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# An Analysis Of Financial Performance Of Select Private Sector Banks- A Special Reference To Profitability Analysis

Mr. V. Thambignanadhayalan<sup>1</sup>, Dr. R. Rajanbabu<sup>2</sup>

<sup>1</sup>Assistant Professor, RVS Institute of Management Studies & Computer Application, Karaikal- 609 609. <sup>2</sup>Associate Professor in Commerce, A.V.C College (Autonomous), Mannampandal, Mayiladuthurai- 609 305.

\*Corresponding Author Mr.V.Thambignanadhayalan

Email: wings.veeteegee@gmail.com

Abstract: The study was aimed to study profitability of selected private sector banks in India. For this purpose the researcher selected three leading private sector banks such as Axis bank, HDFC bank and ICICI bank. The study required accounting data of select banks, which were collected from balance sheet and profit and loss account extracted from annual reports of concerned banks. The study was made for a period of ten years from 2004-05 to 2013-14. The study used ratio analysis as financial tool and it also used mean, standard deviation, co-efficient of variation, compounded annual growth rate (CAGR) and correlation analysis as statistical tools. The study evidenced that growth rate of net profit, total income, working fund and total assets were found high in case of Axis bank and growth rate was high for total deposits for HDFC bank. HDFC bank performed well in terms of net profit to working fund and return on assets, Axis bank performed better in terms of net profit to total income and ICICI bank performed well in terms of net profit to total deposits. It was also evidenced that all variables such as total income, total deposits, working fund and total assets had positive and significant relationship with net profit for all selected banks over the study period.

**Keywords:** Ratio, Return on Assets, Working Fund, Deposits and Profitability.

## INTRODUCTION

Banks are playing pivotal role in economic development of a country. It accumulates savings of people and lead for capital formulation of a country in order to industrial development. Until few decades ago public sector banks were leading banks in India, now private sector banks are becoming tough competitors to public sector banks. They bring innovative banking services to people and attract more customers. Private sector banks are classified as old private sector banks and new private sector banks. Among them new private sector banks are progressing well than old private sector banks. Among private sector banks ICICI bank, HDFC bank and Axis bank are leading banks in terms of business, number of branches and number of ATMs. As on 31<sup>st</sup> March, 2014, ICICI bank had 3,753 branches with 11.315 ATMs, HDFC bank had 3.403 branches with 11,256 ATMs and Axis bank had 2,402 branches with 12,922 ATMs in India. Profit is the main motive of any business organization, hence it is important to study profitability of these banks also. Hence the researcher has taken these banks as the leading private sector banks and profitability of the banks.

## LITERATURE REVIEW

Gopal and Dev [1] in their study found that profitability of SBI and PNB were most successful

followed by HDFC Bank and ICICI Bank but the performance of J& K Bank, Canara Bank and Bank of India was poor. Interest spread emerged as the only strong factor influencing the profitability. Medhat Tarawneh [2] found that the bank with higher total capital, deposits, credits, or total assets did not always mean that had better profitability performance and correlation analysis showed that variables of the study indicated the existence of positive relationships. Mabwe Kumbirai and Robert Webb [3] evidenced significant change was noticed at the onset of the global financial crisis in 2007, reaching its peak during 2008-2009. This resulted in falling profitability, low liquidity and deteriorating credit quality in the South African Banking sector. Vikas Choudhary and Suman Tandon [4] found that the share of private sector banks in aggregate deposits was increasing and all the banks had shown decline in NPAs and increase in capital adequacy ratio. Sunitha Sukhija [5] found that Tamilnadu Mercantile Bank managed its assets efficiently and Profit earning capacity of HDFC Bank was good. The study also found that non interest income to total assets was maximum for Tamilnadu Mercantile Bank and it was minimum for City Union Bank and Karnataka Bank. Nashit V Davda [6] evidenced that HDFC had performed better in terms of Earning per Share than ICICI, AXIS, KOTAK INDUSIND BANK and ING VYSYA during 2002 to 2011. The study also found that after KOTAK Bank again HDFC Bank has performed outstanding in terms of Net Profit margin than remaining banks. Hemal Pandya and Chetana Parmar [7] in their study found that the variables non-interest income, C/D Ratio, Business per employee, Profit per employee have a significant relationship with net profit and net profit of increase by 1.066% if business per Indian bank employee increase by 1% it is positively correlated with net profit. Priya S [8] in her study found that net profit of KVB had highest percent of 22.12 at the end of March 2004 and compared to all other banks SBI had low percent of 1.25 at the end of March 2005. The study also found that there was no significant relationship between the net profit margin of (AXIS, ICICI, KVB, SIB) private sectors banks in India.

## **Statement of the Problem**

Banking sector is backbone of all economic activities of a country. The sector also helps for economic development by contributing more than fifty It also provides employment percent of GDP. opportunities to people. Once upon a time banks were nationalized and they were public sector banks. But in few recent decades private banks were opened and they bring innovative banking services to people and have become competitors to public sector banks. Primary motive of doing business is to earn profit. Earning profit and increase in profit will motivate the proprietors. As a competitive business, it is necessary to study profitability of private banks. Hence the researcher has selected three leading private banks in order to analyse their profitability.

## **Objectives**

The study has been done with the following objectives.

- To study the trend of net profit of select banks.
- To study profitability analysis of select banks in terms of select ratios and
- To study the relationship between net profit and select variables of select banks.

#### METHODOLOGY

The study selected three leading private sector banks namely Axis Bank, HDFC bank and ICICI bank. The study required secondary data such as accounting data of select banks, which were collected from balance sheet and profit and loss account extracted from annual reports of concerned banks. The study was made for a period of ten years from 2004-05 to 2013-14. The study considered net profit as dependent variable and four independent variables which determine profit namely total income, total deposit, working fund and total assets. The study calculated ratios of net profit to total income, net profit to total deposits, net profit to working fund and net profit to total assets. The study also used mean, standard deviation, co-efficient of variation, compounded annual growth rate (CAGR) and correlation analysis as statistical tools.

#### RESULTS AND DISCUSSION

The results and discussion are presented below. It covers trend of net profit of selected banks, results of ratio of net profit to net profit to total income, net profit to total deposits, net profit to working fund and net profit to total assets and results of correlation analysis.

Table-1: Net Profit and its Trend

<b>X</b> 7	Axis	S	HDF	C	ICICI		
Year	Net profit	% Change	Net profit	% Change	Net profit	% Change	
2004-05	334.58		665.56		2005.20		
2005-06	485.08	44.98	870.78	30.83	2540.07	26.67	
2006-07	659.03	35.86	1141.45	31.08	3110.22	22.45	
2007-08	1071.03	62.52	1590.18	39.31	4157.73	33.68	
2008-09	1815.36	69.50	2244.94	41.18	3758.13	-9.61	
2009-10	2514.53	38.51	2948.70	31.35	4024.98	7.10	
2010-11	3388.49	34.76	3926.40	33.16	5151.38	27.99	
2011-12	4242.21	25.19	5167.09	31.60	6465.26	25.51	
2012-13	5179.43	22.09	6726.28	30.18	8325.47	28.77	
2013-14	6217.67	20.05	8478.38	26.05	9810.48	17.84	
Mean	2590.74		3375.98		4934.89		
SD	2092.10		2667.43		2541.23		
CV	80.75		79.01		51.50		
CAGR	33.94		28.98		17.21	_	

Source: Computed from Annual Reports[9,10,11]

Table 1 shows that growth of net profit of Axis bank was increasing from 2004-05 to 2008-09, but in the subsequent years growth rate of net profit of the bank was decreasing. Growth rate was found to be higher during 2008-09 at 69.50 per cent and it was found to be low during 2013-14 at 20.05 per cent. The results of mean, standard deviation and co-efficient of variation of net profit of Axis bank showed that there was wide variation in net profit over the study period. The result of CAGR stood at 33.94 per cent, it showed that during the study period net profit of the bank increased rapidly. Net profit of HDFC bank also was increasing during the first five years of the study period and the growth rate was found high during 2008-09 at 41.18 per cent, during the following years growth rate of net profit was going down and it was found to be low at 26.05 per cent during 2013-14. Results of mean, standard deviation and co-efficient of variation showed that there was wide variation in earning net profit over the study period by HDFC bank. There was considerable growth in net profit as shown by the result of CAGR. Growth rate of net profit of ICICI bank was highly fluctuating over the study period. increasing for the first four years of the study period, growth rate was found to be negative during 2008-09 at 9.61 per cent. The results of mean, standard deviation and co-efficient of variation showed that there was moderate level of variation in net profit over the study period and the result of CAGR was comparatively low. The results showed that growth rate of net profit was found high for Axis bank followed by HDFC bank and it was found to be low for ICICI bank.

Table-2: Ratio of Net profit to Total income

		Axis			HDFC			ICICI	
Year	Net	Total	Ratio	Net	Total	Ratio	Net	Total	Ratio
	profit	income	in %	profit	income	in %	profit	income	in %
2004-05	334.58	2339.98	14.30	665.56	3744.83	17.77	2005.20	12826.04	15.63
2005-06	485.08	3618.42	13.41	870.78	5599.32	15.55	2540.07	18767.64	13.53
2006-07	659.03	5471.77	12.04	1141.45	8164.16	13.98	3110.22	28923.46	10.75
2007-08	1071.03	8800.80	12.17	1590.18	12398.15	12.83	4157.73	39599.11	10.50
2008-09	1815.36	13732.36	13.22	2244.94	19622.86	11.44	3758.13	38696.28	9.71
2009-10	2514.53	15583.80	16.14	2948.70	19980.51	14.76	4024.98	33184.58	12.13
2010-11	3388.49	19786.94	17.12	3926.40	24263.36	16.18	5151.38	32621.95	15.79
2011-12	4242.21	27414.86	15.47	5167.09	32530.05	15.88	6465.26	41045.41	15.75
2012-13	5179.43	33733.68	15.35	6726.28	41917.50	16.05	8325.47	48421.30	17.19
2013-14	6217.67	38046.38	16.34	8478.38	49055.18	17.28	9810.48	54606.02	17.97
Mean	2590.74	16852.90		3375.98	21727.59		4934.89	34869.18	
SD	2092.10	12674.47		2667.43	15418.39		2541.23	12634.90	
CV	80.75	75.21		79.01	70.96		51.50	36.24	
CAGR	33.94	32.16		28.98	29.34		17.21	15.59	

Source: Computed from Annual Reports[9,10,11]

Table 2 showed that the results of CAGR indicated that both total income and net profit increased at higher rate over the study period. The ratio of net profit to total income of Axis bank ranged from 12.04 to 17.12 and the ratio was fluctuating slightly between the years. Higher ratio indicated low level of expenses on total income and low ratio indicated high level of expenses. During the years from 2009-10 to 2013-14 the ratio was found to be more than 15, it was encouraging trend for the bank. The ratio of net profit to total income of HDFC bank ranged from 11.44 to 17.77 during the study period, it was high first two years and last five years. The ratio of net profit to total income of ICICI bank was fluctuating over the study

period. It ranged between 9.71 and 17.97 over the study period. The ratio was decreasing for the first five years of the study period and it was increasing for the last five years of the study period and stood high during 2012-14 at 17.97. It indicated that ICICI bank performed better in terms of net profit to total income during second half of the study period. The results showed that growth rate of total income was found high for Axis bank followed by HDFC bank and it was low for ICICI bank. Performance in terms of net profit to total income was found to be good for Axis bank and HDFC bank over the study period and it was not good for the first five years for ICICI bank.

Table-3: Ratio of Net profit to total deposits

	Axis				HDFC		ICICI			
Year	Net	Total	Ratio	Net	Total	Ratio	Net	Total	Ratio	
	profit	deposits	in %	profit	deposits	in %	profit	deposits	in %	
2004-05	334.58	31712.00	1.06	665.56	36354.25	1.83	2005.20	99818.78	2.01	
2005-06	485.08	40113.53	1.21	870.78	55796.82	1.56	2540.07	165083.17	1.54	
2006-07	659.03	58785.60	1.12	1141.45	68297.94	1.67	3110.22	230510.19	1.35	
2007-08	1071.03	87626.22	1.22	1590.18	100768.60	1.58	4157.73	244431.05	1.70	
2008-09	1815.36	117374.11	1.55	2244.94	142811.58	1.57	3758.13	218347.82	1.72	
2009-10	2514.53	141300.22	1.78	2948.70	167404.44	1.76	4024.98	202016.60	1.99	
2010-11	3388.49	189237.80	1.79	3926.40	208586.41	1.88	5151.38	225602.11	2.28	
2011-12	4242.21	220104.30	1.93	5167.09	246706.45	2.09	6465.26	255499.96	2.53	
2012-13	5179.43	252613.59	2.05	6726.28	296246.98	2.27	8325.47	292613.63	2.85	
2013-14	6217.67	280944.56	2.21	8478.38	367337.48	2.31	9810.48	331913.66	2.96	
Mean	2590.74	141981.19		3375.98	169031.09		4934.89	226583.70		
SD	2092.10	90003.09		2667.43	110065.42		2541.23	64246.44		
CV	80.75	63.39		79.01	65.12		51.50	28.35		
CAGR	33.94	24.38		28.98	26.02		17.21	12.77		

Source: Computed from Annual Reports[9,10,11]

Deposits are the major source of finance for a bank. Hence the ratio of net profit to total deposit will reveal the profitability performance of a bank. Table 3 indicates that the ratio of net profit to total deposit of Axis bank was increasing over the study period. The ratio ranged from 1.06 to 2.21 over the study period, it showed healthy trend of earning profit by Axis bank over the study period. The ratio was fluctuating for HDFC bank for the first five years of the study period and during the subsequent years it was in increasing trend. The ratio ranged between 1.56 and 2.31 over the

study period. The ratio of net profit to total deposits of ICICI bank ranged from 1.35 to 2.96 over the study period. It was more than 2 during the first year of the study period, latter it was decreasing for the next two years and latter it started to increase until last year of the study period. The results of CAGR indicated that growth rate of total deposits of HDFC bank was found high followed by Axis bank and it was found to be low for ICICI bank. The results showed that ICICI bank performed better in terms of net profit to total deposits over the study period than other selected banks.

Table-4: Ratio of Net profit to Working fund

	Axis				HDFC		ICICI			
Year	Net	Working	Ratio	Net	Working	Ratio	Net	Working	Ratio	
	profit	Fund	in %	profit	fund	in %	profit	fund	in %	
2004-05	334.58	37730.27	0.89	665.56	50928.57	1.31	2005.20	167097.99	1.20	
2005-06	485.08	49717.68	0.98	870.78	71804.32	1.21	2540.07	251039.31	1.01	
2006-07	659.03	71669.26	0.92	1141.45	91235.61	1.25	3110.22	344658.11	0.90	
2007-08	1071.03	107669.81	0.99	1590.18	133176.60	1.19	4157.73	399765.72	1.04	
2008-09	1815.36	147256.42	1.23	2244.94	182864.37	1.23	3758.13	379300.96	0.99	
2009-10	2514.53	180184.17	1.40	2948.70	222455.66	1.33	4024.98	363399.72	1.11	
2010-11	3388.49	242083.71	1.40	3926.40	277349.68	1.42	5151.38	406233.38	1.27	
2011-12	4242.21	284847.83	1.49	5167.09	337909.20	1.53	6465.26	473644.70	1.37	
2012-13	5179.43	306944.12	1.69	6726.28	363557.89	1.85	8325.47	469484.13	1.77	
2013-14	6217.67	344197.22	1.81	8478.38	447340.15	1.90	9810.48	520651.54	1.88	
Mean	2590.74	177230.05		3375.98	217862.20		4934.89	377527.56		
SD	2092.10	112101.05		2667.43	135601.15	-	2541.23	105966.75		
CV	80.75	63.25		79.01	62.24		51.50	28.07	·	
CAGR	33.94	24.74		28.98	24.27		17.21	12.04		

Source: Computed from Annual Reports[9,10,11]

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Working fund is fund generated by the bank by various sources in order to run the business. It includes share capital and reserves, deposits, borrowings and liquid liabilities. Table 4 shows that the ratio of net profit to working fund of Axis bank ranged from 0.89 to 1.81 over the study period. It was less than one during the first four years of the study period and it was gradually increasing during remaining years of the study period. The ratio of net profit to working fund of HDFC bank stood more than one during all years of the study period. It ranged from 1.19 to 1.90. The ratio of

net profit to working fund of ICICI bank was decreasing during the first four years of the study period and it started to increase during remaining years of the study period. The ratio stood less than one during 2006-07 and 2008-09 and during remaining years it was more than one. The results of CAGR showed that working fund of Axis bank increased at a higher rate during the study period followed by HDFC bank and it was not so for ICICI bank. The results also showed that HDFC bank performed better in terms of net profit to fund followed working bv Axis bank.

Table-5: Return on Assets

	Axis			HDFC			ICICI		
Year	Net profit	Total assets	Ratio in %	Net profit	Total assets	Ratio in %	Net profit	Total assets	Ratio in %
2004-05	334.58	37743.69	0.89	665.56	51429.00	1.29	2005.20	167659.41	1.20
2005-06	485.08	49731.12	0.98	870.78	73506.39	1.18	2540.07	251388.95	1.01
2006-07	659.03	73257.22	0.90	1141.45	91235.61	1.25	3110.22	344658.11	0.90
2007-08	1071.03	109577.85	0.98	1590.18	133176.60	1.19	4157.73	399795.08	1.04
2008-09	1815.36	147722.05	1.23	2244.94	183270.77	1.22	3758.13	379300.96	0.99
2009-10	2514.53	180647.85	1.39	2948.70	222458.57	1.33	4024.98	363399.72	1.11
2010-11	3388.49	242713.37	1.40	3926.40	277352.59	1.42	5151.38	406233.67	1.27
2011-12	4242.21	285627.79	1.49	5167.09	337909.50	1.53	6465.26	473647.09	1.36
2012-13	5179.43	340560.66	1.52	6726.28	400331.90	1.68	8325.47	536794.68	1.55
2013-14	6217.67	383244.89	1.62	8478.38	491599.50	1.72	9810.48	594641.58	1.65
Mean	2590.74	185082.65		3375.98	226227.04		4934.89	391751.92	
SD	2092.10	123163.17		2667.43	148488.80		2541.23	125732.86	
CV	80.75	66.54		79.01	65.64		51.50	32.10	
CAGR	33.94	26.08		28.98	25.33		17.21	13.50	

Source: Computed from Annual Reports[9,10,11]

It was found from table 5 that return on assets of Axis bank ranged from 0.89 to 1.62 over the study period. It was less than one during the first four years of the study period and it was more than one during the remaining years of the study period. An increasing trend was found during the study period. Return on assets of HDFC bank was more than one during all years of the study period. It ranged between 1.18 and 1.72 over the study period. The ratio was increasing over the study period. The ratio was slightly fluctuating for ICICI bank over the study period. It ranged from 0.90 to 1.65. The results showed that HDFC bank performed well in terms of return on assets than other

selected banks during the study period. It was also found that CAGR of total assets of Axis bank was found to be high followed by HDFC bank.

## **CORRELATION ANALYSIS**

In order to know the relationship between net profit and other variables such as total income, total deposits, working fund and total assets correlation analysis was applied and the results are presented subsequently. For this purpose the following null hypothesis was framed.

 $H_{\mbox{\scriptsize o}}$ : There was no significant relationship between net profit and independent variables.

Table-6: Results of Correlation Analysis of Axis Bank Ltd.

		Net Profit	Total Income	Total Deposits	Working Fund	Total Assets
Net Profit	Pearson Correlation	1	.996**	.993**	.989**	.996**
	Sig. (2-tailed)		.000	.000	.000	.000
	N	10	10	10	10	10
Total Income	Pearson Correlation	.996**	1	.992**	.987**	.996**
	Sig. (2-tailed)	.000		.000	.000	.000
	N	10	10	10	10	10
Total Deposits	Pearson Correlation	.993**	.992**	1	.999**	.999**
	Sig. (2-tailed)	.000	.000		.000	.000
	N	10	10	10	10	10
Working Fund	Pearson Correlation	.989**	.987**	.999**	1	.996**
	Sig. (2-tailed)	.000	.000	.000		.000
	N	10	10	10	10	10
Total Assets	Pearson Correlation	.996**	.996**	.999**	.996**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	10	10	10	10	10

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).

Source: Computed from Annual Reports[9]

Table 6 indicates that net profit and other variables namely total income, total deposits, working fund and total assets of Axis bank were positively related. It was also found that correlation co-efficient was found to be very high. The results were significant

at one per cent level. Hence the null hypothesis was rejected and therefore there was significant relationship between net profit and total income, total deposits, working fund and total assets.

Table-7: Results of Correlation Analysis of HDFC Bank Ltd.

		Net Profit	Total Income	Total Deposits	Working Fund	Total Assets
Net Profit	Pearson Correlation	1	.992**	.991**	.982**	.993**
	Sig. (2-tailed)		.000	.000	.000	.000
	N	10	10	10	10	10
Total Income	Pearson Correlation	.992**	1	.995**	.988**	.995**
	Sig. (2-tailed)	.000		.000	.000	.000
	N	10	10	10	10	10
Total Deposits	Pearson Correlation	.991**	.995**	1	.996**	1.000**
	Sig. (2-tailed)	.000	.000		.000	.000
	N	10	10	10	10	10
Working Fund	Pearson Correlation	.982**	.988**	.996**	1	.997**
	Sig. (2-tailed)	.000	.000	.000		.000
	N	10	10	10	10	10
Total Assets	Pearson Correlation	.993**	.995**	1.000**	.997**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	10	10	10	10	10

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).

Source: Computed from Annual Reports[10]

It was evidenced from table 7 that net profit and independent variables namely total income, total deposits, working fund and total assets of HDFC bank were positively related. It was also evidenced that the results of correlation co-efficient was found to be very

high and the results were significant at one per cent level. Hence the null hypothesis was rejected and therefore there was significant relationship between net profit and total income, total deposits, working fund and total assets.

		Net	Total	Total	Working	Total
		Profit	Income	Deposits	Fund	Assets
Net Profit	Pearson Correlation	1	.894**	.892**	.881**	.947**
	Sig. (2-tailed)		.000	.001	.001	.000
	N	10	10	10	10	10
Total Income	Pearson Correlation	.894**	1	.960**	.963**	.976**
	Sig. (2-tailed)	.000		.000	.000	.000
	N	10	10	10	10	10
Total Deposits	Pearson Correlation	.892**	.960**	1	.962**	.978**
	Sig. (2-tailed)	.001	.000		.000	.000
	N	10	10	10	10	10
Working Fund	Pearson Correlation	.881**	.963**	.962**	1	.981**
	Sig. (2-tailed)	.001	.000	.000		.000
	N	10	10	10	10	10
Total Assets	Pearson Correlation	.947**	.976**	.978**	.981**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	10	10	10	10	10

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).

Source: Computed from Annual Reports[11]

Table 8 reports that net profit and independent variables namely total income, total deposits, working fund and total assets of ICICI bank were positively related. It was also found that correlation co-efficient was found to be very high, but the quantum of relationship was comparatively lower than other selected banks such as Axis bank and HDFC bank. The results were significant at one per cent level. Hence the null hypothesis was rejected and therefore there was significant relationship between net profit and total income, total deposits, working fund and total assets.

### CONCLUSION

Private Banks are becoming important part of banking services in India and they are competitors to public sector banks. Earning profit is the main motive of any business organization. Hence the researcher has aimed to study profitability of select private sector banks in India. For this purpose three leading private sector banks namely Axis bank, HDFC bank and ICICI bank were selected for the study. The study evidenced that growth rate of net profit, total income, working fund and total assets were found high in case of Axis bank and growth rate was high for total deposits for HDFC bank. HDFC bank performed well in terms of net profit to working fund and return on assets, Axis bank performed better in terms of net profit to total income and ICICI bank performed well in terms of net profit to total deposits. It was also evidenced that all variables such as total income, total deposits, working fund and total assets had positive and significant relationship with net profit for all selected banks over the study period.

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