

## Performance Evaluation and Competitive Analysis of State Owned Commercial Banks in Bangladesh

Shah Johir Rayhan (Corresponding author)  
Department of Management & Finance  
Sher-e-Bangla Agricultural University  
Sher-e-Bangla Nagar, Dhaka-1207, Bangladesh.  
Cell: +8801712700906  
E-mail: johir\_rayhan2006@yahoo.com  
Alternative E-mail: sohagag@gmail.com

S.M. Sohel Ahmed  
Department of Marketing  
Northern College Bangladesh (Sister Concern of Northern University Bangladesh)  
Dhaka-1207, Bangladesh.  
Cell: +88 01711053120  
E-mail: smsohelahmed@gmail.com  
Alternative E-mail: smsohel\_ahmed@yahoo.com

Ripon Kumar Mondal  
Department of Agricultural Economics  
Sher-e-Bangla Agricultural University  
Sher-e-Bangla Nagar, Dhaka-1207, Bangladesh.  
Cell: +8801712953758  
E-mail: rkumar.ga@gmail.com

### Abstract

The broad objective of this study is Performance Evaluation and Competitive Analysis of state owned commercial banks in Bangladesh. This paper finds the development and growth of state owned commercial banks in Bangladesh. Secondary data was used for the research. The study reveals all the state owned commercial banks in Bangladesh are not able to achieve a stable growth, net profit, earning per Share, return on equity, return on assets, net asset value per share but they are capable to achieve a stable growth of deposit, loan and advances, equity. It is also observed that all the of state owned commercial banks have high non performing loan/classified loan and % of classified loan to total loan is very high. Employees of all state owned commercial banks are negative growth. Trend equations have been tested for different activities of the state owned commercial Banks. Positive growth was found in deposit, assets and expense while negative trend was found in number of employees. In case of non performing loan and % of classified loan positive trend was found in Sonali Bank Limited and Rupali Bank Limited while negative trend was in Janata Bank Limited and Agrani Bank Limited. Square of correlation coefficient ( $r^2$ ) has also been tested for all trend equations. The  $r^2$  of branches, employees, deposit, assets are more than 0.5. It indicates that the prospects of these indicators of state owned commercial banks are bright. All other indicators like net profit after tax, earnings per share, non performing loan, and % of classified loan to total loan  $r^2$  are not more than 0.5 for all banks. It proves that all state owned commercial banks do not achieve these indicators during the period of 2005-2009.

**Key words:** State owned commercial bank, Competitive evaluation, Performance, Equity.

### 1. Introduction

Banks play very important roles in the economy life of a nation. The health of an economy is closely related to the soundness of its banking system. Although banks create no new wealth but their borrowing,

lending and related activities facilitate the process of production distribution, exchange and consumption of wealth. In this way they become very efficient partners in the process of economic development. Today modern banks are very useful for the utilization of the resources of the country. The banks are mobilizing the savings of the people for the investment purpose. If there would no banks then a great portion of a portion of a capital of the country would remain idle. A bank as a matter of fact is just like a heart in the economic structure and the capital provided by it is like blood in it. As long as blood is in circulation the organ will remain sound and healthy. If the blood is not supplied to any organ then it part would become useless. So if the finance is not provided to agriculture sector or industrial sector it will be destroyed. Loan facility provided by banks as an incentive to the producer to increase the production. Bangladesh financial system is determined by banks where the banking systems account for around 96 percent of total assets of the financial sector. The financial systems in Bangladesh is including Bangladesh Bank (The central Bank), scheduled banks, non-bank financial institutions (NBFIs), Microfinance Institutions (MIs), Insurance companies, co-operative, credit rating agency and stock exchange. Bangladesh has mixed banking system comprising state owned, private and foreign commercial banks. At present among the schedule bank 4 state owned commercial banks (SCBs), 4 state owned specialized banks (SBs), 30 domestic private commercial banks (PCBs), 9 foreign banks and 29 Non Bank Financial Institutions (NBFIs) as of December 31, 2009. Besides the schedule banks 4 development financial institution, Investment Corporation in Bangladesh (ICB), House Building Finance Corporation (HBFC), Samabai (Co-operative) Bank, Ansar VDP Unnayan Bank and Karmasangstan Bank are operating in financial sector in Bangladesh all of which are state owned. The Nobel Prize winning Grameen Bank is a specialized microfinance institution that revolutionized the concept of poverty reduction and the empowerment of women in Bangladesh.

## 2. Review of the literature

Pandey (2006) stated that the easiest way to evaluate the performance of a firm is to compare its present ratio with the past ratio. It gives an indicator of the direction of change and reflects whether the firm's financial performance has improved, deteriorated or remained constant over time. Connelt, *et al.* (2009) observed how government ownership involvement in a country's banking system affects bank performance from 1989 through 2004. Their study uncovers an interesting pattern of changing performance difference between state owned and privately owned banks around the Asian Financial Crisis. They found that State-owned banks operated with less profitability, held less core capital and had greater credit risk than privately owned banks prior to 2001 and the greater performance differing more significant in those countries with greater government involvement and political corruption in the banking system. Shleifer (1998) point out that private ownership should generally be preferred to public ownership when incentive and contain costs are strong and especially when competition between suppliers, reputation mechanism and possibility of provision by private not-for-profit firms as well as political patronage and corruption are brought into play. Chowdhury and Ahmed (2009) observed that all the selected private commercial banks are able to achieve a stable growth of branches, employee, deposit, loans and advances, net income, earning per share during the period of 2002-2006. They indicate that the prospect of private commercial banks in Bangladesh is very bright. Chowdhury (2002) observed that the banking industry of Bangladesh is a mixed one comprising nationalized, Private and foreign banks. Many efforts have been made to explain the performance of these banks. Understanding the performance of the bank requires knowledge about the profitability and the relationship between variables like market size, banks risk and banks market size with the profitability. Chowdhury and Islam (2007) stated that deposit and loan advances of nationalized commercial banks (NCBs) are less sensitive to interest changes than those of Specialized Banks (SBs). So, SBs should not make abrupt change in lending or deposit by following the NCBs. If NCBs change their lending rate, their deposit or loan and advances will be affected less than those of CBs. Moreover, deposits of NCBs have higher volume and higher volatility than those of SBs. However SBs offer higher deposit rates and charge higher lending rate than NCBs, which is why the interest rate spread of SBs was higher than that of NCBs. Siddique and Islam (2001) pointed out that the commercial banks, as a whole are performing well and contributing to the economic development of the country. The average profitability of all Bangladeshi Banks collectively was 0.09% during 1980 to 1995 which means that a profit of Tk.0.09 was earned by utilizing assets of Tk.100 in every aspect of profit; banking sector contributes the national economy as well as the individual organization. Despite overall growth of the banking sector positive the performance of

different categories of banks were not equally attractive. Al-Shammari and Salimi (1998) stated that profitability ratio especially Return on Equity (ROE) signals the earning capability of the organization. They also suggest that higher return on Equity (ROE) ratio is appreciable and it is the primary indicator of banks profitability and functional efficiency. Bhatt and Ghosh (1992) stated that the profitability of commercial banks depends on several factors some of them are endogenous and some exogenous. The endogenous factors represent control of expenditure, expansion of banking business, timely recovery of loan and productivity. The exogenous factors consist of direct investments, such as SLR (Statutory Liquidity Ratio), CRR (Cash Reserve Ratio) and direct credit program such as region wise, population wise guidelines on lending to priority sector. The regulated and restricted regime in the operation of banking system of investment, credit allocation, branch expansion, interest rate determination and internal management corded the productivity and profitability. Jones *et al.* (1999) provide evidence that when government convert state-owned firm to privately-owned firm via public share offering, they under price share issue privatization offer, allocate the share to favored domestic investors, impose control restrictions on privatized firm and typically used fixed price offer rather than competitive tender offer, all to further political and economic policy objectives. Barth *et al.* (2001) concluded that state-ownership of banks tends to be associated with more poorly developed banks, non-banks and securities market. Alam and Jahan (1999) reported that non professional handling of assets both by the state owned commercial banks and the private sector banks was reported as the main reasons for accumulation of loan default problem in Bangladesh. It included the government directed credit for the loss making public sector enterprises and the private sector banks lending to insiders and connected people. Mujeri & Younus (2009) stated that the higher the non interest income as a ratio of total assets of banks the lower interest rate spread. Similarly market share of deposit of a bank, statutory reserve requirement and NSD certificate interest rate affects the IRS. The analysis in terms of banks group shows that IRS is significantly influenced by operating cost and classified loan of state owned commercial bank and specialized banks while inflation, operating cost market share of deposit, statutory reserve requirement and taxes are important for the private commercial banks. On the other hand non interest income, inflation, market share and taxes matter for the foreign Commercial banks. Ahmed *et al.* (2006) stated that in order to strengthen the economic conditions of the economy the NCB must be improved of its NPL, ROA, ROE, NII, and other monitoring, assessment and performance evaluation metrics. Khan (2008) stated that bank is evaluated based on profit and loss as the same way for other business. If the shareholders of the bank get more profit then the bank is identified as successful. Banks can attain success if relevant risks are effectively controlled. Van Horne & Wachowicz (2005) stated that to evaluate a firm's financial condition and performance the financial analyst need to perform "checkups" on various aspects of a firm's financial health. A tool frequently used these checkup is a financial ratio. Brigham and Houston (2004) that financial statement analysis involves comparative the firm's performance with that of other firms in the same industry and evaluating trends in the firm's financial position over time. Jahangir *et al.* (2007) argued that the traditional measure of profitability through stakeholder's equity is quite different in banking industry from any other sector of business, where loan-to-deposit ratio works as a very good indicator of banks' profitability as it depict the status of assets-liability management of banks.

### **3. An overview of the state owned commercial banks in Bangladesh**

#### ***3.1 Sonali Bank Limited***

Sonali Bank Limited is the largest among the state owned commercial banks in Bangladesh. Soon after independence of the country Sonali Bank emerged as the largest and leading Nationalized Commercial Bank by proclamation of the Banks' Nationalization Order 1972 (Presidential Order-26) liquidating the then National Bank of Pakistan, Premier Bank and Bank of Bhowalpur. As a fully state owned institution, the bank had been discharging its nation-building responsibilities by undertaking government entrusted different socio-economic schemes as well as money market activities of its own volition, covering all spheres of the economy. It was registered as a public limited company on June 03, 2007 and has been converted to a Public Limited Company with 100% ownership of the government and started functioning as Sonali Bank Limited from November 15, 2007 taking over all assets, liabilities and business of Sonali Bank. Authorized Capital and paid up capital of the company is Tk.10.00 billion and Tk.9.00 billion. The

bank has 1184 branches of which 341 in urban area and 841 in rural area and 2 in overseas. The bank has 3 subsidiaries company namely Sonali Bank UK Limited having 7 (seven) branches in UK, Sonali Exchange Company Incorporated (SECI) having 8 (eight) branches in USA and Sonali Investment Limited (Merchant Banking) having 1 (one) branch at Motijheel, Dhaka, Bangladesh. Sonali Bank Limited has Debit Card namely Ready Cash. At present Sonali Bank Limited has 267 branches are computerized, 12 ATM booth and 34 branches are included in the online Branch banking network. Branches having ABB facility are also rendering SMS banking services (Annual Report of Sonali Bank Limited 2005-2009).

### *3.2 Agrani Bank Limited*

Agrani Bank Limited, a leading commercial bank with 867 outlets strategically located in almost all the commercial areas throughout Bangladesh, Overseas Exchange Houses and hundreds of overseas Correspondents, came into being as a Public Limited Company on May 17, 2007 with a view to take over the business, assets, liabilities, rights and obligations of the Agrani Bank which emerged as a nationalized commercial bank in 1972 immediately after the emergence of Bangladesh as an independent state. Agrani Bank Limited started functioning as a going concern basis through a Vendors Agreement signed between the ministry of finance, Government of the People's Republic of Bangladesh on behalf of the former Agrani Bank and the Board of Directors of Agrani Bank Limited on November 15, 2007 with retrospective effect from 01 July, 2007. The authorized capital of the Bank is Tk. 800 crore. With a view to serving a huge number of Bangladeshi guest workers in Singapore, Agrani Bank Limited have taken a bold step to open in Singapore Agrani Exchange House Pte Ltd, a subsidiary company fully owned by Agrani Bank Limited, which started its operation since February 08, 2002. (Annual Report of Agrani Bank Limited 2005-2009).

### *3.3 Janata Bank Limited*

Janata Bank Limited, one of the state owned commercial banks in Bangladesh, has an authorized capital of Tk. 20,000.00 million (approx. US\$ 289.85 million), paid up capital of Tk. 5,000.00 million, reserve of Tk.8,202.00 million and retained surplus Tk. 2,737.00 million. Immediately after the emergence of Bangladesh in 1971, the erstwhile United Bank Limited and Union Bank Limited were renamed as Janata Bank. On November 15, 2007 the bank has been corporatized and renamed as Janata Bank Limited. Janata Bank Limited operates through 860 branches including 4 overseas branches at United Arab Emirates. It is linked with 1202 foreign correspondents all over the world. Janata Bank Limited has also a subsidiary company named Janata Exchange Company SRL in Italy. With a view to providing exclusive banking service to NBR's Janata Bank Limited opened NRB branch. Janata Bank Limited is going to launch Islami Banking operation its five branches and also diversified its product they are going to launch Merchant Banking Unit to play an important role in the capital market. Janata Bank Limited, first among the Nationalized Commercial Banks, has introduced ATM Services (Annual Report of Janata Bank Limited 2005-2009).

### *3.4 Rupali Bank Limited*

Rupali Bank Limited, one of the state owned commercial banks in Bangladesh, has an authorized capital of Tk.7,000.00 million (US\$ 120.70 million), Paid up Capital: Tk. 1,250 million (US\$ 21.55 million). The Breakup of paid up Capital is Government Shareholding 93.11% and Private Shareholding: 06.89 %. Rupali Bank Ltd. was constituted with the merger of 3 (three) erstwhile commercial banks i.e. Muslim Commercial Bank Ltd., Australasia Bank Ltd. and Standard Bank Ltd. operated in the then Pakistan on March 26, 1972 under the Bangladesh Banks (Nationalization) Order 1972 (P.O. No. 26 of 1972), with all their assets, benefits, rights, powers, authorities, privileges, liabilities, borrowings and obligations. Rupali Bank Limited worked as a nationalized commercial bank till December 13, 1986. Rupali Bank Ltd. emerged as the largest Public Limited Banking Company of the country on December 14, 1986 (Annual Report of Rupali Bank Limited 2005-2009).

## **4. Objectives of this study**

- To appraise the performance of State Owned Commercial Banks in Bangladesh.
- To appraise the competitive analysis of State Owned Commercial Banks in Bangladesh.
- To make recommendations on the basis of findings.

## 5. Methodology

The present study has been carried out to evaluate the performance of state owned commercial banks in Bangladesh. The banks are Sonali Bank Limited, Agrani Bank Limited, Janata Bank Limited and Rupali Bank Limited. The analysis has been conducted mainly on data from Secondary sources. The relevant data and information were collected from Stock Exchange, Annual Report, in relevant banks in Bangladesh, Bangladesh Bank, Securities and Exchange Commission website and from relevant commercial banks. Relevant article and literature have also been consulted. In this article we analyzed five years (2005-2009) data of state owned commercial Banks of Bangladesh. Among the various straight-line trend method of time series analysis the method of least square is most popular and widely used in practice. The method of least square can be used either to a fit a straight trend or a parabolic trend. The straight-line trend is represented by the equation  $Y_e = a + bx$  where,  $Y_e$  denotes the trend values to distinguish them from the actual  $Y$  values. "a" is the  $Y$  intercept or the value of the  $Y$  variable when  $x = 0$ . "b" represent the slope of the line of the amount of change in  $Y$  variable that if associated with a change of one unit in  $x$  variable.  $X$  variable in the time series analysis represent time. The square of correlation coefficient ( $r^2$ ) is called the multiple determinants or squared multiple correlation coefficients. The coefficient of correlation is denoted by  $r$ . The value of  $r$  lies between 0 and 1. The higher  $r^2$  the greater the percentage of the variation of  $Y$  explained by the regression model, that is, the better the "goodness of fit" of the regression model to the sample observation  $r^2$  closer to zero, the worse the fit. Entire data analysis was performed through SPSS.

## 6. Result and Discussion

### 6.1 Growth of Branches of State Owned Commercial Banks

Table 1 shows the growth pattern of number of branches of state owned commercial banks. In 2009 the growth of branches is highest in Janata Bank Limited where no growth was found in Sonali Bank Limited, Agrani Bank Limited and Rupali Bank Limited. Sonali Bank Limited has the highest number of branches i.e., 1184 and Rupali Bank Limited has the lowest number of branches i.e., 492.

### 6.2 Trend equation and $r^2$ of Branches of State Owned Commercial Banks

Table 2 shows the summary of trend equation and  $r^2$  of branch expansion of state owned commercial banks. It is reflected that trend equation of all state owned commercial banks are positive and goodness of fit of all equations are high. In case of Janata Bank Limited is very high i.e. 0.88.

### 6.3 Growth of Employee of State Owned Commercial Banks

No. of employee of state owned commercial banks have been shown in Table 3. The highest no. of employees are working in Sonali Bank Limited and lowest in Rupali Bank Limited, Negative trend was found during 2005-2007 in each bank. In 2009 the growth percentage is higher in Rupali Bank Limited and still negative and lowest in Janata Bank Limited.

### 6.4 Trend equation and $r^2$ of Employee of State Owned Commercial Banks

Table 4 shows the summary of trend equation and  $r^2$  of employees of state owned commercial banks. It is reflected from the table 4 that trend equation of all state owned commercial banks are negative and goodness of fit of all equation is high. In case of Janata Bank Limited is very high i.e.0.97.

### 6.5 Growth of Deposit State Owned Commercial Banks

Table 5 shows the growth pattern of deposit of state owned commercial banks. It is observed from the table 5 that almost every year of deposit of all state owned commercial banks has increased from the previous year except Rupali Bank Limited. The highest deposit is found in Sonali Bank Limited and lowest in Rupali Bank Limited. The highest growth percentage of deposit is found in Agrani Bank Limited and lowest in Rupali Bank Limited.

### 6.6 Trend equation and $r^2$ of Deposit State Owned Commercial Banks

Table 6 shows the summary of trend equation and  $r^2$  of deposit of state owned commercial banks. It is reflected from the table 6 that trend equation of all state owned commercial banks are positive and goodness of fit of all equation is high. In case of Sonali Bank Limited is very high i.e.0.99.



#### *6.7 Trend equation and $r^2$ of Loan and Advances of State Owned Commercial Banks*

Table 7 shows the summary of trend equation and  $r^2$  of loan and advances of state owned commercial banks. It is reflected from the table 7 that trend equation of all state owned commercial banks are positive and goodness of fit of all equation is high except Sonali Bank Limited.

#### *6.8 Non Performing/Classified Loan of State Owned Commercial Banks*

It is reflected from the table 8 that the non performing loan of all state owned commercial banks is increasing during 2005-2007 but decreasing after 2007 to 2009. The highest NPL is found in Sonali Bank Limited and lowest in Rupali Bank Limited. It is also found that the recovery rate is highest in Rupali Bank Limited and lowest in Sonali Bank Limited.

#### *6.9 Trend Equation and $r^2$ of % of Classified Loan to Total Loan of State Owned Commercial Banks*

Table 9 shows the summary of trend equation and  $r^2$  of % of classified loan to total loan of state owned commercial banks. It is reflected from the table 9 that trend equations of Sonali Bank Limited and Rupali Bank Limited are positive and negative in Janata Bank Limited and Agrani Bank Limited. All the equation are not Goodness of fit except Agrani Bank Limited.

#### *6.10 Growth of Net Profit after Tax of State Owned Commercial Banks*

Table 10 shows the growth pattern of net profit of state owned commercial banks. It is observed from the table 10 that all the banks have failed to earned net income continuously during the year of 2005-2009. In 2009 the highest net income is found in Janata Bank Limited and lowest in Agrani Bank Limited. All banks have negative growth in net profit during 2008-2009 except Rupali bank Limited.

#### *6.11 Trend Equation and $r^2$ of Net Profit after Tax of State Owned Commercial Banks*

Table 11 shows the summary of trend equation and  $r^2$  of net profit of state owned commercial banks. It is reflected from the table 11 that trend equations of all state owned commercial banks are positive and goodness of fit except Rupali Bank Limited equation.

#### *6.12 Trend Equation and $r^2$ of Earnings Per Share (EPS) of State Owned Commercial Banks*

Table 12 shows the summary of trend equation and  $r^2$  of EPS of state owned commercial banks. It is reflected that trend equations of all state owned commercial banks are positive except Agrani Bank Limited and goodness of fit only Janata Bank Limited equation.

#### *6.13 Trend Equation and $r^2$ of Equity of State Owned Commercial Banks*

Table 13 shows the summary of trend equation and  $r^2$  of equity of state owned commercial banks. It is reflected that trend equation of all state owned commercial banks are positive except Rupali Bank Limited and goodness of fit of all equation are highly low. In case of Janata Bank Limited is very high.

#### *6.14 Trend Equation and $r^2$ of assets of State Owned Commercial Banks*

Table 14 shows the summary of trend equation and  $r^2$  of assets of state owned commercial banks. It shows that trend equations of all state owned commercial banks are positive and goodness of fit of all equation is high. In case of Janata Bank Limited is very high i.e.0.99.

#### *6.15 Return on Equity (%) of State Owned Commercial Banks*

Table 15 shows the Return on Equity (ROE) of assets of state owned commercial banks. During December 2009 the highest ROE is found in Janata Bank Limited and lowest in Sonali Bank Limited. Though the equity is negative in Rupali Bank Limited so, ROA is not applicable.

#### *6.16 Return on Asset (%) of State-Owned Commercial Banks*

Table 16 shows the Return on Assets (ROA) of assets of state owned commercial banks. It explores that it is fluctuate from year to year. During December 2009 the highest ROA is found in Rupali Bank Limited and lowest in Sonali Bank Limited.

#### *6.17 Growth of Total Expense of State Owned Commercial Banks*

Table 17 shows the growth pattern of expense of state owned commercial banks. It is observed that almost every year of expense of all state owned commercial banks has increased from the previous year. The highest amount and percentage of expense is found in Sonali Bank Limited and lowest in Rupali Bank Limited.

#### *6.18 Profit to Expense Ratio of State Owned Commercial Banks*

Table 18 shows the Profit to expense ratio of state owned commercial banks. It is found that it is fluctuate from year to year. During December 2009 the highest Profit to expense ratio is found in Rupali Bank Limited and lowest in Sonali Bank Limited.

#### *6.19 Trend Equation and $r^2$ of Net Asset Value per Share of State Owned Commercial Banks*

Table 19 shows the summary of trend equation and  $r^2$  of net asset value per share of state owned commercial banks. It is reflected from the table 15 that trend equation of all state owned commercial banks are positive and goodness of fit of all equations is not high except ABL. In case of Agrani Bank Limited is 0.79.

### **7. Conclusion**

Evaluation of banks financial performance is important for all parties like depositors, bank manager, stockholders, creditors, regulators and educationalist. In a competitive market financial bank performance provides signals to depositor investors whether to invest or withdraw fund from the bank. Similarly, it flashes direction to bank manager whether to improve its deposit service or loan service or both to improve its finance. Stockholders and creditors use the performance to evaluate the attractiveness of the bank as an investment by examining its ability to meets its current and expected future financial obligation. Regulator is also interested to know its regulation purpose. Educationalist can use this article for further research. It has been observed that the net income of the SCB did not continuously increase from previous year rather all SCB have decrease except Rupali Bank Limited during 2008-2009. It is also reflected from the analysis that the EPS of all the SCB are not continuously rising and not so high. It is also indicated that the profitability of all the SCB are not satisfactory. NPL/classified loan indicates that from 2005-2007 the classified loan of all the banks have been decreased but after 2007 all the bank classified loan have decreased but the amount is still high. Loan recovery rate indicates that the banks are able to manage their credit efficiently. It is observed that from 2005 to 2007 % of classified loan have been increased to all the banks and decreased all the banks after 2007. It is also observed that the classified loan of Janata Bank Limited is low among all the SCB. It is also observed that Sonali Bank Ltd, Agrani Bank Limited and Rupali Bank Limited are not able to manage credit efficiency effectively as a result recovery of loan is not quite good. The growth percentages of branches of all SCB are almost zero. Since there are many branches are spread all over the country they do not open their branches. In order to increase their activity and income Janata and Rupali Bank may expand new branches. SCBs play an important role to create employment in the banking sector. There are around seventy thousand people working in SCB. Employment status of SCB indicates that employee of all the banks is decreasing from 2005 to 2009 except Agrani and Rupali Bank Limited in the year 2009. So, all the SCB has to recruit energetic employee to maintain the credit healthy. From the sequence of the analysis it is reflected that the deposit of SBL and JBL has showed increasing trend but ABL and RBL is fluctuating during the period of 2005 to 2009. It is also observed that the total deposit of ABL, RBL are not satisfactory in the comparison of SBL. So these bank need to increase their deposit. It has been identified that the loan and advances of all SCBs are not continuously increasing except RBL. It is fluctuated from the previous year. The growth rate of SBL, ABL and RBL are not satisfactory in comparison with JBL. So SBL, ABL and RBL should try to increase the growth rate of loan and advances. ROE indicates that a bank convert its equity into net earnings. The higher ratio indicates higher ability and indicates that the ROE of all the SCB are fluctuating from year to year. It is also indicates that all the banks fail to maintain a satisfactory ROE. ROA indicates that a bank convert its assets into net earnings. The higher ratio indicates higher ability and indicates that the ROA of all the SCB are fluctuating from year to year. It is also indicates that all the banks fail to maintain a satisfactory ROA. Total expense of SCB indicates that Sonali Bank Limited need to decrease expense to increase net profit. Profit expense ratio shows that SBL has lowest profit expense ratio. SBL need to decrease expense in order

to increase profit expense ratio. From our analysis it is indicated that the assets of all SCB is increasing. It is also indicate that RBL asset growth is not satisfactory in comparison to SBL, ABL and JBL. From the analysis it is indicated that the equity of Janata Bank Limited have increased every year. 15 trend equations have been observed for different activities of SCB. Although zero growth was found in branch but trend is positive. Negative growth and negative trend was found in employee of all SCB. Positive growth and positive trend was found in deposit, assets and expense. Although loan and advances and net profit was fluctuated from year to year but positive trend was found in all the SCB. In case of EPS positive trend was found in SBL, JBL and RBL but negative trend was found in ABL. In case of NPL and % of classified loan to total loan positive trend was found in SBL and RBL but negative trend was found in JBL and SBL. Square correlation coefficient ( $r^2$ ) has also been tested for all equation. The  $r^2$  of branches, employee, deposit, assets are more than 0.5. It indicates that the prospects of these indicators of SCB are bright. All other indicator like net income, EPS, NPL, % of classified loan to total loans  $r^2$  are not more than 0.5 for all banks. It indicates that all the banks do not achieve this indicator during the period 2005-2009.

### 8. Recommendations

All banks have to recruit and select new employees. Sonali Bank Limited and Rupali Bank Limited have to emphasize on recovery department to reduce the classified loan. SBL need to increase net income by decreasing expense. Agrani Bank Limited and Janata Bank Limited need to expand the branches to collect more deposit and increase net income.

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## Appendices

### Appendix-1

Short form	Variable Name
SCB	State Owned Commercial Bank
NPL	Non Performing Loan
EPS	Earnings Per Share,
NAV	Net Asset Value
SBL	Sonali Bank Limited
ABL	Agrani Bank Limited
JBL	Janata Bank Limited
RBL	Rupali Bank Limited
NCB	Nationalized Commercial Bank
ROE	Return on Equity
ROA	Return on Asset
CRR	Cash Requirement Reserve
SLR	Statutory Liquidity Reserve
IRS	Interest Rate Spread
NII	Net Interest Income

ICB	Investment Corporation of Bangladesh
HBFC	House Building Finance Corporation
NBFI	Non-Banking Financial Institution
PCB	Private Commercial Bank
SB	Specialized Bank

### Appendix-2

Table 1: Number of Branches of State-Owned Commercial Banks

Sl No.	Name of Banks	Number of Branches				
		2005	2006	2007	2008	2009
1	Sonali Bank Limited	1183	1183	1183	1184	1184
	Growth		0.00%	0.00%	0.08%	0.00%
2	Janata Bank Limited	847	848	848	849	851
	Growth		0.12%	0.00%	0.12%	0.24%
3	Agrni Bank Limited	864	866	866	867	867
	Growth		0.23%	0.00%	0.12%	0.00%
4	Rupali Bank Limited	491	492	492	492	492
	Growth		0.00%	0.00%	0.00%	0.00%

Source: Compiled from different issues of Annual Report of Sonali Bank Limited, Janata Bank Limited, Agrani Bank Limited and Rupali Bank Limited.

Table 2: Trend equation and  $r^2$  branches of State Owned Commercial Banks

Sl No.	Name of the Bank	$Y_e = a + bx$	$r^2$
1	Sonali Bank Limited	$1182.80 + 0.30x$	0.75
2	Janata Bank Limited	$846.80 + 0.90x$	0.88
3	Agrni Bank Limited	$864.60 + 0.70x$	0.82
4	Rupali Bank Limited	$491.40 + 0.20x$	0.50

Source: Table 1

Table 3: Employee of State Owned Commercial Bank

Sl No.	Name of Banks	Number of Employees				
		2005	2006	2007	2008	2009
1	Sonali Bank Limited	23,933	23,273	22,542	21,839	21,839
	Growth		-2.76%	-3.14%	-3.12%	0.00%
2	Janata Bank Limited	15,321	14,772	13,860	13,379	13,122
	Growth		-3.58%	-6.17%	-3.47%	-1.92%

3	Agrni Bank Limited	11,938	11,793	11,345	10,988	11,443
	Growth		-1.21%	-3.80%	-3.15%	4.14%
4	Rupali Bank Limited	5,008	4,753	4,430	4,269	4,529
	Growth		-5.09%	-6.80%	-3.63%	6.09%

Source: Compiled from different issues of Annual Report of Sonali Bank Limited, Janata Bank Limited, Agrani Bank Limited and Rupali Bank Limited.

Table 4: Trend equation and  $r^2$  employees of State Owned Commercial Banks

SI No.	Name of the Bank	$Ye = a + bx$	$r^2$
1	Sonali Bank Limited	23,809.60 - 562.20x	0.94
2	Janata Bank Limited	15,249.00 - 579.10x	0.97
3	Agrni Bank Limited	11,860.40 - 179.50x	0.57
4	Rupali Bank Limited	4,886.20 - 144.20x	0.62

Source: Table 3

Table 5: Deposit of State Owned Commercial Banks

SI No.	Name of Banks	Total Deposit (Tk. in million)				
		2005	2006	2007	2008	2009
1	Sonali Bank Limited	277,079.00	302,303.00	328,997.20	364,386.00	406,152.00
	Growth		9.10%	8.83%	10.76%	11.46%
2	Janata Bank Limited	168,897.00	182,947.00	198,636.00	221,336.00	246,175.00
	Growth		8.32%	8.58%	11.43%	11.22%
3	Agrni Bank Limited	130,840.00	128,920.00	135,920.00	146,810.00	166,280.00
	Growth		-1.47%	5.43%	8.01%	13.26%
4	Rupali Bank Limited	66,870.50	67,832.10	72,446.10	70,280.50	73,912.80
	Growth		1.44%	6.80%	-2.99%	5.17%

Source: Compiled from different issues of Annual Report of Sonali Bank Limited, Janata Bank Limited, Agrani Bank Limited and Rupali Bank Limited.

Table 6: Trend equation and  $r^2$  of deposit of State Owned Commercial Banks

SI No.	Name of the Bank	$Ye = a + bx$	$r^2$
1	Sonali Bank Limited	271,737.64 + 32,022.90x	0.99
2	Janata Bank Limited	165,009.20 + 19,294.50x	0.98
3	Agrni Bank Limited	124,000.00 + 8,877.00x	0.83
4	Rupali Bank Limited	66,961.80 + 1,653.30x	0.77

Source: Table 5

Table 7: Trend equation and  $r^2$  of loan and advances of State Owned Commercial Banks.

SI No.	Name of the Bank	$Ye = a + bx$	$r^2$
1	Sonali Bank Limited	$223,082.50 + 4,416.31x$	0.16
2	Janata Bank Limited	$121,046.00 + 8,996.90x$	0.62
3	Agrni Bank Limited	$101,238.00 + 5,317.00x$	0.82
4	Rupali Bank Limited	$44,183.44 + 1,816.75x$	0.93

Source: Own study

Table 8: Non Performing/Classified Loan of State Owned Commercial Banks

SI No.	Name of Banks	Non Performing/Classified Loan (Tk. in million)				
		2005	2006	2007	2008	2009
1	Sonali Bank Limited	58,900.90	51,125.50	92,013.50	72,676.70	69,833.50
	Growth		-13.20%	79.98%	-21.02%	-3.91%
2	Janata Bank Limited	13,535.00	17,038.00	19,232.00	16,528.00	13,423.00
	Growth		25.88%	12.88%	-14.06%	-18.79%
3	Agrni Bank Limited	26,920.00	27,820.00	31,790.00	25,490.00	23,740.00
	Growth		3.34%	14.27%	-19.82%	-6.87%
4	Rupali Bank Limited	7,509.20	12,124.40	18,297.20	15,342.40	10,944.10
	Growth		61.46%	50.91%	-16.15%	-28.67%

Source: Compiled from different issues of Annual Report of Sonali Bank Limited, Janata Bank Limited, Agrani Bank Limited and Rupali Bank Limited.

Table 9: Trend Equation and  $r^2$  of % of Classified Loan to Total Loan of State Owned Commercial Banks.

SI No.	Name of the Bank	$Ye = a + bx$	$r^2$
1	Sonali Bank Limited	$26.71 + 1.69x$	0.093
2	Janata Bank Limited	$13.53 - 0.59x$	0.116
3	Agrni Bank Limited	$28.98 - 2.16x$	0.881
4	Rupali Bank Limited	$24.23 + 1.32x$	0.057

Source: Own study

Table 10: Net Profit after Tax of State Owned Commercial Banks

SI No.	Name of Banks	Net Profit after Tax (Tk. In million)				
		2005	2006	2007	2008	2009
1	Sonali Bank Limited	208.00	-36,275.60	973.60	2,311.10	1,536.80
	Growth		-17,540.19%	102.68%	137.38%	-33.50%
2	Janata Bank Limited	0.00	0.00	1,681.00	3,145.00	2,982.00

	Growth			168,100%	87.09%	-5.18%
3	Agrni Bank Limited	1,630.00	1,940.00	860.00	2,650.00	1,110.00
	Growth		19.02%	-55.67%	208.14%	-58.11%
4	Rupali Bank Limited	188.60	93.80	-11,017.50	874.10	1,668.50
	Growth		-50.27%	-	107.93%	90.88%
				11845.74%		

Source: Compiled from different issues of Annual Report of Sonali Bank Limited, Janata Bank Limited, Agrani Bank Limited and Rupali Bank Limited.

Table 11: Trend Equation and  $r^2$  of Net Profit After Tax of State Owned Commercial Banks

SI No.	Name of the Bank	Ye= a + bx	$r^2$
1	Sonali Bank Limited	(-)1,449.81 + 412.44x	0.151
2	Janata Bank Limited	(-)26.02 + 91.09x	0.881
3	Agrni Bank Limited	154.20 + 2.10x	0.002
4	Rupali Bank Limited	(-)238.65 +37.40x	0.013

Source: Table 10

Table 12: Trend Equation and  $r^2$  of EPS of State-Owned Commercial Banks

SI No.	Name of the Bank	Ye= a + bx	$r^2$
1	Sonali Bank Limited	(-)288.96 + 77.70x	0.14
2	Janata Bank Limited	(-)14.40 + 23.99x	0.77
3	Agrni Bank Limited	73.21 -5.87x	0.08
4	Rupali Bank Limited	(-)190.84 +29.86x	0.01

Source: Own study

Table 13: Trend Equation and  $r^2$  of equity of State-Owned Commercial Banks

SI No.	Name of the Bank	Ye= a + bx	$r^2$
1	Sonali Bank Limited	(-)9,340.74 + 10,120.04x	0.455
2	Janata Bank Limited	2,957.60 + 2,335.34x	0.871
3	Agrni Bank Limited	(-)5,391.54 + 4,395.24x	0.316
4	Rupali Bank Limited	(-)944.64 - 1,980.85x	0.404

Source: Own study

Table 14: Trend Equation and  $r^2$  of assets of State-Owned Commercial Banks

SI No.	Name of the Bank	Ye= a + bx	$r^2$
1	Sonali Bank Limited	327,368.70 + 55,261.66x	0.951
2	Janata Bank Limited	188,044.90 + 26,548.66x	0.998
3	Agrni Bank Limited	149,847.00 + 14,576.81x	0.897



4	Rupali Bank Limited	74,372.98 + 3,082.35x	0.947
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Source: Own study

Table 15: Return on Equity (%) of State Owned Commercial Banks

Sl No.	Name of Banks	Return on Equity (%)				
		2005	2006	2007	2008	2009
1	Sonali Bank Limited	3.30	N/A	4.48	9.46	5.04
2	Janata Bank Limited	0.00	0.00	29.60	34.70	21.51
3	Agrni Bank Limited	-7.88	12.65	29.55	41.28	12.09
4	Rupali Bank Limited	N/A	N/A	N/A	N/A	N/A

Source: Compiled from different issues of Annual Report of Sonali Bank Limited, Janata Bank Limited, Agrani Bank Limited and Rupali Bank Limited.

N/A: Not Available

Table 16: Return on Assets (%) of State-Owned Commercial Banks

Sl No.	Name of Banks	Return on Assets (%)				
		2005	2006	2007	2008	2009
1	Sonali Bank Limited	0.06	-10.28	0.21	0.47	0.28
2	Janata Bank Limited	0.00	0.00	0.69	1.18	1.02
3	Agrni Bank Limited	1.05	1.26	0.46	1.42	0.52
4	Rupali Bank Limited	0.25	0.12	-13.52	1.06	1.91

Source: Compiled from different issues of Annual Report of Sonali Bank Limited, Janata Bank Limited, Agrani Bank Limited and Rupali Bank Limited.

Table 17: Total Expense of State-Owned Commercial Banks

Sl No.	Name of Banks	Total Expense (Tk. In million)				
		2005	2006	2007	2008	2009
1	Sonali Bank Limited	15,900.00	20,125.00	20,287.00	25,004.00	30,255.40
	Growth		26.57%	0.80%	23.25%	21.00%
2	Janata Bank Limited	9,842.00	12,059.00	13,559.00	13,919.00	15,496.00
	Growth		22.53%	12.44%	2.66%	11.33%
3	Agrni Bank Limited	8,460.00	8,750.00	8,420.00	8,650.90	9,922.70
	Growth		3.43%	-3.77%	2.74%	14.70%
4	Rupali Bank Limited	3,947.90	4,583.70	4,529.30	4,704.60	5,143.60
	Growth		16.10%	-1.19%	3.87%	9.33%

Source: Compiled from different issues of Annual Report of Sonali Bank Limited, Janata Bank Limited, Agrani Bank Limited and Rupali Bank Limited

Table 18: Profit to Expense Ratio

Sl No.	Name of Banks	Profit to Expense Ratio (%)				
		2005	2006	2007	2008	2009
1	Sonali Bank Limited	1.00	-180.25	4.8	9.24	5.08

2	Janata Bank Limited	0.00	0.00	12.40	22.60	19.24
3	Agrni Bank Limited	16.08	22.17	10.21	30.63	11.19
4	Rupali Bank Limited	4.78	2.05	-243.25	18.58	32.44

Source: Compiled from different issues of Annual Report of Sonali Bank Limited, Janata Bank Limited, Agrani Bank Limited and Rupali Bank Limited.

Table 19: Trend Equation and  $r^2$  of Net Asset Value Per Share of State-Owned Commercial Banks

Sl. No.	Name of the Bank	$Y_e = a + bx$	$r^2$
1	Sonali Bank Limited	$-141.33 + 123.20x$	0.26
2	Janata Bank Limited	$-8.99 + 82.19x$	0.35
3	Agrni Bank Limited	$-673.72 + 263.42x$	0.79
4	Rupali Bank Limited	$-75.82 + 157.00x$	0.39

Source: Own study

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