

# A COMPARATIVE STUDY OF FINANCIAL PERFORMANCE OF SELECTED PUBLIC AND PRIVATE SECTOR BANKS IN INDIA

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## Key Words

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

## INTRODUCTION

At 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sector banks have been incurring losses year after year, their customer service was poor, their work technology was outdated and they were unable to meet the challenges of a competitive environment. 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 were introduced to make the financial system more competitive and get integrated with the world economy through the internationalization of financial markets in the world. In the present paper, the researcher has tried to investigate the performance of selected public and private sector banks and wishes 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 the 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 2002-2011 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 were applied to draw logical conclusions. The correlations were presented in the form of a correlation matrix and were tested for 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
2002	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
2003	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
2004	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
2005	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
2006	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
2007	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
2008	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
2009	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

2010	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
2011	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
2002	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
2003	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
2004	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
2005	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
2006	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
2007	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
2008	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
2009	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
2010	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
2011	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 have been studied. 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 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 cases 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)

Year	Public Sector Banks			Private Sector Banks		
	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)

Public Sector Banks						
Year	Interest Received	Advance (Credit)	Yield on Advance (%)	Deposit	Interest Paid	% Cost of Deposit
2002	51,056.91	232,958.09	21.92	483,184.03	35,250.15	7.30
2003	53,897.64	266,349.86	20.24	535,861.35	35,550.27	6.63
2004	54,062.85	303,739.31	17.80	597,323.56	32,912.14	5.51
2005	58,076.84	387,759.80	14.98	689,218.37	32,631.70	4.73
2006	64,957.83	504,754.16	12.87	758,695.89	36,271.58	4.78
2007	76,489.57	657,349.60	11.64	902,221.85	45,357.14	5.03
2008	95,509.22	799,929.60	11.94	1,081,584.10	63,723.43	5.89
2009	122,689.95	1,038,213.25	11.82	1,416,094.88	82,786.07	5.85
2010	136,280.33	1,234,490.15	11.04	1,635,197.48	89,815.51	5.49
2011	164,345.46	1,533,594.54	10.72	1,978,130.83	99,363.72	5.02

**Table-4 B**

(Rs. In Crores)

Private Sector Banks						
Year	Advance (Credit)	Interest Received	Yield on Advance(%)	Deposit	Interest Paid	% Cost of Deposit
2002	68,808.33	6,999.45	10.17	78,959.72	5,119.24	6.48
2003	84,043.32	14,871.80	17.70	107,644.14	11,738.22	10.90
2004	103,950.02	15,145.89	14.57	143,426.09	10,698.10	7.46
2005	150,477.55	16,609.15	11.04	195,647.22	10,402.00	5.32
2006	225,506.60	23,807.59	10.56	292,207.52	14,915.49	5.10
2007	157,731.40	37,662.44	23.88	394,596.76	24,475.54	6.20
2008	209,921.66	52,104.54	24.82	479,237.29	35,620.79	7.43
2009	281,678.15	63,815.57	22.66	535,621.62	42,376.49	7.91
2010	367,036.16	59,423.98	16.19	572,644.51	35,677.85	6.23
2011	504,108.98	67,803.16	13.45	696,635.35	38,927.04	5.59

(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
2002	483,184.03	232,958.09	48.21	78,959.72	68,808.33	87.14
2003	535,861.35	266,349.86	49.70	107,644.14	84,043.32	78.08
2004	597,323.56	303,739.31	50.85	143,426.09	103,950.02	72.48
2005	689,218.37	387,759.80	56.26	195,647.22	150,477.55	76.91
2006	758,695.89	504,754.16	66.53	292,207.52	225,506.60	77.17
2007	902,221.85	657,349.60	72.86	394,596.76	157,731.40	39.97
2008	1,081,584.10	799,929.60	73.96	479,237.29	209,921.66	43.80
2009	1,416,094.88	1,038,213.25	73.32	535,621.62	281,678.15	52.59
2010	1,635,197.48	1,234,490.15	75.49	572,644.51	367,036.16	64.09
2011	1,978,130.83	1,533,594.54	77.53	696,635.35	504,108.98	72.36

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

The credit deposits ratio is the ratio of credit to deposits. Credit refers to loan which has been given to customers by the bank. Deposit refers to money deposited with the bank for safe keeping and investment purposes. A perusal of the table 5 indicated that there was a fluctuation in the growth pattern of credit deposit ratio of both the sectors public as well as private. The deposit reached from Rs. 483184.03 crore to Rs. 1978130.83 crore (compound growth 16.95%) and advances reached from Rs. 232958.09 crore to Rs. 1533594.54 crore (compound growth 23.39%) in public sector. In private sector deposit reached from Rs. 78959.72 crore to Rs. 696635.35 crore (compound growth 27.37%) and advances from Rs. 68808.33 crore to Rs. 504108.98 crore (compound growth 24.77%).



## CORRELATION MATRIX ANALYSIS

**Table-6 A**  
**Private Sector Banks**

		X1	X2	X3	X4	X5	X6	X7	X8
Total Income	X1	1	0.994861	0.994479	0.98822	0.930116	0.965504	0.990172	0.98736
Total Expenditure	X2	-	1	0.999745	0.990755	0.961186	0.978838	0.996777	0.993367
Interest received	X3	-	-	1	0.98993	0.95961	0.97643	0.997114	0.994801
Interest Paid	X4	-	-	-	1	0.949854	0.964461	0.978971	0.97609
Operating profit	X5	-	-	-	-	1	0.977267	0.961539	0.955115
Net Profit	X6	-	-	-	-	-	1	0.983134	0.976976
Deposit	X7	-	-	-	-	-	-	1	0.998011
Advance	X8	-	-	-	-	-	-	-	1

**Table-6 A**  
**Private Sector Banks**

		X1	X2	X3	X4	X5	X6	X7	X8
Total Income	X1	1	0.999129	0.999849	0.991514	0.996998	0.965953	0.985942	0.891575
Total Expenditure	X2	-	1	0.99922	0.995727	0.995749	0.954691	0.980148	0.87424
Interest received	X3	-	-	1	0.992312	0.997024	0.964101	0.984675	0.888585
Interest Paid	X4	-	-	-	1	0.986805	0.926495	0.960664	0.831387

Operating profit	X5	-	-	-	-	1	0.963386	0.986289	0.888583
Net Profit	X6	-	-	-	-	-	1	0.984828	0.970434
Deposit	X7	-	-	-	-	-	-	1	0.932584
Advance	X8	-	-	-	-	-	-	-	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 then 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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