

An Analytical study of Profitability of Public Sector Banks in India

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Abstract

Profitability is the important key point to reach at for every financial Institutions. Procuring profits is the first and foremost principle of every financial organization. Similarly Indian Public sector banks are also keen to have on reaching to desired profits required to exist in the competency among financial sector. Presently the public sector banks are playing a pivotal role in providing different and diversified services to the people of the country. In this paper, the author has examined the profitability of the selected public sector banks. To serve this purpose, the author has used the financial tools like financial ratios and statistical tools like ANOVA, Mean, Standard deviation and the coefficient of variation to reach to the eventual conclusions.

Keywords: Return on capital employed, return on equity, Return on assets, public sector banks, ANOVA (F-test).

Review of Literature

According to the present research work, the related previous work done is as under:

Dr. K. Madhusudhana Rao "*An analysis on the performance of private and public sector banking systems*" (2014). In this research paper the author had examined the financial performance of SBI and HDFC bank, public sector and private sector respectively from the period 2008-09. The research was descriptive and analytical in nature. The data used for the study was entirely secondary in nature. This study was conducted to compare the financial performance of SBI and HDFC Bank on the basis of ratios such as credit deposit, net profit margin etc. The outcome was that HDFC Bank was performing well and financially sound than SBI but in context of deposits and expenditure both SBI & HDFC bank had better managing efficiency.

Ashish Gupta and V. S. Sundram "*Profitability analysis of selected Public sector banks in India*" (2015). This paper had evaluated the performance of selected public sector banks such as Bank of Baroda, Punjab National bank, Canara bank, Central bank of India and Bank of India for the period 2009 to 2013. To measure the profitability, liquidity and credit

quality performance of selected public sector banks, financial ratios had employed. This study was primarily based on secondary data. The study highlighted movement of banking variables as return on assets, cash to deposit, term deposit to total deposit, interest income to total assets, net interest margin etc. It was concluded that overall banking performance increased very slowly in the year of analysis.

Dr. Pratibha Gargand Surabhi Kumari “An Empirical Analysis of Profitability Position of Selected Private Sector Banks in India” (2015).

In this research paper the author had done an empirical study which examined the profitability from different perspectives of Private Banks in India with a data of 10 years from 2004 to 2014 and five major Private Banks have been considered as sample units. For this analytical study, the Ratio Technique had been used for analysis and to test the hypothesis Single Factor ANOVA (F-test) had been applied. It found that HDFC Bank remained an outperforming player over the last decade in the Banking Sector with leading in the profitability from the different perspectives

Nikhil Kumar and Narendra Kumar “A Comparative Financial Performance Analysis of Selected Public Sector Banks in India(2016)”This paper had sought the financial Performance analysis of selected Public Sector Bank (State Bank of India, Punjab National Bank, Bank of Baroda and Bank of India) during the periods of five financial year (2011 to 2015). The study based on entirely on secondary data and tools like Ratio analysis had employed on the selected public sector banks. In conclusion it was found that SBI, PNB and BOB were financially sound other than BOI.

Period of the study

The study covers a period of 12 years from 2002-03 to 2013-14.

Objectives of the Study

1. To analysis the profitability of selected public sector banks like SBI, PNB, BOB, BOI, and Union Bank of India.
2. To highlight the overall profitability of banks (i.e.) ROA, ROE, ROCE.

Research Methodology

The researcher seeks out data from the financial statements and the annual reports of the public sector banks for the period 2002-03 to 2013-14. The data is secondary in nature which has obtained from the annual reports of the respective banks of the public sector banks from the Indian bank's association. The financial tools like the Ratio analysis which

computed for individual banks. With the help of SPSS Software, the researcher has applied other statistical tools like Mean, Standard deviation and the Coefficient of variation.

Mean = Sum of variable/N

Standard deviation = $\sqrt{\sum X^2/N - (\sum X/N)^2}$

Coefficient of Variation= SD/MEAN*100

Analysis and Interpretations

A. Return on Equity-

TABLE 1: MEAN STANDARD DEVIATION AND COEFFICIENT OF VARIATION

	SBI	PNB	BOB	BOI	UNION BANK OF INDIA
MEAN	8.255833	8.835	6.720833	6.720833	8.5075
S.D	2.311345	1.934446	2.379624	2.909637	2.107752
C.V	27.99	21.89	35.39	36.62	24.77

Source: Based on calculations

The above is the analysis of bank wise mean standard deviation and coefficient of variation of Return on equity ratio of selected banks. PNB has the highest mean value & bank has lowest mean value as compare to other banks. Standard deviation of Return on equity ratio of Bank of India bank has 2.90 with coefficient of variation of 36.62% and PNB has 1.93 lowest standard deviation with lowest coefficient of variation of 21.89%.

Hypothesis

HO: There is no significant relationship between Return on Equity ratios among selected public sector banks in India.

H1: There is significant relationship between Return on Equity ratios among selected public sector banks in India.

5% level of significance

TABLE 2: Projects the results of ANOVA (one way) test

ANOVA: Single Factor

SUMMARY

Groups	Count	Sum	Average	Variance
SBI	12	99.07	8.255833	5.342317
PNB	12	106.02	8.835	3.742082
BOB	12	80.65	6.720833	5.662608
BOI	12	95.32	7.943333	8.465988
Union Bank of India	12	102.09	8.5075	4.44262

ANOVA

Source of variation	SS	df	MS	F	P-value	F critical
Between the groups	31.75115	4	7.937788	1.435113	0.234696	2.539689
Within Groups	304.2118	55	5.531123			
Total	335.9629	59				

Above analysis calculated value of ANOVA one-way test (1.435113) is less than the table value (2.539689) as shown in the above table, null hypothesis is accepted. Therefore, it is concluded that there is no significant relationship between the Return on equity ratios of the selected public sector banks.

B.RETURN ON ASSETS

TABLE 3: MEAN STANDARD DEVIATION AND COEFFICIENT OF VARIATION

	SBI	PNB	BOB	BOI	UNION BANK OF INDAIA
MEAN	0.9125	1.125	1	0.874167	1.0075
S. D	0.13659	0.214624	0.211574	0.339156	0.237453
C.V	14.95	19.077	21.15	38.79	23.57

Source: Based on calculations

The above is the analysis of bank wise mean standard deviation and coefficient of variation of Return on assets ratio of selected banks. PNB has the highest mean value & SBI has lowest mean value as compare to other banks. Standard deviation of Return on equity ratio of Bank of India has 0.33with highestcoefficient of variation of 38.79% and SBI has 0.13% lowest standard deviation with lowest coefficient of variation of 14.95%.

Hypothesis

HO: There is no significant relationship between Return on assets ratios among selected public sector banks in India.

H1: There is significant relationship between Return on assetsratios among selected public sector banks in India.

5% level of significance

TABLE 4: Projects the results of ANOVA (one way) test

ANOVA: Single Factor

SUMMARY

Groups	Count	Sum	Average	Variance
SBI	12	10.95	0.9125	0.018657
PNB	12	13.5	1.125	0.046064
BOB	12	12	1	0.044764
BOI	12	10.49	0.874167	0.115027
Union Bankof India	12	12.09	1.0075	0.056384

ANOVA

Source of variation	SS	df	MS	F	P-value	F critical
Between the groups	0.454377	4	0.113594	2.022006	0.104017	2.539689
Within Groups	3.089842	55	0.056179			
Total	3.544218	59				

Above analysis calculated value of ANOVA one-way test (2.022006) is less than the table value (2.539689) as shown in the above table, null hypothesis is accepted. Therefore, it is concluded that there is no significant relationship between the Return on assets ratios of the selected public sector banks.

C.Return on capital Employed-

TABLE 5: MEAN STANDARD DEVIATION AND COEFFICIENT OF VARIATION

	SBI	PNB	BOB	BOI	UNION BANK OF INDIA
MEAN	1.9675	2.3225	2.383333	2.203333	1.545833
S. D	0.761519	0.480362	1.325295	0.96199	0.858185
C.V	38.70	20.68	55.60	43.65	55.54

Source: Based on calculations

The above is the analysis of bank wise mean standard deviation and coefficient of variation of Return on capital employed ratios of selected banks. Bank of Baroda bank has the highest mean value & Union bank of India has lowest mean value as compare to other banks. Standard deviation of Return on capital employed ratio of Bank of 1.32 with highest

coefficient of variation of 55.60% and PNB has 0.48 lowest standard deviation with lowest coefficient of variation of 20.68%.

Hypothesis

HO: There is no significant relationship between Return-on-capital-employed ratios among selected public sector banks in India.

H1: There is significant relationship between Return-on-capital-employed ratios among selected public sector banks in India.

5% level of significance

TABLE 6: Projects the results of ANOVA (one way) test

ANOVA: Single Factor

SUMMARY

Groups	Count	Sum	Average	Variance
SBI	12	23.61	1.9675	0.579911
PNB	12	27.87	2.3225	0.230748
BOB	12	28.6	2.383333	1.756406
BOI	12	26.44	2.203333	0.925424
Union Bank of India	12	18.55	1.545833	0.736481

ANOVA

Source of variation	SS	df	MS	F	P-value	F critical
Between the groups	5.56701	4	1.391752	1.645498	0.175958	2.539689
Within Groups	46.51868	55	0.845794			
Total	52.0856959	59				

Above analysis calculated value of ANOVA one way test (1.645498) is less than the table value (2.539689) as shown in the above table, null hypothesis is accepted. Therefore, it is

concluded that there is no significant relationship between Return on capital employed ratios of the selected public sector banks.

Limitations

1. The results of the study restricted to the available secondary data which is taken around 12 years periods.
2. Only profitability ratios are taken for the study.

Findings

1. Return on equity ratio shows that SBI has 14.07 highest percentages at the end of March 2005-06 and BOB has lowest percentage of 1.65 at the end of March 2013-14. To conclude that there is no significant relationship between Return on equity ratios of public sector banks in India.
2. Return on assets ratio reveals that PNB bank has percentage of 1.44 at the end of March 2009-10 and BOI has lowest percentage of 0.38 at the end of March 2004-05. To conclude that there is no significant relationship between Return on assets ratios of public sector banks in India.
3. Return on capital employed ratio reveals that BOB has 6.42 percentage at the end of March 2002-03 and bank has lowest percentage of .21 at the March 2004-05. To conclude that there is no significant relationship between Return on assets ratio of public sector banks in India.

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Data Sets

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