# FINANCIAL PERFORMANCE ANALYSIS – A COMPARATIVE STUDY OF SELECTED PUBLIC SECTOR AND PRIVATE SECTOR BANKS.

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#### **ABSTRACT**

This research is based on comparative financial analysis of selected Public and Private Sector Banks using ratios, The banks are selected based on top five & bottom five market capital of the Public and Private sector banks, Earning ratios(Net Interest Margin, Yield on Advances, Return on Equity, Return on Asset), Debt coverage ratios(cash deposit ratio, Investment deposit ratio, Debt to equity ratio, Loan to deposit ratio), Efficiency ratios(Net Non-performing Asset, Cost to income ratio, Operating cost to Asset ratio, Cost of liabilities), Growth ratios(Advances growth, EPS growth, Operating income growth), Liquidity ratios(Credit to deposit ratio, Current and Saving Account ratio, Interest expended to Total fund, Interest income to total fund), Balance sheet ratios(Capital adequacy ratio, Advance/loan fund)Leverage ratio(Current ratio and Quick ratio) Profit and Loss ratios(Interest expended to Interest earned, Other income to Total Income, Operating expenses to Total income) and etc.., this are some ratios which is used in this research, A Graphical representation is used to rank the performance of the bank and T-test is used to comparative analysis of the Public and Private sector banks Regression is used to find out the relation & Predictability of Liquidity(Current ratio, Cash to Deposit ratio, Credit to Deposit ratio, Investment to Deposit ratio) and profitability(Return on Equity, Net Interest Margin) of both Private and Public banks. The ratio data is taken One Year (2019), And this study is mainly focus on to find out the best sector in banking sector.

**Keywords:-** Financial ratios, Comparative analysis of public and private sector banks, Earning ratios, Liquidity ratios, T-test, Regression, Correlation, Growth ratio, Debt coverage ratio, Profit and loss account.

# **1.ABOUT THE STUDY:**

Financial ratios are widely used for modelling purposes both by practitioners and researchers. The firm involves many interested parties, like the Owners management, personnel, customers, suppliers, competitors, regulatory agencies, and academics, each having their views in applying financial statement analysis in their evaluations. Practitioners use financial ratios, for instance, to forecast the future success of companies, while the researchers' main interest has been to develop models exploiting theses ratios. Many distinct areas of research involving financial ratios can be discerned, Historically one can observe several major themes in the financial analysis literature. There is overlapping in the observable themes. And they do not necessarily coincide with what theoretically might be the Best founded areas.

This study about comparing the public and private bank financial statements ratios to analysis the performance level of both banks. And this research is used to rank the top financial performance bank in both

Private and Public Sector. Liquidity and Profitability of the banks is very important parameter to find the financial performance, so this research show the predictability between the two parameters.

Financial Management is the specific area of financial dealing with the financial decision corporations make. And the tools and analysis to make the decisions. The discipline as a whole may be divided between long-term and short-term decisions and techniques. Both share the same goal of enhancing firm value by ensuring that return on capital exceeds cost of capital, without taking excessive financial risks.

#### 1.1-OBJECTIVE:

- The objective is to compare the financial performance and efficiency of public and private sector bank.
- To give suggestive measures to improve the financial analysis.
- To Study the relationship between liquidity and Profitability Management of Public and Private sector banks.
- To study the financial performance & Profitability growth of the public & private sector.

#### 1.2. STATEMENT OF THE PROBLEM:

- There is no standardized method of comparison for Financial statement analysis for banks, so investor cannot compare the two or more banks directly through financial statement (Ex: Profit, Revenue, interest rate).
- The availability of financial data is not in organized manner in financial statement, so through financial statement analysis, investor cannot easily evaluate the trend financial position of a bank over a specific period of time, (Ratio organized the data from financial statements).
- Analyzing Balance Sheet of all banks are getting more difficult, So Financial ratios helps to Analyzing balance sheet very simplest manner.
- Many of non-financial person, they don't know to analysis the financial ratios.

This research Paper determines benchmark for all ratios and How to compare the ratios and provide standardized analysis method.

#### 1.3- LIMITATION OF THE STUDY:

This research is basically concentration on 10 Banks from Public sector and 10 Banks from the Private sector and the bank is selected based on Market Capital of the bank, Time is taken for the research is 5 year to identify the best performance bank and to rank the bank performance, and it is used to find effect of liquidity in management. Even some statistical tools is used for analysis to given better outlook of the effect of liquidity management in the Indian Private and Public banks.

#### 2. INDUSTRY PROFIT:

#### 2.1-PUBLIC SECTOR BANKS:

The Public sector banks are those where govt holdings are more than 50% while nationalized banks are those banks which were nationalized in 1969 and 1980. Thus all nationalized banks are public sector banks. Thus in total 27 PSB's are there. Examples of public sector banks are: SBI Bank, Bank of India, Canara Bank.

# 2.2- PRIVATE SECTOR BANKS:

These are banks majority of share capital of the banks is held by private individuals. These banks are registered as companies with limited liability. "Private banks" can also refer to non-government owned banks in general, in contrast to government-owned (or nationalized) banks, which were prevalent in communist, socialist and some social democratic states in the 20<sup>Th</sup> century. Private banks as a form of organization should also not be confused with "Private Banks" that offer financial services to high net worth individuals and others.

# **3-RESEARCH METHODOLOGY:**

- Data Collection In this research the data's collected to secondary method.
- Source of Data—The ratio data is are taken from trusted websites like Money Control, Stock Edge, Business Standard, Valuestock.com.
- Analysis A study on comparative analysis of financial position of private and public sector banks.
- Time period of the study-The selected ratio variables of public and private sector banks taken for study was from financial year 2015 to 2019 for five years
- Data type -The data used for the research is taken for 10 Public and 10 Private bank, The variables used for finding bank performance are Profitability(ROE,NIM), Liquidity ratio(Cash/deposit ratio, Credit/deposit ratio) etc...,and this ratio is used to find out the liquidity in management.
- Statistical tools used- The tools used for the analysis is T-test it is used to compare the all bank performance of the Private sector banks vs Public sector banks, Regression this test is used for measure the effect of liquidity management on the profitability of both public and private sector banks, Graphical representation it is used for ranking the bank in both sector based on the performance, Correlation analysis is done to study the interrelationship between different sets of independent and dependent variable.

#### 4.DATA ANALYSIS:

#### 4.1 EARNINGS RATIOS:

#### 1.Net Interest Margin:

Net interest margin performance of Public and Private banks, In Public bank SBI ranked first 2.57, Second Indian bank=2.49, Third Bank of Maharashtra=2.19. In Private sector bank Bandhan bank scored high 5.59, Second rank HDFC=4.18, Third Kotak bank=4.11, But overall average Private bank Performance is better than Public bank.

 Table-4.1.1: Statistical Analysis of Net Interest Margin for Public and Private Banks:

t-Test: Two-Sample Assuming Unequal Variances			
P(T<=t) one-tail		0.005386	
t Critical one-tail		1.812461	
P(T<=t) two-tail	The same of the sa	0.010772	
t Critical two-tail		2.228139	

# **Hypothesis Test:**

H0: There is no significant different between Public bank and private bank in Net interest Margin.

# **Interpretation:**

P value is 0.01, it is less then level of Significant 0.05, So accept the Ha and reject the H0, The alternate Hypothesis is There is significant different between Public and Private bank in Net interest Margin. The Performance of the Private bank is better then Public bank, the mean value of Public bank is 2.27 and Private bank is 3.319

#### 2. Yield on Advances:

The above graph Indicate the performance of public and private bank in their yield on advances, Higher the ratio good for bank, In public bank IDBI bank ranked first=13.38%, Second Punjab& Sid bank=13.09%, Third Union bank=11.75%. In Private bank Dhanlaxmi bank ranked bank first=16.56%, Second Bandhan bank=13.78%, Third Kotak bank=13.38%, But over average private bank is performed better then public bank.

**Table4.1.2**: Statistical Analysis of Yield on Advances for Public and Private Banks:

t-Test: Two-Sample Assur	ning Unequal Variances		
P(T<=t) one-tail		0.138327	
t Critical one-tail	J. F.	1.739607	
P(T<=t) two-tail		0.276654	
t Critical two-tail		2.109816	

# **Hypothesis Test:**

H0: There is no significant different between mean value of Public and Private bank in Yield on Advances.

# **Interpretation:**

P value is 0.27, It is greater than level of significant 0.05, So accept the H0 and reject the Ha, the null hypothesis is There is no significant different between man value of Public and Private Sector, But Private sector bank performance little higher then Public bank, The mean value of Public bank is 12.36% and Private bank is 13.16%.

#### 3.Interest Spread:

Interest Spread performance of the Public and Private bank, Higher the ratio good for banks, In Public bank central bank has more Interest Spread = 9.38%, Second UCO Bank=6.67%, Third IDBI Bank=7.54%, In Private Bank Dhanlaxmi Bank has more interest spread=9.91%, Second Bandhan Bank=9.65%, Third HDFC= 7.59%. But overall average Private sector Bank performed better then Public Bank.

**Table-4.1.3:** Statistical Analysis of Interest Spread for Public and Private Banks:

t-Test: Two-Sample Assuming Unequal Variances		
P(T<=t) one-tail	0.135731	
t Critical one-tail	1.739607	
P(T<=t) two-tail	0.271462	
t Critical two-tail	2.109816	

# **Hypothesis Test:**

Ho: There is no significant different between mean value of the public bank and private bank in yield on advances.

# **Interpretation:**

P value is 0.27 It is more than Significant level 0.05, so accept the Ha and reject H0, So the alternate hypothesis is There is Significant different between mean value of the public and private bank in yield on advances. The overall average, Private sector has high Interest Spread then Public Sector, The average mean value of the Private sector bank is 6.54% and Public bank is 7.36%.

#### **Result Summary Hypothesis Testing:**

Ratios	Hypothesis	Summary
Net interest margin	Ha There is significant different between Public and Private bank in Net interest Margin.	Ha=Accepted
Yield on Advances	H0: There is no significant different between man value of Public and Private Sector,	H0=Accepted
Interest Spread	Ha: There is significant different between mean value of the public and private bank in yield on advances.	Ha=Accepted

#### **4.2 DEBT COVERAGE RATIO:**

## 1.Cash/Deposit Ratio:

**Table-4.2.1:** Statistical analysis of Cash/Deposit ratio for Public and Private Banks:

t-Test: Two-Sample Assuming Unequal Variances		
P(T<=t) one-tail	0.379209	
t Critical one-tail	1.739607	
P(T<=t) two-tail	0.758417	
t Critical two-tail	2.109816	

#### **Hypothesis Test:**

H0: There is no significant different between mean value of the public bank and private bank in cash/deposit ratio.

#### **Interpretation:**

P value is 0.75, it is more than 0.05, so accept the H0 and reject the Ha, There is no significant different between mean value of the public bank and private bank in cash/deposit ratio. But Private bank performance is little better than Public bank.

#### 2.Investment/Deposit Ratio:

Investment/Deposit ratio of Public bank and Private Bank, Higher the ratio it is good for bank deposit, In Public bank IDBI Bank has higher ratio=39%, Second rank is UCO Bank=34.34%, Third rank Central Bank=31.25%, In Private Bank ICICI bank has higher investment ranker=40%, Second rank Dhanlaxmi Bank=37.48%, Third rank Axis Bank=35.18%, Private bank has invest more money from their deposit.

**Table-4.2.2**: Statistical analysis of Investment/Deposit ratio for Public and Private banks:

t-Test: Two-Sample Assuming Unequal Variances	

P(T<=t) one-tail	0.390158	
t Critical one-tail	1.745884	
P(T<=t) two-tail	0.780316	
t Critical two-tail	2.119905	

# **Hypothesis:**

H0: There is no significant different between mean value of the public bank and private bank in investment/deposit ratio.

#### **Interpretation:**

The P value is 0.784 and it is more than level of significant so accept the H0 and reject the Ha, Null hypothesis is There is no significant different between public bank and private bank in investment/deposit ratio. Public banks investment are little difference against Private bank.

# 3.Loan/Deposit Ratio:

Loan to deposit ratio of the private and Public bank, In Public bank SBI Bank has high loan to deposit ratio=78.08, Second Union Bank=75.82, Third IDBI Bank=0.304, In Private bank Kotak Bank has high ratio=109.8, Second ICICI Bank=102, Third Axis Bank=91.7.

**Table-4.2.3:** Statistical analysis of Loan/Deposit ratio for Public and Private Banks:

t-Test: Two-Sample Assuming	Unequal Variances		1
P(T<=t) one-tail		0.03003	
t Critical one-tail		1.76131	
P(T<=t) two-tail		0.06006	7
t Critical two-tail		2.144787	

# **Hypothesis:**

H0: There is no significant different between mean value of the public bank and private bank in loan/deposit ratio.

# **Interpretation:**

P value is 0.06 and it is more than level of significant, accept the H0 and reject the Ha, null hypothesis is there is no significant different between public bank and private bank in loan to deposit ratio, But Public banks has less loan to deposit ratio against Private bank, So it is bad sign for Public sector, Public Bank=70% and Private bank has=81%.

#### **Result Summary Hypothesis Testing:**

Ratios	Hypothesis	Summary
Cash/Deposit	H0: There is no significant different between mean value of the public bank and private bank in cash/deposit ratio.	H0=Accepted
Investment/Deposit	H0: There is no significant different between public bank and private bank in investment/deposit ratio.	H0=Accepted

Loan/Deposit ratio	H0: There is no significant different between public bank and	H0=Accepted
	private bank in loan to deposit ratio.	

#### **4.3 MANAGEMENT CAPABILITY RATIO:**

#### 1.CASA Ratio:

The CASA ratio percentage, higher the ratio is best bank, In Public bank, Bank of Maharashtra has high CASA percentage=45.2, Second Bank IDBI bank=44.5%, and Third bank SBI Bank=43.5. In Private Bank Axis Bank has higher CASA Ratio=48.3%, Second Bank ICICI Bank=48.02% and Third bank HDFC Bank=44.32%.

**Table-4.3.1:** Statistical analysis of CASA Ratio for Public and Private Bank:

t-Test: Two-Sample Assuming Unequal Variances		
P(T<=t) one-tail	0.13535	
t Critical one-tail	1.75305	
P(T<=t) two-tail	0.2707	
t Critical two-tail	2.13145	

#### **Hypothesis test:**

H0: There is no significant different between the mean value of the public bank and private bank.

# **Interpretation:**

P value is 0.27 and it is more than level of significant 0.05, So accept the H0 and reject Ha, The alternate hypothesis is There is no significant different between mean value of the private bank and private bank of CASA ratio. The different between Public and Private Bank is 4.55, Public bank has more CASA percentage.

#### 2.Interest Expended to Total Fund Public:

Interest Expended to Total Funds ratio, lower the percentage is best for bank cost efficiency, In Public Bank, Bank of Baroda has lowest percentage=4.17%, Second SBI Bank=4.38%, Third PNB Bank=4.57%. In Public Bank Bandhan Bank has low percentage=3.21%, Second ICICI Bank=3.47%, Third HDFC Bank=4.172.

Table-4.3.2: Statistical analysis of Interest Expended/Total Fund ratio Public and Private Bank:

t-Test: Two-Sample Assuming Unequal Variances			
P(T<=t) one-tail	The second secon	0.3061	
t Critical one-tail		1.76131	
P(T<=t) two-tail		0.6122	
t Critical two-tail		2.144787	

## **Hypothesis Test:**

H0: There is no significant different between the mean value of the public bank and private bank in interest expended/total fund.

# **Interpretation:**

The data set is less than 30, so T test is used for analysis. P value is 0.61, it is greater than level of significant 0.05, so H0 is accepted and Ha is rejected, The null hypothesis is There is no significant different between the mean value of the public bank and private bank in interest expended/total fund. Both Private and Public Bank has very small difference of 0.220, Public bank=5.15 and Private Bank=4.93, Private bank performed better then Public Bank.

# **Result Summary Hypothesis Testing:**

Ratios	Hypothesis	Summary
CASA Ratio	H0: There is no significant different between mean value of the private bank and private bank of CASA ratio.	Rejected
Interest Expended/Interest Earned	Ha: There is significant different between mean value of the public bank and private bank in interest income/total fund.	Accepted
Interest income/Total Fund	Ha: There is significant different between mean value of the public bank and private bank in interest income/total fund.	Accepted

#### **4.4. BALANCE SHEET RATIOS:**

## 1. Capital Adequacy Ratio:

Capital Adequacy Ratio(CAR), Higher ratio is good for bank financial health, In Public bank, Indian Bank has highest CAR percentage=13.02%, Second Bank of Baroda=13.89%, Third SBI=12.71%, In Private bank Dhanlaxmi bank has higher CAR Percentage=25.28%, Second ICICI Bank=17.26%, Third Kotak Bank=17.156%.

**Table-4.4.1:** Statistical Analysis of Capital Adequacy Ratio Public and Private Bank:

t-Test: Two-Sample Assuming Unequal Variances			
P(T<=t) one-tail	0.012817		
t Critical one-tail	1.812461		
P(T<=t) two-tail	0.025634		
t Critical two-tail	2.228139		

# **Hypothesis Test:**

H0: There is no significant different between mean value of the public bank and private bank in capital adequacy ratio.

#### **Interpretation:**

The data set is less than 30, So T test is used for analysis. P value is 0.02, it is less then level of significant value 0.02, So accept the Ha and reject the H0, The alternate hypothesis is There is significant different between mean value of the public bank and private bank in capital adequacy ratio. Capital adequacy ratio of Private Bank is higher the Public Bank, Private bank finance health is better than Public Bank, The Mean value of the Private Bank is 15.18%, Private Bank mean value is 11.55%.

#### 4.5 EFFICIENCY RATIO:

#### 1.Net NPA:

Net NPA of the Private and Public Bank, In Public bank, Bank of Baroda has low NPA=2.708%, Second SBI Bank=3.67%, Third Indian Bank=3.73%. In Private Bank, Bandhan Bank has low NPA=0.32%, Second HDFC Bank=0.33%, Third Kotak Bank=0.99%.

Table-4.5.1: Statistical analysis of Net NPA Public and Private Bank:

t-Test: Two-Sample Assuming Unequal Variances				
P(T<=t) one-tail	~	7.48E-05		
t Critical one-tail		1.770933		
P(T<=t) two-tail		0.00015		
t Critical two-tail		2.160369		

#### **Hypothesis Test:**

H0: There is no significant different between the public bank and private bank in Net NPA.

#### **Interpretation:**

The data set is less than 30, so T test is used for analysis. P value is 0.00015, it is less than 0.05, So accept the Ha and reject the H0, The alternative hypothesis is, There is significant different between the public bank and private bank in Net NPA. The mean value of Public Bank=6.004 and mean value of Private Bank=1.90%, Lesser ratio is good for bank financial Position, So Private bank Performance is better than Public Bank.

# 2. Operating Cost/Asset Ratio:

The operating cost to assets ratio, In Public Bank UCO Bank has very low Operating cost/Asset ratio=1.24, Second IDBI and Bank of Baroda has same value =1.32, Third Punjab & Sid Bank=1.46. In Private Bank, South Indian Bank=1.64, Second ICICI Bank 1.81, Third Axis Bank=1.97.

Table-4.5.2: Statistical analysis of Operating Cost/Asset ratio for Public and Private Bank:

0.000193	
1.75305	
0.000385	
2.13145	
	1.75305 0.000385

# **Hypothesis Test:**

H0: There is no significant different between mean value of the public bank and private bank in operating cost/asset.

## **Interpretation:**

The data set is less than 30, So T test is used for analysis. P value is 0.00038, It is less then level of significant 0.05, So accept the Ha and reject the H0, The Alternate hypothesis is there is significant different between mean value of the public bank and private bank in cost income ratio the Mean value of the Public bank is 1.53 and Private Bank is 2.13, So Public bank Performance is better than Private bank.

#### 3.Cost of Liabilities:

Cost of Liabilities of both Public Bank and Private Bank, In Public Bank, Bank of Baroda has low cost of liabilities=4.69%, Second SBI Bank=4.97%, Third PND Bank=5.004%. In Private Bank, Bandhan Bank has low cost of liabilities=4.11%, Second ICICI Bank & HDFC Bank=4.95%, Third Axis bank=4.96%.

**Table-4.5.3:** Statistical analysis of the Cost of Liabilities Public and Private Bank:

t-Test: Two-Sample Assuming Unequal Variances			
P(T<=t) one-tail	0.352183		
t Critical one-tail	1.75305		
P(T<=t) two-tail	0.704365		
t Critical two-tail	2.13145		

## **Hypothesis Test:**

H0: There is no significant different between mean value of the public bank and private bank in cost of liabilities.

#### **Interpretation:**

The data set is less than 30, So T test is used for analysis. P value is 0.70, it is less then level of significant 0.05, So accept the H0 and reject the Ha, The Null hypothesis is, There is significant different between mean value of the public bank and private bank in cost of liabilities. The Performance of Public and Private Bank is almost same.

# **Result Summary Hypothesis Testing:**

Ratios	Hypothesis	Summary
Net NPA	Ha: There is significant different between the public bank and private bank in Net NPA.	Ha=Accepted H0=Rejected
Operating cost/ Asset ratio	Ha: There is significant different between mean value of the public bank and private bank in cost income ratio.	Ha=Accepted H0=Rejected
Cost of Liabilities	Ha: There is significant different between mean value of the public bank and private bank in cost of liabilities.	Ha=Accepted H0=Rejected

#### 4.6 GROWTH RATIO:

#### 1.Advances Growth:

Advance growth of the bank, In Public bank UCO, IDBI, Central Bank, Bank of Maharashtra shows Negative Growth, SBI has high Advance Growth rate, Second PNB Bank=5.61%, Third Union Bank=5.24%. In Private Bank, Dhanlaxmi Bank shows Negative Growth, Kotak Bank has High Growth rate=31.11%, Second Bandhan Bank=29.05%, Third HDFC Bank=22.06%.

**Table-4.6.1**: Statistical analysis of Advance growth for Public and Private Bank:

t-Test: Two-Sample Assuming Unequal Variances			
P(T<=t) one-tail	0.002676		
t Critical one-tail	1.75305		
P(T<=t) two-tail	0.005353		
t Critical two-tail	2.13145		

# **Hypothesis test:**

H0: There is no significant different between mean value of the public bank and private bank in advances growth.

#### **Interpretation:**

The data set is less than 30, So T test is used for analysis. P value is 0.005, it is lesser then level of significant 0.05, So accept the Ha and reject the H0, The Alternate hypothesis is there is significant different between mean value of the public bank and private bank in advance growth. The Mean value of Public Bank is 2.29% and Private Bank is 15.03%. The Performance of the Private Banks is Very High when compare to Public Banks, The average difference between the both banks is 12.74%.

#### 2.EPS Growth:

The EPS Growth of the Public bank and Private Bank, All Public Bank shows Negative EPS Growth, So Profit of the Banks is gone down, In Private bank, Bandhan Bank has showed 71.82%, Second HDFC Bank has showed 16.96%, Third Kotak Bank=23.10%.

**Table-4.6.2:** Statistical analysis of the EPS Growth for Public and Private Bank:

t-Test: Two-Sample Assuming	Unequal Variances	No. of the last of	
P(T<=t) one-tail		0.011317	
t Critical one-tail		1.795885	
P(T<=t) two-tail		0.022635	

#### **Hypothesis Test:**

H0: There is no significant different between mean value of the public bank and private bank in EPS growth.

#### **Interpretation:**

The data set is less than 30, So T test is used for analysis. P value is 0.02, it is less then level of significant 0.05, So accept the Ha and reject the H0, The Alternate hypothesis is, there is significant different between mean value of the public bank and private bank in EPS growth, The Mean value of Public Banks is -89.89% and Private Banks is 2.4%, So Private Bank has Good Growth Performance compared to Public Bank.

# **4.7. LIQUIDITY RATIOS:**

#### 1. Current Ratio:

Current ratio of the bank, In Public bank IDBI has high current ratio=0.13%, Second UCO& Union Bank has same ratio=0.78%, Third SBI Bank=0.074%, In Private Bank Bandhan Bank has high current ratio=0.142%, Second ICICI Bank=0.11%, Third Axis Bank=0.08%.

**Table-4.7.1**: Statistical analysis of Current ratio for Public and Private banks:

t-test: two-sample assuming unequal variances			
p(t<=t) one-tail	0.467403		
t critical one-tail	1.739607		
p(t<=t) two-tail	0.934806		
t critical two-tail	2.109816		

#### **Hypothesis Test:**

H0: There is no significant different between mean value of the public bank and private bank in current ratio.

# **Interpretation:**

The data set is less than 30, So T test is used for analysis. P value is 0.93, it is greater than level of significant 0.05, So accept the H0 and reject the Ha, The Null hypothesis is There is no significant different between mean value of the public bank and private bank in current ratio.

# **Result Summary Hypothesis Testing:**

Ratios	Hypothesis	Summary
Current ratio	H0: There is no significant different between mean value of the public bank and private bank in current ratio	H0=Accepted.

#### 4.8. REGRESSION ANALYSIS:

# 4.8.1: Return on Equity:

# 1.ROE as dependent variable and CDR, CRDR, CURRENT ratio and IDR are independent variable (2019)

# **PUBLIC SECTOR**

Ho: The CDR, CRDR, Current ratio and IDR are not good predictors of ROE. The model is not fit Ha: The CDR, CRDR, Current ratio and IDR are good predictors of ROE. The model is fit

Model Summary (ROE 2019)

R	R Square	Adjusted R Square	Std. Error of the Estimate
.83	.69	.44	20.77

ANOVA (ROE\_2019)

	Sum of Squares	df	Mean Square	F	Sig.
Regression	4831.10	4	1207.78	2.80	.144
Residual	2156.75	5	431.35		

Coefficients (ROE 2019)

Standardized Coefficients				
В	Std. Error	Beta	T	Sig.

(Constant)	-147.47	170.61	.00	86	.421
CDR_2019	-3.96	4.88	26	81	.454
CRDR_2019	1.70	1.21	.58	1.41	.217
Current_Ratio_2019	-373.77	241.30	66	-1.55	.182
IDR_2019	1.89	3.62	.31	.52	.625

#### **Inference and Conclusion:**

From the analysis, the R square value is 0.69. So, that the ROE had a variation about 69% based on the CDR, CRDR, Current ratio and IDR. And the significance value of these parameters is 0.144. The value is greater than 0.05. So, we accept the null hypothesis and reject the alternate hypothesis. Therefore, the CDR, CRDR, Current ratio and IDR are not good predictors of ROE. The model is not fit. So that the CDR, CRDR, Current ratio and IDR does not highly influences the ROE. The difference between R square and adjusted R square is very low this indicates no new predictors can improve R square if included. The multiple R value is 0.83.

The regression equation is in the format y=a+bx. Therefore, ROE is equal to -147.47-3.96\*CDR +1.70\*CRDR -373.77\*Current ratio -1.89\*IDR. The coefficient of the independent variable i.e., CDR, Current ratio and IDR except CRDR are negative. So it shows that there is a negative relationship between the ROE and those independent variables except CRDR. From these four independent variables, the ROE is highly predicted by the Current ratio. Because the significance value of the Current ratio is (0.182) less among the other independent variable. So the Current ratio influences the ROE very highly compared with the other parameters. This is in public sector banks.

#### PRIVATE SECTOR:

Ho: The CDR, CRDR, Current ratio and IDR are not good predictors of ROE. The model is not fit Ha: The CDR, CRDR, Current ratio and IDR are good predictors of ROE. The model is fit

Model Summary (ROE\_2019)

R	R Square	Adjusted R Square	Std. Error of the Estimate
.54	.29	27	20.72

ANOVA (ROE 2019)

1110 111 (21	<u> </u>	0=>)					
	Sum o	of Squares	df	Mean Squa	arel	F	Sig.
Regression	892.3	1	4	223.08		52	.727
Residual	2147.4	41	5	429.48			7
Total	3039.	72	9				

Coefficients (ROE 2019)

300	Standardized Coefficients				
300	В	Std. Error	Beta	t	Sig.
(Constant)	-54.47	69.29	.00	79	.462
CDR_2019	3.04	4.58	.26	.66	.536
CRDR_2019	.53	.55	.39	.97	.375
Current_Ratio_2019	-79.88	260.61	14	31	.772

#### **Inference and Conclusion:**

From the analysis, the R square value is 0.29. So, that the ROE had a variation about 29% based on the CDR, CRDR, Current ratio and IDR. And the significance value of these parameters is 0.727. The value is greater than 0.05. So, we accept the null hypothesis and reject the alternate hypothesis. Therefore, the CDR, CRDR, Current ratio and IDR are not good predictors of ROE. The model is not fit. So that the CDR, CRDR, Current ratio and IDR does not highly influence the ROE. The difference between R square and adjusted R square is very low this indicates no new predictors can improve R square if included. The multiple R value is 0.54.

The regression equation is in the format y=a+bx. Therefore, ROE is equal to -54.47+3.04\*CDR +0.53\*CRDR -79.88\*Current ratio -0.04\*IDR. The coefficient of the independent variable i.e., CDR and CRDR except IDR, current ratio are positive. So it shows that there is a positive relationship between the ROE and those independent variables except IDR and current ratio. From these four independent variables, the ROE is highly predicted by the CRDR. Because the significance value of the CRDR is (0.375) less among the other independent variable. So the CRDR influences the ROE very highly compared with the other parameters. This is in private sector banks Analysis from the private and public sector on 2019, the ROE is influenced and predicted highly by the CRDR in the private sectors and the Current ratio in public sector.

#### 4.8.2. Net Interest Margin:

# 1.NIM as dependent variable and CDR, CRDR, CURRENT ratio and IDR are independent variable (2019)

#### PUBLIC SECTOR

Ho: The CDR, CRDR, Current ratio and IDR are not good predictors of NIM. The model is not fit Ha: The CDR, CRDR, Current ratio and IDR are good predictors of NIM. The model is fit

# Model Summary (NIM\_2019)

R	R Square	Adjusted R Square	Std. Error of the Estimate
.84	.70	.46	.20

#### **ANOVA (NIM 2019)**

Ì	Sum of Squares	df	Mean Square	Feeten	Sig.
Regression	.45	4	.11	2.92	.135
Residual	.19	5	.04		
Total	.64	9	Carlo		

# Coefficients (NIM 2019)

1	Standardized Coefficients		Jan-		
JA.	В	Std. Error	Beta	t	Sig.
(Constant)	.26	1.61	.00	.16	.875
CDR_2019	10	.05	65	-2.11	.089
CRDR_2019	.01	.01	.30	.72	.502
Current_Ratio_2019	-7.19	2.27	-1.33	-3.16	.025
IDR_2019	.08	.03	1.36	2.32	.068

# **Inference and Conclusion:**

From the analysis, the R square value is 0.70. So, that the NIM had a variation about 70% based on the CDR, CRDR, Current ratio and IDR. And the significance value of these parameters is 0.135. The value is greater than 0.05. So, we accept the null hypothesis and reject the alternate hypothesis. Therefore, the CDR, CRDR, Current ratio and IDR are not good predictors of NIM. The model is not fit. So that the CDR, CRDR, Current ratio and IDR does not highly influence the NIM. The difference between R square and adjusted R square is very low this indicates no new predictors can improve R square if included. The multiple R value is 0.84.

The regression equation is in the format y=a+bx. Therefore, NIM is equal to -26.11-0.10\*CDR +0.01\*CRDR -7.19\*Current ratio +0.08\*IDR. The coefficient of the independent variable i.e., CRDR and IDR except CDR, Current ratio are positive. So it shows that there is a positive relationship between the NIM and those independent variables except CDR and Current ratio. From these four independent variables, the NIM is highly predicted by the Current ratio. Because the significance value of the Current ratio is (0.025) less among the other independent variable. So the Current ratio influences the NIM very highly compared with the other parameters. This is in public sector banks.

#### PRIVATE SECTOR:

Ho: The CDR, CRDR, Current ratio and IDR are not good predictors of NIM. The model is not fit Ha: The CDR, CRDR, Current ratio and IDR are good predictors of NIM. The model is fit

# Model Summary (NIM\_2019):

R	R Square	Adjusted R Square	Std. Error of the Estimate
.86	.74	.54	1.20

#### ANOVA (NIM\_2019)

	Sum of Squares	df	Mean Square	F	Sig.
Regression	20.94	4	5.23	3.65	.094
Residual	7.17	5	1.43		
Total	28.11	9			

From the analysis, the R square value is 0.74. So, that the NIM had a variation about 74% based on the CDR, CRDR, Current ratio and IDR. And the significance value of these parameters is 0.096. The value is greater than 0.05. So, we accept the null hypothesis and reject the alternate hypothesis. Therefore, the CDR, CRDR, Current ratio

and IDR are not good predictors of NIM. The model is not fit. So that the CDR, CRDR, Current ratio and IDR does not highly influences the NIM. The difference between R square and adjusted R square is very low this indicates no new predictors can improve R square if included. The multiple R value is 0.86.

The regression equation is in the format y=a+bx. Therefore, NIM is equal to -1.49+0.67\*CDR +0.03\*CRDR -24.52\*Current ratio +0.00\*IDR. The coefficient of the independent variable i.e., CDR, CRDR and IDR except the Current ratio is positive. So it shows that there is a positive relationship between the NIM and those independent variables except the Current ratio. From these four independent variables, the NIM is highly predicted by the CDR. Because the significance value of the CDR is (0.052) less among the other independent variable. So the CDR influences the NIM very highly compared with the other parameters. This is in private sector banks. Analysis from the private and public sector on 2019, the NIM is influenced and predicted highly by the Current ration in public sector and CDR in private sectors.

#### **5.CONCLUSIONS:**

Finance is the life blood of every bank and businesses. Without effective financial management a bank cannot survive in this competitive banking world. A Prudent financial manager has to do periodic review & analysis of the bank. Both Public and Private banks Financial performance is acceptable condition. But QoQ the banks want to increase the performance. The Overall position of the Private bank is good, But comparatively Public banks performance is not up to level, So Public sector bank want increase the efficiency and capability of the bank Operations, Because most of common people trust the Public banks. As a view point of investor, Many of Depositors preferring the Public bank, But most of investors are not preferring the Public bank because inefficient use of Shareholders funds and resources. And they are providing low return on equity, Earning per share when compare to Private banks. Public sector banks want to increase the management capability to increase the profits, ROE, EPS, ROI and to increase the efficiency of banks. Both Private and Public Sector bank Employees want to work effectively for their bank to improve their bank positions.

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