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## **An evaluative study of profitability of Private Sector Banks in India**

**Dr Preksha Singh**  
**(University of Lucknow)**

### **Abstract**

The Indian financial sector plays a pivotal role in constructing the base of an economy of a country. Indian banking Industry is playing one of specific roles among the Indian Financial system. Private sector banks are one of that cushions thereof. Today private sector banks are becoming crucial in providing different and diversified services to the people of the country. Therefore, these private sector banks are outreaching the trust of the customers gradually. Under this paper, the researcher has examined cross-sectional profitability of the selected private sector banks. To infer the outcomes, the researcher has calculated the financial ratios and tools like ANOVA, Mean, Standard deviation and the coefficient of variation.

**Keywords:** Return on capital employed, return on equity, return on assets and Private sector banks, ANOVA (F-test)

### **Introduction**

Private sector banks in India are emerging as a strongest sector in the financial sector. Nowadays services provided by these banks are being fully accepted and praised by the people. The private sector banks are not only competing with the public sectors but also trying to gain greater momentum in the financial sector and it did it almost. Tracing back the history of private sector banks, it found that the old private sector banks were existed prior to the nationalization in 1969. But these banks were kept independent because they were either too small or specialist to be included in nationalization. The new private sector banks are those banks which are given banking licence since liberalization in the 1990. At present there are 30 private sector banks including old private sector banks and the new private sector banks.

### **Review of Literature**

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

***Mabwe Kumbirai and Robert Webb had conducted study on “A Financial ratio analysis of commercial bank performance in South Africa” (2010). In this paper the author investigated the performance of South Africa’s commercial banking sector for the period of 2005 -09. The study used financial ratios analysis to assess profitability, liquidity and credit quality performance of five large***



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South African based commercial banks. In analysis it was found that overall bank performance increased considerably in the first two years. A significant change in trend was noticed at the onset of the global financial crisis in 2007, reaching its peak during 2008-09. This resulted in falling profitability, low liquidity and deteriorating credit utility in the South African banking sector.

**Dr. K. Madhusudan Raohad** conducted study on the “*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.

**Amit Kumar Singh** had conducted study on the “*An analysis of profitability position of private bank in India*” (2015). Under this research paper the author had objective of this study was overall profitability analysis of different private sector banks in India based on the performance of profitability ratio like interest spread, net profit margin, return on long term funds, return on net worth, return on assets & adjusted cash margin. The author had used tools like ANOVA, Mean, Standard deviation and the coefficient of variation. The author found in hypothesis that there is no significant relationship between the variables like Interest spread, Net profit margin, Adjusted cash margin and the private sector banks (Axis, ICICI, KVB & Yes) in India. Likewise, the variables like Return on long term fund, return on net worth and Return on assets had a significant relationship between private sector banks (Axis, ICICI, KVB & Yes) in India.

**Dr. Pratibha Garg and Surabhi Kumari** had conducted study on the “*An Empirical Analysis of Profitability Position of Selected Private Sector Banks in India*” (2015).

Under 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.



### 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 profitability of selected private sector banks like HDFC bank, Axis Bank, Kotak Mahindra Bank, IndusInd Bank and ICICI Bank.
2. To highlight the overall profitability of banks (i.e.) Return on capital employed, return on equity, return on assets.

### Research Methodology

The researcher seeks to find out data from the financial statements and the annual reports of the private sector banks for the period 2002-03 to 2013-14. The data used in this study is secondary in nature which obtained from the annual reports of the respective banks of the private sector banks from the Indian bank's association. The research method used under this study is 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-** Return on equity (ROE) measures the profitability of a corporation in relation to stockholders' equity.

Return on Equity=Net Income/ Average Shareholders' Equity

**TABLE 1: MEAN STANDARD DEVIATION AND COEFFICIENT OF VARIATION**

Year	HDFC	Axis	Kotak Mahindra	IndusInd	ICICI
Mean	8.278333	8.764167	5.596667	7.1275	6.070833
S.D	0.981945	1.733139	2.455711	4.235455	1.843191
C.V	11.86	19.78	43.82	59.41	30.31

**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. Axis bank has the highest mean value & ICICI bank has lowest mean value as compare to other banks. Standard deviation of Return on Equity ratio of IndusInd bank has 4.23 with coefficient of variation of 59.41% and HDFC bank has 0.98 lowest standard deviation with lowest coefficient of variation of 11.86%.

**Hypothesis**

HO: There is no significant relationship between return on equity ratios among selected private sector banks in India.

H1: There is significant relationship between return on equity ratios among selected private sector banks in India.

5% level of significance

**TABLE 2(a): Projects the results of ANOVA (one way) test  
ANOVA: Single Factor**

**SUMMARY**

Groups	Count	Sum	Average	Variance
HDFC	12	99.34	8.278333	0.964215
Axis	12	105.17	8.764167	3.003772
Kotak Mahindra	12	67.16	5.596667	6.030515
IndusInd	12	85.53	7.1275	17.93908
ICICI	12	72.85	6.070833	3.397354

**ANOVA 2(b):**

Source of variation	SS	df	MS	F	P-value	F critical
Between the groups	89.46108	4	22.36527	3.568744	0.011696	2.539689
Within Groups	344.6842	55	6.266986			
Total	434.1453	59				

Above analysis calculated value of ANOVA one way test (3.568744) is greater than the table value (2.539689) as shown in the above table, null hypothesis is rejected. Therefore, it is concluded that there is significant relationship between return on equity ratios of the selected among private sector



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banks.

### **B.Return on Assets**

Return on assets (ROA) is an indicator of how well a company utilizes its assets in terms of profitability.

**Return on Assets = Net Income/Total assets**

**TABLE 3: MEAN STANDARD DEVIATION AND COEFFICIENT OF VARIATION**

	HDFC bank	Axis bank	Kotak Mahindra bank	IndusInd bank	ICICI bank
Mean	1.544167	1.439167	1.653333	1.103333	1.3225
S.D	0.232514	0.252387	0.489384	0.598685	0.251545
C.V	14.93	17.48	29.09	53.63	18.93

**Source: Based on calculations**

The above is the analysis of bank wise mean standard deviation and coefficient of variation of return on assets ratios of selected banks. Kotak Mahindra bank has highest mean value & ICICI bank has lowest mean value as compare to other banks. Standard deviation of return on assets ratio of Kotak Mahindra bank has 0.48 with highest coefficient of variation of 29.09% and HDFC bank has 0.23 lowest standard deviation with lowest coefficient variation of 14.93%.

### **Hypothesis**

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

H1: There is significant relationship between return on assets ratios among selected private sector banks in India

5% level of significance

**TABLE 4: Projects the results of ANOVA (one way) test.****ANOVA: Single Factor****SUMMARY**

Groups	Counts	Sum	Average	Variance
HDFC	12	18.53	1.544167	0.054063
Axis	12	17.27	1.439167	0.063699
Kotak Mahindra	12	19.84	1.653333	0.239497
ICICI	12	13.24	1.103333	0.358424
IndusInd	12	15.87	1.3225	0.063275

**ANOVA**

Source of Variation	SS	df	MS	F	P-value	F-critical
Between Groups	2.156783	4	0.539196	3.461006	0.013601	2.539689
Within Groups	8.568542	55	0.155792			
Total	10.72533	59				

According to table (4) it is found that calculated ANOVA one way test (3.461006) is greater than the table value (2.539689) so null hypothesis is rejected. Therefore, it concluded that there is significant relationship of Return on assets ratios of among the selected private sector banks in India.

**C.Return on capital Employed-**

Return on capital employed (ROCE) is a financial ratio that measures a company's profitability in terms of all of its capital.

$$\text{ROCE} = \text{Capital Employed} / \text{EBIT}$$

where:

EBIT=Earnings before interest and tax  
Capital Employed=Total assets – Current liabilities.



**Table 5: MEAN, STANDARD DEVIATION AND COEFFICIENT OF VARIATION**

	HDFC	Axis	Kotak Mahindra	IndusInd	ICICI
Mean	2.804167	2.495	2.429167	2.203333	2.331667
S. D	0.813896	0.492683	0.716703	0.877282	0.475238
C.V	28.92	19.67	29.33	39.54	20.17

**Source: Based on calculations**

Table (5) shows the detail about bank wise mean, standard deviation & coefficient of variation of Return on capital employed ratios of selected private sector banks. HDFC bank has highest mean value & IndusInd bank has lowest mean value as compare to rest of selected banks. Standard deviation of Return on capital employed of IndusInd bank has .877282 with coefficient of variation of 39.54% and ICICI bank has .4752 lowest standard deviation & lowest coefficient of variation is 20.17%.

### Hypothesis

1. HO: There is no significant relationship between return on capital employed ratio among selected private sector banks in India.
2. H1: There is significant relationship between return on capital employed ratio among selected private 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
HDFC	12	33.65	2.804167	0.662427
Axis	12	29.94	2.495	0.242736
Kotak Mahindra	12	29.15	2.429167	0.513663
IndusInd	12	26.44	2.203333	0.769624
ICICI	12	27.98	2.331667	0.225852

### ANOVA

Source of variation	SS	df	MS	F	P-value	F critical
Between Groups	2.432457	4	0.608114	1.2594	0.297048	2.539689
Within Groups	26.55732	55	0.48286			
Total	28.98977					



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According to table (6) it is found that calculated of ANOVA one way test (1.2594) is less than table value (2.539689) so null hypothesis is accepted. Therefore, it concluded that there is no relationship of return on capital employed ratios in among selected private sector banks.

### Findings

1. Return on equity ratio shows that IndusInd bank has 16.37 highest percentages at the end of March 2003-04 and Kotak Mahindra bank has lowest percentage of 1.1 at the end of March 2003-04. To conclude that there is no significant relationship between Return on equity ratio ratios of (HDFC, Axis, Kotak Mahindra, IndusInd, ICICI) private sector banks in India.
2. Return on assets reveals that Kotak Mahindra bank has highest percentage of 2.49 at the end of March 2002-03 and ICICI bank has lowest percentage of 0.34 at the end of March 2006-07 and 2007-08. To conclude that there is significant relationship between return on equity ratio of (HDFC, Axis, Kotak Mahindra, IndusInd, ICICI) private sector banks in India.
3. Return on capital employed ratio reveals that Kotak Mahindra bank has 3.74 at the end of March 2009-10 and HDFC bank has lowest percentage of .28 at the March 2007-08. To conclude that there is no significant relationship between Return on capital employed ratio of (HDFC, Axis, Kotak Mahindra, IndusInd, ICICI) private sector banks in India

### Limitations

1. The study is related to a period of 12 years.
2. As the data are only secondary i.e., they are collected from the published annual reports.
3. Only profitability ratios are taken for the study.

### Conclusions

The operational efficiency of banking sector is of paramount factor and profitability of banks is one of them. In this research paper, four ratios have been analysed i.e., Return on equity, return on asset, return on capital employed. It can be concluded that HDFC banks has been consistent grip on ROCE ratio except in year 2007-2008. Axis Bank too have consistent ROCE ratio over the period. Kotak Mahindra too have enacted their ROCE ratio except a lowest ratio seen in 2002-2003 i.e., 0.75. Similarly, IndusInd bank has also remained stagnant throughout except a few hiccups in intervening time of study period. Last and the least only ICICI bank having same ratio pattern over the period except in year 2006-2007.

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