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A STATISTICAL ANALYSIS OF SELECTED KEY RATIOS OF PRIVATE SECTOR BANKS IN INDIA

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ABSTRACT

Banks play an essential role in the economic development of a country. Banks are a fundamental component of the financial system. In India, private banks are available and known for offering expeditious service to their customers. In Today's competitive business environment, the banking industry, like many other financial service industries, faces a hastily changing market, new technologies, economic fears, ferocious competition, and exceptionally more demanding customers; and the changing climate has presented an unparalleled set of challenges. The Private Banks are accountable for 18.2 percent of the Indian banking industry. Significant changes took place in the functioning of Banks in India only after liberalization, globalization, and privatization. This study is a small step in the understanding of private sector banks' role in contributing the economic growth.

KEYWORDS: *Credit Deposit Ratio, Investment Deposit Ratio, public sector, NPA, ANOVA.*

INTRODUCTION

The "private-sector banks" are banks where the private shareholders hold more significant parts of the stake or equity. The private sector banks are split into two groups; the old private sector banks existed before the nationalization in 1969 and kept their independence. The new private sector banks have gained their banking license since the liberalization in the 1990s.In India, private banks are known for offering expeditious service to their customers. Public sector banks have dominated Indian Banking since 1969, when the Indian government nationalized all major banks. However, since liberalization in government banking policy in the 1990s, old and new private sector banks have re-emerged; they have grown faster & bigger over the two decades since liberalization using the latest technology, providing contemporary innovations and monetary tools and techniques.In 1994, the Reserve Bank of India opened the door for private banks and made them responsible for formulating the policies to control the affairs of the private banks. The RBI policy assures the liberation of Private Banks in terms of their independent operation. The first indigenous private bank was Trust Bank, later known as Oriental Bank of Commerce. Other private banks like HDFC Bank, International Bank, ING Vysya Bank, Kotak Mahindra Bank, SBI Commercial Bank, Karnataka Bank, Kashmir Bank, ICICI Bank, and more came. Private banks in India achieved a milestone for serving people and offered outstanding commitment. Private banks in India have earned great response for their service and are also known for bringing revolution by serving millions of customers. It offers the best option for saving and various schemes with maximum return. It offers its service 24 hours and makes the job of fund transfer easier by offering a new banking service. Besides, many ATMs have been set up by such private banks and made the task of withdrawing liquid money easier. The private banks are accountable for 18.2

percent of the Indian banking industry.

In this background, the present study will be a great endeavor to analyze the selected key ratios of private sector banks in India.

LITERATURE REVIEW:

1) **Rohit Bansal (2014):** The analysis of financial ratios mainly focuses on understanding the information contained in the financial statements to know the strengths and weaknesses of the organization and anticipate future prospects.This paper investigates the performance of the commercial banking sector for the period from April- 2011 to March -2014.This study aims to determine the liquidity, activity, leverage, profitability, and market value ratios of AXIS, ICICI, HDFC, and FEDERAL bank. Also, determine norms, industry figures, and peculiarities of the Indian banking sector. Find out comparative financial analysis among these banking companies. Evaluate financial performance using DuPont analysis.In a comprehensive financial ratio analysis of the private sector banks, it is found that only the Federal bank has the ideal current ratio of 2:1. However, Profitability ratio, Activity turnover ratio, Assets turnover ratio, Leverage ratio, and DuPont analysis of all the private sector banks, it is seen that HDFC and Federal have relatively stable asset turnover ratios, which indicates their efficient utilization of resources in revenue generation. Also, the Federal has the best price earnings ratio among other banks. The total assets turnover ratio of Federal bank shows that it keeps significantly highly assets to meet the debts. Therefore, it is inferred that overall, the Federal bank is the most financially stable compared to others.

2) **J. K. Bawaet. All (2016): This** paper evaluated the effect of financial ratios on bank NPAs using a comprehensive framework of variables under the intermediation approach. The paper examines the determinants of non-performing assets (NPA) of Indian scheduled commercial banks from 2007 to 2014 and adds to the non-performing assets. The variables present a holistic view of the bank's operational capability, profitability, solvency, business development capacity, capital adequacy, and liquidity. The study aims to grasp the business performance at the functional and corporate levels. The functional level was captured through the operational, liquidity, and solvency indicators.In contrast, the banks' business growth strategy (asset growth) at the corporate level was captured using business development capacity as a proxy. If banks followed an aggressive growth strategy, they would witness higher NPAs. The intermediation cost ratio is a proxy to capture the role of bank agents to monitor bank loans and protect depositor interest. It is found that a significant intermediation cost ratio helps bank agents spend more time and effort monitoring bank asset quality and lower the default probability faced by the banks. The banks should place the restructured assets as non-performing assets. Restructured assets recognition allowed banks to defer recognizing a loan as bad for at least five years.

3) **P Shrinivasan, J Britto (2017):** The study endeavors to reckon the financial performance of selected Indian commercial banks from 2012/13 to 2016/17. It comprises sixteen commercial banks, eleven representing the public sector and five from the private sector, and the financial performances of these banks are analyzed using the financial ratios. The liquidity ratio is relatively better in the case of private sector banks. However, the quick ratios of private and public sector banks show leaps and bounds during the study period. The private banks have a better ROA, ROE, P/E ratio, and EPS than the public banks. The private banks are relatively better than the public sector banks with respect to solvency ratio and capital adequacy ratio. The study shows that the financial performances of selected private sector banks are relatively better than the public sector banks throughout the sample period. In addition, the study examines the impact of liquidity, solvency, and efficiency on the profitability of the selected

Indian commercial banks by employing the panel data estimations, viz., the Fixed Effect and Random Effects Models. The empirical results from the panel data estimations revealed that the liquidity ratio and solvency ratio and the turnover ratio and solvency ratio are found to have a positive and significant impact on the profitability of the selected public sector and private sector banks, respectively, bearing testimony to the fact that profitability is a function of those ratios. Due to immense competition, policy changes, and the operational environment in which the Indian banking system is presently operating, there has been an increased focus on liquidity, solvency, operational efficiency, and profitability among the selected private sector banks.Most of the selected public sector banks have significantly improved their asset turnover ratio and profit margins. However, the selected private sector banks still have better profitability, liquidity, solvency, and healthy capital adequacy ratios.The public sector banks should take necessary steps to enhance their liquidity and solvency position to amplify their profitability. The private banks should escalate their turnover and solvency position to augment their profits.

4) **Rao (2014)** analyzed the performance of private and public sector banks. The purpose of the study was to examine the financial performance of SBI and HDFC Banks, both public and private sectors, respectively, and to compare profitability between SBI and HDFC Bank. The research, which was descriptive and analytical, used data from a secondary source. The study compared the financial performance of SBI and HDFC Bank based on ratios such as credit deposits, net profit margin, etc. The study covered 2008-09 and 2012-13. The study found that HDFC Bank is performing well and financially more sound than SBI Bank, but in terms of deposits and expenditure, SBI Bank has better managing efficiency. The study also found that the overall financial performance of HDFC Bank is better than SBI Bank.

5) **Pandey and Singh (2015)** empirically evaluated the performance of commercial banks in India using the Malmquist and Data Envelopment Analysis Approach. They attempted to find out bank productivity in India from 2008-to 2013. This study was conducted using panel data from 40 banks (26 public sector banks, ten private banks, and four foreign banks). Data were compiled from statistical tables relating to banks in India from the bank-wise data published by RBI annually. The principal data sources also included the trends and progress of banking in India published by RBI yearly. In their paper, banks were treated as intermediaries that transform the inputs into outputs. Two output and three input variables were used to evaluate the product performance. They also used the DEA Model to measure the technical efficiency and later decompose it into pure technical efficiency and scale efficiency through the VRS Model. The study found that the TFP growth of the bank is very much affected by internet technology. They also found that IDBI Bank, ICICI Bank, Kotak Mahindra Bank, Citibank, and Standard Charter bank are consistently efficient under the VRS and CRS models. In addition, the State Bank of India and Royal Bank of Scotland were found to be consistently efficient under VRS. They suggested that public sector banks should enlarge the scale of their operations to expand their customer base. They also suggested that banks should further innovate by utilizing internet technology to expand and enlarge their scale of operations.

Objectives of the study

1. To understand the concept of Credit Deposit Ratio and Investment Deposit Ratio.
2. To verify the yearly differences in Credit Deposit Ratio and Investment Deposit Ratio of Private Sector Banks in India.
3. To analyze the differences between the Credit Deposit Ratio and Investment Deposit Ratio of all the Private Sector Banks.

Hypothesis of the study:

H0: There is no significant difference among the selected variables of the private banks in India.

H1: There is significant difference among the selected variables of the private banks in India.

RESEARCH METHODOLOGY:

The present study mainly aims to assess the conceptual framework of critical financial ratios. The study also aims to analyze the differences among the variables. A descriptive and analytical approach is followed for deriving conclusions Twenty Two dominant private sector banks were chosen as a sample. Empirical data for the period from 2013-14 to 2015-16 related to crucial variables was obtained from www.iba.org.in (Data Source). Data analyzed and interpreted using appropriate statistical tools, viz. Mean, Standard Deviation, and ANOVA.

DATA ANALYSIS AND INTERPRETATIONS:

Credit Deposit Ratio (CDR):

The credit-deposit ratio of a bank is an indicator of how much a bank lends out of its deposits or how much of its core funds are used for lending. The higher it is, the better the earning capacity of a bank and vice versa.CD ratio helps in assessing banks liquidity Table 1. Shows the CD Ratio of Private Sector Banks for 2014, 2015 and 2016;

Table 1

Sr.No	Banks	Credit Deposit Ratio		
		2014	**2015**	**2016**
1	City Union Bank Ltd.	73.11	74.62	77.53
2	ING Vysya Bank Ltd*	86.93	86.49	0.00
3	Tamilnad Mercantile Bank Ltd.	75.70	75.38	74.34
4	The Catholic Syrian Bank Ltd.	63.68	65.42	54.39
5	Dhanlaxmi Bank Ltd	65.41	61.94	61.24
6	The Federal Bank Ltd.	72.72	72.41	73.37
7	The Jammu & Kashmir Bank Ltd.	66.90	67.80	72.33
8	The Karnataka Bank Ltd.	69.85	68.86	67.15
9	The KarurVysya Bank Ltd.	77.68	80.80	78.05
10	The Lakshmi Vilas Bank Ltd.	69.40	74.45	77.24
11	Nainital Bank Ltd.	52.41	47.84	50.58
12	RBL Bank	84.80	84.51	87.19
13	The South Indian Bank Ltd.	76.29	72.03	73.74
14	Axis Bank Ltd.	81.89	87.17	94.64
15	Development Credit Bank Ltd.	78.84	83.00	86.57
16	HDFC Bank Ltd.	82.49	81.08	85.02
17	ICICI Bank Ltd.	102.05	107.18	103.28
18	Indusind Bank Ltd.	91.07	92.79	95.07

19	Kotak Mahindra Bank Ltd.	89.77	88.38	85.59
20	YES Bank	74.99	82.86	87.91
21	Bandhan Bank	0.00	0.00	102.89
22	IDFC Bank	0.00	0.00	1347.02

(Source: www.iba.org.in)

Table 2
ANOVA

Source of Variation	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*
Rows	416467.2	21	19831.77	0.715826	0.793135	1.812817
Columns	58527.94	2	29263.97	1.05628	0.356802	3.219942
Error	1163600	42	27704.75			
Total	1638595	65				

As the Critical Value (1.812817) is greater than the calculated value (0.715826) at the 5 % Level of Significance in the above table the null hypothesis (H0) is failed to accept. Hence it is concluded that, there is no significant difference among the Credit Deposit Ratios of the private banks in India.

Investment Deposit Ratio (IDR):

Investment-Deposit Ratio is calculated as Investments (In Government securities and other approved securities)/aggregate deposits. This helps to understand how much of the deposit is being invested.Table 3.Shows the ID Ratio of Private Sector Banks for 2014, 2015 and 2016.

Table 3

Sr.No	**Banks**	**Investment Deposit Ratio**		
		2014	**2015**	**2016**
1	City Union Bank Ltd.	27.04	24.38	23.29
2	ING Vysya Bank Ltd*	40.57	39.87	0.00
3	Tamilnad Mercantile Bank Ltd.	29.90	29.91	29.19
4	The Catholic Syrian Bank Ltd.	37.53	30.59	41.46
5	Dhanlaxmi Bank Ltd	36.94	36.32	33.40
6	The Federal Bank Ltd.	40.38	29.04	28.06
7	The Jammu & Kashmir Bank Ltd.	37.78	34.61	29.33
8	The Karnataka Bank Ltd.	37.52	30.50	32.20
9	The KarurVysya Bank Ltd.	30.27	27.69	26.40
10	The Lakshmi Vilas Bank Ltd.	30.63	27.55	25.74
11	Nainital Bank Ltd.	24.51	25.79	26.01

12	RBL Bank	56.20	57.27	59.29
13	The South Indian Bank Ltd.	30.22	27.13	26.24
14	Axis Bank Ltd.	40.42	36.46	34.08
15	Development Credit Bank Ltd.	35.20	35.45	29.03
16	HDFC Bank Ltd.	32.93	33.64	29.99
17	ICICI Bank Ltd.	53.33	43.73	38.06
18	Indusind Bank Ltd.	35.64	30.86	33.56
19	Kotak Mahindra Bank Ltd.	43.14	38.28	36.97
20	YES Bank	55.20	47.41	43.72
21	Bandhan Bank	0.00	0.00	31.09
22	IDFC Bank	0.00	0.00	592.20

Table 4
ANOVA

Source of Variation	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*
Rows	82604.03	21	3933.525	0.726194	0.782641867	1.812817
Columns	8568.854	2	4284.427	0.790977	0.460038955	3.219942
Error	227498.4	42	5416.629			
Total	318671.3	65				

As the Critical Value (1.812817) is greater than the calculated value (0.726194) at the 5 % Level of Significance in the above table the null hypothesis (H0) is failed to accept. Hence it is concluded that, there is no significant difference among the Investment Deposit Ratios of the private banks in India.

RESEARCH IMPLICATIONS: As the Credit-Deposit Ratio of a bank is an indicator of how much a bank lends out of its deposits or how much of its core funds are used for lending. Investment Deposit Ratio helps to understand how much of the deposit is being invested After analyzing the Private Sector Banks CD Ratio and ID Ratios found no significant difference henceforth any of the private bank must be rationale to invest deposits for worth.

LIMITATIONS:

As the study pertains to private sector banks, the results could not be generalized to other banking sectors. Analysis of financial data restricted for Only three years chosen explicitly for study. Raising the fair conclusions and findings depends upon the data accuracy.

CONCLUSION:

The study's main objectives are to understand the concept of Cash Deposit Ratio and Investment Deposit Ratio, Deciding the significance level after analysis. The major findings that pertain to the study are listed below:

1. Chronologically, ICICI Bank, Axis Bank, and RBL Bank constantly have higher credit deposit ratios over the study period.

2. There is the insignificant difference for all selected private sector banks in Credit Deposit Ratio and Investment Deposit Ratio..
3. A high deviation rate was observed in 2016 for Credit Deposit Ratio and Investment Deposit Ratio.
4. Bandhan Bank and IDFC bank reported Unfavorable responses for the initial two years of the study

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