

Comparative Analysis of Financial Performances of State-owned and Private commercial banks in Bangladesh

Md. Rouf Biswas

Senior Lecturer in Accounting, Department of Business Administration, North Western University, 236, M. A Bari Road, Sonadanga, Khulna, Bangladesh.

Abstract:

Today, banking system in Bangladesh is consistent with modern banking rules and free market conditions. Since foreign participation in the banking sector contributes to the rivalry for innovations and introductions of new bank products in the market. I have focused the basic differences between state-owned bank and private commercial bank into this article. This paper analyzed the financial performance of private commercial banking sector and state-owned banking sector in Bangladesh for the period of 5 years from 2011 to 2015. I used Liquidity Ratios like current ratio and the quick ratio, Assets Quality, Loan Quality Ratio and Profitability ratios along the following dimensions; Return on Assets (ROA), Return on Equity (ROE) and Net Interest Margin (NIM).

Key words: Bank, Financial Performance, Private Commercial, Ratio, State-owned.

Introduction:

The study on this topic has undertaken since currently banking sector is playing vital role in the economic development of Bangladesh. Comparative study has been taken to show the financial performances of the state-owned and private commercial bank to focus which types of bank are showing better performance. We have selected this topic since performance measurement of banking sectors more essential to the general people as well as government. There are many study has been taken like this we have tried to focus the innovation by formulating the different types of hypotheses. Johan and Hui (2012) compared the financial performance of different ownership structured commercial banks in Nepal based on their financial characteristics by taking CAMEL model into consideration. They analyzed eighteen commercial banks for the 2005-2010 periods. The results have shown that public sector banks are significantly less efficient than their counterparts. This study also revealed that return on assets is significantly influenced by capital adequacy ratio, interest expenses to total loan and net interest margin while capital adequacy ratio has considerable effect on return on equity. Performance evaluation is the important approach for enterprises to give incentive and restraint to their operators and it is an important channel for enterprise stakeholders to get the performance information (Sun, 2011).

Alam, Raza&Akram (2011) compared performances of state and domestic banks operating in Pakistan between the years 2006-2009 with the help of financial ratios. The result of analysis showed that domestic banks have a larger size of assets than state banks. Additionally, it is concluded that state banks have a better performance in terms of profitability and liquidity than domestic banks.

Competition in Banking is desirable because of its effects on market performance and allocation of scarce resources in the desired direction. Competition in banking appears primarily as rivalry with other banks and financial institutions and in concern over profits, market shares and growth. The extent of competition in respect of shares in total bank deposits and bank advances of various groups of banks.

Ally (2013) analyzed the financial performance of commercial banking sector in Tanzania for the period of 2006 to 2012 by using analysis of variance (ANOVA) to test the significant mean differences of profitability among peer bank groups. This study shows that there are significant differences among bank groups in terms of ROE and NIM, but not in terms of ROA.

Bakar and Tahir (2009) in their paper used multiple linear regression technique and simulated neural network techniques for predicting bank performance. ROA was used as dependent variable of bank performance and seven variables including liquidity, credit risk, cost to income ratio, size and concentration ratio, were used as independent variables. They concluded that neural network method outperforms the multiple linear regression method however it needs clarification on the factor used and they noted that multiple linear regressions, notwithstanding its limitations, can be used as a simple tool to study the linear relationship between the dependent variable and independent variables.

Aburime, (2009) said that a lucrative and profitable commercial banking sector is capable to tolerate the adverse distress and adds the strength and power in the economic system. It is obvious that a sound and profitable banking sector is able to withstand negative shocks and contribute to the stability of the financial system (Athanasoglou et al. 2005.)

The financial environment of any economy consists of typically five components namely: money, financial instruments, financial institutions, rules and regulations and financial markets. Among the various financial institutions, banks are a fundamental component and the most active players in the financial system (Dhanabhakya&Kavitha, 2012). Financial measures such as return on assets (ROA), interest margins (IM), and capital adequacy (CA) has positive relation with customer service quality (Elizabeth & Elliot 2004). The banking sector of Bangladesh compared to its economic size is moderately bigger than many other economies of equal level of development and per capita income (Nguyen, Islam & Ali, 2011).

There are two broad approaches used to measure bank performance, the accounting approach, which makes use of financial ratios and econometric techniques. Traditionally accounting methods primarily based on the use of financial ratios have been employed for assessing bank performance (Ncube, 2009). The increasing competition in the national and international banking markets, the change over towards monetary unions and the new technological innovations herald major changes in banking environment, and challenge all banks to make timely preparations in order to enter into new competitive financial environment (Velnampy, 2008). B. Satish Kumar (2008), in his article on an evaluation of the financial performance of Indian private sector banks wrote Private sector banks play an important role in development of Indian economy. After liberalization the banking industry underwent major changes. The economic reforms totally have changed the banking sector. RBI permitted new banks to be started

in the private sector as per the recommendation of Narashiman committee. The Indian banking industry was dominated by public sector banks. But now the situations have changed new generation banks with used of technology and professional management has gained a reasonable position in the banking industry.

Aswini et, al., (2013) done a study in the field of banking, objectives of the study was to analyze the soundness and to measure the efficiency of public and private sector banks based on market gap. Capital adequacy, Assets quality, Management soundness, Earnings and Liquidity - CAMEL rating system was used in this study. They found that private banks were at the top of the list with their performance in terms of soundness. Public sector banks such as Union Bank and SBI had taken backseat of the list and shown low economic soundness than private banks. Kajal and Monika (2011) did a study to analyze how efficiently Public and Private sector banks have been managing non-performing asset (NPA). This study had become mandatory to study to make a comparative analysis of services of both Private and Public sector banks. Due to the increased competition, new information technologies thereby declining processing cost, the erosion of product and geographic boundaries and less restrictive governmental regulations, Public sector banks of India to forcefully compete with Private and Foreign banks.

In the analysis regarding financial performance of State Bank of India for the year 2000-2012 based on parameters of different ratios like Capital Adequacy Ratios, Asset Quality Ratios, Capability Ratios, Profitability Ratios and Liquidity Ratios, the researcher has investigated that the bank's financial performance has been almost progressive over the operational periods considered for the study. The study emphasized on relevant areas where the bank has to concentrate on improving its financial performance (Aravind&Nagamani, 2013). The study of Olweny and Shiphoo (2011) in Kenya focused on sector-specific factors that affect the performance of commercial banks. Yet, the effect of macroeconomic variables was not included.

Moreover, to the researcher's knowledge the important element, the moderating role of ownership identity on the performance of commercial banks in Kenya was not studied. Thus, this study was conducted with the intention of filling this gap. Yap, Munuswamy and Mohamed (2012), ratio analysis is simply a postmortem analysis of past financial data, an effort has been made to know whether and to what extent different ratio affects profitability and productivity of the selected banks through correlation analysis, followed by regression analysis comparing performances of different selected private sector banks and a forecast of the future trend is also deduced.

The major objective of this study is to analyze financial performance of State-owned and Private commercial banks in Bangladesh. The following are the sub objectives,

- I. To show the differences between state-owned and private sector banks.
- II. To compare overall financial performance of state-owned and private banks in Bangladesh.
- III. To find out the mean difference between the levels of profitability of state-owned and private banks in Bangladesh.
- IV. To find out the mean difference between the levels of liquidity of state-owned and private banks in Bangladesh.

Methodology of the Study

This paper uses a descriptive financial ratio analysis to measure, describe and analyse the performance of state-owned and private commercial banks in Bangladesh during the period 2010-2015. Data has been collected from secondary sources such as the annual reports of state-owned and private commercial during the period 2011-2015

Sample selection, measurement of variables:

To prepare this article, at first we have selected 04 (four) banks (02 private commercial banks and 02 state-owned banks) randomly. Average of five years ratios is calculated to compare the financial performance of state-owned banks with private banks which were working in Bangladesh during the period of 2011-2015. I have also collected data from 100 customers to take their opinion regarding various financial services provided by private commercial banks and State-owned banks.

Theoretical and Conceptual Framework:

State-owned Bank:

State-owned banks are banks that are owned by the government in which they operate. Banks in many developing or transitioning countries are state-owned banks. Because of the absence of profit motives there is little incentive for them to allocate their capital to the most productive sources. The primary loan customer of state-owned banks is often the government which doesn't always use the funds wisely. (<https://www.subjectmoney.com/definitiondisplay.php?word=State-Owned%20Banks>).

State-owned banks are functioning as nationalist. Among the state owned banks, six are commercial and two are specialized. Here is the list of the state-owned banks in Bangladesh:

State-owned Commercial Banks

(1) Sonali Bank Limited (2) Janata Bank Limited (3) Agrani Bank Limited (4) Rupali Bank Limited (5) BASIC Bank Limited (6) Bangladesh Development Bank Limited

State-owned Specialized Banks

(1) Rajshahi Krishi Unnoyon Bank (RKUB) (2) Bangladesh Krishi Bank Limited

Private Commercial Bank:

A commercial bank is a financial institution that provides services, such as accepting deposits, giving business loans and auto loans, mortgage lending, and basic investment products like savings accounts and certificates of deposit. The traditional commercial bank is a brick and mortar institution with tellers, safe deposit boxes, vaults and ATMs. However, some commercial banks do not have any physical branches and require consumers to complete all transactions by phone or Internet. In exchange, they generally pay higher interest rates on investments and deposits, and charge lower fees. (<http://www.investopedia.com/terms/c/commercialbank.asp>).

Private banks are the highest growth sector due to the dismal performances of government banks (above). They tend to offer better service and products. Here is the list of private commercial in Bangladesh:

(1) Southeast Bank Limited (2) Meghna Bank Limited-Official website (3) Bangladesh Commerce Bank Limited (4) Bank Asia Limited (5) AB Bank Limited (6) Dhaka Bank Limited (7) Dutch Bangla Bank Limited (8) Eastern Bank Limited (9) IFIC Bank Limited (10) Jamuna Bank Limited (11) Mercantile Bank Limited (12) Midland Bank Limited (13) Modhumoti Bank Limited (14) Mutual Trust Bank Limited (15) National Bank Limited (16) NCC Bank Limited (17) NRB Bank Limited (18) NRB Commercial Bank Limited (19) NRB Global Bank Limited (20) One Bank Limited (21) Prime Bank Limited (22) Pubali Bank Limited (23) South Bangla Agriculture and Commerce Bank Limited (24) BRAC Bank Limited (25) Standard Bank Limited (26) The City Bank Limited (27) The Farmers Bank Limited (28) The Premier Bank Limited (29) Trust Bank Bangladesh Limited (30) United Commercial Bank Limited (31) Uttara Bank Limited.

There are eight private Islamic Commercial Banks in Bangladesh:

(1) Islami Bank Bangladesh Limited (2) Al-Arafah Islami Bank Limited (3) Export Import Bank of Bangladesh Limited (4) Social Islami Bank Limited (5) Shahjalal Islami Bank Limited (6) First Security Islami Bank Limited (7) Union Bank Limited (8) ICB Islamic Bank Limited.

Differences between State-owned Bank and Private Commercial Banks:

State-owned banks are those where majority of the stake in the bank is held by government.

In private commercial bank majority is held by shareholders of the bank.

Interest rates offered by state-owned banks are slightly higher whereas private commercial banks offered interest rates are marginally lower.

Private commercial banks are providing better services so they charge for the extra services provided by them. On the other hand State-owned banks fees and charges are less.

Mostly state-owned sector accounts are opened for government employees for their salaries, fixed deposits, lockers etc where as private commercial sector bank in Bangladesh target company employees for their salary accounts, debit card, credit card and net banking.

In terms of most of the parameters like non performing assets and net interest margins, private sector banks tend to be much better placed. The share prices of these banks are also significantly higher. Another important factor is that in terms of capital adequacy as well, as public sector banks are lagging behind, their private sector banking peers.

The private commercial banks also give advice to their customers on financial matters particularly on investment decision such as expansion, diversification, new ventures, rising of funds etc. whereas customers of state-owned banks do not get these types of services normally.

State-owned bank has a greater share of government (more than 50%) so that the main motto of social welfare other than maximizing profit remains.

Where as private sector banks are those banks where the management is controlled by private individuals and government does not have any say in the management of these banks. Maximizing profit is the basic motto.

Analysis and Discussions:

The analysis and discussion of the study are described under the following heads;

- (i) Liquidity Analysis (ii) Profitability Analysis (iii) Asset Quality Analysis and (iv) Loan Quality Analysis.

Liquidity Analysis:

Banks Liquidity refers to a bank's ability to pay short-term obligations; the term also refers to its capability to sell assets quickly to raise cash.

Liquidity ratios measure the availability of cash to pay debt.

Current Ratio (Working Capital Ratio):

The current ratio measures a company's ability to pay off its current liabilities (payable within one year) with its current assets such as cash, accounts receivable and inventories. The higher the ratio, the better the company's liquidity position.

Table 01: Current ratio during the year 2011 to 2015

State-Owned Banks								
Banks	2011	2012	2013	2014	2015	Mean	Standard Deviation	Coefficient of Variation (CV)
Janata Bank Limited	1.11	1.11	1.09	1.11	1.13	1.11	0.04	3.60%
Sonali Bank Limited	1.07	1.20	1.19	0.98	0.99	1.09	0.098	8.99%
Average						1.10	0.069	6.29%
Private Commercial Banks								
Banks	2011	2012	2013	2014	2015	Mean	Standard Deviation	Coefficient of Variation (CV)
National Bank Limited	1.22	1.22	1.17	1.18	1.22	1.20	0.07	5.83%
Trust Bank Limited	5.63	7.80	13.68	2.54	1.09	6.15	4.42	71.87%
Average						3.68	2.25	38.85%

: Published Financial Statements

From the above table we can observe that current ratio of private commercial banks is more significant than the state-owned banks. Mean value of current ratio of private commercial banks is higher during these five years. It indicates that private commercial banks are maintaining better liquidity position than the state-owned bank. For this depositors will want to deposit their money into the private commercial banks for their safe and security. Although the mean value of state-owned bank is lower than the private commercial yet standard deviation of current ration of state-owned bank is lower than the private commercial bank. Coefficient of variation is shown higher by the private commercial bank.

Quick Ratio:

The quick ratio is a measure of short-term solvency of a business. It is said to be an improved version of current ratio in many aspects. A quick ratio of 1:1 is considered good because the assets included in the calculation of quick ratio are cream assets easily converted into cash without shrinkage in value.

State-Owned Banks								
Banks	2011	2012	2013	2014	2015	Mean	Standard Deviation	Coefficient of Variation (CV)
Janata Bank Limited	0.40	0.38	0.50	0.49	0.51	0.54	0.10	18.52%
Sonali Bank Limited	0.42	0.58	0.69	0.55	0.59	0.57	0.09	15.79%
Average						0.55	0.095	17.15%
Private Commercial Banks								
Banks	2011	2012	2013	2014	2015	Mean	Standard Deviation	Coefficient of Variation (CV)
National Bank Limited	0.35	0.39	0.39	0.36	0.39	0.38	0.02	5.26%
Trust Bank Limited	0.04	0.11	13.57	2.53	0.27	3.3	4.49	136.06%
Average						1.84	2.25	70.66%

: Published Financial Statements

Quick ratio of private commercial banks is not more significant than the state-owned banks since variation of mean value is happening in the private commercial banks. During 2013 and 2014 private commercial banks have shown the higher mean value but remaining three years they have shown lower mean value on the other hand state-owned bank has shown the stability of mean value of quick ratio.

Profitability Analysis:

Profitability is the ability of a business to earn a profit. A profit is what is left of the revenue a business generates after it pays all expenses directly related to the generation of the revenue, such as producing a product, and other expenses related to the conduct of the business activities.

Profitability analysis is a component of enterprise resource planning (ERP) that allows administrators to forecast the profitability of a proposal or optimize the profitability of an existing project. Profitability analysis can anticipate sales and profit potential specific to aspects of the market such as customer age groups, geographic regions, or product types.

For the present study the following accounting ratios are calculated for the purpose of profitability analysis.

Return on Assets (ROA):

Return on assets (ROA) is an indicator by which we can get an idea as to how efficient management is at using its assets to generate earnings. ROA has displayed as a percentage.

State-Owned Banks								
Banks	2011	2012	2013	2014	2015	Mean	Standard Deviation	Coefficient of Variation (CV)
Janata Bank Limited	0.95%	(2.98%)	1.64%	0.61%	0.68%	0.18%	1.48%	822.22%
Sonali Bank Limited	1.44%	(4.18%)	0.40%	0.64%	0.05%	(0.33%)	1.98%	(600%)
Average						(0.075)	1.73%	111.11%
Private Commercial Banks								
Banks	2011	2012	2013	2014	2015	Mean	Standard Deviation	Coefficient of Variation (CV)
National Bank Limited	0.80%	0.87%	0.89%	1.04%	1.37%	0.99%	0.185%	18.69%
Trust Bank Limited	7.06%	0.99%	0.22%	0.88%	0.85%	2.00%	1.59%	79.50%
Average						1.49%	0.89%	49.09%

Source: Published Financial Statements

From the above table we can observe that return on assets of private commercial banks is more significant than the state -owned banks. Mean value of return on assets of private commercial banks is higher during these five years. It indicates that private commercial banks are maintaining better assets management than the state-owned bank. For this depositors will want to deposit their money into the private commercial banks for their safe and security. Coefficient of variation is shown higher by the state -owned banks it indicates that the variation of return on assets of the state -owned banks is not significant than the private commercial banks.

Return on Equity (ROE):

Return on equity (ROE) is the amount of net income returned as a percentage of shareholders equity. Return on equity indicates how much profit a company generates with the money which has invested by the shareholders.

ROE has displayed as a percentage.

State-Owned Banks								
Banks	2011	2012	2013	2014	2015	Mean	Standard Deviation	Coefficient of Variation (CV)
Janata Bank Limited	14.06%	(90.77%)	25.96%	9.71%	11.17%	(5.97%)	42.78%	(716.58%)
Sonali Bank Limited	17.79%	(140.86%)	6.91%	10.07%	0.94%	(21.03%)	60.16%	(286.06%)
Average						(13.5%)	51.47%	(501.32%)
Private Commercial Banks								
Banks	2011	2012	2013	2014	2015	Mean	Standard Deviation	Coefficient of Variation (CV)
National Bank Limited	6.23%	6.95%	8.76%	9.99%	11.61%	8.71%	1.96%	22.50%
Trust Bank Limited	9.51%	13.90%	3.81%	15.34%	15.64%	11.64%	4.49%	38.57%
Average						10.18%	3.22%	30.54%

Source: Published Financial Statements

Return on equity of private commercial banks is more significant than the state -owned banks. Mean value of return on equity of state -owned banks is negative where as mean value of return on equity of

private commercial banks is shown positive. Private commercial banks are earning on their owner’s investment and the owners of these banks are taking dividend from the bank but the state -owned banks are not earning on government investment and the owner of these banks are not taking dividend from the bank.

Net Interest Margin:

Net interest margin is a performance metric that examines how successful a bank's investment decisions are compared to its debt situations. A negative Net Interest Margin indicates that the bank was unable to make an optimal decision, as interest expenses were higher than the amount of returns produced by loan and investments. It is calculated as:

State-Owned Banks								
Banks	2011	2012	2013	2014	2015	Mean	Standard Deviation	Coefficient of Variation (CV)
Janata Bank Limited	0.02	0.01	0.004	(0.004)	(0.005)	0.005	0.0068	136%
Sonali Bank Limited	0.009	(0.003)	(0.014)	(0.15)	(0.014)	(0.034)	0.0582	(171.17%)
Average						(0.015)	0.0325	(17.85%)
Private Commercial Banks								
Banks	2011	2012	2013	2014	2015	Mean	Standard Deviation	Coefficient of Variation (CV)
National Bank Limited	0.016	0.007	0.014	0.017	0.011	0.013	0.0036	27.69%
Trust Bank Limited	0.15	0.14	(0.0001)	(0.003)	0.02	0.061	0.0688	112.79%
Average						0.037	0.0362	70.24%

Source: Published Financial Statements

Net interest margin of private commercial banks is more significant than the state -owned banks. Standard deviation of net interest margin of state -owned banks is higher where as standard deviation of net interest margin of private commercial banks is lower its indicate that the deviation of net interest margin is low of private commercial banks i.e higher stability is existed.Coefficient of variation (CV) of

net interest margin of state -owned banks is higher where as coefficient of variation (CV) of net interest margin of private commercial banks is lower its indicate that the potential investors will select the private commercial banks to deposit their money.

Asset Quality Analysis:

Asset quality is related to the left-hand side of the bank balance sheet. Bank managers are concerned with the quality of their loans since that provides earnings for the bank. Loan quality and asset quality are two terms with basically the same meaning.

Government bonds and T-bills are considered as good quality loans whereas junk bonds, corporate credits to low credit score firms etc. are bad quality loans. A bad quality loan has a higher probability of becoming a non-performing loan with no return.

State-Owned Banks								
Banks	2011	2012	2013	2014	2015	Mean	Standard Deviation	Coefficient of Variation (CV)
Janata Bank Limited	0.008%	0.006%	0.008%	0.04%	0.06%	0.024%	0.0217%	90.42%
Sonali Bank Limited	1.14%	0.12%	0.46%	1.93%	1.13%	0.956%	0.6257%	65.45%
Average						0.49%	0.3237%	77.94%
Private Commercial Banks								
Banks	2011	2012	2013	2014	2015	Mean	Standard Deviation	Coefficient of Variation (CV)
National Bank Limited	0.06%	0.008%	0.005%	0.002%	0.003%	0.016%	0.0247%	154.38%
Trust Bank Limited	0.06%	0.04%	0.032%	0.025%	0.024%	0.036%	0.0132%	36.67%
Average						0.026%	0.019%	95.53%

Source: Published Financial Statements

From the above table we can observe that assets quality ratio of the state -owned banks is more significant than the private commercial banks. Mean value of assets quality ratio of state -owned banks is higher during these five years. It indicates that state -owned banks are not maintaining better assets management than the private commercial banks. For this depositors will want to deposit their money

into the private commercial banks for their safe and security. Coefficient of variation is shown higher by the state -owned banks it indicates that the variation of asset quality ratio of the state -owned banks is not significant than the private commercial banks.

Loans quality ratio

In this case it is evaluated the weight of total doubtful loans on gross loans. The reserve comprehends the total amount of impaired loans, cumulated year after year.

State-Owned Banks								
Banks	2011	2012	2013	2014	2015	Mean	Standard Deviation	Coefficient of Variation (CV)
Janata Bank Limited	1.14%	8.25%	0.02%	0.97%	0.64%	2.20%	3.047%	138.5%
Sonali Bank Limited	0.13%	9.73%	0.087%	0.03%	2.37%	2.47%	3.7370%	151.30%
Average						2.33%	3.39%	145%
Private Commercial Banks								
Banks	2011	2012	2013	2014	2015	Mean	Standard Deviation	Coefficient of Variation (CV)
National Bank Limited	0.06%	0.02%	0.04%	0.21%	0.84%	0.234%	0.3103	132.61%
Trust Bank Limited	1.06%	9.04%	6.00%	0.60%	0.75%	3.49%	3.43	98.28%
Average						1.86%	1.87%	115.45%

Source: Published Financial Statements

Loan equity ratio of private commercial banks is more significant than the state -owned banks. Standard deviation of loan equity ratio of state -owned banks is higher where as standard deviation of loan equity ratio of private commercial banks is lower its indicate that the deviation of loan equity ratio is low of private commercial banks i.e reserve for loan is maintained as lower. Coefficient of variation (CV) of loan equity ratio of state -owned banks is higher where as coefficient of variation (CV) of loan equity ratio of private commercial banks is lower its indicate that the potential investors will select the private commercial banks to deposit their money.

Formulation and Testing Hypothesis:

Now I have focused on formulating and testing hypothesis related to financial performances of Private commercial bank and State-owned bank.

Hypothesis:

Ho: Private Commercial Banks are shown better financial performances than State-Owned bank in Bangladesh.

At the time of my study I have mentioned some factors that are related to the financial performances of banks. Here I have shown the positive answers that are provided by the customers regarding the financial services of private commercial banks.

Factors	Observed Frequencies	Expected Frequencies
The Private commercial banks collect deposits from the public in proper way	90	100
Banks encourage saving habit among the public	95	100
Private commercial banks provide higher rate of interest on deposit.	85	100
The Private commercial bank advances loans to the business community and other members of the public.	92	100
Rate of interest and other condition of loan is reasonable	93	100
The bank acts as an agent of its customers like Transfer of Funds, Collection of Cheques, Periodic Payments, Portfolio Management, Periodic Collections, Other Agency Functions	95	100
The bank also performs general utility functions, such as Issue of Drafts, Letter of Credits, etc., Locker Facility, Underwriting of Shares, Dealing in Foreign Exchange, Project Reports, Social Welfare Programmes, Other Utility Functions.	94	100

Sources: Field Survey

For hypothesis testing we have used Chi-Square static. We know,

$$x^2 = \sum \frac{(O - E)^2}{E}$$

Where,

x^2 = Chi-square statistic, O = Observed Frequency and E = Expected Frequency.

Calculation of x^2

Observed Frequencies (O)	Expected Frequencies (E)	(O - E)	(O - E) ²	$\frac{(O - E)^2}{E}$
90	100	-10	100	1
95	100	-5	25	0.25
85	100	-15	225	2.25
92	100	-8	64	0.64
93	100	-7	49	0.49
95	100	-5	25	0.25
94	100	-6	36	0.36
				$\sum \frac{(O - E)^2}{E} = 5.24$

Here,

$$x^2 = 5.24$$

Degree of freedom (df) = k-1, = 7-1 = 6

Where k = number of cells associated with row or column data.

The critical /table value of x^2 for 6 degree of freedom is at 0.05 level of significance is 12.60. Here the calculated value of x^2 is less than the table value so the null hypothesis is accepted and we can conclude that private commercial banks are shown better financial performances than state-owned bank in Bangladesh.

Findings of the Study:

From the above discussion the major findings of the study are given as follows:

- (i) State-owned accounts are opened for government employees for their various job purposes in Bangladesh.
- (ii) Private commercial bank accounts are opened for salary accounts, debit card, credit card and net banking.

- (iii) The private commercial banks gives advice to their customers on financial matters particularly on investment decision such as expansion, diversification, new ventures, rising of funds etc.
- (iv) Main motto of private commercial banks is maximizing profit.
- (v) Average of Current ratio of private commercial banks is higher than the State-Owned banks but they have shown greater variability in the ratio than State-Owned banks.
- (vi) Quick ratio of private commercial bank is not more significant than the state-owned banks since they have shown greater value of coefficient of variation (CV).
- (vii) State-owned banks are showing lower efficient management is at using its assets to generate earnings than the private commercial banks. Average value of return on assets (ROA) has shown negative by the state-owned banks.
- (viii) Return on equity (ROE) of state-owned bank is not significant. Average value of return on equity (ROE) has shown negative by the state-owned banks whereas Average value of return on equity (ROE) has shown positive by the private commercial banks.
- (ix) Average value net interest margin (NIM) by the state-owned banks has shown negative it indicates that the bank was unable to make an optimal decision, as interest expenses were higher than the amount of returns produced by loan and investments on the other hand Average value net interest margin (NIM) by the private commercial banks has shown positive it indicates that the bank was able to make an optimal decision, as interest expenses were lower than the amount of returns produced by loan and investments.
- (x) Assets quality ratio of the state -owned banks is more significant than the private commercial banks. Mean value of assets quality ratio of state -owned banks is higher during these five years. It indicates that state -owned banks are maintaining better assets management than the private commercial banks.
- (xi) Loan equity ratio of private commercial banks is more significant than the state -owned banks. Standard deviation of loan equity ratio of state -owned banks is higher where as standard deviation of loan equity ratio of private commercial banks is lower its indicate that the deviation of loan equity ratio is low of private commercial banks.

Recommendations:

The recommendations are given below considering the context of the findings that are mentioned earlier by the researcher:

- (i) State-owned accounts should be opened for government employees not only for their various job purposes but also for debit card, credit card and net banking in Bangladesh.
- (ii) State-owned accounts should gives advice to their customers on financial matters particularly on investment decision such as expansion, diversification, new ventures, rising of funds etc.
- (iii) Private commercial banks should concentrate on the satisfaction of customer not only on the maximization of profit.
- (iv) State-Owned banks should increase their current ratio i.e should increase the ability to pay off their current liabilities with its current assets.
- (v) Private commercial banks should increase their short-term solvency of business.
- (vi) State-owned banks should increase their efficient management at using its assets to generate earnings than the private commercial banks.
- (vii) State-owned banks should increase profit with the money which has invested by the shareholders.

- (viii) Net interest margin (NIM) by the state-owned banks should increase by making an optimal decision, as interest expenses would be lower than the amount of returns produced by loan and investments.
- (ix) State -owned banks should try to make stability into their loan equity ratio.

Conclusion:

Investors are more concerned about returns- dividend, with a little or no understanding of how it came about or the underlying financial statement. The findings of the study have shown that both banks are financially feasible as both have used the appropriate financial tools and policies to manage their organization and to adapt to their dynamic environment, resulting in a modest maximization of their profits. The result of various ratio analysis shows that financial performance of private commercial is holding a better position. For economic development of Bangladesh they are playing a crucial role. For making sustainable profitability the bank should minimize its risks. I hope state -owned bank will increase its financial performance in future for earning a worldwide reputation and establishing profitable image for the economic development of Bangladesh.

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