused indication of supervisory concerns in this area.

**1. Interest Spread Ratio:**

Spread is the difference between interest earned and interest paid. So spread is the amount available to the commercial banks for meeting their administrative, operating and other expenses. As a matter of practice, banks try to increase the spread volume so that it is sufficiently available to meet the non-interest expenses and the remainder contributes to the profit volume.

**Spread Ratio (%) = (Spread / Working Fund)\*100**

**TABLE – 16 INTERESTS SPREAD RATIO**

**Group Statistics**

BANKS		N	Mean	Std. Deviation	Std. Error Mean
INTEREST_SPREAD	AXIS BANK	7	4.0171	.83138	.31423
	KOTAK MAHINDRA BANK	7	6.5314	1.66609	.62972

**Independent Samples Test**

	Levene's Test for Equality of Variances	t-test for Equality of Means								
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
INTEREST_SPREAD	Equal variances assumed	10.482	.007	-3.573	12	.004	-2.51429	.70377	-4.04767	-.98090
	Equal variances not assumed			-3.573	8.814	.006	-2.51429	.70377	-4.11147	-.91710

**\*Findings:** The Significant p value is 0.007 < 0.05 than equal variance not assumed is 0.006 < 0.05 than null hypothesis Ho is rejected.

\*

(If variances are equal p value will be greater than 0.05 use equal variance assumed) (If variances are unequal p value will be greater than 0.05 use equal variance not assumed)

If (sig.2 tailed) ≤ 0.05: significant difference – reject hypothesis.

If (sig.2 tailed) > 0.05: no significant difference NS

Group means are significantly different as the value in the sig. (2 tailed) low is less than 0.05

**H<sub>0</sub>:** μ<sub>1</sub> = μ<sub>2</sub> (Null hypothesis: mean of two banks are equal)

**H<sub>a</sub>:** μ<sub>1</sub> < μ<sub>2</sub> (Alternate hypothesis: mean of two banks are not equal)

## **SUMMARY OF FINDINGS, CONCLUSIONS AND SUGGESTIONS:**

Based on the above analysis, the following are the summary of findings; conclusions and suggestions about the comparative financial performance of the AXIS and KOTAK MAHINDRA bank are drawn:

1. The capital adequacy and Tier I capital ratio of AXIS and KOTAK MAHINDRA Bank is more than the Basel Accord norms but the average Tier II capital ratio of AXIS and KOTAK MAHINDRA Bank. We conclude that both the banks are good with respect capital adequacy because it is above the Basel norms.
2. The loans to total assets of HDFC are more compared with ICICI Bank. Hence, we can say that the risk is more in HDFC bank compared with ICICI Bank.
3. The total advances to customer deposit of AXIS Bank are less compared with KOTAK MAHINDRA Bank. Hence, KOTAK MAHINDRA bank is managing more efficiently for converting deposits to advances.
4. The net profit ratio of AXIS Bank is more compared with KOTAK MAHINDRA Bank.
5. The Average current assets and quick assets of AXIS Bank is more compared with KOTAK MAHINDRA bank. So, we can conclude that the AXIS Bank liquidity has well compared with KOTAK MAHINDRA Bank and the t-test has also proved the same in the case of all the liquidity ratios.
6. The debt-equity ratio of AXIS Bank 12.09 % is more compared with KOTAK MAHINDRA Bank 5.56 % ; hence long term solvency is well in AXIS Bank.
7. The spread ratio of AXIS Bank is more compared with KOTAK MAHINDRA Bank. Hence, we can say that the KOTAK MAHINDRA bank Interest income more compared with interest expenses. Hence KOTAK MAHINDRA bank earns more profits.

From the CAMELS' analysis it clears that there is no significance difference between the AXIS and KOTAK MAHINDRA bank's financial performance but we conclude that the KOTAK MAHINDRA bank performance is slightly less compared with AXIS Bank.

## **SUGGESTIONS:**

The spread of the AXIS bank should control otherwise the income of the bank is eaten away by the interest expenses in the long-run.

### **Limitations of the study:**

The Limitation of the present study is that the analysis is restricted to only two major private banks. The inherent limitation is secondary data. The published data is not uniform and not properly disclosed by the banks.

### **Scope for Further Research:**

Capital Adequacy ratio (CAR) is a ratio that regulators in the banking system use to watch bank's health, specifically bank's capital to its risk. Regulators in most countries define and monitor CAR to protect depositors, thereby maintaining confidence in the banking system. This research paper and its findings may be of considerable use to banking institutions, policy makers and to academic researchers in the area of banking performance evaluation with special reference to capital adequacy.

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