Financial Performance Appraisal of South and North Indian Banks: An Empirical Study of selected Banks

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Abstract

Banking in India forms the base for the economic development of the country. Major changes in the banking system and management have been seen over the years with the advancement in technology, considering the needs of people. If the banking industry does not perform well, the effect to the economy could be huge and broad. So there is a great need to investigate those factors which have impact on performance level of banking sector. The banks are judged purely on the output ratios and ranked based on these parameters. The present study uses 9 years' data of selected five banks each from North and South India.

The results reveal that North Indian banks are far better than those of South Indian Banks. HDFC bank is in top position followed by Karnataka bank, State Bank of India, ICICI bank, Andhra bank, AXIS bank etc. In majority of the parameters, there are significant differences except Return on Assets, Provision coverage ratio, Deposit ratio among the banks.

Corporation Bank and Andhra banks have to focus on their profitability. Corporation Bank, Canara Bank, Syndicate Bank, and State Bank of India should formulate effective strategies to combat NPAs in war-footing way. Corporation Bank should also initiate to undertake effective service motive to increase its non-interest income.

Keywords: **Return on Assets (ROA), Return on Net Worth (RONW), Income to Overhead Ratio (IOR), Gross NPA, Net NPA, Provision Coverage Ratio, Loan Ratio, Deposit Ratio, Loan to Deposit Ratio, Capital adequacy ratio, Interest Income/Interest Cost, Non-Interest Income/Non-Interest Cost, ANOVA.**

1. INTRODUCTION

Banking System plays an important role in promoting economic growth not only by channeling savings into investments but also by improving allocative efficiency of resources. The banking sector in India is the most dominant sector of the financial system. Bank supervisory agencies are responsible for monitoring the financial conditions of commercial banks and enforcing related legislation and regulatory policy. RBI, being the apex institution, looks after the financial health and overall stability of the banking sector in India. The assessment is done by RBI based on various parameters and statistics that throw up important conclusions. These results generally set up precedents for further regulatory controls and actions for better financial environment.

RBI uses its own set of Camels ratings assessment to assure the health of banks and their financial stability. The RBI inspects banks on an annual basis. The Camels rating report is kept confidential by both-the regulator and the bank. To the extent that this information filters out into the financial markets, it appears to affect the prices of bank securities. Hence, no banks disclose the rating for publicity even if it has a good rating.

Although much of the information needed to do so can be gathered from regulatory reports, on-site examinations are needed to verify report accuracy and to gather further supervisory information. Much research has explored the value of this private information, both to the bank supervisors and to the public who monitor banks through the financial markets. Thus, private supervisory information in Camels ratings also appears to be useful in the public monitoring of banks, especially the one conducted by various rating agencies.

2. ABOUT CAMELS RATING

In 1995, RB1 had set up a working group under the chairmanship of S Padmanabhan to review the banking supervision system. The committee implemented control elements for the inspection cycle commencing from July 1998. It recommended that the banks should be rated on a five-point scale (A to E) based on the lines of international Camels rating model (Table-1). Camels rating evaluates banks on the following six parameters:

TABLE 1: CAMELS RATING

Rating symbol	Rating Symbol Indicates
A	Bank is sound in every aspect.
B	Bank is fundamentally sound but with moderate weakness.
C	Financial, operational or compliance weaknesses that give cause for supervisory concern.
D	Serious or immoderate finance, operational and managerial weakness that could impair future viability.
E	Critical financial weakness and there is high possibility in the near future.

a) Capital Adequacy: Capital adequacy is measured by the ratio of Capital to Risk-Weighted Assets (CRAR). A sound capital base strengthens confidence of depositors.

b) Asset Quality: One of the indicators for asset quality is the ratio of nonperforming loans to total loans (GNPA). The gross non-performing loans to gross advances ratio is more indicative of the quality of credit decisions made by the bankers. Higher GNPA is indicative of poor credit decision making.

c) Management: The ratio of non-interest expenditures to total assets can be one of the measures to assess the working of the management. This variable, which includes a variety of expenses, such as payroll, workers' compensation and training investment, reflects the management policy stance.

d) Earnings: It can be measured as the return on asset ratio.

e) Liquidity: Cash maintained by the banks and balances with central bank, to total asset ratio is an indicator of bank's liquidity. In general, banks with a larger volume of liquid assets are perceived safe, since these assets would allow banks to meet unexpected withdrawals.

f) Systems and Control: Each of the above six parameters is weighted on a scale of 1 to 100 and contains a number of sub-parameters with individual weightage.

However, the Camels approach tends to have inherent indeterminacy and subjectivity (Vong, 2009). There can be instances when an examination of the accounting records cannot decide whether to give an average or below average score. The 'good' and 'bad' indicators are easy to spot, but not so the 'in-betweens'. This is a problem of indeterminacy. But when bank inspectors are forced to make a judgment, then it leads to the second problem of subjectivity and hence these ratings could come up with differing levels of expectations and perspectives.

3. CRITERION FOR EVALUATION

Earning Ability, Asset Quality, Growth, Liquidity, Equity and Strategy are able to measure and compare banks' performance in a more determinate, objective and consistent manner.

a) **Earning Ability:** This is shown by three indicators - Return on Assets (ROA), Return On Net Worth (RONW) and Income to Overhead Ratio (IOR). The importance of the IOR is usually that income depends on external market forces, while overheads is highly influenced by internal staffing. So the bank must know how to adjust the staffing according to market demand for its products and Services.

b) **Asset Quality:** This is best judged by the level of bad debt provisions, i.e., bad and doubtful debts as a percentage of total loans. A conservative approach will dictate that the quantum of provision to be on the high side rather low.

c) **Growth:** Growth rates of loans and core deposits are the most important indicators of how a bank wants to position itself in the marketplace. A high growth loan book without a corresponding growth in deposit base signifies an intention to increase interest margins. A higher deposit growth without a corresponding growth in loans means that the bank suffers from lovy interest margins.

d) **Liquidity:** Liquidity can be described as the ability of a bank to have sufficient funds to meet cash demands for loans, deposit withdrawals and operating expenses. It is important for a bank to maintain a balance between the amounts of deposits garnered and the quantum of loans extended. The indicator is the deposit to loan ratio. Also, investment deposit ratio is used as an efficient indicator of liquidity.

e) **Equity:** Equity level and capital adequacy have profound impact upon the bank. Not only is there an international guideline (Basel 11) that stipulates a bank to have a minimum capital equivalent to 8 % of risk - adjusted asset, even RBI has mentioned a comfort zone of 10-12% of total Capital Adequacy Ratio (CAR) for banks in India.

f) **Strategy:** The effective management of a bank strategy is indicated by the Strategic Response Quotient (SRQ). It assesses management's ability to lend, to garner deposits, and obtain fee-based income to manage the operating cost. As to what is an appropriate balance three core banking activities will depend on the bank's Strategy. The SRQ is obtained dividing the interest margin by net operating cost (i.e., total operating cost less fee income). The higher the figure, the better combined with excellent risk controls.

Each of the six parameters is divided into further sub-parameters for an effective. evaluation. The Eagles model, unlike Camels, is based purely on arithmetical ratios hence does not involve grades or ratings. Thus, there is no subjectivity involved in Eagle and banks are judges purely on the ratios obtained and ranked according to highest to lowest based on these parameters (Bhutra, 2011).

Each bank is ranked highest to lowest on each of the sub-parameter. The bank with more number of ranks in more number of sub-parameters will be ranked highest in that particular parameter. Accumulating

all the parameters, the bank that gets the highest rank in more number of parameters stands on top of the list.

Why Eagles method is better for measuring performance? Eagles is able to measure and compare banks performance in a more determinate, objective and consistent manner. Against this backdrop, the present paper attempts to analyze the financial performance of the selected public and private sector banks in India using Eagles model.

4. LITERATURE REVIEW

John Vong, the founder of Eagles model in his study analyzed the parameters of Carmels model and overall rating and concluded that it suffers from indeterminacy, Subjectivity and even inconsistency (Nong, 2009). Then , he came up with the Eagles model which is able to measure and compare banks' performance in a more determinate, objective and consistent manner.

The author identified two major Thai banks that were showing signs of distress. So they had adopted Eagles benchmark to analyze the performance of the banking sector in three Asian countries, and offered an insight Why Malaysia is in a better position in the region of financial upheaval. The author Concluded that Eagles model can identify distress signals and also system of things going wrong (Vong, 1998).

Nagarajan (2003) in his study assessed the rural banks in the Philippines using Eagles model. Microenterprise Access to Banking Services (MABS) was implemented by the rural bankers association of the Philippines, The objectives for MABS are to establish a rating System that can be effectively used as a monitoring tool for MABS on a frequent basis and build up an information database to help Construct performance standards, and provided management tool for the rural banks,

Kothari and Doshi (2012) analyzed the performance of private sector banks using Eagles model for the period 2008-2011. They analyzed each bank separately by using the Eagles model.

Balachandher (2015) developed a quantitative technique using Operations Research (OR) strategies to discover the ability of merger partners that could optimize the key performance parameters in the Eagles framework. To this extent, the transportation algorithm is used to produce a viable preliminary selection of merger partners that could then be subjected to more rigorous qualitative issues before making the final decision.

Only a few studies have been conducted comparing both Camels and Eagles model. The researchers mostly concluded that Eagles method is a better tool to judge the performance of banks.

Vong and Song (2015) in their paper analyzed the banks' performance by taking into consideration different models. Among all models, the authors found that Eagles model is able to judge the performance of banks with a few parameters.

Vaidya (2013) in this study considered 17 banks to determine their performance on both Camels and Eagles model. In Camels model, the author concluded that the 17 banks could not feature on the top-10 list under both ratings. The banks with negative capital adequacy ratio and very low ROA were seen behind in ranking under Camels rating. Similarly, the banks with huge amount of nonperforming loan and negative ROA were seen at the lowest rank under Eagles rating.

Girish and Reddy ((2011) in their study analyzed the performance of private sector banks for two years, i.e., 2009-10 and 2010-11, using Eagles model. Based on all the components of Eagles model, Lakshmi Vilas Bank, Karur Vysya Bank and City Union Bank were found to be performing well as compared to other banks. Karur Vysya Bank showed the highest growth in its balance sheet along with stable asset quality and controlled cost ratios, also on its balance sheet. City Union Bank had one of the lowest cost ratios with one of the best return ratios in the industry, robust balance sheet growth with sound asset quality and good strategic balance by the management. Lakshmi Vilas Bank showed drastic step-up in the last couple of years, with robust balance sheet growth and speckle down in its cost ratios with good liquidity and good strategy by management showing positive results on return ratios.

5. OBJECTIVES

The main objectives of the study are to:

- Analyze the financial performance of the selected South Indian and North Indian banks in India
- Compare the financial performance of selected banks; and
- Make suggestions to improve the financial performance of Indian banks.

The following hypotheses were framed for the purpose of the study:

H_0: There is no significant difference between selected public and private sector banks.

H_1: There is significant difference between selected public and private sector banks.

6. DATA AND METHODOLOGY

Ratio based model for evaluating the performance of banks. It is a management tool that measures earnings, asset quality, growth, liquidity, equity and strategy. The study adopts analytical and descriptive design.

The present study is based on secondary data that has been collected from 2010-2011 to 2018-2019 from the annual reports, websites of the respective banks, magazines, journals, and other published information.Thirteen variables are used in the study. For analyzing and interpreting the results, the statistical tools used are arithmetic mean, standard deviation, coefficient of variation, growth rate, and t-test. The t-test is used to test the hypotheses. It determines the significant difference between the average value of selected North Indian and South Indian banks.

The total assets of the selected banks are presented and adopted for analyzing and comparing the banks. The following Eagles' parameters are considered for the study: Earnings (ROA, RONW and IOR),

Asset Quality (gross NPA, net NPA and provision coverage ratio), Growth (loans and deposits), Liquidity (loan-to-deposit and investment-to-deposit ratio), Equity (capital adequacy) and Strategy (interest income to interest cost and non-interest income to non-interest cost).

TABLE 2: LIST OF SAMPLED BANKS

Sl.No.	Denomination	
	South Indian	**North Indian**
1	Andhra Bank	Axis Bank
2	Canara Bank	HDFC Bank
3	Corporation Bank	ICICI Bank
4	Karnataka Bank	Punjab National Bank
5	Syndicate Bank	State Bank of India

7. RESULTS AND DISCUSSION

7.1. Earning Appraisal:

Sustainable high level of earning enables a bank to boost its capital and improve economic performance. There is a negative relationship between profitability and probability of failure for any business organization. As bank is profit-making organization, for the purpose of conducting the performance appraisal, the following ratios have been analyzed for each of the nationalized commercial banks:

7.1.1. Return on Assets (ROA): -

ROA is one of the widely used measures of profitability. ROA is measured by net profit as a percentage of total assets. A bank with higher level of ROA is inherently sounder than one with a lower level of ROA. ROA is also used for deciding PCA trigger and target ratio by the supervisiors.

TABLE 3: RETURN ON ASSETS IN SOUTH INDIAN AND NORTH INDIAN BANKS

Year	South Indian Bank					North Indian Bank				
	SYN	AND	CAN	COR	KAR	AXI	SBI	HDFC	ICICI	PNB
2011	0.66	0	1.19	0.98	0.64	1.39	0.6	1.41	1.26	1.17
2012	0.71	0	0.87	0.92	0.67	1.48	0.87	1.52	1.36	1.06
2013	0.93	0.88	0.69	0.74	0.83	1.52	0.9	1.68	1.55	0.99
2014	0.67	0.26	0.49	0.25	0.66	1.62	0.6	1.72	1.64	0.6
2015	0.5	0.34	0.49	0.25	0.87	1.59	0.63	1.73	1.72	0.5
2016	-0.53	0.26	-0.5	-0.21	0.73	1.56	0.42	1.73	1.34	-0.59
2017	0.12	0.07	0.19	0.22	0.7	0.61	0.38	1.68	1.26	0.18
2018	-0.99	-1.4	-0.68	-1.82	0.46	0.03	-0.18	1.64	0.77	-1.6
2019	-0.83	-1.11	0.04	-2.96	0.6	0.58	0.02	1.69	0.34	-1.28
Mean	**0.12**	**-0.07**	**0.28**	**-0.16**	**0.62**	**1.04**	**0.42**	**1.48**	**1.12**	**0.1**
σ	**0.69**	**0.68**	**0.59**	**1.26**	**0.24**	**0.66**	**0.37**	**0.53**	**0.57**	**0.97**
C.V	**5.58**	**-9.73**	**2.11**	**-7.75**	**0.4**	**0.64**	**0.88**	**0.36**	**0.51**	**9.47**
CAGR	**-2.03**	**0**	**-0.31**	**-2.13**	**-0.01**	**-0.09**	**-0.31**	**0.02**	**-0.14**	**-2.01**
Ranks based on C.V	**9**	**1**	**8**	**2**	**4**	**6**	**7**	**3**	**5**	**10**
ANOVA:										
F-test	7.1953									
P-value	0.75									

AND: Andhra Bank, CAN: Canara Bank, COR: Corporation Bank, KAR: Karnataka Bank, SYN: Syndicate Bank, AXI: Axis Bank, SBI: State Bank of India, HDFC: HDFC Bank, ICICI: ICICI Bank and PNB: Punjab National Bank.

HDFC stands top in earning the highest average ROA followed by ICICI, Axis, KAR, SBI, CAN, SYN and PNB bank respectively. The rest of the banks are negative in their average ROA. North Indian banks are better than those of south Indian banks. There is significant difference among the banks under study since its P value of 0.75 is higher than 5% level of significance.

7.1.2. Return on Networth (RONW): -

It measures the rate of return on shareholders' investment. It is a proportion of profit after tax to networth of the business. It indicates the bank's ability to generate income on the investment of shareholders. RONW is directly proportional to bank's profitability.

TABLE 4: RETURN ON NETWORTH IN SOUTH INDIAN AND NORTH INDIAN BANKS

Year	SOUTH INDIAN BANK					NORTH INDIAN BANK				
	SYN	AND	CAN	COR	KAR	AXI	SBI	HDFC	ICICI	PNB
2011	15.7	0	22.4	19.8	8.92	17.8	11.3	15.5	9.35	22.1
2012	16.3	0	15.9	18.2	9.47	18.6	13.9	17.3	10.7	18.5
2013	21	15.3	12.6	15	12.2	15.6	14.3	18.6	12.5	15.2
2014	15.7	4.98	10.1	5.56	10.2	16.3	9.2	19.5	13.4	9.69
2015	12.5	6.34	10.2	5.57	13.3	16.5	10.2	16.5	13.9	8.12
2016	-15	4.91	-10.8	-4.73	11.3	15.5	6.89	16.9	11.2	-11.2
2017	2.85	1.53	3.96	4.65	8.79	6.59	6.69	16.3	10.1	3.47
2018	-24.1	-31.5	-14.5	-39.8	6.52	0.43	-3.37	16.5	6.63	-32.9
2019	-17.4	-21.2	1.16	-40.4	8.88	7.01	0.39	14.1	3.19	-24.2
Mean	**2.76**	**-1.97**	**5.11**	**-1.62**	**8.95**	**11.4**	**6.95**	**15.1**	**9.09**	**0.89**
σ	**16.3**	**13.9**	**11.6**	**21.7**	**3.69**	**7.22**	**6.1**	**5.51**	**4.53**	**18.3**
C.V	**5.91**	**-7.05**	**2.26**	**-13.4**	**0.41**	**0.63**	**0.88**	**0.37**	**0.5**	**20.7**
CAGR	**-2.01**	**0**	**-0.28**	**-2.08**	**0**	**-0.1**	**-0.31**	**-0**	**-0.11**	**2**
Ranks based on C.V	**9**	**2**	**8**	**1**	**4**	**6**	**7**	**3**	**5**	**10**
ANOVA										
F-test	2.15									
P-value	0.034									

AND: Andhra Bank, CAN: Canara Bank, COR: Corporation Bank, KAR: Karnataka Bank, SYN: Syndicate Bank, AXI: Axis Bank, SBI: State Bank of India, HDFC: HDFC Bank, ICICI: ICICI Bank and PNB: Punjab National Bank.

HDFC again secures the highest average RONW of 15.10% during the study period. It is followed by Axis bank of 11.43%, ICICI bank of 9.09%, KAR bank by 8.95%, SBI bank of 6.95%, CAN bank of 5.11%, SYN bank of 2.76% and PNB bank of 0.89% respectively. The other two banks namely Andhra and corporation bank have negative return during the study period. The consistency of the banks under study are in the range of 0.37% of HDFC to 20.67% of PNB**.** All banks of North Indian banks have positive but not south Indian banks. Since P-value of ANOVA is 0.034%, there are significance differences among the banks.

7.1.3. Income to Overhead Ratio (IOR): -

The Income to Overheads ratio (IOR) is also reflective of bank's efficiency. Income to overhead ratio is operating expenses divided by total income less interest expenses; higher ratio being indicative of more efficiency managed bank.

TABLE 5: INCOME TO OVERHEAD RATIO IN SOUTH INDIAN AND NORTH INDIAN BANKS

Year	SOUTH INDIAN BANK					NORTH INDIAN BANK				
	SYN	AND	CAN	COR	KAR	AXI	SBI	HDFC	ICICI	PNB
2011	4.85	5.38	4.91	6.32	4.85	4.14	4.22	3.39	4.92	4.8
2012	5.8	6.76	6.52	8.13	6.06	4.56	4.63	3.78	5.22	5.8
2013	5.75	6.85	6.68	8.48	6.24	4.87	4.63	3.73	5.37	5.64
2014	6.04	6.76	6.74	8.19	5.36	4.81	4.33	4.07	5.29	5.11
2015	6.54	6.52	6.27	8.33	5.76	4.76	4.52	4.1	5.32	4.97
2016	4.97	6.56	6.9	7.34	5.58	4.98	4.59	4.17	5.36	5.44
2017	4.81	5.89	5.61	7.27	4.59	4.6	4.53	4.14	4.99	5.99
2018	4.47	6.08	5.48	6.22	4.76	4.05	4.42	4.2	4.6	4.21
2019	3.95	5.62	5.06	5.01	4.74	4.3	3.99	4.46	4.3	5.08
Mean	**4.72**	**5.64**	**5.42**	**6.53**	**4.79**	**4.11**	**3.99**	**3.6**	**4.54**	**4.7**
σ	**1.83**	**2.05**	**2.03**	**2.55**	**1.78**	**1.48**	**1.42**	**1.3**	**1.63**	**1.73**
C.V	**0.39**	**0.36**	**0.38**	**0.39**	**0.37**	**0.36**	**0.36**	**0.36**	**0.36**	**0.37**
CAGR	**-0.02**	**0**	**0**	**-0.03**	**0**	**0**	**-0.01**	**0.03**	**-0.01**	**0.01**
Ranks based on C.V	**4**	**1**	**3**	**4**	**2**	**1**	**1**	**1**	**1**	**2**
ANOVA										
F-test	23.025									
P-value	0									

AND: Andhra Bank, CAN: Canara Bank, COR: Corporation Bank, KAR: Karnataka Bank, SYN: Syndicate Bank, AXI: Axis Bank, SBI: State Bank of India, HDFC: HDFC Bank, ICICI: ICICI Bank and PNB: Punjab National Bank.

The highest average income to overhead ratio is achieved by Corporation bank. Average income of all selected banks under study varies from the highest of 6.53 times to the lowest of 3.60 times of overhead expenses. It is evident from the F statistics that there is significance difference among the banks with respect to income to overhead ratio.

7.2. Asset Quality Analysis:

Good quality assets are the assets that have the capacity to generate maximum value with minimum risk characteristic. The issue of maintaining good quality assets continues to be the biggest challenge before the Indian banking sector. One of the major constraints of the competitive efficiency of banks is the tendency to accumulate poor quality assets. A good quality asset is indicative of efficient credit administration, i.e., standard credit appraisal, effective follow up and efficient recovery of loans. Nothing is a true indicator of the quality of assets than the incidence of the quantum of NPAs in relation to total portfolio. High level of NPAs demonstrates poor asset quality of banks and this has serious implication not only for current earnings of banks but also their future income. Significant amount of funds are locked in loan due to their non-recovery on time and this further aggravates the problem for banks due to provisioning requirements for NPAs' classification. Banks with adequate credit risk management practices are expected to have lower NPAs. Various asset quality ratios have been used to analyze the quality of assets in banks.

7.2.1. Gross NPAs: -

They are the sum total of all loan assets that are classified as NPAs as per RBI guidelines as on balance sheet date. Gross NPA reflects the quality of the loans made by banks. It consists of all the non-standard assets like substandard, doubtful, and loss assets. It can be calculated as follows:

Gross NPAs = Gross NPA's/Gross Advances Ratio

TABLE 6: GROSS NPAs IN SOUTH INDIAN AND NORTH INDIAN BANKS

Year	SOUTH INDIAN BANK					NORTH INDIAN BANK				
	SYN	AND	CAN	COR	KAR	AXI	SBI	HDFC	ICICI	PNB
2011	2	1	1	1	4	1	3	1	0	2
2012	3	2	2	1	3	1	5	1	0	3
2013	2	4	3	2	3	1	5	1	0	4
2014	3	5	2	3	3	1	5	1	0	5
2015	3	5	4	5	3	1	4	1	4	7
2016	7	8	9	10	3	2	7	1	6	13
2017	9	12	10	12	4	5	7	1	9	13
2018	12	17	12	17	5	7	11	1	10	18
2019	11	16	9	15	4	5	8	1	7	16
Mean	**5.2**	**7**	**5.2**	**6.6**	**3.2**	**2.4**	**5.5**	**0.9**	**3.6**	**8.1**
σ	**4.21**	**6.09**	**4.34**	**6.35**	**1.32**	**2.37**	**2.99**	**0.32**	**4.12**	**6.37**
C.V	**0.81**	**0.87**	**0.83**	**0.96**	**0.41**	**0.99**	**0.54**	**0.35**	**1.14**	**0.79**
CAGR	**0.21**	**0.36**	**0.28**	**0.35**	**0**	**0.2**	**0.12**	**0**	**0**	**0.26**
Ranks based on C.V	**5**	**7**	**6**	**8**	**2**	**9**	**3**	**1**	**10**	**4**
ANOVA										
F-test	3.1841									
P-value	0.0024									

AND: Andhra Bank, CAN: Canara Bank, COR: Corporation Bank, KAR: Karnataka Bank, SYN: Syndicate Bank, AXI: Axis Bank, SBI: State Bank of India, HDFC: HDFC Bank, ICICI: ICICI Bank and PNB: Punjab National Bank.

HDFC has the lowest average gross NPAs registering 0.9% during the study period. It is followed by other banks in the min-max of 2.40% and 8.10**%.** The P-value 0.0024 of ANOVA is lesser than 5% level of significance. Hence there are significance differences with respect to gross NPAs among the banks during the study period.

7.2.2. Net NPAs: -

Like gross NPA ratio, low level of net NPA ratio indicates quality of credit risk management and quality of assets. Net NPA shows the actual burden of the banks.

TABLE 7: NET NPAs IN SOUTH INDIAN AND NORTH INDIAN BANKS

Year	SOUTH INDIAN BANK					NORTH INDIAN BANK				
	SYN	AND	CAN	COR	KAR	AXI	SBI	HDFC	ICICI	PNB
2011	1	0	1	0	2	0	2	0	1	1
2012	1	1	1	1	2	0	2	0	1	2
2013	1	2	2	1	2	0	2	0	1	2
2014	2	3	2	2	2	0	3	0	1	3
20s15	2	3	3	3	2	0	2	0	2	4
2016	4	5	6	7	2	1	4	0	3	9
2017	5	8	6	8	3	2	4	0	5	8
2018	6	8	7	8	3	4	6	0	5	11
2019	6	6	5	6	3	2	3	0	2	7
Mean	**2.8**	**3.6**	**3.3**	**3.6**	**2.1**	**0.9**	**2.8**	**0**	**2.1**	**4.7**
σ	**2.25**	**3.03**	**2.5**	**3.31**	**0.88**	**1.37**	**1.62**	**0**	**1.73**	**3.77**
C.V	**0.8**	**0.84**	**0.76**	**0.92**	**0.42**	**1.52**	**0.58**	**0**	**0.82**	**0.8**
CAGR	**0.22**	**0**	**0.2**	**0**	**0.05**	**0**	**0.05**	**0**	**0.08**	**0.24**
Ranks based on C.V	**5**	**7**	**4**	**8**	**2**	**9**	**3**	**1**	**6**	**5**
ANOVA										
F-test	4.3231									
P-value	0.0001									

AND: Andhra Bank, CAN: Canara Bank, COR: Corporation Bank, KAR: Karnataka Bank, SYN: Syndicate Bank, AXI: Axis Bank, SBI: State Bank of India, HDFC: HDFC Bank, ICICI: ICICI Bank and PNB: Punjab National Bank.

HDFC bank has maintained zero level of average Net NPAs. The other banks are in the range of 4.70% of PNB to 0.90% of Axis bank**.** There is a significance difference among the banks under study since its F statistics is more than the critical value.

7.2.3. Provision Coverage Ratio: -

PCR helps the banks to meet their financial obligations. In a broader sense, the higher the coverage ratio, the better the ability of the bank to meet its future obligations. The key relationship in analyzing asset quality of the bank is between the cumulative provision balances of the banks on a particular date to cross gross NPAs. It is a measure that indicates the extent to which the bank is provided against the troubled part of its loan portfolio.

Provision Coverage ratio = Cumulative Provisions/Gross NPAs

TABLE 8: PROVISION COVERAGE RATIO IN SOUTH INDIAN AND NORTH INDIAN BANKS

Year	SOUTH INDIAN BANK					NORTH INDIAN BANK				
	SYN	AND	CAN	COR	KAR	AXI	SBI	HDFC	ICICI	PNB
2011	0.56	0.64	0.34	0.78	0.17	0.79	0.4	1.12	0.22	0.56
2012	0.53	0.55	0.46	7.65	0.32	0.63	0.32	0.71	0.16	0.41
2013	0.35	0.26	0.35	0.65	0.26	0.73	0.21	0.71	0.18	0.45
2014	0.41	0.34	0.49	0.59	0.33	0.66	0.25	0.53	0.24	0.35
2015	0.31	0.3	0.26	0.35	0.22	0.56	0.34	0.6	0.25	0.31
2016	0.31	0.25	0.32	0.34	0.27	0.6	0.3	0.62	0.44	0.32
2017	0.2	0.22	0.21	0.21	0.33	0.56	0.32	0.61	0.32	0.22
2018	0.32	0	0	0	0.48	0.4	0.33	0.68	0.32	0.34
2019	0.19	0.25	0.32	0.57	0.34	0.4	0.31	0.67	0.43	0.36
Mean	**0.32**	**0.28**	**0.28**	**1.11**	**0.27**	**0.53**	**0.28**	**0.63**	**0.26**	**0.33**
σ	**0.16**	**0.2**	**0.17**	**2.31**	**0.13**	**0.23**	**0.11**	**0.27**	**0.13**	**0.15**
C.V	**0.52**	**0.72**	**0.61**	**2.08**	**0.47**	**0.42**	**0.4**	**0.43**	**0.51**	**0.45**
CAGR	**-0.11**	**-0.1**	**-0.01**	**-0.03**	**0.08**	**-0.07**	**-0.03**	**-0.1**	**0.08**	**-0.05**
Ranks based on C.V	**7**	**9**	**8**	**10**	**5**	**2**	**1**	**3**	**6**	**4**
ANOVA										
F-test	1.3663									
P-value	0.2174									

AND: Andhra Bank, CAN: Canara Bank, COR: Corporation Bank, KAR: Karnataka Bank, SYN: Syndicate Bank, AXI: Axis Bank, SBI: State Bank of India, HDFC: HDFC Bank, ICICI: ICICI Bank and PNB: Punjab National Bank.

Cumulative provisions of Corporation bank have an average 1.11% of Gross NPAs followed by others whose cumulative provisions are not more than 0.63%. There are no significant differences among the banks with respect to Provision Coverage ratio since its P-value is 0.2174.

7.3. Growth:

Growth rates of loans and core deposits are the most important indicators of how a bank wants to position itself in the marketplace.

7.3.1. Loans Ratio: -

Loans are the effiective rate of return on the bank's investment. Higher loan growth indicates higher earning capacity of the bank. It is observed that loan growth has declined for all selected banks over the period of study due to increase in the proportion of disbursement over the period of study in absolute terms.

TABLE 9: LOAN RATIO IN SOUTH INDIAN AND NORTH INDIAN BANKS

Year	SOUTH INDIAN BANK					NORTH INDIAN BANK				
	SYN	AND	CAN	COR	KAR	AXI	SBI	HDFC	ICICI	PNB
2011	0.18	0.27	-0.34	0.37	0.2	0.36	0.19	0.27	0.19	0.29
2012	0.15	0.16	0.1	0.15	0.19	0.19	0.14	0.22	0.17	0.21
2013	0.19	0.18	0.04	0.18	0.21	0.16	0.2	0.22	0.14	0.05
2014	0.17	0.09	0.24	0.15	0.12	0.16	0.15	0.26	0.16	0.13
2015	0.16	0.17	0.09	0.05	0.11	0.22	0.07	0.2	0.14	0.08
2016	0	0.03	-0.01	-0.03	0.07	0.2	0.12	0.27	0.12	0.08
2017	0	0.04	0.05	0	0.09	0.1	0.07	0.19	0.06	0.01
2018	0.05	0.08	0.11	-0.14	0.27	0.17	0.23	0.18	0.1	0.03
2019	-0.02	0.06	0.12	0.01	0.16	0.12	0.12	0.24	0.14	0.07
Mean	**0.09**	**0.11**	**0.04**	**0.07**	**0.14**	**0.17**	**0.13**	**0.21**	**0.12**	**0.1**
σ	**0.09**	**0.08**	**0.15**	**0.14**	**0.08**	**0.09**	**0.07**	**0.08**	**0.06**	**0.09**
C.V	**1.01**	**0.78**	**3.78**	**1.93**	**0.56**	**0.55**	**0.54**	**0.38**	**0.46**	**0.97**
CAGR	**-1.78**	**-0.15**	**-1.89**	**-0.33**	**-0.02**	**-0.11**	**-0.05**	**-0**	**-0.03**	**-0.15**
Ranks based on C.V	**8**	**6**	**10**	**9**	**5**	**4**	**3**	**1**	**2**	**7**
ANOVA										
F-test	2.939									
P-value	0.0046									

AND: Andhra Bank, CAN: Canara Bank, COR: Corporation Bank, KAR: Karnataka Bank, SYN: Syndicate Bank, AXI: Axis Bank, SBI: State Bank of India, HDFC: HDFC Bank, ICICI: ICICI Bank and PNB: Punjab National Bank.

Loan ratio of selected banks under study period are not more than 21% of HDFC bank and not less than 1% of PNB. This indicates the aggressive nature of banks in increasing the profits of the banks. All banks except Syndicate Bank maintained consistency in the loan ratio. It is evident from the F-statistics that the P value is less than 5% level of alpha. Hence, there are significant differences among the banks with respects to this ratio.

7.3.2. Deposits: -

Deposits is the amount accepted by banks from the savers in the form of current deposits, savings deposits and fixed deposits and interest is paid to them.

TABLE 10: DEPOSITS RATIO IN SOUTH INDIAN AND NORTH INDIAN BANKS

Year	SOUTH INDIAN BANK					NORTH INDIAN BANK				
	SYN	AND	CAN	COR	KAR	AXI	SBI	HDFC	ICICI	PNB
2011	15.9	18.6	25.1	25.9	15.2	33.9	16.1	24.6	11.7	158
2012	16.5	14.9	11.5	16.6	15.6	16.3	11.7	18.3	13.3	0
2013	17.4	17	8.8	21.9	14.1	14.8	15.2	20.1	14.5	-3.19
2014	14.6	14.6	18.2	16.5	12.6	11.2	15.9	24	13.4	-11
2015	20.3	9.28	12.6	3.07	13.4	14.8	13.1	22.7	8.93	-9.34
2016	2.48	12.4	1.25	2.92	9.73	11	9.76	21.2	16.6	-9.96
2017	-0.44	12.1	3.22	7.5	12.4	15.8	18.1	17.8	16.3	-13.3
2018	4.68	6.46	5.95	-16.9	10.8	9.47	32.4	22.5	14.5	-3.05
2019	-4.72	5.64	14.2	0.68	8.87	20.9	7.57	17	16.4	-17.6
Mean	**8.65**	**11.1**	**10.1**	**7.82**	**11.3**	**14.8**	**14**	**18.8**	**12.6**	**9.02**
σ	**9.12**	**5.75**	**7.89**	**12.7**	**4.53**	**8.7**	**8.33**	**7.11**	**5**	**52.5**
C.V	**1.05**	**0.52**	**0.78**	**1.62**	**0.4**	**0.59**	**0.6**	**0.38**	**0.4**	**5.82**
CAGR	**-1.87**	**-0.12**	**-0.06**	**-0.33**	**-0.06**	**-0.05**	**-0.08**	**-0**	**0.04**	**-1.78**
Ranks based on C.V	**7**	**3**	**6**	**8**	**2**	**4**	**5**	**1**	**2**	**9**
ANOVA										
F-test	0.352									
P-value	0.954									

AND: Andhra Bank, CAN: Canara Bank, COR: Corporation Bank, KAR: Karnataka Bank, SYN: Syndicate Bank, AXI: Axis Bank, SBI: State Bank of India, HDFC: HDFC Bank, ICICI: ICICI Bank and PNB: Punjab National Bank.

HDFC accepts the largest average amount of 18.82 Cr. deposits among the sample bank during study period. It was followed by the rest of the banks ranging from 13.99 crores deposits of Axis bank to 7.89

Cr. of COR bank. Because of P value 0.9542, it accepts null hypothesis. Hence there is no significance difference with respect to deposits among the banks.

7.4. Liquidity Analysis:

Liquidity management is one of the essential functions of treasury department of banks to meet the different demands for funds. A bank must maintain high liquid assets in sufficient amount to meet deposits, withdrawals as well as legitimate loan request. The various objectives of liquidity are presented in Table-19.

TABLE 11: OBJECTIVES OF LIQUIDITY

1	Deposit Liquidity	To honour depositors for funds.
2	Protective Liquidity	To protect the bank against scale of creditworthy assets in adverse market scenario in case of emergency need of funds.
3	Portfolio Liquidity	Maintenance of additional funds to meet additional demand for loan. Tracking the assets and liabilities maturity profile for marking cash inflow and cash outflows.
4	Regulatory Liquidity	To accomplish 25% SLR requirements as per RBI's guideline.

Liquidity ratio provides the primary means of judging a bank's liquidity position. In banking, there is no universally recognized liquidity ratio as liabilities are not predictable. In case of non-financial firms, liabilities have fixed maturities, while a large portion of bank's liabilities is repayable on demand. The ratios used to analyse the liquidity position of banks are as follows:

7.4.1. Loans to Deposit Ratio: -

Loans to deposit ratio indicates the extent up to, which the bank has already used up its available resources to accommodate the credit needs of the customers. The presumption is that the higher the ratio, the lesser would be the ability of the bank to make additional loans. Thus, higher value indicates higher degree of vulnerability of liquidity. A high loan deposit ratio indicates that a bank has a large portion of its earning assets in loans and small percentage in securities. The loan deposit ratio has a psychological impact on the bank's management. As the ratio increases, lending becomes more cautious and selective. The ratio also helps bank's management in setting the upper limit to a bank's ability to make additional loans without resource to more or less continuous borrowings. Every commercial bank has to maintain a 25% SLR which further affects the lending capacity of bank.

Loans to deposits ratio = Total Loans/Total Deposits

TABLE 12: LOANS TO DEPOSITS RATIO IN SOUTH INDIAN AND NORTH INDIAN BANKS

Year	SOUTH INDIAN BANK					NORTH INDIAN BANK				
	SYN	AND	CAN	COR	KAR	AXI	SBI	HDFC	ICICI	PNB
2011	0.78	0.77	0.71	0.74	0.63	0.75	0.81	0.76	0.95	0.37
2012	0.78	0.78	0.71	0.73	0.65	0.77	0.83	0.79	0.99	0.45
2013	0.79	0.79	0.68	0.71	0.69	0.77	0.86	0.8	0.99	0.49
2014	0.81	0.75	0.71	0.7	0.69	0.81	0.86	0.82	1.02	0.63
2015	0.79	0.81	0.69	0.72	0.68	0.87	0.82	0.81	1.07	0.75
2016	0.76	0.75	0.67	0.68	0.67	0.94	0.84	0.85	1.03	0.91
2017	0.76	0.7	0.69	0.63	0.65	0.9	0.76	0.86	0.94	1.07
2018	0.77	0.71	0.72	0.65	0.75	0.96	0.71	0.83	0.91	1.14
2019	0.78	0.72	0.71	0.65	0.8	0.9	0.75	0.88	0.89	1.48
Mean	**0.7**	**0.68**	**0.63**	**0.62**	**0.62**	**0.77**	**0.72**	**0.74**	**0.88**	**0.73**
σ	**0.25**	**0.24**	**0.22**	**0.22**	**0.22**	**0.28**	**0.26**	**0.26**	**0.31**	**0.43**
C.V	**0.35**	**0.36**	**0.35**	**0.36**	**0.36**	**0.36**	**0.36**	**0.35**	**0.36**	**0.59**
CAGR	**0**	**-0.01**	**0**	**-0.01**	**0.03**	**0.02**	**-0.01**	**0.02**	**-0.01**	**0.17**
Ranks based on C.V	**1**	**2**	**1**	**2**	**2**	**2**	**2**	**1**	**2**	**3**
ANOVA										
F-test	4.4543									
P-value	0.0001									

AND: Andhra Bank, CAN: Canara Bank, COR: Corporation Bank, KAR: Karnataka Bank, SYN: Syndicate Bank, AXI: Axis Bank, SBI: State Bank of India, HDFC: HDFC Bank, ICICI: ICICI Bank and PNB: Punjab National Bank.

ICICI bank provides the highest average 88% of deposits as a loan incorporating the riskiest bank in its aggressive nature. It is followed by 77% of Axis bank, 74% of HDFC bank 73% of PNB bank, 72% of SBI bank, 70% of SYN bank, 68% of AND bank, 63% of CAN bank, and 62% each for COR bank and KAR bank respectively. It is witnessed from the ANOVA summary that there is significance difference among the banks because of its P value lesser than 5% level of significance.

7.5. Equity:

Equity level and capital adequacy have profound impact on the bank.

7.5.1. Capital Adequacy Ratio: -

Capital adequacy ratio (capital to risk weighted assets) is the most widely employed measure of soundness of banks. It reflects bank's ability to withstand shocks in the event of adverse developments. Basel accord of 1988 played a very positive role in providing financial stability and competitive equality among different banks. However, the ongoing refinements have increased pressure on commercial banks to rise capital from different alternatives and reduce exposure in assets that carries higher degree of risk weightage without compromising earning opportunities. The overall capital position of commercial banks has witnessed considerable improvements in the post-reform phase.

TABLE 13: CAPITAL ADEQUACY RATIO IN SOUTH INDIAN AND NORTH INDIAN BANKS

Year	SOUTH INDIAN BANK					NORTH INDIAN BANK				
	SYN	AND	CAN	COR	KAR	AXI	SBI	HDFC	ICICI	PNB
2011	13	14	15	14	13	13	12	16	20	12
2012	12	13	14	13	13	14	14	17	19	13
2013	13	12	12	12	13	17	13	17	19	13
2014	11	11	11	12	13	16	13	16	18	12
2015	11	11	11	11	12	15	12	17	17	13
2016	11	12	11	11	12	15	13	16	17	11
2017	12	12	13	11	13	15	13	15	17	12
2018	12	11	13	9	12	17	13	15	18	9
2019	14	14	12	12	13	16	13	17	17	10
Mean	**10.9**	**11**	**11.2**	**10.5**	**11.4**	**13.8**	**11.6**	**14.6**	**16.2**	**10.5**
σ	**3.96**	**4.03**	**4.16**	**3.92**	**4.03**	**5.01**	**4.12**	**5.19**	**5.79**	**3.92**
C.V	**0.36**	**0.37**	**0.37**	**0.37**	**0.35**	**0.36**	**0.35**	**0.36**	**0.36**	**0.37**
CAGR	**0.01**	**0**	**-0.02**	**-0.02**	**0**	**0.02**	**0.01**	**0.01**	**-0.02**	**-0.02**
Ranks based on C.V	**2**	**3**	**3**	**3**	**1**	**2**	**1**	**2**	**2**	**3**
ANOVA										
F-test	33.7364									
P-value	0									

AND: Andhra Bank, CAN: Canara Bank, COR: Corporation Bank, KAR: Karnataka Bank, SYN: Syndicate Bank, AXI: Axis Bank, SBI: State Bank of India, HDFC: HDFC Bank, ICICI: ICICI Bank and PNB: Punjab National Bank.

The capital adequacy ratio banks understudy is in the range of 16.22% of HDFC to 10.50% COR and PNB banks. Because of its P value lesser than 5% level of significance, there is significant difference among the sample banks during the study period.

7.6. Strategy:

This defines the management's bandwidth of actions with regard to growth of income and balance sheet. Strategy is broken down into two ratios, viz., interest and non-interest. Interest income on interest cost helps in understanding the bank's ability to re-price its assets in line with liabilities and passing through the hikes in interest cost to its customers. Non-interest income on non-interest cost signifies how much a bank incurs to earn the non-interest income. The ratio ideally should be higher than 1.

The effective management of a bank strategy is indicated by the Strategic Response Quotient (SRQ). It assesses management's ability to lead, to garner deposits, obtain fee-based income and to manage the operating cost. As to what an appropriate balance of the three core banking activities will depend on the bank's strategy. The SRQ is obtained by dividing the interest margin by net operating cost (operating cost less free income). The higher the figure the better combined with excellent risk controls.

7.6.1. Interest Income/Interest Cost: -

Higher interest income/Interest cost (II/IC) ratio signifies that interest income has grown more than proportionate to increase in interest cost. The bank has been able to either control its cost of deposits or has been able to grow its loan book faster to garner higher interest income or has been able to increase its yield on advances faster than increase in its cost of deposits, i.e., lower maturity of assets compared to liabilities.

TABLE 14: INTEREST INCOME/INTEREST COST IN SOUTH INDIAN AND NORTH INDIAN BANKS

Year	SOUTH INDIAN BANK					NORTH INDIAN BANK				
	SYN	AND	CAN	COR	KAR	AXI	SBI	HDFC	ICICI	PNB
2011	1.62	1.63	1.5	1.47	1.34	1.76	1.66	2.12	1.53	1.77
2012	1.49	1.49	1.33	1.31	1.31	1.57	1.68	1.82	1.47	1.58
2013	1.46	1.41	1.3	1.28	1.31	1.55	1.58	1.82	1.52	1.54
2014	1.42	1.35	1.29	1.26	1.33	1.63	1.56	1.81	1.59	1.59
2015	1.34	1.38	1.28	1.26	1.33	1.66	1.56	1.85	1.63	1.55
2016	1.34	1.43	1.28	1.27	1.35	1.69	1.53	1.84	1.67	1.47
2017	1.37	1.44	1.31	1.29	1.4	1.68	1.54	1.91	1.67	1.46
2018	1.43	1.54	1.41	1.37	1.52	1.68	1.51	1.99	1.72	1.45
2019	1.44	1.54	1.44	1.54	1.47	1.65	1.57	1.95	1.74	1.5
Mean	**1.29**	**1.32**	**1.21**	**1.21**	**1.24**	**1.49**	**1.42**	**1.71**	**1.45**	**1.39**
σ	**0.46**	**0.47**	**0.43**	**0.43**	**0.44**	**0.53**	**0.5**	**0.61**	**0.52**	**0.5**
C.V	**0.36**	**0.36**	**0.36**	**0.36**	**0.36**	**0.35**	**0.35**	**0.36**	**0.36**	**0.36**
CAGR	**-0.01**	**-0.01**	**0**	**0.01**	**0.01**	**-0.01**	**-0.01**	**-0**	**0.01**	**-0.02**
Ranks based on C.V	**2**	**2**	**2**	**2**	**2**	**1**	**1**	**2**	**2**	**2**
ANOVA										
F-test	35.7349									
P-value	0									

AND: Andhra Bank, CAN: Canara Bank, COR: Corporation Bank, KAR: Karnataka Bank, SYN: Syndicate Bank, AXI: Axis Bank, SBI: State Bank of India, HDFC: HDFC Bank, ICICI: ICICI Bank and PNB: Punjab National Bank.

The average highest interest income to Interest cost ratio of HDFC bank is 1.71 during the study period followed by other banks in the range of 1.49% of Axis bank to 1.21% of COR bank. Since its P value is zero, they are not same.

7.6.2. Non-Interest Income/Non-Interest Cost: -

Non-Interest Income/Non-Interest Cost (NII/NIC) as a ratio signifies management's ability to earn the NII with matching cost. This ratio ideally should be higher than 1, which signifies that bank has been able to gamer more NII at a controlled cost of earning that income. None of the banks have shown this ratio to be higher than 1, largely due to slowing of other incomes and spike up to operating costs leading to higher cost to income ratios.

TABLE 15: NON-INTEREST INCOME/NON-INTEREST COST RATIO IN SOUTH INDIAN BANKS AND NORTH INDIAN BANKS

Year	SOUTH INDIAN BANK					NORTH INDIAN BANK				
	SYN	AND	CAN	COR	KAR	AXI	SBI	HDFC	ICICI	PNB
2011	0.21	0.31	0.43	0.45	0.41	0.59	0.39	0.39	0.63	0.32
2012	0.22	0.26	0.39	0.47	0.4	0.58	0.31	0.42	0.63	0.33
2013	0.25	0.29	0.38	0.44	0.41	0.59	0.34	0.42	0.6	0.29
2014	0.25	0.28	0.37	0.33	0.4	0.56	0.32	0.44	0.61	0.26
2015	0.34	0.27	0.39	0.29	0.41	0.54	0.35	0.42	0.6	0.3
2016	0.24	0.24	0.27	0.26	0.37	0.52	0.37	0.41	0.57	0.26
2017	0.36	0.3	0.46	0.44	0.43	0.44	0.4	0.39	0.62	0.39
2018	0.22	0.19	0.29	0.2	0.38	0.37	0.35	0.4	0.51	0.24
2019	0.19	0.17	0.31	0.13	0.41	0.43	0.2	0.39	0.38	0.21
Mean	**0.23**	**0.23**	**0.33**	**0.3**	**0.36**	**0.46**	**0.3**	**0.37**	**0.52**	**0.26**
σ	**0.1**	**0.09**	**0.13**	**0.16**	**0.13**	**0.18**	**0.12**	**0.13**	**0.2**	**0.1**
C.V	**0.43**	**0.4**	**0.4**	**0.52**	**0.35**	**0.39**	**0.4**	**0.35**	**0.38**	**0.4**
CAGR	**-0.01**	**-0.06**	**-0.04**	**-0.13**	**0**	**-0.03**	**-0.07**	**0**	**-0.05**	**-0.05**
Ranks based on C.V	**5**	**4**	**4**	**6**	**1**	**3**	**4**	**1**	**2**	**4**
ANOVA										
F-test	22.8254									
P-value	0									

AND: Andhra Bank, CAN: Canara Bank, COR: Corporation Bank, KAR: Karnataka Bank, SYN: Syndicate Bank, AXI: Axis Bank, SBI: State Bank of India, HDFC: HDFC Bank, ICICI: ICICI Bank and PNB: Punjab National Bank.

ICICI bank is ranked the first in earning non-interest income among the sample banks during the study period. It is followed by other banks in the range of 0.46 of Axis bank to 0.23 of SYN. From the ANOVA statistics it is observed that they are not same under 95% confidence level.

8. CONCLUSION

In nutshell, it is observed that North Indian Banks are better than South Indian Banks. Among all banks, HDFC bank fares the best in all respects. In North Indian Banks, HDFC is followed by State Bank of India bank, ICICI bank, AXIS bank, PNB respectively. Similarly, in South Indian Banks, Karnataka bank is assessed to be the best bank. It is followed by Andhra bank, Corporation Bank, Canara Bank, Syndicate Bank respectively. In majority of the parameters, there are significant differences except Return on Assets, Provision coverage ratio, Deposit ratio among the banks.

Corporation Bank and Andhra banks have to focus on their profitability. Corporation Bank, Canara Bank, Syndicate Bank, and State Bank of India should formulate effective strategies to combat NPAs in war-footing way. Corporation Bank should also initiate to undertake effective service motive to increase its non-interest income.

9. LIMITATIONS

Due to constraints of time and resources, the study suffers from certain limitations:

- The study is based on the secondary data, which might have affected the results;
- The secondary data was taken from the annual reports of the respective banks. It is possible that the data shown in the annual reports might have been window dressed and might not reflect the actual position of the banks.

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