

“Analysis of Profitability of Indian Banks: A Comparative Study of Selected Public and Private Banks.”

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Abstract:

Indian financial sector has traditionally been bank based. A sound financial system is indispensable for the growth of a healthy and vibrant economy. Performance of the banking sector is an effective measure and indicator to check the performance of any economy to a large extent. The most common measure of bank performance is profitability. It plays an important role in survivability of the firm in the long run. With a view to evaluating financial performance of Indian public and private sector banks, financial ratios such as gross profit ratio, net profit ratio, return on net worth and return on assets have been calculated. Statistical techniques mean and F test for testing hypotheses were used to support the findings and conclusions and interbank comparison.

KEY WORDS:

Profitability, public sector banks, private sector banks, Financial Performance.

Introduction:-

Indian financial sector has traditionally been bank based. A sound financial system is indispensable for the growth of a healthy and vibrant economy. Performance of the banking sector is an effective measure and indicator to check the performance of any economy to a large extent. The stage of development of the banking industry is a good reflection of the development of the economy. Evaluation of the financial performance of the banking sector is an effective measure and indicator to check the soundness of economic activities of the country.⁽¹⁾

Profitability of banks enables banks to attract more resources (equity capital) from the market (RBI, 2013). It equips banks to absorb the risk of non-performing assets and third, it would facilitate the implementation of aggressive written off policy for non-performing loans (Chaudhuri, 2002). Profitability also supports development activities of banks such as branch expansion in the rural areas and the fulfillment of priority sector

advances (Mittal and Aruna, 2007). Thus, a profitable banking system is essential in the economy. A business that is highly profitable has the ability to reward its owners with a large return on their investment. For this purpose the following profitability ratios are considered.

With a view to evaluating financial performance of Indian public and private sector banks, financial ratios such as gross profit ratio, net profit ratio, return on net worth and return on assets have been calculated.

Literature Review:-

The study by (Nathawani Nirmal, 2004) studied of financial performance of banking sector of India. Research was for the period of five years from the year 1997-98 to 2001-02. The aim of his study was to understand and to find out different types of efficiency level of all the commercial banks in India.

Study by (A. B. Singh, P. Tandon, 2012) studied of financial performance: A comparative analysis of SBI and ICICI bank. The period of study taken was form the year 2007-08 to 2011-12. They found that SBI was performing well and financially sound than ICICI bank but in context of deposits and expenditure ICICI bank has better managing efficiency than SBI.

The study by (T. Nagaraju, 2014) has analyzed the performance of Indian public and private banks. This study revealed that Indian public (nationalized and state bank group) and private banks underperformed in terms of marketability and profitability efficiency. However, they were performing relatively better in terms of profitability efficiency as compared to the stock market performance (marketability efficiency). Specifically, these inefficiencies are explained by the ownership of the banks, and not by their size

Study by (P.Garg, S.kumari, 2015) revealed that HDFC bank remained an outperforming player over the last decade in the banking sector with leading in the profitability from the different perspectives.

Objective of the Study:-

- To compare the financial performance of the selected banks and groups of Indian banking sector during last 10 years.

Hypothesis:-

On the basis of objectives of the study following hypothesis has been formulated.

- **Null Hypothesis:** There is no difference in financial performance among the selected banks of Indian banking sector,

- **Alternative Hypothesis:** There is a significant difference in financial performance among the selected banks of Indian banking sector.

Research Design & Period of the Study:-

The design of the present study is descriptive and analytical in nature and covers the period of 10 years, from 2005-06 to 2014-15.

Sample Selection:-

Sample size refers to the number of items to be selected from the universe to constitute a sample. 16 banks out of total 37 public and private sector banks in India were selected for research which are registered in Bombay stock exchange, Mumbai. These banks have been divided in three categories (I) 9 banks have been selected from Public Sector Banks (II) 4 banks have been selected from Old Public Sector Banks (III) 3 banks have been selected from New Private Sector Banks. On the basis of their deposit and advances selected banks arranged in sub category, large, medium, and small.

Data Collection:-

This study includes mainly secondary source of data which has been taken from published information and through internet. The data on banking companies is collected from, RBI (Reserve Bank of India), moneycontrol.com and individual websites of selected banking companies.

Limitations of the Study:-

- This study is based on secondary data which has been taken from published annual reports and financial literature of the banking companies in India under study and from published journals and magazines and therefore its findings depend entirely on the accuracy of such data.
- Inferences are based upon banks selected for study from selected banking groups from banking sector in India.

Data Analysis and Interpretation:

- With the help of the data, ratios have been calculated to understand of financial performance of the selected banking groups.
- Statistical techniques mean and Annova have been used for testing the hypotheses and interbank comparison.

Table No:- 1
GROSS PROFIT RATIO

(% Percentage) (Amount In ` Million)

No	Bank Name	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	Mean
1	2	3	4	5	6	7	8	9	10	11	12	13
PUBLIC SECTOR BANKS												
1	SBI	15.91	17.33	18.11	18.54	16.20	15.38	15.29	14.70	10.44	11.04	15.29
2	BOB	10.91	15.93	15.92	18.73	21.73	22.88	18.21	12.44	12.67	11.44	16.09
3	PNB	18.74	16.73	20.27	21.48	23.59	21.45	17.30	14.14	9.81	7.58	17.11
4	SYND	11.96	10.93	11.43	9.93	10.47	10.40	8.49	8.55	8.24	8.41	9.88
5	ALHBD	17.76	15.88	15.73	12.65	17.92	15.59	12.86	8.21	7.83	7.38	13.18
6	OBC	15.39	13.99	10.38	11.53	14.01	15.62	8.36	7.93	7.54	2.87	10.76
7	VIJAYA	6.91	11.23	6.28	9.12	11.92	9.53	7.62	5.97	3.92	3.04	7.56
8	BOM	2.60	11.24	13.61	10.67	10.68	6.36	8.38	12.76	5.82	5.95	8.81
9	PSB	10.54	12.42	19.88	15.89	15.37	14.33	8.91	6.29	2.93	1.64	10.82
OLD PRIVATE SECTOR BANKS												
1	JKB	14.37	20.16	21.50	19.55	22.79	22.91	23.23	23.06	24.48	10.72	20.28
2	FB	17.24	18.73	17.19	20.70	20.45	19.74	19.20	17.47	15.86	18.33	18.49
3	KB	22.71	19.07	18.84	17.60	8.06	8.82	8.37	11.15	8.71	10.75	13.41
4	DB	6.72	9.91	10.91	16.33	4.44	3.77	-7.45	-1.64	-18.44	-17.64	0.69
NEW PRIVATE SECTOR BANKS												
1	HDFC	22.39	20.08	18.40	16.82	21.28	23.98	22.32	23.26	26.04	26.68	<u>22.13</u>
2	YES	29.13	18.37	18.40	19.11	24.67	23.41	20.24	20.16	19.88	21.37	21.47
3	DCB	-24.73	0.41	4.91	-11.32	-12.84	4.51	6.74	9.88	11.95	13.10	<u>0.26</u>

Source:-<http://dbie.rbi.org.in/OpenDocument/opendoc/openDocument.jsp> 22/7/2015 (Data Compiled and Calculated)

The ratio gives the indication as to how much gross profit a bank is able to generate as percentage of total income. Higher the ratio, higher is the profitability. It was found that mean of gross profit ratio is reported higher by Punjab national bank (17.11%) where as vijaya bank (7.56%) showed lower ratio amongst the selected public sector banks during research period. Jammu and kashmir bank (20.28%) showed higher ratio where as Dhanlaxmi bank (0.69%) showed lower ratio in old private sector banks during research period. In new private sector banks HDFC bank showed the highest ratio (22.13%) whereas DCB bank showed the lowest ratio (0.26%) amongst all selected banks during research period.

Table No:- 2

Gross Profit Ratio				Anova: Single Factor		
Groups	Count	Sum	Average	Variance		
PUBLIC SECTOR BANKS	10	121.66	12.17	9.80		
OLD PRIVATE SECTOR BANKS	10	132.17	13.22	17.64		
NEW PRIVATE SECTOR BANKS	10	146.20	14.62	18.34		
Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	30.32	2	15.16	0.99	0.38	3.35
Within Groups	412.04	27	15.26			
Total	442.36	29				

It was observed that mean of new private sector banks (14.62%) have highest gross profit ratio amongst the three groups selected for study in banking sector in India. Highest fluctuating trend in mean in gross profit ratio has been observed among the selected new private sector banks during research period.

Calculated value of F is 0.99 which was lower than table value of F 3.35, so null hypothesis has been accepted and alternative hypothesis has been rejected. Therefore it can be concluded that there was no significant difference in gross profit ratio in selected banking sector in India.

Table No:- 3

NET PROFIT RATIO

(% Percentage) (Amount In ` Million)

NO	BANKS NAME	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	MEAN
1	2	3	4	5	6	7	8	9	10	11	12	13
PUBLIC SECTOR BANKS												
1	SBI	10.15	10.32	11.67	11.93	10.66	8.50	9.69	10.39	7.03	7.49	9.78
2	BOB	10.11	9.88	10.35	12.48	15.68	17.18	15.13	11.54	10.46	7.17	12.00
3	PNB	13.26	11.88	12.60	13.93	15.60	14.49	12.01	10.30	6.99	5.86	11.69
4	SYND	11.63	10.75	9.64	8.74	7.25	8.47	8.04	10.96	8.58	6.42	9.05
5	ALHBD	16.62	14.26	13.66	9.04	12.20	11.49	11.10	6.27	5.60	2.86	10.31
6	OBC	11.93	10.07	4.74	8.97	9.90	11.52	6.69	6.86	5.44	2.25	7.84
7	VIJAYA	4.89	10.70	8.17	4.42	8.63	8.21	6.82	6.06	3.64	3.34	6.49
8	BOM	2.01	9.10	8.59	7.83	8.25	5.42	5.49	7.22	3.00	3.30	6.02
9	PSB	7.63	11.18	15.07	11.80	11.71	9.80	6.55	4.39	3.58	1.35	8.30
OLD PRIVATE SECTOR BANKS												
1	JKB	9.73	13.33	13.44	12.68	14.75	15.09	15.54	15.94	16.52	6.64	13.37
2	FB	13.62	13.91	12.65	13.06	11.05	12.85	12.75	12.27	10.98	12.12	12.53
3	KB	14.86	12.38	13.45	11.75	7.10	7.68	7.14	8.36	6.63	8.67	9.80
4	DB	4.11	5.84	8.03	11.78	3.73	2.47	-7.52	0.18	-18.45	-17.64	-0.75
NEW PRIVATE SECTOR BANKS												
1	HDFC	15.55	13.98	12.83	11.44	14.63	16.18	15.35	16.05	17.28	17.78	15.11
2	YES	19.08	12.06	12.01	12.46	16.22	15.59	13.64	13.62	13.82	14.73	14.32
3	DCB	-25.65	1.68	5.21	-11.51	-13.85	3.31	6.74	9.88	11.95	12.04	-0.02

Source:- <http://dbie.rbi.org.in/OpenDocument/.opendoc/openDocument.jsp> 22/7/2015

The ratio gives the indication as to how much net profit a bank is able to generate as percentage of total income. Higher the ratio, higher is the profitability. It was found that mean of Net profit ratio was reported higher by bank of baroda (12.00%) where as bank of maharashtra (6.02%) showed the lower ratio among the selected public sector banks during research period. Jammu and kashmir bank (13.37%) showed higher ratio in old private sector banks where as Dhanlaxmi bank (-0.75%) showed negative and the lowest ratio among the all selected banks during research period. In new private sector banks HDFC bank has (15.11%) which was the highest amongst the all selected banks whereas DCB bank (-0.02%) showed negative and lower ratio during research period.

Table No:- 4

Net Profit Ratio		Anova: Single Factor			
Groups	Count	Sum	Average	Variance	
PUBLIC SECTOR BANKS	10	90.54	9.05	4.92	
OLD PRIVATE SECTOR BANKS	10	87.36	8.74	11.10	
NEW PRIVATE SECTOR BANKS	10	98.03	9.80	17.95	
Source of Variation	SS	df	MS	F	F crit
Between Groups	6.00	2	3.00	0.26	3.35
Within Groups	305.72	27	11.32		
Total	311.72	29			

It was observed that the mean of new private sector banks (9.80%) have highest NPR among three selected groups in banking sector in India. Highest fluctuating trend in mean in NPR has been observed among the selected new private sector banks during research period.

Calculated value of F was 0.26 which was lower than table value of F 3.35, so null hypothesis was accepted and alternative hypothesis was rejected. So it can be concluded that there is no significant difference in net profit ratio in selected groups in banking sector in India.

Table No:- 5
RETURN ON AVERAGE NET WORTH

(% Percentage) (Amount In ` Million)

NO	BANKS NAME	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	MEAN
1	2	3	4	5	6	7	8	9	10	11	12	13
PUBLIC SECTOR BANKS												
1	SBI	17.04	15.41	16.75	17.05	14.80	12.62	15.72	15.43	10.03	10.62	14.55
2	BOB	12.28	12.45	14.58	18.62	21.86	23.47	20.64	15.07	13.36	8.96	16.13
3	PNB	16.41	15.55	18.01	22.92	24.12	22.60	19.80	15.70	9.75	8.17	17.30
4	SYND	21.32	22.17	21.42	19.63	15.29	16.53	16.32	20.47	15.29	12.23	18.07
5	ALHBD	23.67	18.49	20.10	13.88	19.14	18.65	19.64	10.84	10.12	5.08	15.96
6	OBC	13.11	10.78	6.21	13.51	14.51	15.55	9.91	10.74	8.70	3.65	10.67
7	VIJAYA	7.79	18.58	16.59	9.36	15.32	12.63	11.54	10.83	7.27	7.29	11.72
8	BOM	3.26	16.40	18.64	17.46	16.36	9.68	9.91	13.66	5.61	5.84	11.68
9	PSB	13.03	16.63	21.86	20.37	21.40	16.40	11.21	7.66	6.25	2.29	13.71
OLD PRIVATE SECTOR BANKS												
1	JKB	10.21	14.42	16.78	16.71	18.19	18.96	21.22	23.56	22.34	8.60	17.10
2	FB	22.82	21.27	13.56	12.13	10.30	11.98	14.37	13.89	12.60	13.69	14.66
3	KB	16.85	15.07	18.46	18.10	9.83	9.60	9.79	12.76	10.53	14.02	13.50
4	DB	7.65	11.43	17.83	19.27	5.39	4.06	-14.70	0.35	-33.53	-33.08	-1.53
NEW PRIVATE SECTOR BANKS												
1	HDFC	17.74	19.46	17.74	17.17	16.30	16.74	18.69	20.34	21.28	19.37	18.48
2	YES	14.01	13.88	18.99	20.64	20.27	21.13	23.07	24.81	25.03	21.33	20.32
3	DCB	-46.92	2.96	7.88	-14.27	-13.09	3.50	7.43	10.95	14.04	13.94	-1.36

Source:- <http://dbie.rbi.org.in/OpenDocument/opendoc/openDocument.jsp> for 2015 Date. 22/07/15

Return on net worth indicates the bank's ability to earn sufficient revenues and profits in order to make the best use of its capital assets. High ROAN is a validation of a company's competitive advantage.

It was observed from the table no. 5 that higher mean return on net worth was reported by Syndicated bank (18.07%) where as Oriental bank of commerce (10.67%) showed lower ratio amongst the selected public sector banks during research period. In old private sector banks Jammu & Kashmir bank ltd (17.10%) showed the higher ratio where as Dhanlaxmi bank (-1.53%) showed negative and the lowest ratio among the all selected banks during research period. In new private sector banks, Yes bank has (20.32%) ratio which was the highest return amongst all selected banks whereas DCB bank (-1.36) showed negative and lower ratio during research period.

Table No.6
RETURN ON AVERAGE NET WORTH
Anova: Single Factor

<i>Groups</i>	<i>Count</i>	<i>Sum</i>	<i>Average</i>	<i>Variance</i>	
PUBLIC SECTOR BANKS	10	144.21	14.42	12.53	
OLD PRIVATE SECTOR BANKS	10	109.32	10.93	30.77	
NEW PRIVATE SECTOR BANKS	10	124.80	12.48	55.94	
<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>F crit</i>
Between Groups	61.12	2	30.56	0.92	3.35
Within Groups	893.21	27	33.08		
Total	954.33	29			

It was observed that public sector banks with (14.42%) have highest mean return on net worth among three selected groups in banking sector in India. Highest fluctuating trend in mean in return on mean net worth has been observed amongst the new private sector banks during the research period.

It was clear from the table that calculated value of F was 0.92 which was lower than table value of F 3.35, so null hypothesis has been accepted and alternative hypothesis has been rejected. So it can be concluded that there is no significant difference in return on mean Net worth for selected banks from banking sector in India

Table No:- 7
RETURN ON ASSETS

(% Percentage) (Amount In ` Million)

N O	BANKS NAME	2005 -06	2006 -07	2007 -08	2008 -09	2009 -10	2010 -11	2011 -12	2012 -13	2013 -14	2014 -15	MEAN
1	2	3	4	5	6	7	8	9	10	11	12	13
PUBLIC SECTOR BANKS												
1	SBI	0.89	0.84	1.01	1.04	0.88	0.71	0.88	0.97	0.65	0.68	0.86
2	BOB	0.79	0.80	0.89	1.09	1.21	1.33	1.24	0.90	0.75	0.49	0.95
3	PNB	1.09	1.03	1.15	1.39	1.44	1.34	1.19	1.00	0.64	0.53	1.08
4	SYND	0.91	0.91	0.88	0.81	0.62	0.76	0.81	1.07	0.78	0.58	0.81
5	ALHBD	1.42	1.26	1.32	0.90	1.16	1.11	1.02	0.64	0.57	0.29	0.97
6	OBC	1.39	1.21	1.02	0.88	0.91	1.03	0.67	0.71	0.56	0.23	0.86
7	VIJAYA	0.45	0.92	0.75	0.59	0.76	0.72	0.66	0.59	0.35	0.33	0.61
8	BOM	0.16	0.76	0.75	0.72	0.70	0.47	0.55	0.74	0.30	0.33	0.55
9	PSB	0.64	1.01	1.49	1.24	1.05	0.90	0.65	0.44	0.35	0.13	0.79
OLD PRIVATE SECTOR BANKS												
1	JKB	0.67	0.96	1.09	1.09	1.20	1.22	1.56	1.70	1.74	0.70	1.19
2	FB	1.28	1.38	1.34	1.48	1.15	1.34	1.41	1.35	1.20	1.32	1.33
3	KB	1.28	1.15	1.37	1.25	0.67	0.72	0.73	0.89	0.71	0.91	0.97
4	DB	0.33	0.47	0.76	-1.25	0.35	0.23	-0.73	0.02	-1.84	-1.77	-0.34
NEW PRIVATE SECTOR BANKS												
1	HDFC	1.38	1.33	1.32	1.28	1.53	1.58	1.77	1.90	2.00	2.02	1.61
2	YES	2.13	1.44	1.54	1.59	1.79	1.58	1.57	1.57	1.61	1.71	1.65
3	DCB	-2.01	0.71	0.48	-1.25	-1.30	0.30	0.68	1.06	1.31	1.37	0.14

Source:- <http://dbie.rbi.org.in/OpenDocument/opendoc/openDocument.jsp> for 2015 (Data Compiled and Calculated)

This ratio indicates the effectiveness of using assets to generate revenues. Generally it is indicated that higher the ratio, higher the more effectiveness of banks. It was found that mean of return on assets ratio was reported higher by Punjab national bank (1.08%) where as bank of maharashtra (0.55%) showed lower ratio amongst the selected public sector banks during research period. Federal bank (1.33%) showed higher in old private sector banks where as Dhanlaxmi bank (-0.34%) showed negative and the lowest ratio among the all selected banks during research period. In new private sector banks HDFC bank has (1.61%) which was the highest among the all selected banks whereas DCB bank (0.14%) shows lower ratio in new private sector banks during research period.

Table No:- 8

RETURN ON ASSETS			Anova: Single Factor			
<i>Groups</i>	<i>Count</i>	<i>Sum</i>	<i>Average</i>	<i>Variance</i>		
PUBLIC SECTOR BANKS	10	8.31	0.83	0.04		
OLD PRIVATE SECTOR BANKS	10	7.86	0.79	0.07		
NEW PRIVATE SECTOR BANKS	10	11.33	1.13	0.19		
<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Between Groups	0.71	2	0.36	3.55	0.04	3.35
Within Groups	2.71	27	0.10			
Total	3.43	29				

It was observed that new private sector banks with (1.13) have highest mean return on net worth among three selected groups in banking sector in India. Highest fluctuating trend in mean in return on asset has been observed amongst the new private sector banks during the research period.

It is clear from the table that calculated value of F is 3.55 which is higher than the table value of F 3.35, so null hypothesis has been rejected and alternative hypothesis has been accepted. So it can be concluded that there is significant difference in return on assets in selected banks from banking sector in India.

Conclusion

After conducting a comprehensive financial ratio analysis of the above selected banks from three different banking groups, the following conclusions have been made. After comparing gross profit ratio and net profit ratios of all the selected banks, it was found that HDFC, Yes and JK bank have the ideal position whereas Danlaxmi bank and Development Credit bank have the lowest and negative profitability ratio. In both ratios new private sector banks were higher ratio in all three groups. By comparing return on net worth and assets ratios it was found that, Yes, HDFC and Syndicate banks have the best earnings ratio amongst other banks selected for the study. Public sector banks were good in return on net worth whereas in return on asset new private sector banks were good. Therefore it was inferred that overall HDFC bank was the most profitable bank in comparison to the other banks selected for the study.

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