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Profitability of the Public and the Private Sector Banking in Bangladesh: A Comparative Study

* Mohammad Ahsan Ullah

Abstract: *The main objective of the study is to analyze the profitability of the public and the private sector banking in Bangladesh. To manage both the public and the private banking efficiently, profitability is urgently needed to have due attention. It always remains at the center point of all the banking activities in particular and the overall economic development of a country as a whole. Data are presented in the forms of tables, percentages, ratios etc. and statistical techniques like mean, Standard Deviation (SD), Coefficient of Variance (CV), Annual Growth Rate (AGR), Average Annual Growth Rate (AAGR) etc. are also used in the study. It is found in the study that the public sector banking is required to be improved in the areas of managerial efficiency and customer services side by side of maintaining the present trends of social banking for being profitable in the competitive world. The private banking is required to be ensured in the areas of societal banking like branch expansion to the rural areas, services to priority sector, reduction of disparity among the regions etc. along with sustaining the present trends of profitability.*

Keywords: *Banking, profitability, comparative, public, private and bank*

1. Introduction

The stronger the banking system, the stronger the economic base of a country. It is quite impossible to make sustainable economic progress and industrial development without suitable banking system. To manage a bank effectively, profitability is urgently needed to have due consideration. The smooth functioning of banking mostly depends upon profitability. It also acts as a catalyst to economic growth. Thus, profitability always stays at the center point of all the banking activities in particular and the overall economic development of a country as a whole. Now it is well known to all that the banks either in the public sector or in the private sector have to take some public responsibilities in addition to the satisfaction of private interest. Hence, it is transparent that the 'profitability' and the 'societal banking' have become the twin objectives of the commercial banking in the present context of Bangladesh. They have to serve the clients in new ways and means with greater efficiency and effectiveness. Under these circumstances, public and private banks are performing a major role in giving direction to the economic progress of Bangladesh. In the context of present market economy and globalization scenario, private sector banks' roles are

* Professor, Department of Management Studies, Comilla University, Cumilla-3506, Bangladesh

more emphasized. But historically the public sector banks played an important role in the economic development of post independent Bangladesh. For the development of this growing economy, both the sectors must act positively and play their due role in the process of development. Bangladesh, actually, started her own banking journey with the Nationalization Order on March 26, 1972. At the very beginning of our independence on December 16, 1971, the then Government of Bangladesh (GOB) nationalized all the commercial banks to ensure better services and facilities to all areas of the country for the balanced development of the nation as a whole. With the passage of time it was realized that the public banks could neither achieve the goal of commercial profitability nor could they render necessary services to the society for which they were meant, rather gradually they became loosing concerns and a burden of the government, and ultimately of the society. With this backdrop, there had been a basic change in the Government's policy in favor of privatization and denationalization of the banks with a view to ensuring better service and performance, and to providing the scope for competition between them. Thus, private banks in Bangladesh started their journey in 1983. By this time, the banking sector of Bangladesh experienced about three and half decades i.e., 1983–2024 of coexistence of both the public and private sector banking. Thus, private banks have also been performing a mentionable role in achieving the economic growth of Bangladesh side by side with the public banks since 1983. It is, therefore, high time to analyze the profitability of the public and the private sector banking in Bangladesh to know their actual scenario of contributions in the economic development of the country. But, a few studies are done to examine the profitability of the public and the private sector banking in Bangladesh. The present study, therefore, aims at analyzing the profitability of the public and the private sector banking in Bangladesh.

2. Statement of the Problem

After independence in 1971, the then government of Bangladesh (GOB) nationalized all the banks, except the foreign ones, operating in the country with a view to establishing the government's socialist leaning economic policy although history of banking in Bangladesh is a history of private banking from 1846 with the establishment of Dacca Bank gathering the experiences of a long period of nearly one and a half centuries (Abedin, 1995). The main thrust of nationalization was to ensure social profitability even with low and reasonable commercial profitability (Abdur Raquib, 1993). Keeping pace with this policy, almost all the thanas and the viable unions of the country were banked with the increase of total number of commercial banks' branches. More than half of the new branches were established in rural areas. New categories of borrowers like small transport operators, village artisans, retail traders, small and marginal farmers came to the focus of bank lending during the same period. Thus, the banks witnessed, in the decades of seventies and early eighties, the emergence of what might be called 'mass banking' instead of 'class banking'. But later on, not only the tempo of 'mass banking' slowed but also the performance of those was faced with multifarious questions. During 1972-82, the commercial banks, except the foreign banks' branches, were under the Government ownership and control. With the passage of time, it was realized that the public banks could neither achieve the goal of commercial profitability nor could they render necessary services to the society for which they were meant, rather gradually they became loosing concerns and a burden of the Government, and ultimately of the society. With this backdrop, there had been a basic change in the Government's policy in favor of privatization and denationalization of the banks with a view to ensuring better service and performance, and to providing the scope for competition between the public and private banking. The Government already partially executed the said policy through the conversion of some public banks into public limited companies and by giving up the control of such banks' substantially.

The private banks, in most of the cases, operate for earning profits. But they cannot remain blind towards social needs. In Bangladesh, public banks are responding boldly to the growing socio-economic needs of the country. It does not mean that private banks are exempted from social responsibilities. Private banks are more cost conscious than the public banks. But no financial institution can survive for long without paying due economic consideration for its operation (Bahar, 1989). Recognizing the above fact, Verna and Malhotra (Verna and Malhotra, 1993) state, "understandably, as in any other business enterprises, commercial profitability is extremely important in banking too." Public banks are also required to conduct their business in ensuring a fair level of commercial profitability. In this regard, Bayes (Bayes, 1987) also observes, "banks are no longer treated as commercial enterprises, motivated only to make profits but they are also expected to grow as vital vehicles of socio-economic development. Hence, it is transparent that the 'profitability' and the 'social banking' have become the twin aims of the commercial banking in the present social context (Verna & Malhotra, 1993). So, a banking of mixed system is now running in Bangladesh. They are competing with each other. But healthy coexistence of both of them are very much necessary for the smooth growth and development of Bangladesh. Hence, it is essential to analyze the profitability of both the public and the private sector banking in Bangladesh with a view to promoting their progress as well as to assisting in the ongoing development process of the country.

3. Literature Review

Knowledge gaps are explored through the review of related literatures. Some of the relevant studies have been reviewed below to find out the knowledge gaps:

Agarwal (2019) examined both public and private Indian banks with regard to their profitability; with the help of ROA, ROE, NIM, and operating profits for the period 2005-

2017. It is shown in the study that due to the heavy burden of non-performing assets the public banks face deterioration in their profit. The results suggest that the financial standing of publicly owned banks is not as favorable as that of privately owned banks.

Mathur (2022) evaluated the operating performance and financial returns of India's public and private banks. The research was conducted from 2016 to 2020. According to the results of this study, private banks are doing better financially than their public sector counterparts. Although private banks catered more to individual consumers, public banks primarily served corporations. Another finding is that public sector banks yield higher profits compared to private sector banks, which allows them to be more efficient.

Mohanty (2021) examined ICICI Bank's and Indian Overseas Bank's financial results covering 2017 to 2021. Given the results of the study, it can be concluded that ICICI Bank has good liquidity, profitability, and asset quality management. Therefore, ICICI Bank has outperformed the IOB in terms of financial performance.

Patel and Bhanushali (2017) undertook a comparative assessment of the financial performance of privately owned and state-owned banks spanning from 2010 to 2015. This study reveals that both banks are profitable but nationalized banks face some challenges. The author suggests that these banks should try to control their expenses and should manage their resources efficiently.

Patra et al. (2023) evaluated the effectiveness of India's public and private banking systems. Government-run banks outperform their private sector counterparts in terms of efficiency. The authors found that banks, whether public or private, are vulnerable to instability. Public bank’s efficiency is determined by the return on assets (ROA), capital, nonperforming assets (NPA), market share, and bank size, meanwhile, private bank’s efficiency is majorly affected by capital and returns on assets. The merger in public sector banks helps PSBs in attaining efficiency. The authors suggest that Indian banks should keep adequate levels of capital to meet stressful situations.

Rai (2020) examined and compared three banks from the public sector and three banks from the private sector covering 2016 to 2020. According to the research, public sector banks have all the necessary resources and have a vast customer base but their bad loans create barriers in the way of the efficient utilization of their resources. It is also observed that the non-performing assets of private banks have gone down in recent years. The authors concluded that private banks’ efficiency is more than that of public banks.

Savita Lathwal (2024) in her article entitled “A Comparative Analysis of Profitability of Selected Public and Private Banks in India” said that a strong and stable banking sector works as a base for the development of a national economy. The profitability of the banking sector is a vital factor in analyzing bank’s performance. This study utilizes data for the last five years from 2019 to 2023, pertaining to six banks in India. In this investigation, they incorporate three state-owned banks and three privately owned banks selected in accordance to their total assets. This research compares the financial health of different banks using ROA and ROE metrics. This study also provides insights for researchers, academicians, and professionals about the profitability of public as well as private banking sector. It is found that private banks generate greater profits than public banks.

4. Objectives of the Study

The main objective of the study is to analyze the profitability of the public and the private sector banking in Bangladesh. The specific objectives are as follows:

1. To review the growth and development of the public and private sector banking in Bangladesh.
2. To identify the areas of dominance of both the public and the private sector banking in Bangladesh.
3. To analyze the profitability performance of the public and the private sector banking in Bangladesh.
4. To explore the trends of profitability of the public and the private sector banking and to compare with each other, and
5. To provide suggestions for the development of profitability of both the public and the private sector banking in Bangladesh.

5. Hypotheses of the Study

In this study, followings are the major hypotheses:

1. There is a positive correlation among the variables i.e. total income, total deposits, advances, total investment, total assets and total equity of public and private banks during the period of study.
2. There are significant variations among the variables like total income, total deposits, advances, total investment, total assets and total equity of public and private banks during the period of study.
3. Total income depends on the variables such as, total deposits, advances, total investment, total assets and total equity of public and private banks during the period of study.

6. Methodology of the Study

Data, their Authenticity, Reliability and Presentation

Both primary and secondary data are analyzed in the study. All the data are brought in the study in accordance with their suitability with due care, attention and acknowledgements. For justifying the authenticity of the documents and credibility of the data within the documents, special care has been taken in using the original works and documents, distinguishing between a fact and opinion. Reliability is also confirmed by caring the author in acknowledging the sources of information. Data are presented in the forms of tables, percentage, rate, ratios etc. and statistical techniques are also applied keeping pace with the relevance of the respective fields.

Period of the Study

It is the comparative study on profitability of the public and the private sector banking. Hence, the study covers the period of a decade (12 years) on the basis of availability of data maintaining the same year for both the public and the private banks.

Selection of Banks

For the proposed study, being a comparative one in nature, two banks each from the public sector, namely Janata Bank PLC and the private sector, namely The City Bank PLC have been selected considering their maturity in their respective sector in independent Bangladesh, which are shown as the public bank and the private bank respectively throughout the study.

Tools and Techniques of Data Analysis

Major statistical formulae and measures of profitability are applied to analyze them.

Statistical formulae of Data Analysis

Mean: Mean is computed in the following formula:

$$\overline{X} = \frac{\sum X}{N}$$

Where,

$\overline{X}$ = Arithmetic mean

X = The value of observation

N = Number of observations

Standard Deviation: The formulas of Standard Deviation are given below:

$$\delta = \sqrt{\frac{\sum (X-A)^2}{n} - \{\frac{\sum X-A)}{n}\}^2}$$

Where,

δ = Standard Deviation

A = Mid-value of class interval

X = The individual value

n = Number of observations

For frequency distribution with equal size class interval, the formula is as follows:

$$\delta = \sqrt{\frac{\sum f(X-A)^2}{n} - \{\frac{\sum f(X-A)}{n}\}^2}$$

Where,

A = Assumed mean

f = Class frequency

X = Mid-value

n = Total number of frequency

Co-efficient of Variation: Following formula is applied for Co-efficient of Variation (CV):

$$\text{CV} = \frac{\delta}{X} \times 100$$

Where,

CV = Co-efficient of Variation

δ = Standard Deviation

X = Mean value

Measures of Growth

Simple Growth Rate (SGR): The following equation represents this rate:

$$\text{SGR} = (Y_t — Y_{t-1}) / (Y_{t-1})$$

Where,

SGR=Simple Growth Rate

Y_t=Value of the variable Y in year t

Y_{t-1} = Value of the variable Y in year $_{t-1}$

$_{t=}$ Considered year, and

$_{t-1}$= Previous year of the considered year.

Compound Growth Rate (CGR): The equation may be expressed as:

$$\text{CGR} = [(Y_1/Y_0)^{1/t} - 1]\ 100$$

Where,

CGR = Compound Growth Rate

Y_1 = Value of variable Y at the terminal year

Y_0 = Value of the variable Y at the initial year, and

$_t$ = Differences of years between and the initial year.

Measures of Profitability

Ratio analysis: In this study, following ratios of profitability are found out by the researcher:

i. Total Income to Total Deposits
ii. Total Income to Total Advances
iii. Total Income to Total Investment
iv. Total Income to Total Assets
v. Total Income to Total Equity

7. Data Analysis and Interpretation

7.1 Profitability of the Public & the Private Banking in Bangladesh during the period of Study

Table No. 1

Total Income to Total Deposit of Public & Private Banking during the Period of Study

Year	Public	Private	Avg.	Year	Public	Private	Avg.
	(In %)				(In %)		
1st	7.08	7.71	7.40	7th	7.91	10.77	9.34
2nd	7.56	8.85	8.21	8th	8.31	12.35	10.33
3rd	8.25	9.51	8.88	9th	7.24	12.18	9.71
4th	8.77	9.40	9.09	10th	7.78	12.10	9.94
5th	8.80	9.83	9.32	11th	7.78	12.10	9.94
6th	8.07	10.18	9.13	12th	9.11	13.86	11.49
Average (Avg.)					8.06	10.74	9.40
Standard Deviation (SD)					0.63	1.79	1.21
Coefficient of Variance (CV)					7.77	16.69	12.23
Annual Growth Rate (AGR)					28.69	79.90	54.30
Average Annual Growth Rate (AAGR)					3.44	6.90	5.17
Maximum Level (Max.Lev.)					9.11	13.86	11.49
Minimum Level (Min. Lev.)					7.08	7.71	7.40

Source: Annual Reports of Selected Banks & Resumes during the Period of Study

Table No. 1: This table shows the comparative position of profitability ratio i.e., Total Income to Total Deposits of public and private banks including AVG, GA, SD, CV, AGR, AAGR, Maximum & Minimum level during the period of study. In average, the SD & CV positions of both the public and the private banks were poor, which indicate the little fluctuation during the study period. In the position of AGR &AAGR, it is found that the private bank is in better position than that of the public bank during the period under study. The maximum level of the public and private banks was found 9.11% and 13.86% respectively and the minimum level of them was 7.08% and 7.71% respectively, which indicates the poor range during the period under study. So, it is clear that the private bank had the favorable position than the position of the public bank regarding the ratio during the period under study.

Table No. 2

Total Income to Total Advances of Public & Private Banking during the Period of Study

Year	Public	Private	Avg.	Year	Public	Private	Avg.
	(In %)				(In %)		
1st	10.99	10.99	10.99	7th	11.02	15.27	13.15
2nd	12.42	11.69	12.06	8th	11.35	16.75	14.05
3rd	12.74	11.67	12.21	9th	10.14	15.90	13.02
4th	11.05	13.20	12.13	10th	10.64	64.02	37.33
5th	11.37	13.61	12.49	11th	10.64	64.02	37.33
6th	11.14	13.74	12.44	12th	12.31	74.13	43.22
Average (Avg.)					11.32	27.08	19.20
Standard Deviation (SD)					0.79	24.49	12.64
Coefficient of Variance (CV)					6.95	90.44	48.70
Annual Growth Rate (AGR)					11.97	574.67	293.32
Average Annual Growth Rate (AAGR)					1.88	9.27	5.58
Maximum Level (Max.Lev.)					12.74	74.13	43.44
Minimum Level (Min. Lev.)					10.14	10.99	10.57

Source: Annual Reports of Selected Banks & Resumes during the Period of Study

Table No. 2: This table shows the comparative position of profitability ratio like Total Income to Total Advances of public and private banks including AVG., GA, SD, CV, AGR, AAGR, Maximum & Minimum level during the period of study. The average position of the private bank i.e., 27.08% is better than the public bank i.e., 11.32%. In average, the SD & CV positions of of both the public and private banks indicate the little fluctuation during the study period. In the position of AGR &AAGR, the private bank is more positive than the public bank. The maximum level and the minimum level of the public bank are 12.74% and 10.14% respectively during the period under study. On the other hand, the maximum level and the minimum level of the private bank are 74.13% and 10.99% respectively during the period under study. In fact, the private bank had the favorable position than the position of the public bank in context of Total Income to Total Advances during the period under study.

Table No. 3

Total Income to Total Investment of Public & Private Banking during the Period of Study

Year	Public	Private	Avg.	Year	Public	Private	Avg.
	(In %)				(In %)		
1st	33.54	95.04	64.29	7th	36.98	84.45	60.72
2nd	34.51	104.14	69.33	8th	50.47	73.24	61.86
3rd	40.43	100.43	70.43	9th	38.54	85.65	62.10
4th	42.20	79.00	60.60	10th	45.08	222.89	133.99
5th	45.20	84.03	64.62	11th	45.08	222.89	133.99
6th	48.95	88.43	68.69	12th	49.96	198.34	124.15
Average (Avg.)					42.58	119.88	81.23
Standard Deviation (SD)					5.85	58.13	31.99
Coefficient of Variance (CV)					13.73	48.49	31.11
Annual Growth Rate (AGR)					48.96	108.69	78.83
Average Annual Growth Rate (AAGR)					6.80	6.00	6.40
Maximum Level (Max.Lev.)					50.47	222.89	136.68
Minimum Level (Min. Lev.)					33.54	73.24	53.39

Source: Annual Reports of Selected Banks & Resumes during the Period of Study

Table No. 3: This table shows the comparative position of profitability ratio like Total Income to Total Investment of public and private banks including AVG., GA, SD, CV, AGR, AAGR, Maximum & Minimum level during the period of study. Here the private bank i.e., 119.88% had the higher average position than the public bank i.e., 42.58% during the study period. In average, the SD & CV positions of the private bank were found better than the public bank. It is seen in the position of AGR & AAGR that the private bank had the satisfactory positive performance during the period under study. The maximum level and the minimum level of the public bank were 50.47% and 33.54% respectively while the same levels of the private bank were 222.89% and 73.24% respectively. It is, therefore, clear that the private bank had the favorable position than the position of the public bank during the period under study.

Table No. 4

Total Income to Total Assets of Public & Private Banking during the Period of Study

Year	Public	Private	Avg.	Year	Public	Private	Avg.
	(In %)				(In %)		
1st	50.05	8.18	29.12	7th	52.99	8.66	30.83
2nd	50.08	8.70	29.39	8th	55.07	10.44	32.76
3rd	50.09	7.97	29.03	9th	55.91	10.27	33.09
4th	50.03	7.62	28.83	10th	69.69	38.28	35.99
5th	50.03	7.88	28.96	11th	74.44	37.35	55.90
6th	51.72	8.44	30.08	12th	68.70	40.97	54.84
Average (Avg.)					56.57	16.23	36.40
Standard Deviation (SD)					8.99	13.70	11.35
Coefficient of Variance (CV)					15.90	84.41	50.16
Annual Growth Rate (AGR)					37.25	400.56	218.91
Average Annual Growth Rate (AAGR)					3.18	5.00	4.09
Maximum Level (Max .Lev.)					74.44	40.97	57.71
Minimum Level (Min. Lev.)					50.03	7.62	28.83

Source: Annual Reports of Selected Banks & Resumes during the Period of Study

Table No. 4: This table shows the comparative position of profitability ratio like Total Income to Total Assets of the public and private banks including AVG., GA, SD, CV, AGR, AAGR, Maximum & Minimum level during the period of study. Here public bank had the higher average position than that of the private bank during the study period. In average, the SD & CV positions of the public bank were poor, by indicating the little fluctuation during the study period. In the position of AGR & AAGR, private bank is better than public bank during the study period. The maximum level and the minimum level of the public bank were 74.44% and 50.03% respectively while the same levels of the private bank were 40.97% and 7.62% respectively, which indicates the minimum range during the period under study. In some cases, public bank is in favorable position and in some other categories; private bank is in favorable position.

Table No. 5

Total Income to Total Equity of Public & Private Banking during the Period of Study

Year	Public	Private	Avg.	Year	Public	Private	Avg.
	(In %)				(In %)		
1st	196.39	248.20	222.30	7th	348.56	270.52	309.54
2nd	240.26	217.13	228.70	8th	363.54	299.28	281.41
3rd	234.31	236.20	235.26	9th	281.31	191.10	236.21
4th	259.58	278.72	269.15	10th	337.99	201.82	269.91
5th	294.44	320.59	307.52	11th	337.99	201.82	269.91
6th	319.60	413.37	366.49	12th	439.55	241.37	340.46
Average (Avg.)					304.46	260.01	282.24
Standard Deviation (SD)					67.11	62.96	65.04
Coefficient of Variance (CV)					22.04	24.22	23.13
Annual Growth Rate (AGR)					123.82	-2.75	59.16
Average Annual Growth Rate (AAGR)					8.51	5.85	7.18
Maximum Level (Max.Lev.)					439.55	413.37	426.46
Minimum Level (Min. Lev.)					196.39	191.10	193.75

Source: Annual Reports of Selected Banks & Resumes during the Period of Study

Table No. 5: This table shows the comparative position of profitability ratio like Total Income to Total Equity of the public and private banks including AVG, GA, SD, CV, AGR, AAGR, Maximum & Minimum level during the period of study. The average position of the public bank is better than private. In average, the SD & CV positions of both the public and private banks indicate the little fluctuation during the study period. In the position of AGR &AAGR, public bank had the positive position during the study period. The maximum level of the public and private banks were found 439.55% and 413.37% respectively while the minimum level of them were 196.39% and 191.10% respectively, which indicate the little range during the period under study. Actually, the public bank had the favorable position than that of the private bank during the period under study.

7.2 Testing of Hypotheses

For Testing Hypotheses, the calculation of Multiple Correlation, Multiple Regression and ANOVA Test of the selected Public and Private Banks in Bangladesh during the period of study is shown below:

7.2.1 Testing of Hypotheses of the Public Bank

Table No. 6
Multiple Correlations

	Y	*X1*	*X2*	*X3*	*X4*	*X5*	*X6*	*X7*	*x8*	*x9*	*x10*	*x11*
Y	1											
X1	0.899	1										
X1	0.965	0.907	1									
X3	0.944	0.911	0.989	1								
X4	0.910	0.862	0.952	0.932	1							
X5	0.760	0.704	0.865	0.881	0.832	1						
X6	0.946	0.872	0.973	0.979	0.925	0.904	1					
X7	0.822	0.777	0.900	0.928	0.861	0.950	0.963	1				
X8	-0.455	-0.435	-0.573	-0.567	-0.403	-0.564	-0.532	-0.551	1			
X9	-0.905	-0.818	-0.881	-0.854	-0.833	-0.679	-0.805	-0.655	0.303	1		
X10	0.944	0.913	0.989	1.000	0.932	0.880	0.979	0.927	-0.57	-0.854	1	
X11	0.947	0.913	0.992	0.998	0.952	0.880	0.979	0.924	-0.54	-0.859	0.998	1

Source: Exhibit No. 1

This table shows the significant positive correlation in between net profit, total equity, total deposits, loan & advance, total investment, total assets, total income, total expenditure, total manpower, total branch, net worth and capital employed of the Public Bank during the period of study at 5 % level of significance. Net profit position of the bank is directly dependent on x1, x2 ----- x11 which implies the correlation matrix.

Table No. 7
Multiple Regressions: Summary Output of Regression Statistics

Multiple R	0.988
R Square	0.976
Adjusted R Square	0.948
Standard Error	376.523
Observations	12

ANOVA

Variations	*df*	*SS*	*MS*	*F*	*Significance F*
Regression	6	29644828	4940804.666	34.850	0.00063
Residual	5	708849.914	141769.9828		
Total	11	30353677.91			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*
Intercept	-2854.583	1799.385	-1.586	0.174	-7480.043	1770.877
X Variable 1	0.181	0.684	0.265	0.802	-1.578	1.940
X Variable 2	0.053	0.024	2.177	0.081	-0.010	0.115
X Variable 3	-0.037	0.032	-1.157	0.300	-0.118	0.045
X Variable 4	-0.027	0.062	-0.437	0.680	-0.188	0.133
X Variable 5	-0.176	0.077	-2.274	0.072	-0.374	0.023
X Variable 6	0.403	0.182	2.214	0.078	-0.065	0.871

Source: Exhibit No. 1

This table shows the multiple regression of net profit with other selected variables i.e., total equity, total deposits, loan & advance, total investment, total assets, total manpower & total branch. From this table, it is predicted that value of Multiple R, R Square & Adjusted R^2, Standard Error, Observations i.e., 0.988, 0.976, 0.948, 376.523 & 12 indicate the high dependence with each other of the Public Bank during the period of study. As F value is greater than the value of Significance F i.e., 34.850 > 0.00063, it implies the significant variation for the same.

7.2.2 Testing of Hypotheses of the Private Bank

Table No. 8
Multiple Correlations

	Y	*X1*	*X2*	*X3*	*X4*	*X5*	*X6*	*X7*	*x8*	*x9*	*x10*	*x11*
Y	1											
X1	0.939	1										
X1	0.947	0.931	1									
X3	-0.193	-0.173	-0.042	1								
X4	0.355	0.333	0.492	0.807	1							
X5	-0.128	-0.120	0.051	0.982	0.847	1						
X6	0.973	0.942	0.991	-0.083	0.474	0.003	1					
X7	0.904	0.901	0.984	0.021	0.559	0.120	0.978	1				
X8	0.834	0.719	0.655	-0.508	-0.058	-0.454	0.723	0.589	1			
X9	0.862	0.911	0.854	-0.085	0.440	-0.066	0.883	0.862	0.571	1		
X10	-0.084	-0.057	0.068	0.993	0.858	0.981	0.028	0.128	-0.429	0.022	1	
X11	-0.009	0.010	0.143	0.981	0.900	0.978	0.106	0.206	-0.373	0.095	0.996	1

Source: Exhibit No. 2

This table shows the significant positive correlation in between net profit, total equity, total deposits, loan & advance, total investment, total assets, total income, total expenditure, total manpower, total branch, net worth and capital employed of the Private Bank during the period of study at 5 % level of significance. Net profit position of bank is directly dependent on x1, x2 ----- x11 which implies the correlation matrix.

Table No. 9

Multiple Regressions: Summary Output of Regression Statistics

Multiple R	0.989
R Square	0.979
Adjusted R Square	0.954
Standard Error	100.231
Observations	12

ANOVA

Variations	***df***	***SS***	***MS***	***F***	***Significance F***
Regression	6	2344425.83	390737.638	38.894	0.00048
Residual	5	50231.05	10046.210		
Total	11	2394656.88			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*
Intercept	-159.943	266.590	-0.600	0.575	-845.233	525.347
X Variable 1	-0.090	0.244	-0.367	0.729	-0.717	0.538
X Variable 2	-0.055	0.050	-1.098	0.322	-0.182	0.073
X Variable 3	0.068	0.057	1.192	0.287	-0.079	0.214
X Variable 4	-0.173	0.188	-0.917	0.401	-0.656	0.311
X Variable 5	-0.030	0.035	-0.850	0.434	-0.120	0.060
X Variable 6	0.949	0.364	2.611	0.048	0.015	1.884

Source: Exhibit No. 2

This table shows the multiple regression of net profit with other selected variables i.e., total equity, total deposits, loan & advance, total investment, total assets, total manpower & total branch. From this table, it is predicted that value of Multiple R, R Square & Adjusted R^2, Standard Error, Observations i.e., 0.989, 0.979, 0.954, 100.231 & 12 indicate the high dependence with each other of the bank during the period of study. As F value is greater than the value of Significance F i.e., 38.894 > 0.00048, it implies the significant variation for the same.

8. Findings of the Study

The giant existence of the public banking is still going on although the average growth rate of number of branches of the private banking is higher than that of the public banking. The common people throughout the country have easier entrance to the public banking than that of the private banking. There is more reflection of societal banking in the public sector than that of the private sector. On the other hand, private banking is better in the areas of customer services, capital adequacy, quality of assets etc. than that of public banking.

The profitability performance of the public and private banking in Bangladesh is not satisfactory although the profitability of the private banking in most of the cases shows upward trends. The trends of profitability of the public banking in context of total income to total deposits, advances & investment are downward and total income to total assets & equity are upward. On the other hand, the profitability of the private banking in all respects is at upward trends. In overall consideration, it can be said that the private banking was in more favorable position in the area of profitability than that of the public banking during the period under study.

9. Conclusions

Bangladesh is going to be a middle income country soon. She wants to ensure sustainable development of all sectors of the country. But sustainable development of a country is quite impossible in the absence of adequate financial infrastructure of that country. Financial infrastructure comprises of a wide variety of financial institutions. Banks are the most important of all the financial institutions in the modern economy. They work as a catalyst to the economic growth of a country. Commercial banks remain at the center point of all the banks and are considered to be the heart of the financial structure. Both the public and the private banks are integral parts of the commercial banking system in Bangladesh. To run a bank effectively, profitability is urgently needed to have due consideration. It plays the central role in smooth functioning of both the public and the private sector banking. It also occupies an important place in all the development efforts of a country. Thus, profitability always stays at the center point of all the banking activities in particular and the overall economic development of a country as a whole. The study shows that public banks are operating on financial and social profit considerations in context of the overall socio-economic situation prevailing in the country, whereas the private banks' main objective is to maximize financial profits for the private owners of the banks.

10. Recommendations

The profitability of the public and the private sector banking in Bangladesh was not satisfactory although the private banking had the increasing trend for profitability during the period under study. At present, profitability is the most important question for survival of any bank. Hence, the public banking should immediately control the declining trend of profitability. It is shown in the study that the public banking needs to improve managerial efficiency and customer services along with maintaining the present trends of societal banking for being profitable in the competitive world. The private banking needs to ensure societal banking, like expansion of the branches to rural areas, priority sector services, reduction of regional disparity etc., side of side of sustaining the present trends of profitability and customer services in consideration of socio-economic condition of the common people in Bangladesh. To maximize profitability, an adequate and well planned cost accounting system should be established in all areas particularly in the areas of fund management, cost management, overall management of the banks, which should calculate the actual costs of the banking services and the reasonable prices for those services. Periodical cost-benefit analysis should be ensured. It is necessary to keep in mind that the banking services can be provided at a minimum cost but not at a price below the cost. Moreover, bank management in Bangladesh needs to address some vital national and international problems such as, nepotism, corruption, default culture, money laundering etc. because of their increase over the time and the global nature of the problem.

References

Agarwal, P. (2019). Profitability of Indian Public and Private Sector Banks: A Comparative Study. IJRAR, 6(1), 919-927.

Agrawal, R. B. L. (1991). Social Banking and Bank Profitability. Jaipur: Arihant Publishers.

Alam, H. M., Raza, A. & Akram, M. (2011). A Financial Performance Comparison of Public vs Private Banks: The Case of Commercial Banking Sector of Pakistan. *International Journal of Business and Social Science*, 2(11): 56-64.

Azhagaiah, R. (2012). Financial Performance of Private Sector and Public Sector Banks in India: An empirical Analysis. International Center for Business Research, pp. 19-29.

Amandeep (1993). Profits and Profitability in Commercial Banks. New Delhi: Deep & Deep Publications.

Bahar, Habibullah (1989). An Evaluation of Banks in Bangladesh: The Exploratory Approach. *Bank Parikrama*, XIV (3 & 4): 89-90.

Balaji, C. and Kumar, G.P. (2016). A Comparative Study on Financial Performance of Selected Public & Private Sector Banks in India. Journal of Commerce and Trade, XI (2), 89-96.

Bhattacharjee, Durga Das and Saha, Saroj Kumar (1989). An Evaluation of Performance of NCBs in Bangladesh. *Bank Parikrama,* 14 (1 & 2): 1-5.

Bhattacharya, D. and Rao, S. R. Suba (1988). Branch Banking and Profitability. *The Banker* (India), 35 (3): 11-15.

Bayes, Abdul (1987). Bangladesh Banking: Growth, Structure and Performance". *Bank Parikrama,* XII (2)

Chopra, Kiron (1987). Managing Profits, Profitability and Productivity in Public Sector Banking. Jalandhar: ABC Publications.

Goel, C., & Rekhi, C. B. (2013). A comparative study on the performance of selected public sector and private sector banks in India. Journal of business management & Social sciences research, 2(7), 46-56. Harnet, Donald L. and Murphy, James L. (1999). Introductory Statistical Analysis. London: Addison-Wesley Publishing Company.

Hassan, Kamrul & Islam, M. Rafiqul (2006). Financial Sector Reform and Competition in Banking Sector in Bangladesh: A Preliminary Assessment. *Journal of Business Administration*, 32 (3 & 4): 84.

Kajal, C., & Monika, S. (2011). Performance of Indian Public Sector Banks and Private Sector Banks: A Comparative Study, *International Journal of Innovation, Management and Technology*, 2 (3): 249-256.

Khan, M. M. (1989). Advanced Accounting, Dhaka: Ideal Library. Vol. 2, pp. 18-45 Kothari, C. R. (2004). Research Methodology: Methods &, Techniques. New Delhi: Vishwa Prakashan, p. 164.

Lester, James D. (1967). Writing Research Paper-A Complete Guide, Illinois: Scott, Foresman and Company, pp. 39-42.

Malek, Moniruzzaman (2005). A Comparative Analysis of Commercial Banking Performance in Bangladesh. *The Cost & Management*, Journal of ICMAB, Pp. 29-33

Mathur, R. (2022). Profitability and Efficiency of Indian Banking (A Comparative Study of Selected Public and Private Sector Banks). SAMVAD, 23, 23-36.

Mohan, Iqbal Kabir (1999), Modern Banking, Dhaka: Sowrab Prokashoni.

Mohanty, S. (2021). A Comparative Financial Performance of Selected Public and Private Sector Banks in India. Parikalpana: KIIT Journal of Management, 17(2), 155-174.

Moniruzzaman, M. and Rahman, Md. Saydur (1990 & 1991). Profitability Performance of Denationalized Banks-A Comparative Study of Pre and Post Denationalization Periods. *Bank Parikrama*, Vol. XV & XVI, pp. 85-97

Patel, J., & Bhanushali, K. (2017). Comparative Study of Profitability of Nationalized Banks And Private Sector Banks. Rising Journal of Research, 1(1).

Patra, B., Padhan, P. C., & Padhi, P. (2023). Efficiency of Indian Banks–private versus public sector banks: A two-stage analysis. Cogent Economics & Finance, 11(1)

Rai, N. K. (2020). A Comparative Study of the Selected Top Indian Public and Private Banks. International Journal of Management (IJM), 11(10).

Raquib, Abdur (1993). A Decade of Private Banking in Bangladesh. *Bank Parikrama, Vol. XVIII (*1 and 2): 8.

Saini, N. (2014). Measuring the Profitability and Productivity of Banking Industry: A Case Study of Selected Commercial Banks in India. *Prestige International Journal of Management & IT- Sanchayan*, 39 (1): 53-61.

Savita Lathwal (2024). A Comparative Analysis of Profitability of Selected Public and Private Banks in India, Journal of Research in Business and Management Volume 12 ~ Issue 2 (2024) pp: 172-176

Sheela, P., &Bastray, T. (2015). Asset-Liability-Management–A comparative study of a public and private sector bank. IRJBM– (www. irjbm. org) Volume No–VIII.

Soneja (1985). Profitability of Banks. *The Banker*, XXXI (II): 41-55.

Spiegel, Murray R. (1998). Theory and Problems of Statistics, London: McGraw-Hill Book Company, p. 91

Taqi, M and Mustafa, M.S.M. (2018). Financial Analysis of Public and Private Sector Banks of India: A Comparative Study of Punjab National Bank and HDFC Bank. International Academic Journal of Business Management, 5(1), 26-47.

Tandon, D., Chaturvedi, A., & Vidyarthi, H. (2017). Non-performing Assets and Profitability of Indian Banks: An Econometric Study. International Journal of Business Competition and Growth, 6(1), 60-76.

Taneja, Pawan Kumar and Taneja, Shallini S. (2007). Banking Sector Reforms and Technical Efficiency of Public Sector Banks in India: Lesson to SAARC Nations. *Proceedings of 9th South Asian Management Forum*, AMDISA, Dhaka, Bangladesh, pp. 358-365.

Verna, H. L. and Malhotra,H. K. Malhotra (1993). Fund Management in Commercial Banks, New Delhi: Deep and Deep Publications, pp. 197-209.

Zikmund, William G. (2000), Business Research methods, Orlando: The Dryden Press, p. 373

GOB, "The Bangladesh Bank (Administration of Financial Institutions) Order, 1972", *The Bangladesh Gazette Extra Ordinary,* January 7, 1972.

GOB, "The Bangladesh Banks (Nationalization) Order, 1972", *The Bangladesh Gazette Extraordinary,* March 26, 1972.

GOB, *Resume of the Activities of Banks and Financial Institutions in Bangladesh up to 20*23.

Selected Public and Private Banks, *Annual Reports* up to 2023

APPENDICES

Exhibit No. 1

Consolidated Information of the Public Bank during the Study period

(Taka in Million)

Year	Net Profit/ Loss	Total Equity	Total Deposit	Loan & Adv.	Invest ment	Total Assets	Total Income	Total Exp.	Total Man power	Total Br.	Net Worth	Capital Emp loyed
	Y	**x1**	**x2**	**x3**	**x4**	**x5**	**x6**	**x7**	**x8**	**x9**	**x10**	**x11**
1st	11.10	2729.00	75704.20	48754.60	15979.00	10707.90	5359.50	5348.40	17351	897	51483.60	67462.60
2nd	20.40	2737.30	87031.70	52946.10	19058.00	13133.00	6576.70	6556.30	17113	897	55683.40	74741.40
3rd	27.50	3117.20	88489.00	57329.90	18065.00	14580.50	7304.00	7276.50	17451	897	60447.10	78512.10
4th	10.30	3125.30	92479.00	73409.90	19223.00	16214.70	8112.50	8102.20	17138	898	76535.20	95758.20
5th	11.20	3127.00	104678.00	80952.90	20368.00	18402.80	9207.00	9195.80	16947	898	84079.90	104447.90
6th	666.00	3133.00	124122.00	89862.00	20455.00	19360.00	10013.00	9347.00	12692	900	92995.00	113450.00
7th	1239.80	3153.00	138893.00	99748.70	29719.00	20740.20	10990.00	9750.20	16330	871	102901.70	132620.70
8th	2120.90	3168.37	138597.00	101461.90	22822.00	20915.90	11518.40	9397.50	15989	847	104630.27	127452.27
9th	2312.90	3887.00	151035.00	107786.00	28375.00	19556.10	10934.50	8621.60	15705	847	111673.00	140048.00
10th	3301.00	3890.00	168895.00	123546.00	29168.00	18866.00	13148.00	9847.00	15321	847	127436.00	156604.00
11th	3602.00	3987.00	172603.00	132564.00	30125.00	19542.00	14547.00	10945.00	15406	849	136551.00	166676.00
12th	4642.00	3992.00	192603.00	142564.00	35120.00	25542.00	17547.00	12905.00	15297	849	146556.00	181676.00

Source: Annual Reports of Public Bank and Resumes during the period of Study

Exhibit No. 2

Consolidated Information of the Private Bank during the Study period

(Taka in Million)

Year	Net Profit/ Loss	Total Equity	Total Deposit	Loan & Adv.	Invest ment	Total Assets	Total Income	Total Exp.	Total Man power	Total Br.	Net Worth	Capital Emp loyed
	Y	**x1**	**x2**	**x3**	**x4**	**x5**	**x6**	**x7**	**x8**	**x9**	**x10**	**x11**
1st	179.89	319.40	10286.00	7215.25	834.13	9685.76	792.75	612.86	1721	76	7534.65	8368.78
2nd	176.40	423.12	10377.00	7856.56	882.25	10556.67	918.74	742.34	1714	76	8279.68	9161.93
3rd	123.58	423.12	10510.00	8564.98	995.16	12545.26	999.41	875.83	1811	76	8988.10	9983.26
4th	144.30	423.12	12544.00	8935.54	1492.80	15468.45	1179.30	1035.00	1724	76	9358.66	10851.46
5th	188.30	423.12	13804.00	9964.54	1614.36	17209.10	1356.50	1168.20	1674	76	10387.66	12002.02
6th	407.39	423.12	17184.00	12729.22	1977.95	20726.40	1749.07	1341.68	1688	76	13152.34	15130.29
7th	551.23	784.00	19684.00	13884.90	2511.40	24481.60	2120.89	1569.66	1751	76	14668.90	17180.30
8th	675.87	827.00	20047.00	14778.55	3379.26	23698.56	2475.04	1799.17	1692	77	15605.55	18984.81
9th	922.05	1417.00	22237.00	17027.82	3161.38	26375.56	2707.84	1785.79	1803	77	18444.82	21606.20
10th	981.08	1425.00	23773.00	4492.07	1290.28	7512.40	2875.87	1894.79	1893	77	5917.07	7207.35
11th	995.00	1430.00	24136.00	4652.00	1302.00	8014.00	2993.00	1998.00	1895	77	6082.00	7384.00
12th	1595.00	1530.00	26636.00	4982.00	1862.00	9014.00	3693.00	2098.00	2285	77	6512.00	8374.00

Source: Annual Reports of the Private Bank Ltd. and Resumes during the period of Study