

## **PERFORMANCE COMPARISON OF SELECTED PUBLIC AND PRIVATE SECTOR BANKS IN INDIA**

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### **ABSTRACT**

In the beginning of 90's, there were so many deficiencies prevailing in the Indian economy, particularly in the financial sector and also in the banking sector. The major deficiencies prevailing in the system were regarding productivity and efficiency, which directly effect profitability. Banking system's profitability has been eroded due to poor productivity and efficiency. Several public sector banks and financial institutions have become weak financially, some public sector banks have been incurring losses year after year, their customer service was poor, their work technology was outdated and they were unable to meet the challenges of a competitive environment.

**Keywords** - Profitability, Yield on advance, Cost of Deposit, Public and Private sector Banks

## **INTRODUCTION**

Keeping in mind all the above said distortions in the financial and banking sectors, the government of India and the RBI has taken several remedial measures and introduced reforms in the financial and banking sector also. So as to promote rapid economic growth and development with stability through the process of globalization, liberalization and privatization in the financial system was introduced to make the financial system more competitive and get integrated with the world economy through internationalizations of financial markets in the world. In the present paper researcher has tried to investigate the performance of selected public and private sector banks and wish to suggest some strategies to enhance the low performance in banks in e-age.

## **OBJECTIVE**

- To study the profitability of banks under study.
- To study the income and expenditure pattern of banks under study.
- To analyze comparative position of banks under study.
- To suggest ways and means to improve the profitability.

## **RESEARCH METHODOLOGY**

The time series data spread over a period of 10 years from 2004-2013 in respect of various variables like income, expenses, operating profit, net profit, gross profit, interest received, interest paid, advance (credit) and deposit for the public and private sector banks constitute the basis of the study. Public sector banks constitute State Bank of India, Punjab National Bank, Canara Bank, Bank of Baroda and Allahabad Bank. Private sector bank constitutes Axis Bank, Federal Bank, HDFC Bank, ICICI Bank and ING Vysya Bank. The source of the data was the published annual reports of the individual banks. The various tools like compound growth rate and correlation analysis was applied to draw logical conclusions. The correlations were

presented in the form of a correlation matrix and were tested for the significance with the help of 't' test at 5% and 1% level of significance.

## ANALYSIS OF DATA

### INCOME AND EXPENSES

**Table-1 A**(Rs. In Crores)

Public Sector Banks			Private Sector Banks			
Year	Interest Income	Other Income	Total Income	Interest Income	Other Income	Total Income
2004	51,056.91 (86.40)	8,036.19 (13.60)	59,093.10	6,999.45 (79.15)	1,844.38 (20.85)	8,843.83
2005	53,897.64 (83.87)	10,363.91 (16.13)	64,261.55	14,871.80 (76.20)	4,644.94 (23.80)	19,516.74
2006	54,062.85 (79.27)	14,139.08 (20.73)	68,201.93	15,145.89 (76.12)	4,751.01 (23.88)	19,896.90
2007	58,076.84 (82.33)	12,462.98 (17.67)	70,539.82	16,609.15 (77.58)	4,799.34 (22.42)	21,408.49
2008	64,957.83 (84.36)	12,042.81 (15.64)	77,000.64	23,807.59 (76.32)	7,387.38 (23.68)	31,194.97
2009	76,489.57 (86.28)	12,165.94 (13.72)	88,655.51	37,662.44 (79.00)	10,010.84 (21.00)	47,673.28
2010	95,509.22 (85.10)	16,720.10 (14.90)	112,229.32	52,104.54 (79.24)	13,648.38 (20.76)	65,752.92
2011	122,689.95 (84.76)	22,051.37 (15.24)	144,741.32	63,815.57 (80.41)	15,548.72 (19.59)	79,364.29
2012	136,280.33 (84.05)	25,856.54 (15.95)	162,136.87	59,423.98 (78.58)	16,199.96 (21.42)	75,623.94
2013	164,345.46 (86.54)	25,555.49 (13.46)	189,900.95	67,803.16 (79.63)	17,346.32 (20.37)	85,149.48

**Table-1 B** (Rs. In Crores)

Public Sector Banks			Private Sector Banks			
Year	Interest Paid	Other Expenses	Total Expenses	Interest Paid	Other Expenses	Total Expenses
2004	35,250.15 (64.41)	19,481.41 (35.59)	54,731.56	3,780.95 (64.04)	1,689.92 (35.96)	5,470.87
2005	35,550.27 (60.92)	22,806.42 (39.08)	58,356.69	5,119.24 (67.12)	2,875.18 (32.88)	7,994.42
2006	32,912.14 (54.81)	27,138.99 (45.19)	60,051.13	11,738.22 (62.23)	5,749.54 (37.77)	17,487.76
2007	32,631.70 (52.21)	29,865.40 (47.79)	62,497.10	10,698.10 (57.24)	6,492.29 (42.76)	17,190.39

2008	36,271.58 (53.30)	31,783.67 (46.70)	68,055.25	10,402.00 (55.61)	7,771.98 (44.39)	18,173.98
2009	45,357.14 (57.14)	34,019.57 (42.86)	79,376.71	14,915.49 (58.08)	11,904.12 (41.92)	26,819.61
2010	63,723.43 (64.06)	35,752.71 (35.94)	99,476.14	24,475.54 (60.98)	17,664.31 (39.02)	42,139.85
2011	82,786.07 (64.95)	44,674.90 (35.05)	127,460.97	35,620.79 (59.81)	22,790.18 (40.19)	58,410.97
2012	89,815.51 (63.35)	51,963.88 (36.65)	141,779.39	42,376.49 (54.53)	28,480.07 (45.47)	70,856.56
2013	99,363.72 (59.00)	69,042.71 (41.00)	168,406.43	35,677.85 (54.23)	29,751.08 (45.77)	65,428.93

(Source: Data compiled from software, 'PROWESS')

In the context of our objectives of the present investigation, the composition and growth of income and expenses of public and private sector banks has been studied. The table 1 revealed that during the period under study interest income reached from Rs. 51056.91 crore to Rs. 164345.46 crore in case of public sector banks and from Rs. 6999.45 crore to Rs. 67803.16 crore to in case of private sector banks. Other income reached for Rs. 8036.19 crore to Rs. 25555.49 crore in public sector banks and from Rs. 1844.38 crore to Rs. 17346.32 crore in private sector banks. The interest income was around 80% of total income in both the case and it indicates that major part of income comes from interest income in both the sectors. The compound growth rates were observed 13.87% in public sector and 28.70% private sector respectively. While analyzing the expenses details it was observed that total expenses reached from Rs. 54731.56 crore to Rs. 168406.43 crore in public sector and from Rs. 5470.87 crore to Rs. 65428.93 crore in private sector, where around 60% outflows as interest on deposits and around 40% other expenses in public sector and almost same trend was followed in private sector also.

## PROFITS

**Table-2** (Rs. In Crores)

Year	Public Sector Banks			Private Sector Banks		
	Operating Profits	Growth Rate	Net Profits	Operating Profits	Growth Rate	Net Profits
2002	58438.99		4,361.55	8453.85	29.13	849.39

2003	63486.66	8.64	5,904.86	11033.59	30.52	2,028.97
2004	66520.19	4.78	8,150.80	19246.44	74.43	2,706.52
2005	64777.68	-2.62	8,042.73	18138.12	-5.76	3,310.87
2006	68300.81	5.44	8,945.40	29547.27	62.90	4,375.36
2007	82419.26	20.67	9,278.80	45727.25	54.76	5,533.43
2008	108876.69	32.10	12,753.15	65246.35	42.69	7,341.94
2009	136495.64	25.37	17,280.33	77828.02	19.28	8,507.70
2010	156591.42	14.72	20,357.50	74914.22	-3.74	10,194.98
2011	176126.95	12.48	21,494.53	83664.97	11.68	13,372.00

(Source: Data compiled from software, 'PROWESS')

The performance of any business unit is measured on the basis of the profits earned by that unit at a part of time. The table 2 shows the trend of operating profits, gross profits and net profits. As per table 2, it is clear that the operating profit in the public sector banks is continuously improving during the period of 10 years under study except for the year 2005 where it is showing a fall on 2.62%. It has increased nearly 3 times (Rs. 58438.99 crore to Rs. 176126.95 crore) from 2002 to 2011 with the compound growth rate of 13.04% as public sector, private sector also showing negative growth (-5.76) in the same year (2005) otherwise all the remaining years are showing improvement in the operating profit and it has increased nearly 9.90 times (Rs. 8453.85 crore to Rs. 83664.97 crore)

The growth rate of net profit in public sector banks registering a peak of 38.04% with the trough of -1.33% and net profit reached from Rs. 4361.55 crore to Rs. 21494.53 crore in 10 years of the study period. The compound growth rate of net profit of public sector was 19.39%. In private sector net profit is showing a sharp jump of 138.87% in year 2003 as compare to 2002, rest of the period show average growth varied between 15.88% (2009) to 33.39% (2004) and net profit reached to Rs. 13372.00 crore with the compound growth rate of 19.39%.

**INTEREST RATE SPREAD****Table-3** (Rs. In Crores)

Public Sector Banks			Private Sector Banks			
Year	Interest Received	Interest Paid	Interest Spread	Interest Received	Interest Paid	Interest Spread
2002	51,056.91	35,250.15	15,806.76	6,999.45	5,119.24	1,880.21
2003	53,897.64	35,550.27	18,347.37	14,871.80	11,738.22	3,133.58
2004	54,062.85	32,912.14	21,150.71	15,145.89	10,698.10	4,447.79
2005	58,076.84	32,631.70	25,445.14	16,609.15	10,402.00	6,207.15
2006	64,957.83	36,271.58	28,686.25	23,807.59	14,915.49	8,892.10
2007	76,489.57	45,357.14	31,132.43	37,662.44	24,475.54	13,186.90
2008	95,509.22	63,723.43	31,785.79	52,104.54	35,620.79	16,483.75
2009	122,689.95	82,786.07	39,903.88	63,815.57	42,376.49	21,439.08
2010	136,280.33	89,815.51	46,464.82	59,423.98	35,677.85	23,746.13
2011	164,345.46	99,363.72	64,981.74	67,803.16	38,927.04	28,876.12

(Source: Data compiled from software, 'PROWESS')

The success of any business unit depends on the profit earning capacity of that business unit and profit is known as the difference between earnings and expenses. So bank's performance also can be measured in terms of profits earned by the bank. As Tables 1A and 1B show that major portion of bank's income comes from interest earned and major expenses go to interest paid. So bank's profits depend on the difference of interest earned and interest paid, known as interest spread.

Table 3 shows a continuous improvement in interest spread in both public as well as private sector banks over the period of 10 years. In public sector it reached from Rs.15807.76 crore to Rs. 64981.74 crore and Rs. 1880.21 crore to Rs. 28876.12 crore in private sector. The growth rate of interest spread showed a fluctuating trend but not negative in any year in both the sectors.

**YIELD & COST OF DEPOSIT****Table-4 A** (Rs. In Crores)

<b>Public Sector Banks</b>						
<b>Year</b>	<b>Interest Received</b>	<b>Advance (Credit)</b>	<b>Yield on Advance(%)</b>	<b>Deposit</b>	<b>Interest Paid</b>	<b>% Cost of Deposit</b>
2004	51,056.91	232,958.09	21.92	483,184.03	35,250.15	7.30
2005	53,897.64	266,349.86	20.24	535,861.35	35,550.27	6.63
2006	54,062.85	303,739.31	17.80	597,323.56	32,912.14	5.51
2007	58,076.84	387,759.80	14.98	689,218.37	32,631.70	4.73
2008	64,957.83	504,754.16	12.87	758,695.89	36,271.58	4.78
2009	76,489.57	657,349.60	11.64	902,221.85	45,357.14	5.03
2010	95,509.22	799,929.60	11.94	1,081,584.10	63,723.43	5.89
2011	122,689.95	1,038,213.25	11.82	1,416,094.88	82,786.07	5.85
2012	136,280.33	1,234,490.15	11.04	1,635,197.48	89,815.51	5.49
2013	164,345.46	1,533,594.54	10.72	1,978,130.83	99,363.72	5.02

**Table-4 B** (Rs. In Crores)

<b>Private Sector Banks</b>						
<b>Year</b>	<b>Advance (Credit)</b>	<b>Interest Received</b>	<b>Yield on Advance(%)</b>	<b>Deposit</b>	<b>Interest Paid</b>	<b>% Cost of Deposit</b>
2004	68,808.33	6,999.45	10.17	78,959.72	5,119.24	6.48
2005	84,043.32	14,871.80	17.70	107,644.14	11,738.22	10.90
2006	103,950.02	15,145.89	14.57	143,426.09	10,698.10	7.46
2007	150,477.55	16,609.15	11.04	195,647.22	10,402.00	5.32
2008	225,506.60	23,807.59	10.56	292,207.52	14,915.49	5.10
2009	157,731.40	37,662.44	23.88	394,596.76	24,475.54	6.20
2010	209,921.66	52,104.54	24.82	479,237.29	35,620.79	7.43
2011	281,678.15	63,815.57	22.66	535,621.62	42,376.49	7.91
2012	367,036.16	59,423.98	16.19	572,644.51	35,677.85	6.23

2013	504,108.98	67,803.16	13.45	696,635.35	38,927.04	5.59
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(Source: Data compiled from software, 'PROWESS')

The main function of bank, defined as per Banking Regulation Act 1949, is to accept deposit and giving loans (advance). Bank provides loans to its customers to earn interest. The ratio of interest earned to advance (Yield on advance) is given in coloum4 of table 4-A yield on advance has shown negative growth over the period of 10 years except 2008 and reached from 21.92% to 10.72% in public sector banks. In case of private sector banks yield on advance shown a mix tendency of growth with overall improved position. Yield on advance has a compound growth 3.15% in public sector and -1.68% in private sector. If banks receive interest for advances then it has to pay interest on deposit known as cost of deposit. Coloum7 of table 4-B shows cost of deposit which shows fluctuating trend in public as well as private sector. In public sector banks cost of deposits varied between 4.73% to 7.30% with overall compound growth rate -4.10% in private sector cost of deposit moved between 5.10% to 10.90% with overall compound growth rate of -1.68%.

## CREDIT DEPOSIT RATIO

**Table-5** (Rs. In Crores)

Public Sector Banks				Private Sector Banks		
Year	Deposit	Advance	Credit Deposit Ratio	Deposit	Advance	Credit Deposit Ratio
2004	483,184.03	232,958.09	48.21	78,959.72	68,808.33	87.14
2005	535,861.35	266,349.86	49.70	107,644.14	84,043.32	78.08
2006	597,323.56	303,739.31	50.85	143,426.09	103,950.02	72.48
2007	689,218.37	387,759.80	56.26	195,647.22	150,477.55	76.91
2008	758,695.89	504,754.16	66.53	292,207.52	225,506.60	77.17
2009	902,221.85	657,349.60	72.86	394,596.76	157,731.40	39.97
2010	1,081,584.10	799,929.60	73.96	479,237.29	209,921.66	43.80
2011	1,416,094.88	1,038,213.25	73.32	535,621.62	281,678.15	52.59
2012	1,635,197.48	1,234,490.15	75.49	572,644.51	367,036.16	64.09
2013	1,978,130.83	1,533,594.54	77.53	696,635.35	504,108.98	72.36

(Source: Data compiled from software, 'PROWESS')





**Table-6 A**

<b>Private Sector Banks</b>									
		<b>X1</b>	<b>X2</b>	<b>X3</b>	<b>X4</b>	<b>X5</b>	<b>X6</b>	<b>X7</b>	<b>X8</b>
Total Income	<b>X1</b>	1	0.999129	0.999849	0.991514	0.996998	0.965953	0.985942	0.891575
Total Expenditure	<b>X2</b>	-	1	0.99922	0.995727	0.995749	0.954691	0.980148	0.87424
Interest received	<b>X3</b>	-	-	1	0.992312	0.997024	0.964101	0.984675	0.888585
Interest Paid	<b>X4</b>	-	-	-	1	0.986805	0.926495	0.960664	0.831387
Operating profit	<b>X5</b>	-	-	-	-	1	0.963386	0.986289	0.888583
Net Profit	<b>X6</b>	-	-	-	-	-	1	0.984828	0.970434
Deposit	<b>X7</b>	-	-	-	-	-	-	1	0.932584
Advance	<b>X8</b>	-	-	-	-	-	-	-	1

As per the data presented above the correlation analysis was also carried out to study of the relationship between various variables for both the sectors separately. The correlation coefficients calculated as per formula defined earlier are presented in the form of correlation matrix. For the public sector it is observed that there is a very high degree of correlation between all the possible combinations of variable under study namely income, expenses, interest received, interest paid, operating profit, net profit, deposit and advance. These correlations as tested by 't' test are found to be very highly significant at 1% level of significance. There are certain variables where the correlation is almost neared to 1 and all these correlation are positive. Clearly indicating that the variables as indicated above income, expenses, interest received, interest paid, operating profit, net profit, deposit and advance are growing in the same direction for example with the increase in income, the expenses have also shown a growth. Similarly in the case of private sector the correlation matrix shows that the inter correlation between all the entire variable define earlier are highly significant at 1% of level of significance. However a comparison between the public and private sector some of the correlation with advance (X8) are

comparatively higher in public sector than private sector. For example the correlation of interest paid with advance in public sector is higher (0.976) compared to private sector (0.831).

## **CONCLUDING OBSERVATIONS**

The present investigation related to the analysis of certain performance indicators of selected public and private sector banks. The data spread over the period of 10 years were subjected to analysis the growth pattern in income, expenses, operating profit, net profit, gross profit, interest received, interest paid, advance (credit). It was noticed that over the period of the study almost all variables have shown consistent compound growth with certain exception of negative growth also. It was noticed that around 60% was the expenses towards outflow as interest on deposits and around 40% as other expenses in public sector and almost the same phenomenon in private sector also. The peculiarity of the study was that the growth rate of the net profit was as high as 38% and as low as -1.33%. The growth of interest spread has shown a divergent trend but not negative in any year. Analysis in various tables is self explanatory to draw relevant inferences.

The study has been found quite informative and may serve as important guidelines for the future planning and development in banking sector. It is suggested that trends can be gainfully used for the future projection of various economic indicator under public and private sector banks.

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2006	32,912.14 (54.81)	27,138.99 (45.19)	60,051.13	11,738.22 (62.23)	5,749.54 (37.77)	17,487.76
2007	32,631.70 (52.21)	29,865.40 (47.79)	62,497.10	10,698.10 (57.24)	6,492.29 (42.76)	17,190.39

2008	36,271.58 (53.30)	31,783.67 (46.70)	68,055.25	10,402.00 (55.61)	7,771.98 (44.39)	18,173.98
2009	45,357.14 (57.14)	34,019.57 (42.86)	79,376.71	14,915.49 (58.08)	11,904.12 (41.92)	26,819.61
2010	63,723.43 (64.06)	35,752.71 (35.94)	99,476.14	24,475.54 (60.98)	17,664.31 (39.02)	42,139.85
2011	82,786.07 (64.95)	44,674.90 (35.05)	127,460.97	35,620.79 (59.81)	22,790.18 (40.19)	58,410.97
2012	89,815.51 (63.35)	51,963.88 (36.65)	141,779.39	42,376.49 (54.53)	28,480.07 (45.47)	70,856.56
2013	99,363.72 (59.00)	69,042.71 (41.00)	168,406.43	35,677.85 (54.23)	29,751.08 (45.77)	65,428.93

(Source: Data compiled from software, 'PROWESS')

In the context of our objectives of the present investigation, the composition and growth of income and expenses of public and private sector banks has been studied. The table 1 revealed that during the period under study interest income reached from Rs. 51056.91 crore to Rs. 164345.46 crore in case of public sector banks and from Rs. 6999.45 crore to Rs. 67803.16 crore to in case of private sector banks. Other income reached for Rs. 8036.19 crore to Rs. 25555.49 crore in public sector banks and from Rs. 1844.38 crore to Rs. 17346.32 crore in private sector banks. The interest income was around 80% of total income in both the case and it indicates that major part of income comes from interest income in both the sectors. The compound growth rates were observed 13.87% in public sector and 28.70% private sector respectively. While analyzing the expenses details it was observed that total expenses reached from Rs. 54731.56 crore to Rs. 168406.43 crore in public sector and from Rs. 5470.87 crore to Rs. 65428.93 crore in private sector, where around 60% outflows as interest on deposits and around 40% other expenses in public sector and almost same trend was followed in private sector also.

## PROFITS

**Table-2**

(Rs. In Crores)

Year	Public Sector Banks			Private Sector Banks		
	Operating Profits	Growth Rate	Net Profits	Operating Profits	Growth Rate	Net Profits
2002	58438.99		4,361.55	8453.85	29.13	849.39



2003	63486.66	8.64	5,904.86	11033.59	30.52	2,028.97
2004	66520.19	4.78	8,150.80	19246.44	74.43	2,706.52
2005	64777.68	-2.62	8,042.73	18138.12	-5.76	3,310.87
2006	68300.81	5.44	8,945.40	29547.27	62.90	4,375.36
2007	82419.26	20.67	9,278.80	45727.25	54.76	5,533.43
2008	108876.69	32.10	12,753.15	65246.35	42.69	7,341.94
2009	136495.64	25.37	17,280.33	77828.02	19.28	8,507.70
2010	156591.42	14.72	20,357.50	74914.22	-3.74	10,194.98
2011	176126.95	12.48	21,494.53	83664.97	11.68	13,372.00

(Source: Data compiled from software, 'PROWESS')

The performance of any business unit is measured on the basis of the profits earned by that unit at a part of time. The table 2 shows the trend of operating profits, gross profits and net profits. As per table 2, it is clear that the operating profit in the public sector banks is continuously improving during the period of 10 years under study except for the year 2005 where it is showing a fall on 2.62%. It has increased nearly 3 times (Rs. 58438.99 crore to Rs. 176126.95 crore) from 2002 to 2011 with the compound growth rate of 13.04% as public sector, private sector also showing negative growth (-5.76) in the same year (2005) otherwise all the remaining years are showing improvement in the operating profit and it has increased nearly 9.90 times (Rs. 8453.85 crore to Rs. 83664.97 crore)

The growth rate of net profit in public sector banks registering a peak of 38.04% with the trough of -1.33% and net profit reached from Rs. 4361.55 crore to Rs. 21494.53 crore in 10 years of the study period. The compound growth rate of net profit of public sector was 19.39%. In private sector net profit is showing a sharp jump of 138.87% in year 2003 as compare to 2002, rest of the period show average growth varied between 15.88% (2009) to 33.39% (2004) and net profit reached to Rs. 13372.00 crore with the compound growth rate of 19.39%.

**INTEREST RATE SPREAD****Table-3** (Rs. In Crores)

Public Sector Banks			Private Sector Banks			
Year	Interest Received	Interest Paid	Interest Spread	Interest Received	Interest Paid	Interest Spread
2002	51,056.91	35,250.15	15,806.76	6,999.45	5,119.24	1,880.21
2003	53,897.64	35,550.27	18,347.37	14,871.80	11,738.22	3,133.58
2004	54,062.85	32,912.14	21,150.71	15,145.89	10,698.10	4,447.79
2005	58,076.84	32,631.70	25,445.14	16,609.15	10,402.00	6,207.15
2006	64,957.83	36,271.58	28,686.25	23,807.59	14,915.49	8,892.10
2007	76,489.57	45,357.14	31,132.43	37,662.44	24,475.54	13,186.90
2008	95,509.22	63,723.43	31,785.79	52,104.54	35,620.79	16,483.75
2009	122,689.95	82,786.07	39,903.88	63,815.57	42,376.49	21,439.08
2010	136,280.33	89,815.51	46,464.82	59,423.98	35,677.85	23,746.13
2011	164,345.46	99,363.72	64,981.74	67,803.16	38,927.04	28,876.12

(Source: Data compiled from software, 'PROWESS')

The success of any business unit depends on the profit earning capacity of that business unit and profit is known as the difference between earnings and expenses. So bank's performance also can be measured in terms of profits earned by the bank. As Tables 1A and 1B show that major portion of bank's income comes from interest earned and major expenses go to interest paid. So bank's profits depend on the difference of interest earned and interest paid, known as interest spread.

Table 3 shows a continuous improvement in interest spread in both public as well as private sector banks over the period of 10 years. In public sector it reached from Rs.15807.76 croreto Rs. 64981.74 croreand Rs. 1880.21 croreto Rs. 28876.12 crorein private sector. The growth rate of interest spread showed a fluctuating trend but not negative in any year in both the sectors.

**YIELD & COST OF DEPOSIT****Table-4 A** (Rs. In Crores)

<b>Public Sector Banks</b>						
<b>Year</b>	<b>Interest Received</b>	<b>Advance (Credit)</b>	<b>Yield on Advance(%)</b>	<b>Deposit</b>	<b>Interest Paid</b>	<b>% Cost of Deposit</b>
2004	51,056.91	232,958.09	21.92	483,184.03	35,250.15	7.30
2005	53,897.64	266,349.86	20.24	535,861.35	35,550.27	6.63
2006	54,062.85	303,739.31	17.80	597,323.56	32,912.14	5.51
2007	58,076.84	387,759.80	14.98	689,218.37	32,631.70	4.73
2008	64,957.83	504,754.16	12.87	758,695.89	36,271.58	4.78
2009	76,489.57	657,349.60	11.64	902,221.85	45,357.14	5.03
2010	95,509.22	799,929.60	11.94	1,081,584.10	63,723.43	5.89
2011	122,689.95	1,038,213.25	11.82	1,416,094.88	82,786.07	5.85
2012	136,280.33	1,234,490.15	11.04	1,635,197.48	89,815.51	5.49
2013	164,345.46	1,533,594.54	10.72	1,978,130.83	99,363.72	5.02

**Table-4 B** (Rs. In Crores)

<b>Private Sector Banks</b>						
<b>Year</b>	<b>Advance (Credit)</b>	<b>Interest Received</b>	<b>Yield on Advance(%)</b>	<b>Deposit</b>	<b>Interest Paid</b>	<b>% Cost of Deposit</b>
2004	68,808.33	6,999.45	10.17	78,959.72	5,119.24	6.48
2005	84,043.32	14,871.80	17.70	107,644.14	11,738.22	10.90
2006	103,950.02	15,145.89	14.57	143,426.09	10,698.10	7.46
2007	150,477.55	16,609.15	11.04	195,647.22	10,402.00	5.32
2008	225,506.60	23,807.59	10.56	292,207.52	14,915.49	5.10
2009	157,731.40	37,662.44	23.88	394,596.76	24,475.54	6.20
2010	209,921.66	52,104.54	24.82	479,237.29	35,620.79	7.43
2011	281,678.15	63,815.57	22.66	535,621.62	42,376.49	7.91
2012	367,036.16	59,423.98	16.19	572,644.51	35,677.85	6.23

2013	504,108.98	67,803.16	13.45	696,635.35	38,927.04	5.59
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(Source: Data compiled from software, 'PROWESS')

The main function of bank, defined as per Banking Regulation Act 1949, is to accept deposit and giving loans (advance). Bank provides loans to its customers to earn interest. The ratio of interest earned to advance (Yield on advance) is given in coloum4 of table 4-A yield on advance has shown negative growth over the period of 10 years except 2008 and reached from 21.92% to 10.72% in public sector banks. In case of private sector banks yield on advance shown a mix tendency of growth with overall improved position. Yield on advance has a compound growth 3.15% in public sector and -1.68% in private sector. If banks receive interest for advances then it has to pay interest on deposit known as cost of deposit. Coloum7 of table 4-B shows cost of deposit which shows fluctuating trend in public as well as private sector. In public sector banks cost of deposits varied between 4.73% to 7.30% with overall compound growth rate -4.10% in private sector cost of deposit moved between 5.10% to 10.90% with overall compound growth rate of -1.68%.

## CREDIT DEPOSIT RATIO

**Table-5** (Rs. In Crores)

Public Sector Banks				Private Sector Banks		
Year	Deposit	Advance	Credit Deposit Ratio	Deposit	Advance	Credit Deposit Ratio
2004	483,184.03	232,958.09	48.21	78,959.72	68,808.33	87.14
2005	535,861.35	266,349.86	49.70	107,644.14	84,043.32	78.08
2006	597,323.56	303,739.31	50.85	143,426.09	103,950.02	72.48
2007	689,218.37	387,759.80	56.26	195,647.22	150,477.55	76.91
2008	758,695.89	504,754.16	66.53	292,207.52	225,506.60	77.17
2009	902,221.85	657,349.60	72.86	394,596.76	157,731.40	39.97
2010	1,081,584.10	799,929.60	73.96	479,237.29	209,921.66	43.80
2011	1,416,094.88	1,038,213.25	73.32	535,621.62	281,678.15	52.59
2012	1,635,197.48	1,234,490.15	75.49	572,644.51	367,036.16	64.09
2013	1,978,130.83	1,533,594.54	77.53	696,635.35	504,108.98	72.36

(Source: Data compiled from software, 'PROWESS')



**Table-6 A**

<b>Private Sector Banks</b>									
		<b>X1</b>	<b>X2</b>	<b>X3</b>	<b>X4</b>	<b>X5</b>	<b>X6</b>	<b>X7</b>	<b>X8</b>
Total Income	<b>X1</b>	1	0.999129	0.999849	0.991514	0.996998	0.965953	0.985942	0.891575
Total Expenditure	<b>X2</b>	-	1	0.99922	0.995727	0.995749	0.954691	0.980148	0.87424
Interest received	<b>X3</b>	-	-	1	0.992312	0.997024	0.964101	0.984675	0.888585
Interest Paid	<b>X4</b>	-	-	-	1	0.986805	0.926495	0.960664	0.831387
Operating profit	<b>X5</b>	-	-	-	-	1	0.963386	0.986289	0.888583
Net Profit	<b>X6</b>	-	-	-	-	-	1	0.984828	0.970434
Deposit	<b>X7</b>	-	-	-	-	-	-	1	0.932584
Advance	<b>X8</b>	-	-	-	-	-	-	-	1

As per the data presented above the correlation analysis was also carried out to study of the relationship between various variables for both the sectors separately. The correlation coefficients calculated as per formula defined earlier are presented in the form of correlation matrix. For the public sector it is observed that there is a very high degree of correlation between all the possible combinations of variable under study namely income, expenses, interest received, interest paid, operating profit, net profit, deposit and advance. These correlations as tested by 't' test are found to be very highly significant at 1% level of significance. There are certain variables where the correlation is almost neared to 1 and all these correlation are positive. Clearly indicating that the variables as indicated above income, expenses, interest received, interest paid, operating profit, net profit, deposit and advance are growing in the same direction for example with the increase in income, the expenses have also shown a growth. Similarly in the case of private sector the correlation matrix shows that the inter correlation between all the entire variable define earlier are highly significant at 1% of level of significance. However a comparison between the public and private sector some of the correlation with advance (X8) are

comparatively higher in public sector than private sector. For example the correlation of interest paid with advance in public sector is higher (0.976) compared to private sector (0.831).

### **CONCLUDING OBSERVATIONS**

The present investigation related to the analysis of certain performance indicators of selected public and private sector banks. The data spread over the period of 10 years were subjected to analysis the growth pattern in income, expenses, operating profit, net profit, gross profit, interest received, interest paid, advance (credit). It was noticed that over the period of the study almost all variables have shown consistent compound growth with certain exception of negative growth also. It was noticed that around 60% was the expenses towards outflow as interest on deposits and around 40% as other expenses in public sector and almost the same phenomenon in private sector also. The peculiarity of the study was that the growth rate of the net profit was as high as 38% and as low as -1.33%. The growth of interest spread has shown a divergent trend but not negative in any year. Analysis in various tables is self explanatory to draw relevant inferences.

The study has been found quite informative and may serve as important guidelines for the future planning and development in banking sector. It is suggested that trends can be gainfully used for the future projection of various economic indicator under public and private sector banks.

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