Determinants of profitability of Non Bank Financial Institutions' in a developing country: Evidence from Bangladesh

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Abstract
This project examines the determinants of the profitability of firms in the Non Banking Financial Institution (NBFIs) industry of Bangladesh. Financial Performance of a financial institution basically depends on its some key financial determinants. Specially operating efficiency is main influencing factor which is calculated through operating income. Besides it capital Structure composite of equity and liability, operating expense, total asset significantly affect the profitability of any NBFI company. In addition term deposit also affects the profitability though that is statistically not significant. Different Statistical techniques such as correlation matrix, multiple regressions have been used to determine the relationships between variables. And before doing regression analysis normality distribution test by Run test, and K-W test for randomness has been done. The research is an attempt to find out the statistically significant key determinants variable and their level of influence over net profit.

Key words:
Determinants, Non Banking Financial Institution (NBFIs), Financial Performance, Capital Structure,

1.00 Introduction

Financial Sector is the 4th highest sector in term of market capitalization. NBFIs industry is considered the second highest source of loan and provider of different financial services. The growing financial performance of this sector has a colossal effect on whole economy performance. Typically financial sector refers to mainly banking sector of any country. Recently the performance of NBFIs industry has dramatically influencing the performance of banking sector. The contribution of this industry toward the economy has been emerging and as facts suggest the curiosity of investors has significantly increased. Consequently the financial performance of this sector's company has been in stakeholder's prime apprehension in recent times. As the empirical studies suggest numbers of research works have been accomplished on profitability of banking sectors to categorize the fundamental determinants of profitability. But still very few research works have been conducted on NBFI sector.

2.00 Objective of the study

(a) To identify the major financial features affecting the profitability in the NBFI industry of Bangladesh.
(b) To stain out the influential factor behind the NBFI industry's profitability.
(c) To find out the key fundamental of Profitability of any NBFI company;
(d) To determine the most significant influencer variable on Profitability;

3.00 Variables for the study

In this section, an attempt has been done to find out the associations between profitability and performance indicating variables with assistance of few statistical tools. In this study, the dependent variable and the independent variables are as follows:

Dependent Variable	Independent Variables	
Financial Performance 1. Net profit (NP)	1. Total Assets (TA), 2. Total Liabilities (TL), 3. Total Equity (TE),	4. Term Deposit (TD), 5. Operating Revenue (OR) and 6. Operating Expense (OE)

4.00 Research Methodology

The data for this study was gathered from the audited annual financial report published by the listed 22 companies. The annual data for the all listed NBFI during 2008 to 2011 are used in order to assess the profitability of the financial institution of Bangladesh. Any progress of Financial institutions thereafter is thus out of the scope of the report. Help of other sources like annual report, magazines, brochures, journals, newspapers, websites, etc. have also been chosen whenever found necessary. This paper is based on secondary data collection.

In processing the data, various methods of conventional statistics were deployed. Frequency distribution, measures of central tendency and dispersion, time series analysis, simple correlation and regression analysis and correlation matrix in some cases calculated data are presented in graph to give the reader a better understanding of financial components.

The study uses the major financial services and is comprised of Total Assets, Total Liabilities, Total Equity, Term Deposit, Operating Revenue and Operating Expense. Also this study tries to explore any kind of variance according to its different variables. Pearson correlation coefficient also used to investigate the correlation between the variables at 5% level of significance.

4.01 Data Analysis & Presentation Technique

In order to analyze gathered data, we plan to use statistical software like SPSS that will run z-test, t-test, regression and such. The data will be presented through graphs for better visual understanding.

4.02 Limitation

Limited access to the data is the prime limitation of this report, as the prime sources of data is the annual report. In audited quarterly reports companies usually provides with those information which generate positive notion about the company and presentation of the information in their own way evidently is a key limitation in case of illustration of the exact scenario. Also scarceness of work on this sector profitability is also a great hindrance for the report, which results in acute shortage of literature in this arena. Restatement of data in following year has been also a great concern as maximum companies restate the amount in following year.

5.00 Literature Review

To get an insight of profitability determinants, several studies have been executed up to till date. But the fact suggests that, most of the researches have been conducted on banking industry. So, the evident with regard to profitability is scarce in the NBFI sector.

FadzlanSufian, and RoyfaizalRazali Chong (2008) examined the determinants of Philippines banks profitability during the period 1990–2005. Their empirical findings suggest that all the bank-specific determinant variables have a statistically significantly impact on bank profitability. They also found that size, credit risk, and expense preference behavior are negatively related to banks' profitability, while non-interest income and capitalization have a positive impact. According to their analysis inflation has a negative impact on bank profitability, while the impact of economic growth, money supply, and stock market capitalization have not significantly explained the variations in the profitability of the Philippines banks.

Shah-Noor Rahman and Tazrina Farah (2012), in their research paper on "Non Bank Financial Institution's Profitability Indicators: Evidence from Bangladesh" examined the indicators of the profitability of firms in the Non Banking Financial Institution (NBFIs) industry of Bangladesh. Their finding was profitability indicator variables have impact upon net profit. And there variable was Net profit as dependent variable and Current Asset, Financial Expense, Long term liability, Interest Income, and Operating revenue as independent variable. According to their report among the independent variables the Liquidity Condition and Operating Efficiency exert significant influence on Profitability of Non Bank sector in Bangladesh.

Fadzlan Sufian (2009) in his research paper title "Determinants of non-bank financial institutions' profitability: empirical evidence from Malaysia" analyzed the determinants of profitability on NBFIs in developed country. He found that "Malaysian NBFIs with a higher risk exhibits lower profitability level. On the other hand, the large Malaysian NBFIs with high operational expenses exhibits higher profitability level, thus supporting the expense preference behavior hypothesis". He also suggested that specialization has no significant relationship with Malaysian NBFIs profitability.

James W. Scott and José Carlos Arias (2011) in their study" Banking profitability determinants" surveyed top five bank holding companies in the United and concluded that profitability determinants for the banking industry include positive relationship between the return of equity and capital to asset ratio as well as the annual percentage changes in the external per capita income. There was also a virtual consensus identified concerning the effect that the internal factor of size as measured by an organization's total assets had on its ability to compete more effectively, even in times of economic downturns.

Christos K. Staikouras & Geoffrey E. Wood (2011) examined the factors that that influence the profitability of financial institution in their research paper "The Determinants of European Bank Profitability". Their main finding was "the rate of return earned by a financial institution is affected by numerous factors. These factors include elements internal to each financial institution and several important external forces shaping earnings performance. The type of explanation would determine possible policy

implications and ought to be taken seriously". Their paper quantifies how internal determinants ("within effects" changes) and external factors ("dynamic reallocation" effects) contribute to the performance of the EU banking industry as a whole in 1994-1998.

Balchandher K. Guru, J. Staunton & B. Shanmugam (2009) in this research paper "Determinants of commercial bank profitability in Malaysia" examined to what extent are the profitability performance disparities due to variations in management controllable internal factors and external factors. He took net profit as his dependent variable and Asset Composition, Capital, Deposit Composition, Expenses Management, Liquidity, Firm Size, Inflation Rate, Market Growth, Market Interest, Market Share and Regulation as his independent variable. He suggested that all variable has significant relationship with net profit. And also he added that in order to increase profitability the Expense Management should be proper as this variable significance is very high.

Demirguc-Kunt & Huizinga (2001) and Bikker and Hu (2002) find a negative relationship between stock market capitalization and banks' profitability, it means that equity and bank financing acts as substitutes rather than complements. In case of the industry-specific factors, the Structure- Conduct-Performance premise point out that growing market power enhances the profitability (income) of banks.

Antonina Davydenko(2011) surveyed about 3236 bank-quarter observations and concluded that Ukrainian banks suffer from low quality of loans and do not manage to extract considerable profits from the growing volume of deposits. Despite low profits from the core banking activities

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Nadim Jahangir', Shubhankar Shill and Md. AmlanJahidHaque(2007) surveyed 15 commercial banks in Bangladesh and found that market concentration and bank risk do little to explain bank return on equity, whereas bank market size is the only variable providing an explanation for banks return on equity in the context of Bangladesh. They found that market size and bank's return on equity proved to have strong relationship. Also, a strong and significant relationship was identified between market size and bank's return on equity. It suggests that capital adequacy is important for a bank to be profitable.

5.01 Research Gap

After reading several research papers we found that no one has yet made any research paper on effect of internal determinants on company's profitability in Bangladesh. In fulfilling that gap our research paper will play a significant role. As our research paper deals with role of fundamental determinants on company performance, so everyone will get an overall idea about how the fundamental determinants affect the company's profitability. It never can be taken as the conclusion rather as the beginning of research topic.

6.00 Non Banking Financial Industry (NBFIs) in Bangladesh
Table: 1

Industry Snapshot	
Paid-up Capital (BDT mn)	20438.96
Number of listed Company	22
Capitalization (BDT)	163,911,375,872
Sector PE	19.1
Sertor Earning	8,714,468,569
Sector Beta	0.905396574

Non-Bank Financial Institutions (NBFIs) are those institutions that are licensed and controlled by the Financial Institutions Act of 1993 (FIA 93). NBFIs give loans and advances for industry, commerce, agriculture or housing; carries on business of hire purchase transactions including leasing of machinery or equipment; involves in business of the underwriting or acquisition of, or the investment or re-investment in shares, stocks, bonds, debentures or debenture stock or securities issued by the government or any local authority;

Finances venture capital; gives loan for house building and property purchases and uses its capital to invest in companies. The major differences of NBFIs with commercial banks are that the former cannot accept any deposit which is payable on demand by cheques, drafts or orders drawn by the depositor and cannot deal in

foreign exchange. Starting from the IPDC in 1981, a total of 31 NBFIs are now working in the country as of October, 2012. And out of 29 NBFI 22 companies are listed at DSE and CSE.

The financial system of Bangladesh is comprised of three broad fragmented sectors:

  (i) Formal Sector,   (ii) Semi-Formal Sector,   (iii) Informal Sector.

The sectors have been categorized in accordance with their degree of regulation. The **formal sector** includes all regulated institutions like *Banks, Non-Bank Financial Institutions (NBFIs), Insurance Companies, Capital Market Intermediaries* like Brokerage Houses, Merchant Banks etc The **semi formal sector** includes those institutions which are regulated otherwise but do not fall under the jurisdiction of Central Bank, Insurance Authority, Securities and Exchange Commission or any other enacted financial regulator. This sector is mainly represented by *Specialized Financial Institutions* like House Building Finance Corporation (HBFC), Palli Karma Sahayak Foundation (PKSF), and Samabay Bank, Grameen Bank etc., *Non Governmental Organizations (NGOs and discrete government programs.* The **informal sector** includes private intermediaries which are completely unregulated.

Non Bank Financial Institutions (NBFIs) are those types of financial institutions which are regulated under Financial Institution Act, 1993 and controlled by Bangladesh Bank. Now, 31 NBFIs are operating in Bangladesh while the maiden one was established in 1981. Out of the total, 2 is fully government owned, 1 is the subsidiary of a SOCB, 13 were initiated by private domestic initiative and 15 were initiated by joint venture initiative. Major sources of funds of NBFIs are Term Deposit (at least six months tenure), Credit Facility from Banks and other NBFIs, Call Money as well as Bond and Securitization. The major difference between banks and NBFIs are as follows:

 (a) NBFIs cannot issue cheques, pay-orders or demand drafts;
 (b) NBFIs cannot receive demand deposits;
 (c) NBFIs cannot be involved in foreign exchange financing;
 (d) NBFIs can conduct their business operations with diversified financing modes like syndicated financing, bridge financing, lease financing, securitization instruments, private placement of equity etc.

7.00 Empirical research & explanation

In this section, the statistical research of different variables has been done to determine the association between company financial performance (Net Profit) and different fundamental performance determinants with assistance of few statistical tools.

In this section, an attempt has been done to find out the associations between profitability and performance indicating variables with assistance of few statistical tools. At first, a simple regression model is executed with each of the independent explainers. In this model, the dependent variable is Net Profit and the independent factors are Current Assets, Financial Expense, Long Term Liability, Interest Income and Operating Revenue. These dynamics are chosen in accordance with the eminence that in what degree those can contribute to the determination of profitability. In the second part of analysis, the investigation has been done through multiple regression models. The dependent and independent factors are kept the same as the simple regression model. The empirical study has been done as a whole to find out the extent of relationship between dependent and independent variables. After performing the analysis, it will be likely to come to a supposition about the explanatory powers of the Performance indicating variables towards the profitability.

7.01 Descriptive Statistics

Table: 2

Descriptive Statistics						
	N	Minimum	Maximum	Mean	Std. Deviation	Variance
NP	86	-6.E7	5.E9	4.26E8	7.822E8	6.118E17
TA	86	1.E9	6.E10	1.05E10	1.016E10	1.033E20
TE	86	4.E8	3.E10	2.15E9	4.256E9	1.811E19
TL	86	8.E8	3.E10	8.31E9	7.011E9	4.916E19
TD	86	6472378	3.E10	4.67E9	5.444E9	2.964E19
OR	86	6.E7	7.E9	7.94E8	1.144E9	1.309E18
OE	86	1.E7	1.E9	1.58E8	1.915E8	3.666E16
Valid N (list-wise)	86					

In this table different descriptive statistics such as minimum, maximum, mean, standard deviation and variance of all selected variable has been included.

7.02 Correlation Matrix

Table: 3

		NP	TA	TE	TL	TD	OR	OE
				Correlations				
NP	Pearson Correlation	1	.871**	.943**	.688**	.789**	.962**	.675**
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.000
	N	86	86	86	86	86	86	86
TA	Pearson Correlation	.871**	1	.834**	.942**	.963**	.928**	.829**
	Sig. (2-tailed)	.000		.000	.000	.000	.000	.000
	N	86	86	86	86	86	86	86
TE	Pearson Correlation	.943**	.834**	1	.601**	.764**	.879**	.616**
	Sig. (2-tailed)	.000	.000		.000	.000	.000	.000
	N	86	86	86	86	86	86	86
TL	Pearson Correlation	.688**	.942**	.601**	1	.933**	.809**	.825**
	Sig. (2-tailed)	.000	.000	.000		.000	.000	.000
	N	86	86	86	86	86	86	86
TD	Pearson Correlation	.789**	.963**	.764**	.933**	1	.864**	.778**
	Sig. (2-tailed)	.000	.000	.000	.000		.000	.000
	N	86	86	86	86	86	86	86
OR	Pearson Correlation	.962**	.928**	.879**	.809**	.864**	1	.810**
	Sig. (2-tailed)	.000	.000	.000	.000	.000		.000
	N	86	86	86	86	86	86	86
OE	Pearson Correlation	.675**	.829**	.616**	.825**	.778**	.810**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	
	N	86	86	86	86	86	86	86
**. Correlation is significant at the 0.01 level (2-tailed).								

In this table the correlation among all variable has been shown. Especially the correlation between dependent variable and independent variable has been shown. All the independent variables are positive correlated with net profit except operating expense. As the result suggests, the association of operating efficiency (operating revenue) is the highest among all the variables.

7.03 Goodness of Fit test

The goodness of fit test applies to situation in which we want to determine whether a set of data may be looked upon as a random sample from a population having a given distribution. Normally it is done to find out whether values of variable are normally distributed or not. Kolmogorov-Smirnov goodness of fit test is used in the study. This part is done to determine whether to do parametric test or non-parametric test.

		NP	TA	TE	TL	TD	OR	OE
				One-Sample Kolmogorov-Smirnov Test				
N		86	86	86	86	86	86	86
Normal Parameters[a]	Mean	4.26E8	1.05E10	2.15E9	8.31E9	4.67E9	7.94E8	1.58E8
	Std. Deviation	7.822E8	1.016E10	4.256E9	7.011E9	5.444E9	1.144E9	1.915E8
Most Extreme Differences	Absolute	.285	.183	.338	.159	.247	.265	.257
	Positive	.268	.179	.307	.159	.247	.265	.257
	Negative	-.285	-.183	-.338	-.141	-.196	-.260	-.226
Kolmogorov-Smirnov Z		2.641	1.693	3.137	1.476	2.293	2.461	2.383
Asymp. Sig. (2-tailed)		.000	.006	.000	.026	.000	.000	.000
a. Test distribution is Normal.								

Table: 4

Hypothesis: Null Hypothesis (H_0): The values are normally distributed.
Decision: As the P-value of all variables are greater than 0.05, we cannot reject the null hypothesis. Soall variables' values are normally distributed. So we can use parametric test.

7.04 Mean Test Analysis

					95% Confidence Interval of the Difference	
One-Sample Test						
Test Value = 0						
	t	df	Sig. (2-tailed)	Mean Difference	Lower	Upper
NP	5.051	85	.000	4.260E8	2.58E8	5.94E8
TA	9.571	85	.000	1.049E10	8.31E9	1.27E10
TE	4.689	85	.000	2.152E9	1.24E9	3.06E9
TL	10.996	85	.000	8.314E9	6.81E9	9.82E9
TD	7.963	85	.000	4.675E9	3.51E9	5.84E9
OpR	6.432	85	.000	7.936E8	5.48E8	1.04E9
OE	7.640	85	.000	1.577E8	1.17E8	1.99E8

Table: 5

Hypothesis: Null Hypothesis: Mean of variable is equal to zero
Decision: The significance level of all variable is lower than 0.05. Therefore, the null hypothesis should be rejected. So it can be stated that mean of all variable is not equal to zero.

7.05 Simple Regression Analysis

In this part of report we will start to estimate simple regression model keeping financial performance i.e. Net Profit of all company as dependent variable and all other financial circumstances indicator as independent variable. Simple regression model will follow below format:

$$Y = a + bX$$

Where, Y= Dependent variable, a= Y- intercept/constant, b=slope, X= independent variable
The outputs of regression are summarized in the following table:

Dependent Variable	Independent Variable	Equation	R^2	F- test Value	P Value of the Model
Net Profit (NP)	Total Asset (TA)	NP = -2.774+ .871 TA	75.60%	264.78	.000
	Total Liability (TL)	NP = 5.299+ .688 TL	88.80%	677.88	.000
	Total Equity (TE)	NP = -2.12+ .238 TE	47.70%	75.512	.000
	Term Deposit (TD)	NP = -1.03+ .789 TD	61.80%	138.50	.000
	Operational Revenue (OR)	NP = -9.59+ .962 OR	92.50%	1.044	.000
	Operational Expense (OE)	NP = -9.27+ .329 OE	45.00%	70.49	.000

Table: 6

After examining the values of R^2 (Coefficient of determination) and P values of F test in the above table, we can say that Operating Revenue has the most influential impact over Net income. After that Total liability and then Term deposit significantly affect the company financial performance. So, it can be concluded that, Profitability of NBFIs are mostly persuaded by the changes in different expenses and capital structure along with its operating efficiency.

Among this 6 performance indicating Operating Revenue have the highest value for R^2 (92.50%) which indicates that this can explain 92.50% of the variations in profitability over this 4 years of time horizon (2008-2011). P- Value (0.00) of F - tests at 95% confidence level states that the result is significant as it is less than .05. However, Total Equity has the lowest value of R^2 (47.70%) and P value (0.456) of F test, which indicates that this variable has very lower impact on profitability as a predictor (i.e. independent) variable when used in simple regression analysis.

7.06 Multiple Regression Model
7.06.1 Model Details
Table: 7

Model	Variables Entered	Variables Removed	Method
Variables Entered/Removed[b]			
1	OE, TA,TE, TL, OR, TD		Enter
a. Dependent Variable: NP			

7.06.2 ANOVA
Null Hypothesis: The model is not adequate or $\beta_1 = \beta_2 = \beta_3 = \beta_4 = \beta_5 = \beta_6 = 0$
Alternative Hypothesis: The model is adequate or at least one $\beta_i \neq 0$

Table: 8

ANOVA[b]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5.118E19	5	1.024E19	10.002E3	.000[a]
	Residual	8.175E17	80	1.022E16		
	Total	5.200E19	85			
a. Predictors: (Constant), OE,TA, TE, TL, OR, TD						
b. Dependent Variable: NP						

Explanation:
The SPSS output for ANOVA shows that F value is 10.002 and the level of significance is .000. Because the F value is greater than the critical F value of 5.11 or 8.17 and the significance level .000 is lower than acceptable level of significance .05, we can reject the null hypothesis. Therefore the model is adequate.
7.06.3 T-Test
Null Hypothesis: Variable X_i is not affecting Y ($\beta_i = 0$)
Alternative Hypothesis: Variable X_i is affecting Y ($\beta_i \neq 0$)

Table: 9

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-3.056E7	2.001E7		-1.527	.131
	TA	.025	.193	.301	.131	.011
	TE	.074	.007	.401	10.140	.000
	TL	.011	.006	.097	1.758	.003
	TD	-.029	.008	-.203	-3.582	.001
	OR	.588	.033	.860	18.085	.000
	OE	-.781	.115	-.191	-6.774	.000
a. Dependent Variable: NP						

Explanation:
The coefficient table above shows that significance level for Total Asset, Total Liability, Total Equity, Term Deposit, Operation Revenue, Operating Expense are .000, .003, .001, .118, .000, .060. So it can be stated that all the variables have significant impact on the model. In other words, all variables are affecting the model.
7.06.4 Main Model
Table: 10

Multiple Regression Model	
Model	**Net Profit = -3.05** + .301 TA+ **.097** TL + **.401** TE + (-**.203)** TD + **.86** OR + (-**.191**) OE
Other Statistics for Model	
R	.992
R^2	.983
F- test value	17.482
P- value of F test	.000[a]

Explanation:
Profitability related with performance indicators in the following ways:
(a) For 1 unit increases (decreases) in Total Assets (and values for other independent variables remaining the same), Net Profit will increase by .301 units and vice versa;
(b) For 1 unit increase (decreases) in Total Liability (and values for other independent variables remaining the same), Net Profit will increase by .097 units and vice versa;

(c) For 1 unit increases (decreases) in Total Equity (and values for other independent variables remaining the same), Net Profit will increase by .401 units and vice versa;

(d) For 1 unit increases (decreases) in Term Deposit (and values for other independent variables remaining the same), Net Profit will decrease by .203 units and vice versa;

(e) For 1 unit increases (decreases) in Operating Revenue (and values for other independent variables remaining the same), Net Profit will increase by 0.86 units;

(f) For 1 unit increases (decreases) in Operating Expense (and values for other independent variables remaining the same), Net Profit will decrease by 0.191 units.

The relationship among the variables in relative terms can be estimated with the help of coefficient of multiple correlations (R). R= .992 indicates that there exists a high degree of relationship among the variables.

From the value of R^2 we can say that all these 6 predictor variables combined explain 98.30% of the variance in Net Profit. The P- value (0.00) of F- test states that the regression is significant.

8.00 Model Diagnostic Analysis
Discussion A. Test for Normality Residuals

Case Processing Summary						
	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Unstandardized Residual	86	100.0%	0	.0%	86	100.0%

Descriptives				
			Statistic	Std. Error
Unstandardized Residual	Mean		-4.7129254E-8	1.057534 23E7
	95% Confidence Interval for Mean	Lower Bound	-2.1026614E7	
		Upper Bound	2.1026614E7	
	5% Trimmed Mean		-1.0088967E6	
	Median		-3.7264290E5	
	Variance		9.618E15	
	Std. Deviation		9.80716895E7	
	Minimum		-3.61227E8	
	Maximum		3.11238E8	
	Range		6.72465E8	
	Interquartile Range		8.12592E7	
	Skewness		.132	.260
	Kurtosis		3.543	.514

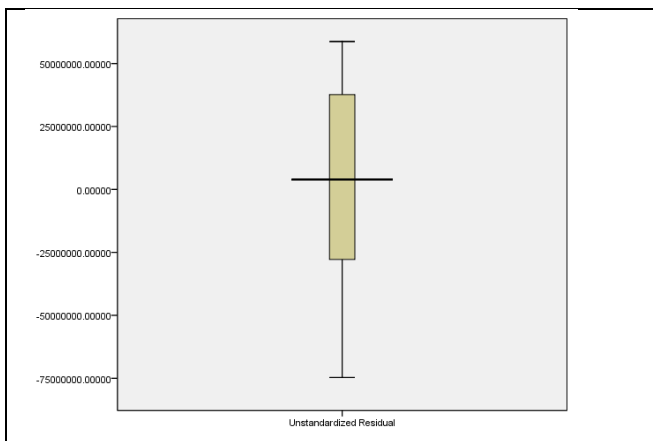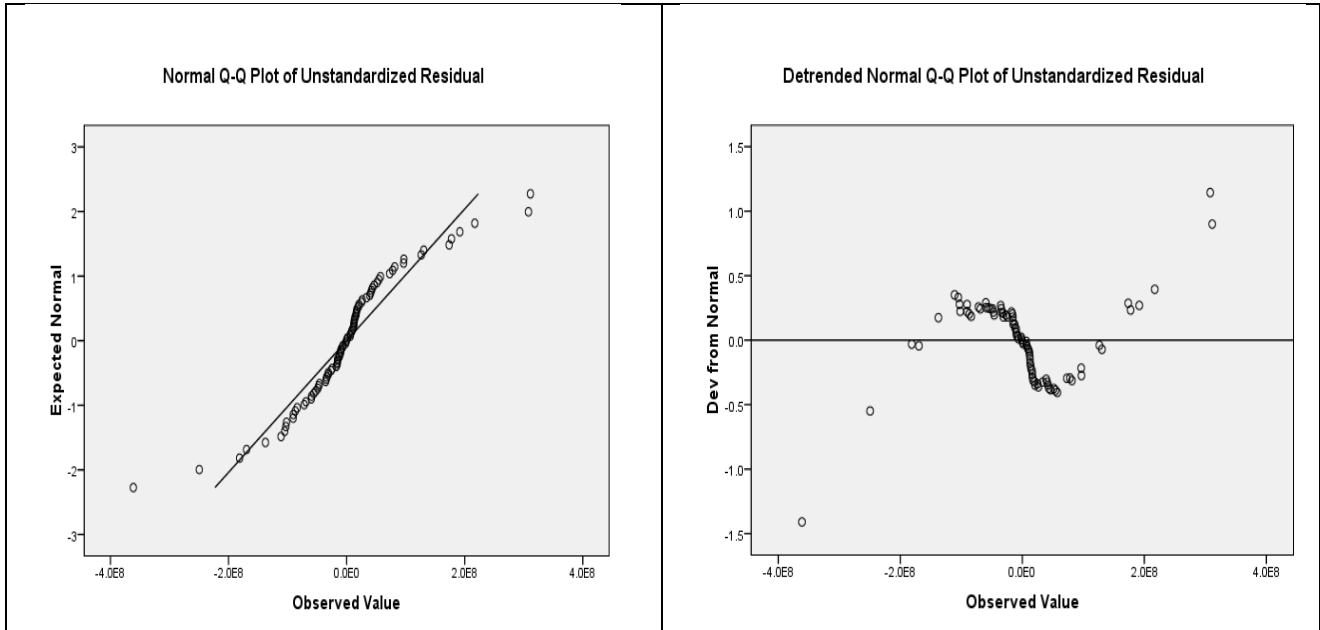| Tests of Normality						
	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Unstandardized Residual	.139	86	.000	.916	86	.000
a. Lilliefors Significance Correction						

```
Unstandardized Residual Stem-and-Leaf Plot
 Frequency    Stem &  Leaf
     4.00 Extremes    (=<-2E+008)
     5.00        -1 .  00013
    10.00        -0 .  5555678899
    24.00        -0 .  000001111111112233333444
    27.00         0 .  000000111111111112222334444
     8.00         0 .  55577899
     2.00         1 .  23
     6.00 Extremes    (>=173582737)
 Stem width:  1.0E+008
```

Each leaf: 1 case(s)

Normal Q-Q Plot of Unstandardized Residual

Detrended Normal Q-Q Plot of Unstandardized Residual

Explanation:
We now use the examine command to look at the normality of these residuals. All of the results from the examine command suggest that the residuals are not fully normally distributed the skewness and kurtosis are near 0, the "tests of normality" are not significant, the histogram looks normal, and the Q-Q plot looks normal. Based on these results, the residuals from this regression appear to conform to the assumption of being normally distributed.

Discussion B: Hetrocedasticiy Test:

Scatterplot

Dependent Variable: NP
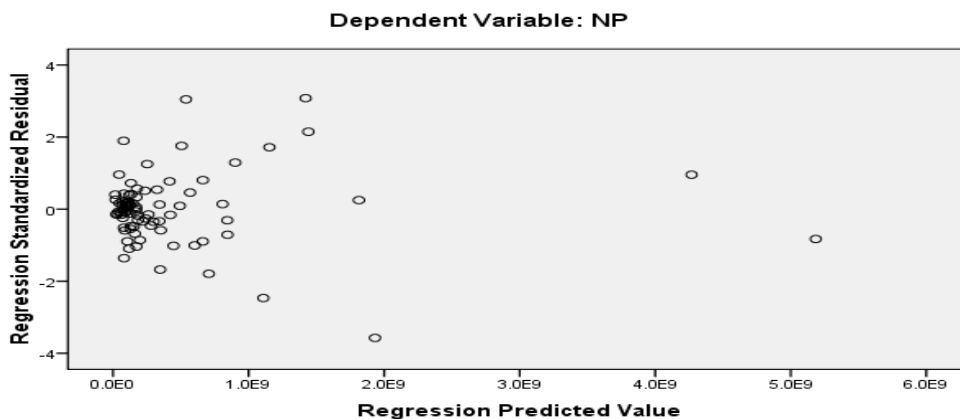
Explanation: The residuals looked good so there is no problem of heterocedasticy.

Discussion C: *Multi-collinearity* **test**

Coefficients[a]								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-3.056E7	2.001E7		-1.527	.131		
	TA	.025	.193	.901	.131	.899	.000	6.516
	TE	.074	.007	.401	10.140	.000	.126	7.968
	TL	.011	.006	.097	1.758	.083	.064	5.635
	TD	-.029	.008	-.203	-3.582	.001	.061	6.272
	OpR	.588	.033	.860	18.085	.000	.087	1.515
	OE	-.781	.115	-.191	-6.774	.000	.247	4.053
a. Dependent Variable: NP								

Explanation:

As the VIF Value is less than 10 so there exists no Multi-Collinearity Problem.

9.00 Findings & Conclusion

According to our study it is clear that the selected profitability determinants have impact upon net profit, but among the independent variables the Total Asset, Term Deposit, Operating Revenue, Operating Expense significantly manipulate the Profitability of Non Banking sector in Bangladesh. As we know that Total asset is considered as one of the most prominent yardstick of financial stability measurement of financial institutions, stakeholders generally perceive the financial institutions to be superior over the others if it total asset is higher than other institutions. When an NBFI has huge Operating Revenue and Total Equity the investors feel more secured and approach to this NBFI for their investment. As the number of customers increases it results in more profitable organization. Again we see operating revenue is the another variable which has a major impact on net profit. So it is undoubtedly true that if the revenue increases, ultimately it has a positive effect over the profitability.

The results of multiple regressions suggest that the selected independent variables explain more than 98.30% changes in the net profit. By analyzing the other statistical results of multiple regressions we found that the results are very much consistent with the simple regression. All the results are statistically significant and overall provide an idea that liquidity is the basic determinant of profitability in NBFI sector. So it can be inferred that this promising and potential sector in Bangladesh can flourish very fast and enhance profitability by improving total equity and operating efficiency.

To make the findings easier to understand, summary of the analysis is given below:

There were 7 variables. 6 were independent and 1 was dependent.

In total, 16 quarterly data of each variable was taken for analysis.

Almost all the independent variables have strong positive relation with the dependent variable. Among all variables has positive impact on net profit except term deposit and operating expense.

The findings of the paper cannot be taken as conclusion and it will be wrong to end here with such a result. Because this study gives a simple picture and leaves room for further study in different areas of NBFI functions such as products of productivity analysis, Data Envelopment Analysis (DEA), CAMELS rating, robust estimation approach based on the competing efficient structure (ES) hypothesis, effect of commercial property price movements, use of statistical tools and more. The impact of government policy in the performance of NBFI is also not studied in this study which must have significant impact on the performance of NBFI. Further study also can be concluded on post and performs of NBFI sector.

However, the study provides managers with understanding of activities that would improve their NBFI's financial performance.

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