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An Analysis of the Financial Performance of National Bank Limited Using Financial Ratio

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Abstract This study attempts primarily to measure the financial performance of National Bank Limited which one of the largest and prominent private commercial banks in Bangladesh for the period 2008-2013 and to identify whether any difference exists between a banks's years of operation and its performance classifying two period (2008-10 & 2011-13). To complete my task I have to use various materials and take help form online source. Analyse the ratio here used financial ratio analysis (FRA) method which help to draw a overview about financial performance of the National bank limited in terms of profitability, liquidity and credit performance. To test the hypothesis the study has been worked on Student t-test by using SPSS. These analyses helps to see the current performance condition of this bank compare past performance. Because now a day's banking sector of Bangladesh is suffering the disease of default culture which is the consequence or result of bad performance of most banks. The performances of banks are dependent more on the management's ability in formulating strategic plans and the efficient implementation of its strategies. The study findings can be helpful for management of National bank ltd. always for private commercial banks in Bangladesh to improve their financial performance and formulate policies that will improve their performance. The study also identified specific areas for bank to work on which can ensure sustainable growth for these banks.

Keywords: *private commercial bank, financial performance, financial ratios, descriptive study, FRA method, student t test*

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1. Introduction

Financial analysis is structural and logical way to present overall financial performance of a financial institution. It's also help to evaluate and decision making for business operation. In financial analysis process ratio analysis is the most dominant and logical structure to help business related stakeholder. Under the financial ratio analysis process there are few categories to identical area of financial institution. So business stakeholders try to concentrate to get overall business overview from profitability, liquidity, assets management and solvency ratio analysis. These ratios not only help to decision making process also emphasized on risk avoiding and profit raising related factors. To calculate this ratio need to take quantitative data from bank trading activity and other sources.

Investopedia Describe about ratio analysis as Quantitative analysis of information contained in a company's financial statements. Ratio analysis is based on line items in financial statements like the balance sheet, income statement and cash flow statement; the ratios of one item – or a combination of items - to another item or combination are then calculated. Ratio analysis is used to evaluate various aspects of a company's operating and financial performance such as its efficiency, liquidity, profitability and solvency. The trend of these ratios over time is studied to check whether they are improving or deteriorating. Ratios are also compared across different companies in the same sector to see how they stack up, and to get an idea of comparative valuations. Ratio analysis is a cornerstone of fundamental analysis (Investopedia).

This study evaluates bank performance for the period 2008-2013 using financial ratio analysis (hereafter FRA). Financial ratio analysis has wide range advantage to show the bank financial position compare to past year performance. To analyse the ratio I am take data from National Bank Limited annual report. That's help me to understand the financial position of this bank and purpose of the study. The study has been used Financial Ratio analysis (FRA) method and for hypothesis testing Student's T-test. The bread and butter of statistical data analysis are the Student's t-test. It was named after a statistician who called himself Student but whose real name was William Gossett. As an employee of Guinness Brewery in Dublin, Ireland, he tackled a number of practical statistical problems related to the operation of the brewery. Since he was discouraged from publishing under his own name, he adopted the Student moniker.

Data of this study collected from secondary source in annual report of National bank ltd. This data research helps to evaluate the overall bank financial position. To evaluate data make descriptive statistical analysis these contain Mean, Standard deviation, Minimum, Maximum. From this descriptive statistics we analyse the financial performance of National Bank. For descriptive statistics and student's T-test I used SPSS and MS excel program to calculate data and find difference between two periods. This bank financial ratio enable us to identify unique bank strengths and weaknesses achieve over the six year period, which in itself inform bank profitability, liquidity and credit quality.

2. Statement of the Problem

The era of globalization modern free market economy introduce a window of banking acidity that has huge impact on any countries trade and overall development. To complete the process of banking or trading financial intermediaries and institution act like as safe gateway between two sides. As an institution, bank has been contributing towards the development of any economy for a long time and at the moment it is treated as an important banking industry in modern world. Now days the functioning area of bank not limited within same geographical limit of any country. Therefore bank has to manage large volume transaction. Industry related stakeholder need to know about the financial performance of the bank. To analyse financial performance ratio analysis is the most logical way to show the bank financial position. So this study has conduct to expose restriction of the function area and process of Financial performance through ratio analysis of National bank limited by comparing banks past year balance sheet, Income statement and cash flow by generating ratio that conduct how much financial stability can be achieve. A general belief is that a firm's financial performance depends on certain key financial factors i.e. turnover, profit and the variables which are found in the balance sheet of a firm, have a direct and indirect relation with each other. By establishing a close relationship between the variables, a firm can analyze its financial performance in terms of liquidity, profitability and viability (M.S.Ramaratnam & R.Jayaraman, 2010). To evaluate financial ratio I used various instrument for analysis like Descriptive analysis, FRA method, Student's T-test for finding difference between variable.

The problem statement is "to Analysis the financial performance of NBL Using Financial ratio."

3. Purpose of the Study

The objectives of the study are outlined below:

- To Discussed the Financial ratio measurement and analysis.
- To analyze National Bank trading recent years.
- To measure profitability, liquidity and credit management of National Bank
- To show the financial stability analysis consists of (profitability and liquidity).
- To analyze the balance sheet and income statement.
- To measure descriptive statistics.
- To using Financial ratio analysis (FRA method).
- To using student T test for hypothesis testing.
- And to know overall Bank financial performance condition.

4. The Variables

4.1. Profitability Performance

The most common measure of bank performance is profitability. Generally, accounting profits are the difference between revenues and costs. Profitability is considered to be the most difficult attributes of a firm to conceptualize and to measure (Ross, Westerfield, and Jaffe 2005). These ratios are used to assess the ability of the business to generate earnings in comparison with its all expenses and other relevant costs during a specific time period. More specifically, these ratios indicate firm's profitability after taking account of all expenses and income taxes, the efficiency of operations, firm pricing policies, profitability on assets and to shareholders of the firm (Van Horne 2005). Profitability ratios are generally considered to be the basic bank financial ratio in order to evaluate how well bank is performing in terms of profit. For the most part, if a profitability ratio is relatively higher as compared to the competitor(s), industry averages, guidelines, or previous years' same ratios, then it is taken as indicator of better performance of the bank. Study applies these criteria to judge the profitability of the National banks Limited. Profitability is measured using the following criteria:

1. Return on Assets (ROA) = net profit/total assets shows the ability of management to acquire deposits at a reasonable cost and invest them in profitable investments (Ahmed, 2009). This ratio indicates how much net income is generated per TK of assets. Return on assets indicates the profitability on the assets of the Bank after all expenses and taxes (Van Horne 2005). It is a common measure of managerial performance (Ross, Westerfield, Jaffe 2005). It measures how much the firm is earning after tax for each Taka invested in the assets of the firm. That is, it measures net earnings per unit of a given asset, moreover, how bank can convert its assets into earnings (Samad & Hassan 2000). Generally, a higher ratio means better managerial performance and efficient utilization of the assets of the firm and lower ratio is the indicator of inefficient use of assets. ROA can be increased by Banks either by increasing profit margins or asset turnover but they can't do it simultaneously because of competition and trade-off between turnover and margin. So bank maintain higher ROA will make more the profit.

2. Return on Equity (ROE) = net profit/ total equity. ROE is the most important indicator of a bank's profitability and growth potential. It is the rate of return to shareholders or the percentage return on each TK of equity invested in the bank. Return on equity indicates the profitability to shareholders of the Bank after all expenses and taxes (Van Horne 2005). It measures how much the firm is earning after tax for each Taka invested in the Bank. In other words, ROE is net earnings per dollar equity capital. (Samad & Hassan 2000). It is also an indicator of measuring managerial efficiency [(Ross 1994), Sabi (1996), Hassan (1999), and Samad (1998). By and large, higher ROE means better managerial performance; however, a higher return on equity may be due to debt (financial leverage) or higher return on assets. Financial leverage creates an important difference between ROA and ROE in that financial leverage always magnifies ROE. This will always be the case as long as the ROA (gross) is greater the interest rate on debt (Ross, Westerfiled, Jaffe 2005). Usually, there is higher ROE for high growth companies.

3. Cost to Income Ratio (C/I) = total cost /total income measures the income generated per Taka cost. That is how expensive it is for the bank to produce a unit of output. In managerial aspects its show how much a manager can efficiently operate the bank activity as much as lower cost against income generate from operation. The lower the C/I ratio, the better the performance of the bank.

4.2. Liquidity Performance

Liquidity indicates the ability of the bank to meet its financial obligations in a timely and effective manner. Samad (2004:36) states that ‘‘*liquidity is the life and blood of a commercial bank*’’. Financial liabilities are attracted through retail and wholesale distribution channels. Retail generated funding is considered less interest elastic and more reliable than deposits attracted from wholesale distribution channels (Thygerson, 1995). The following ratios are used to measure liquidity.

1. Cash & Portfolio Investment to Deposit Ratio (CPIDR) = Cash & Portfolio Investment / Deposits. This ratio indicates the percentage of short term obligations that could be met with the bank’s liquid assets in the case of sudden withdrawals. The measure of liquidity of the bank is the cash and portfolio investments to deposit ratio. The higher the ratio the better is the liquidity position of the bank, therefore, the more is the confidence and trust of the depositors in the bank as compared to the bank with lower CPIDR. This ratio serves two purposes. First, it boosts the trust of the depositors in the bank as the depositors know that bank is not only having enough cash but also made some investments in securities portfolio and supposedly earning some positive returns on those portfolio investments. Secondly, they feel confident that in need of cash bank may sell these portfolio investments at any time in the secondary market which is readily available for this purpose.

2. Net Loans to total asset ratio (NLTA) = Net loans/total assets NLTA measures the percentage of assets that is tied up in loans. Net loan to total assets ratio (NLTA) is also another important ratio that measures the liquidity condition of the bank. Whereas Loan to Deposits is a ratio in which liquidity of the bank is measured in terms of its deposits, NLTA measures liquidity of the bank in terms of its total assets. That is, it gauges the percentage of total assets the bank has invested in loans (or financings). The higher is the ratio the less the liquidity is of the bank. Similar to LDR, the bank with low NLTA is also considered to be more liquid as compared to the bank with higher NLTA. However, high NLTA is an indication of potentially higher profitability and hence more risk. The higher the ratio, the less liquid the bank is.

3. Loans to deposit Ratio (LDR) = Loans/total deposits. Loan to deposit is the most important ratio to measure the liquidity condition of the bank. Here, loan means the *advances* for the conventional banks. Bank with Low LDR is considered to have excessive liquidity, potentially lower profits, and hence less risk as compared to the bank with high LDR. However, high LDR indicates that a bank has taken more financial stress by making excessive loans and also shows risk that to meet depositors’ claims bank may have to sell some loans at loss. A high figure denotes lower liquidity.

4.3. Asset Credit Quality (Credit Performance)

Credit risk is one of the major risks faced by bank. This can be described as potential loss arising from the failure of counter party to perform according to contractual arrangement with the bank. The failure may arise due to unwillingness of the counter party or decline in economic condition etc. banks risk management has been designed to address all these issues. While it is expected that banks would bear some bad loans and losses in their lending activities, one of the key objectives of the bank is to minimize such losses (Casu *et al*, 2006). Credit performance evaluates the risks associated with the bank’s asset portfolio i.e. the quality of loans issued by the bank. Several ratios can be used for measuring credit quality however, not all information on the loans is always available. Non-performing loans is available for National banks Limited therefore this paper use the following ratio:

Nonperforming Loans to Total Loan (NPLTL) = Nonperforming Loans /Total loans. This ratio indicates the proportion of the total loans that has been set aside but not charged off. It is percentage of total loan that has been either in default or close to being in default. Once a loan is nonperforming, the odds that it will be repaid in full are considered to be substantially lower. If the debtor starts making payments again on a nonperforming loan, it becomes a reperforming loan, even if the debtor has not caught up on all the missed payments (Investopedia). Institutions holding nonperforming loans in their portfolios may choose to sell them to other investors in order to get rid of risky assets and clean up their balance sheets. Sales of nonperforming loans must be carefully considered since they can have numerous financial implications, including affecting the company's profit and loss, and tax situations.

5. Conceptual Framework Model

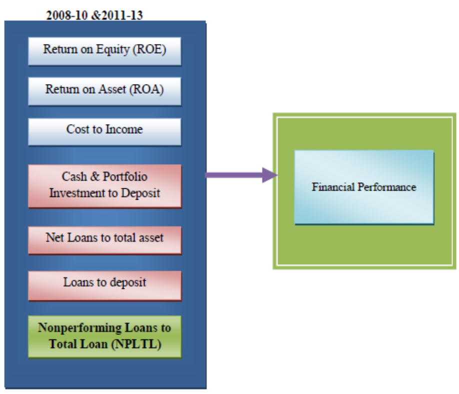

Figure 3.1. Conceptual Framework

6. Research Question & Hypothesis

6.1. Research Question

The main objective of this research can be gained answer through tested these research questions:

1. Is there any significant difference between 2008-10 and 2010-13 Return on Asset and Financial performance?
2. Is there any significant difference between 2008-10 and 2010-13 Return on Equity and Financial performance?
3. Is there any significant difference between 2008-10 and 2010-13 Cost to income and financial performance?
4. Is there any significant difference between 2008-10 and 2010-13 Net Loans to total asset and financial performance?
5. Is there any significant difference between Cash & Portfolio Investment to Deposit and Financial performance?
6. Is there any significant difference between Loans to deposit and financial performance?
7. Is there any significant relationship between Nonperforming Loans to Total Loan and financial performance?

6.2. Hypothesis

During this research below mentioning Null hypothesis has been generated and ready test from research question which mentioned earlier in above.

$H0_1$. There is no significant difference between2008-10 and 2010-13 Return on Asset and Financial performance.

$H0_2$. There is no significant difference between2008-10 and 2010-13 Return on Equity and Financial performance.

$H0_3$. There is no significant difference between2008-10 and 2010-13 Cost to income and financial performance.

$H0_4$. There is no significant difference between 2008-10 and 2010-13 Net Loans to total asset and financial performance.

$H0_5$. There is no significant difference between Cash & Portfolio Investment to Deposit and Financial performance.

$H0_6$. There is no significant difference between Loans to deposit and financial performance.

$H0_7$. There is no significant relationship between Nonperforming Loans to Total Loan and financial performance.

7. Research Methodology

7.1. Research Design

The degrees to which the methodology of this research can be structured two categories are Qualitative and quantitative method. Quantitative methods emphasis on objective measurement and numerical analysis of data collected through polls, questionnaires or surveys. Quantitative research focuses on gathering numerical data and generalizing it across groups of people. I use quantitative method for my research project. The research has been carried out once and it represents a snapshot of one point in time. So it is a Descriptive study under the category of time dimension.

The research was designed for breadth rather than depth. Null Hypotheses were tested quantitatively and the generalization of our findings was presented based on the representativeness of the sample. So it can be inferred that it is a statistical study.

7.2. Data Collection & Sampling

For achieving the specific objective of the study, data will be gathered entirely from secondary sources.

Secondary Sources

- Website of National Bank Limited.
- Annual Reports, Brochures, Manuals and Publication of the National Bank Ltd.
- Website of Bangladesh Bank
- Manual published by National Bank Ltd.

Using collected data as raw sample to make of this research project. National bank Ltd last six years financial history are used as per require of this study. Most of this data are used in financial ratio analysis of this bank. The data was obtained from Bank scope and the bank's financial statements and websites.

7.3. Methodology

This research paper uses a descriptive financial ratio analysis to measure, describe and analyse the performance of National bank limited in Bangladesh during the period 2008-2014. Additionally, to examine whether the difference in performance of the banks in 2008-2010 is statistically different from that of 2011-2013 a student's t- test **(Paired *t*-Test)** is employed to test the hypothesis that the means of the two periods are the same on the seven variables as detailed in section. In this case, we want to determine whether there is evidence that the Ratio effective difference. That is, if we calculate differences as **μd** = "2008-10" Ratio minus "2011-13" ratio ($\mu 1 - \mu 2$).

The following hypothesis has been tested:

H0: $\mu 1 = \mu 2$, or $\mu d = 0$.

Where $\mu 1$ is the mean for 2008-2010 and $\mu 2$ is the mean for 2011-2013. Inferences about the hypothesis are made by looking at test statistics and critical values associated with the mean. If P-value $\leq \alpha$ ($\alpha = 0.05$), reject the null hypothesis. If P-value $> \alpha$ ($\alpha = 0.05$), do not reject the null hypothesis. The results of the test are to be handled with caution as there are very few observations and the statistical tool might not be very effective when the sample is small.

The selection of the FRA method for this study is motivated by the fact that from the review of past studies on various banks and to the researchers' knowledge, few researchers has used FRA to measure the performance of commercial banks in around the world. Authors Oberholzer and Van der Westhuizen (2004) used the method in measuring branch performance however, the authors concentrated on branches of a single large bank. The main advantage of FRA is its ability and effectiveness in distinguishing high performance banks from others and the fact that FRA compensates for disparities and controls for any size effect on the financial variables being studied (Samad, 2004). Additionally, financial ratios can be used to identify a bank's specific strengths and weaknesses as well as providing detailed information about bank profitability, liquidity and credit quality policies (Hempel et al, 1994: Dietrich, 1996). FRA permits a historical sketch of bank returns and risks which Hempel et al, (1994) suggests presents an opportunity to evaluate the past performance of the bank which is an important step for planning for future performance. Although accounting data in financial statements is subject to manipulation and financial statements are backward looking, they are the only detailed information available on the bank's overall activities (Sinkey, 2002). Furthermore, they are the only source of information for evaluating the management's potential to generate satisfactory returns in future.

8. Data analysis and Discussions

This section of the research work present and discusses the results

8.1. Profitability Performance

In banking the risk-reward trade off is constantly present. Risk taking generates higher expected earnings through various mechanisms. For example granting high margin loans to risky customers may increase earnings in the short term but it also increases the credit risk profile and the probability of future losses (KPMG, 1998). NBL is giving continued emphasis on quality assets, which resulted in providing a sound asset base for the bank. So now we are show NBL Return on asset ratio with a descriptive analysis last six financial years from their balance sheet result.

i. Return on Assets (ROA) = net profit/total assets

Table 1. Net Profit to Total Asset (Taka in millions)

Year & Ratio	2008	2009	2010	2011	2012	2013
ROA	0.0211	0.0252	0.0605	0.0401	0.0080	0.0096

Below table here are some descriptive statistical measurement generated from above data table.

Table 2.

	ROA (2008-10)	ROA (2011-13)
Mean	0.035600	0.019533
SD	0.0216613	0.0186079
MAX	0.0605	
MIN	0.0080	

Last year was another challenging year for the banking sector if we are compare to 2008-2010. During the year average interest margin has decreased due to bank investment of fund to the low yield and government securities. With expansion of business, asset profile of the bank also increased gradually. Total asset of bank grew up 14.60% at December 2013 against last year. The significant increase in asset was mainly achieved due to rise in loan and advance, investment, cash and balance with other bank and institutions. This factor is effecting the calculation of ROA.

Table 1 shows in 2008-10 period banks ROA gradually increased. In 2011-13 financial year bank earn ROA 4.01%, 0.80% and 0.96% which is lower than previous period. Bank performs most effectively in 2010 as I can mention from graph. But in last year there some hope that it will try to reach previous position. If we focus on Table 2 here two period means respectively 3.56% and 1.95% which shown the downward trend for last period. Maximum 6.05% and minimum 0.80% that is clarify the ROA position of this bank. So current observations on ROA of NBL indicate they do not perform at satisfactory level. This trend we can easily identify by below ROA graph of 2008-2013.

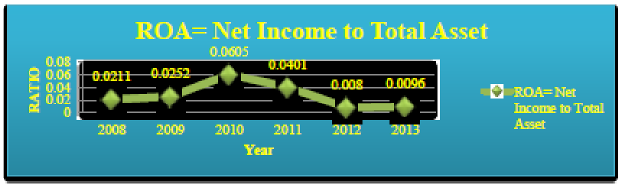

Figure 3.2. Return on Asset 2008-2013

ii. Return on Equity (ROE) = net profit/ total equity.

Table 3. Net Profit to Total Equity (Taka in millions)

Year & Ratio	2008	2009	2010	2011	2012	2013
ROE	0.2486	0.2753	0.4896	0.2996	0.0678	0.0914

Below table here are some descriptive statistical measurement generated from above data table.

Table 4.

	ROE (2008-10)	ROE (2011-13)
Mean	0.337833	0.1529333
SD	0.132110	0.12756400
MAX	0.4896	
MIN	0.0678	

Moreover the return on equity (ROE) was average 33.78% in 2008-2010 and 15.29% in 2011-13 periods. Lower ROE in 2012 was 6.78%. If we compare to last year ROE to previous year 2.36% gap with last year. The earnings per share was Tk. 1.49 in 2013 increasing 41.90% over Tk 1.05 previous year. The net asset value per share stood at Tk. 16.86 which was Tk. 15.75 in 2012.

In Table 3 ROE reached highest point 48.96% at 2010 than its getting lower towards. NBL earn maximum ROE 48.96% in 2010 and minimum 6.78% in 2012.

In accordance with prudent capital structure plan, the bank has a consistent dividend policy. In addition NBL declared high stock dividend as and when possible to strengthen the capital base. So bank current ROE position need to change if we compare to last 4 years except of 2012.

Figure 3.3. Return on Equity 2008-2013

iii. Cost to Income Ratio (C/I) = total cost /total income

Table 5. Cost to Income (Taka in millions)

Year & Ratio	2008	2009	2010	2011	2012	2013
C/I	0.4857	0.4785	0.3141	0.2473	0.3403	0.3959

Below table here are some descriptive statistical measurement generated from above data table

Table 6.

	C/I (2008-10)	C/I (2011-13)
Mean	0.426100	0.3278333
SD	0.0970616	0.07508031
MAX	0.4857	
MIN	0.2473	

Cost to Income ratio of NBL continues with consistency among the banking industry in Bangladesh. Cost to income decreased 23% from last period. It also increased to 39.59% in 2013 from 34.03% of 2012 due to increased in personnel and establishment cost.

For Cost to income ratio maximum was 48.57% and minimum 24.73%. In 2011 bank performing good because at that time they hold cost 24.73% of their total income. Overall al cost to income ratio significantly changed from 2008-2013 which boost profitability.

Figure 3.4. Cost to Income ratio 2008-2013

In term of bank profitability ROA and ROE was increased till 2010 then it goes downward bit mixed trend and Cost to income ratio most effective at 2011 then it goes slightly upward but not more than 2008-2009. So bank should focus on improve the return on assets and equity.

8.4. Liquidity performance

Liquidity performance measures the ability to meet financial obligations as they become due and is crucial to the sustained viability of banking institutions. What began as credit concerns for the US sub-prime market developed into concerns in global credit markets with unknown financial exposures and potential losses (ABSA, 2009). The resultant uncertainty made financial market participants exceedingly risk averse, such that they were unwilling to invest in any markets or financial instruments other than 'safe havens'. This severely reduced the levels of liquidity in the global financial markets (SARB, 2009). NBL was not immune to such developments and this is reflected in the liquidity ratios. Bangladeshi banks rely on customer's deposits and their current balances with the Bangladesh bank for their liquidity.

I. Cash & Portfolio Investment to Deposit Ratio (CPIDR) = Cash & Portfolio Investment / Deposits

Table 7. Cash & Portfolio Investment to Total Deposits. (Taka in millions)

Year & Ratio	2008	2009	2010	2011	2012	2013
CPIDR	0.1685	0.1603	0.2439	0.2366	0.3453	0.2935

Below table here are some descriptive statistical measurement generated from above data table

Table 8.

	CPIDR (2008-10)	CPIDR (2011-13)
Mean	0.190900	0.2918000
SD	0.0460821 0.05436994	
MAX	0.3453	
MIN	0.1603	

Bank used their deposits in investment activity increased consistently. So mean of two period 19% in 2008-10 & 29% in 2011-13. Increased in CPIDR more liquid bank is. Because investment in stock more closely related to liquid things will make bank more liquid that build good relation to bank customer Bank use their deposits in investment highest in 2012 and lowest 2009. Other year respectively performed is good.

Figure 3.5. Cash & portfolio Investment to deposits ratio 2008-2013

II. Net Loans to total asset ratio (NLTA) = Net loans/total assets

Table 9. Net Loans to total asset ratio. (Taka in millions)

Year & Ratio	2008	2009	2010	2011	2012	2013
NLTA	0.6876	0.7085	0.6829	0.6826	0.6148	0.6425

Below table here are some descriptive statistical measurement generated from above data table

Table 10.

	NLTA (2008-10)	NLTA (2011-13)
Mean	0.693000	0.6466333
SD	0.013628	0.0340885
MAX	0.7085	
MIN	0.6148	

Net loan to total asset ratio has consistency between two periods. The mean of this period 0.693 in 2008-10 & 2011-13 it was 0.647 which show quit well performs in 2011-13 periods as perspective of liquidity. Bigger the ratio less liquid is bank. In this part they perform significant. In Table 9 net loans to total asset peak point in 2009 70.85% and lower 61.48% at 2012. This ratio indicate bank net loan against asset. So Increases net loan will reduce the liquidity of bank. On the other hand idle cash or asset never will positive trend for bank. So bank should maintain enough liquidity according to Bangladesh bank policy also operates effectively in their business activity.

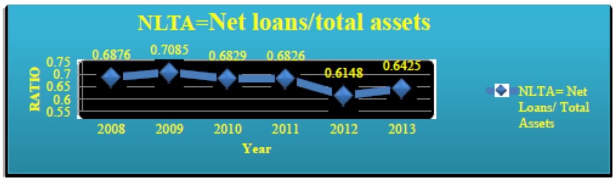

Figure 3.6. Net loans to Total Asset ratio 2008-2013

III. Loans to deposit Ratio (LDR) = Loans/total deposits

Table 11. Loans to deposit Ratio. (Taka in millions)

Year & Ratio	2008	2009	2010	2011	2012	2013
LDR	0.8252	0.8477	0.8978	0.9000	0.8019	0.7803

Below table here are some descriptive statistical measurement generated from above data table

Table 12.

	LDR (2008-10)	LDR (2011-13)
Mean	0.856900	0.827400
SD	0.0371641	0.0637943
MAX	0.9000	
MIN	0.7803	

In perspective of bank total deposits percentage of total loans calculate. Higher the ratio means less liquid and taking more risk. So bank has to maintain certain ratio for following the central bank policy and keep sustainable position in the competitive market.

Bank total loan against deposit was 90% in 2011 which reached highest point around this period and minimum 78.03% in year 2013. the mean of two segments 85.69% in 2008-10 and in 2011-13 was 82.74%. Lower rate of ratio means more liquidity of bank. According to below graph indicate that is NBL current LDR well consistent compare previous years.

Liquidity position of this bank improved all three ratio that refers bank has more liquidity than other time compare to present.

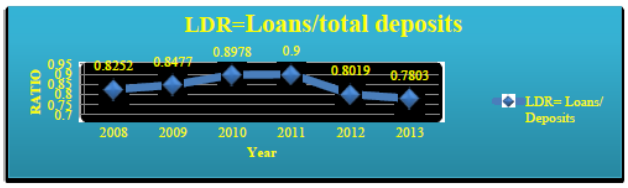

Figure 3.7. Loans to total deposits ratio 2008-2013

8.4. Asset Credit Quality (Credit Performance)

Credit performance is concerned with the examination of the risk associated with a bank's asset portfolio. By depending on banks credit performance profitability and liquidity move. Because if nonperforming or bad loans reduced bank will increase efficiency that help to rise of profit and liquid asset.

I. Nonperforming Loans to Total Loan (NPLTL) = Nonperforming Loans /Total loans.

Table 13. Nonperforming Loans /Total loans (Taka in millions)

Year & Ratio	2008	2009	2010	2011	2012	2013
NPLTL	0.0540	0.0596	0.0396	0.0283	0.0432	0.0324

Below table here are some descriptive statistical measurement generated from above data table

Table 14.

	NPLTL (2008-10)	NPLTL (2011-13)
Mean	0.051067	0.034633
SD	0.0103176	0.0076970
MAX	0.0596	
MIN	0.0283	

National bank can reduce the risk of loan related factor because they can able consequently improvement in the ratio of nonperforming loan to total return. Which reduced at 2.83% was in

2011 and highest point was 5.96% in 2009. The mean of two different periods respectively 5.1% was in 2008-10 & 3.46% in 2011-13. The NPLTL ratio stood at 3.24% which appears to be satisfactory in the country global context. The bank made adequate provision for classified with a view to reflecting a transparent and resilient of affairs of the bank.

Overall, although risk appetites were adjusted in line with challenging economic conditions and caution was exercised with regard to lending. So NBL nonperforming loan to total loan need close as much as possible which is sound development for this bank.

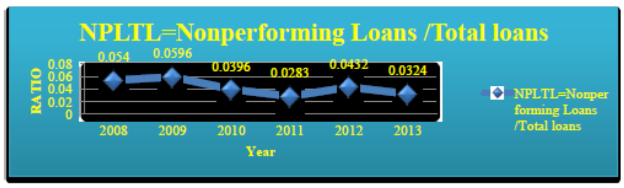

Figure 3.8. Nonperforming Loans to Total Loans ratio 2008-2013

National Bank limited given preference in Nonperforming loans to total loans that the improvements of this ratio we see compare to all the six years current ratio is lower. So we can conclude bank has now comfortable position compare to others time in terms of Nonperforming loan to total loan ratio.

9. Hypothesis Testing

To examine whether the difference in performance of the banks in 2008-2010 is statistically different from that of 2011-2013 a student's t- test is employed to test the hypothesis that the means of the two periods are the same on the seven variables. The table below provides a summary of a student's paired t- test results for the two periods under review.

Table 15.

	Ratios	Mean 2008-2010 μ1	Mean 2010-2013 μ2	(μ1 –μ2)	Student's T-test Score	P-Value	Decision
Profitability	ROA	0.04	0.02	0.02	0.786	0.257	Accept
	ROE	0.34	0.15	0.19	1.421	0.146	Accept
	C/I	0.43	0.33	0.10	1.039	0.204	Accept
	CPIDR	0.19	0.29	-0.10	-2.380	0.070	Accept
Liquidity	NLTA	0.69	0.65	0.04	1.799	0.107	Accept
	LDR	0.86	0.82	0.04	0.526	0.326	Accept
Credit Performance	NPLTL	0.05	0.04	0.01	3.077	0.046	Rejected

In the Table 15 all the ratios mean different are positive except Cash and portfolio investment to deposits ratio. But we are testing these hypothesis by using Student's *T=test* statistic which associated with critical value to determine *p*- value. If P-value ≤ α (α = 0.05), reject the null hypothesis. If *p*-value > α (α = 0.05), do not reject the null hypothesis.

NBL profitability ratio in ROA the calculated T-statistic is given by 0.786 which has *p* value of 0.257 one tailed at α = 0.05 level which is higher, we do not reject null (H0) hypothesis. ROE *p* value 0.146 one tailed at α = 0.05 level which is higher so we do not reject null hypothesis. CI *p* value 0.204 one tailed at α = 0.05 level is higher we do not reject Null hypothesis. The entire profitability ratio do not reject null hypothesis. That means there is no statistical significant difference between 2008-2010 and 2011-2013 profitability ratio.

Now NBL liquidity ratio, cash and portfolio investment to deposits ratio computer given T- statistics is -2.380 and *p* value 0.070 one tailed at α = 0.05 level is higher we do not reject Null hypothesis. As follows Net loans to total asset *p* value 0.107 one tailed at α = 0.05 level is higher we do not reject Null hypothesis. For loan to deposits ratio *p* value 0.326 one tailed at α = 0.05 level is higher we do not reject Null hypothesis. NBL liquidity ratio hypothesis prove that there are no statistical significant difference between two period ratios.

NBL nonperforming loan to total loan ratio the calculated T-statistic is given by 3.077 which has *p* value of 0.045 one tailed at α = 0.05 level which is lower, we reject null (H0) hypothesis. And accept Alternate Hypothesis. There is significant difference between two periods NPLTL.

10. Limitations of the Study

From Starting of this study some force has restricted the area of study, which may interrupt the accuracy, fluency knowledge limitation of this whole work.

- Study exclusively depends on the published financial data, so it is subject to all limitations that are inherent in the condensed published financial statements.
- The study is confined to Six years data only (2008–2013). Detailed analysis covering a lengthy period, which may give slightly different results, has not been made.
- The study is based on secondary data collected from the website www.nbl-bd.com and branch; so, the quality of the study depends purely upon the accuracy, reliability and quality of the secondary data source.
- Shorter time frame of internship may be restricted area of study.
- Limited Knowledge about SPSS may occur discrepancy in measurement procedure

The main model, profitability analysis, used in this research to evaluate the Foreign exchange financial performance of NBL has some limitations itself.

11. Major Findings

The Financial Position of NBL is satisfactory compare to other commercial bank but has some problems. There have also some problems in balance sheet others area. The presentation of data can be summarized as of the following findings:

- Profit rate is low in recent years. So to somebody it is unattractive.
- Profitability performance of NBL not satisfactory level because of last 2 years lower growth.
- Liquidity quit good compare to others but they have chance to improve more.
- Credit management last few year really good because the trend of nonperforming loan getting lower.
- Overall Financial performance effective if we compare to others bank because of last few years unstable environment in our country
- In case of import and export financing it takes long time to sanction the fund.
- NBL banks have their own websites which acts as an information center and promotional tool for the banks.
- NBL has own banking software.
- Lack of available information on banking product.
- Internet Banking has been introduced. But most of the time the server is unavailable.

So overall performance would not been satisfactory level because they have improved and steadily maintain the assets and income position. Share price also need to increase with dividend for bank stakeholder.

12. Summary & Conclusion

Despite of severe unfavorable economic conditions of last few years, NBL achieved a worthy performance in all core areas of banking operation. Main goal of this paper to analyze the research question and tested the hypothesis by descriptive study. So I try to solve the differences between financial performances of NBL over the two periods. This paper measured the performance of NBL over the Financial 2008-2013. The results indicate that the overall bank performance in terms of profitability (ROA, ROE, C/I), liquidity and credit performance has been improving since 2008 up to 2011 and declining at 2012 including 2013. Banks increased the size of their portfolios during the period.

Bank is a very important and vital for economic development in mobilizing capital and other resources. NBL is also contributing to the advancement of the socioeconomic condition of the country. To keep pace with the current market and demand, NBL is following several strategies and taking new initiatives, offering new products and services to the customers. The bank should maintain well-structured communication from upper level to lower level. NBL have a strong position in the competitive market. It is among one of the fastest growing Bank

As the economy of Bangladesh is increasing so is the foreign trade and NBL Bank like always have played its role in making sure that things go smoothly. The bank is doing its best to provide better portfolio to its stakeholder.

Income, Total assets, Investment activity, Export, Import and Remittance are all showing positive trends even after the global challenges that we are facing today. But the little concerned on financial stability of the bank decreased in recent year, this may be because of opening of new branches in different business centers and the instability in the economy of the world.

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