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STIMULANTS OF PROFITABILITY OF NON-BANK FINANCIAL INSTITUTIONS: EVIDENCE FROM BANGLADESH

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ABSTRACT: *Financial institutions both Bank and Non-Bank play a significant role in the economy of a country. Like other developing countries Beside the Banking industry necessarily of Non-Bank financial institutions cannot overlook in Bangladesh. This study inspects the profitability of firms in the Non-Banking Financial Institutions (NBFIs) diligence of Bangladesh. Financial Enactment of a financial organization fundamentally depends on its some key financial factors. Specially operating efficiency is main inducing factor which is designed through operating income. Besides it capital Structure combination of equity and liability, term deposit, total asset considerably affect the profitability of any NBFI company. In addition operating expense also upsets the profitability though that is not statistically significant. Different Statistical procedures such as correlation matrix, multiple regressions have been used to determine the associations between variables. And before doing regression analysis normality distribution test has been accomplished by One-Sample Kolmogorov- Smirnov Test. This research is an effort to find out the statistically significant key stimulants variable and their level of impact over net profit.*

KEYWORDS: Profitability, Non-Bank Financial Institutions (NBFI), Financial Performance, Operating efficiencies, Capital structure.

INTRODUCTION

Financial institutions are categories into the banking and non-banking ones. The banking system in Bangladesh includes the commercial banks, specialized banks, foreign banks etc. .Non-Bank financial institutions (NBFIs) are those institutions that are licensed and controlled by the Financial Institutions Act of 1993(FIA 93). These institutions provide loan and advances for the development of Commerce, Industry, housing and agriculture. It also does the business of hire purchase including leasing of equipment or machinery ,it may involves in business of the underwriting or acquisition of shares, bonds debenture or securities issued by the government or any other local authority. The main difference between banks and NBFIs are that NBFIs cannot accept deposit that is payable on demand by draft, cheques or order drawn by the depositors and cannot deal in transactions of foreign exchange. From the establishing of IPDC in 1981, a total of 30 NBFIs are now working in Bangladesh as of March, 2015 and of them 22 companies are listed both at DSE and CSE. Main sources of funds of NBFIs are Term Deposit (at least six months tenure), Credit Facility from commercial Banks and other NBFIs, Call Money as well as Securitization and Bond.

Non-Bank Financial Institutions (NBFIs) show a important role in fulfilling the varied financial needs of different sectors of an economy and thus contribute to the economic development of the

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country as well as to the extending of the country's financial system. According to Goldsmith (1969), financial development in a country begins with the development of banking institutions. As the development process proceeds, NBFIs become prominent along with the banking sector. Both can play momentous roles in influencing and mobilizing savings for investment. Their participation in the process generally creates them competitors as they try to cater to the same needs. However, they are also harmonizing to each other as each can develop its own position, and thus may venture into an extent where the other may not, which eventually strengthens the financial flexibility of both.

Objective of the study

(a) To ascertain the main financial features those affect the profitability in the NBFIs of Bangladesh.

(b) To stain out the dominant factor behind the NBFI industry's profitability.

(c) To determine the most important stimulant variable on Profitability.

METHODOLOGY OF THE RESEARCH

Source of Data

This is an empirical research**.** Here the researcher followed the judgmental sampling with sample size consisting of the leading NBFIs in Bangladesh. 10 annual reports of the 6 selected companies were collected for the year of 2005 to 2014. Magazines, brochures, journals, newspapers, websites, etc. have also been used as sources of data whenever found necessary. This research is based on the collection of secondary data.

Tools for Analysis of Data

To Process the data, descriptive statistics, simple correlation and regression and correlation matric were used for better understanding of inter relationship and effectiveness of variables. With the help of SPSS software statistical tests were conducted at 5% level of significance.

Variables for the Research

To measure the facts of profitability and performance of NBFIs following dependent variable and the independent variables were considered:

Dependent Variable	Independent Variables	
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 Expenses (OE).

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Limitation of the Study

The main limitation of the study is the limited access of data, as the major source of data is the annual reports. Side by side the paucity of relevant literature is prime hindrance of the study. Judgments and interpretations of the study will only be applicable for the circumstances which conquered during the period for which data were taken.

LITERATURE REVIEW

To find an insight of profitability stimulants, numerous researches have been executed with the help of different tools like as ratios, Correlational and Regression analysis up to the present time. But it's the reality that most of the studies have been conducted on banking industry. So, availability of literature with regards to profitability in rare in the NBFI sector. Suresh Vadde (2011) analysed the performance of NBFCs in India during 2008-09. Totally 1215 companies were selected as sample and were categorized into five major groups according to their activity viz, share trading and investment holding, loan finance, asset finance, diversified and miscellaneous groups. A comparison is also made for the preceding two years 2006-07 and 2007-08 for the same set of companies. The study revealed that operating profits and the share of external sources of the select companies declined along with diminishing profitability during 2008-09.The major portion of funds raised during the year was deployed as loans and advances. The share of 'investment' in total use of funds increased during 2008-09 on account of investment in the mutual funds, shares and debentures of other Indian companies.

Sarker and Das (1997) made the comparison on the enactment of public, private and overseas banks for the duration of 1994-95 by using dealings of profitability, productivity and financial management. Their study showed that PSBs were not performing well with the other two categories. However, they give attention that no firm inference can be derived from an assessment done for a distinct year. Abreu and Mendez (2002), Haron (2004), Naceur (2003), and Wasiuzzaman and Ahmed Tarmizi (2010) originate a significant positive affiliation between profitability and operational competence of the banks. Even though the effect was insignificant, Bashir (2003) and Izhar and Asutay (2007) also found an affirmative relationship between profitability and operational effectiveness of the banks. However, Ramadan et al (2011) found a substantial adverse relationship between profitability and cost management based on research done on Jordanian banks. Smirlock & Brown, (1986) studied the influence of demand deposits as a function of total deposits on profitability. Their results suggest that demand deposits had a noteworthy affirmative relationship with profits. Miller and Noulas, (1997) found that loan defeat provision and net charge offs had a substantial negative effect on the profitability of enormous banks. These results showed that net charge offs were supplementary affected by asset and liability arrangement. Thus, the asset liability portfolio choices of commercial banks can be projected to affect the profitability of these associations via net charge offs. It was also detected that upper salaries and remunerations per employee were consistently connected with higher net charge offs to total properties. This recommended that banks with upper salaries and benefits would involve higher net interest margins to uphold profitability. Nadim Jahangir', Shubhankar Shill and Md.

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Amlan Jahid Haque (2007) investigated 15 commercial banks in Bangladesh and originated that market awareness and bank risk do little to clarify bank return on equity, while bank market size is the only variable providing an explanation for banks return on equity in the context of Bangladesh. They originated that market size and bank's return on equity demonstrated to have strong affiliation. Also, a resilient and significant relationship was recognized between market size and bank's return on equity. It recommends that capital sufficiency is significant for a bank to be profitable. Antonina Davydenko(2011) surveyed about 3236 bank-quarter interpretations and concluded that Ukrainian banks suffer from low excellence of loans and do not accomplish to extract substantial profits from the increasing volume of deposits. Shveeta and Satish Verma (2002) examined the inter-temporal profitability performance of SBI group, other state-owned and foreign banks in India. They empirically assessed factors inducing the profitability of banks. They resolved that priority sector advances (in case of PSBs) and extent and burden (for all categories of banks) were the major and substantial factors that affect the profitability of banks. Balchandher K. Guru, J. Staunton & B. Shanmugam (2009) in this study paper “Determinants of commercial bank profitability in Malaysia” inspected to what amount are the profitability performance inequalities due to dissimilarities in management adaptable internal factors and outward factors. He took net profit as his dependent variable and Asset Structure, Capital, Deposit Composition, Expenses Management, Liquidity, Firm Size, Inflation Rate, Market Growth, Market Interest, Market Share and Regulation as his independent variable. He recommended that all variable has substantial relationship with net profit. And also he added that in order to upturn profitability the Expense Management should be appropriate as this variable implication is very high.

Empirical Study and Explanation

In this segment, the statistical investigation of different variables has been done to decide the association between company’s financial performance (Net Profit) and different significant performance stimulant with the assistance of few statistical tools. A simple regression model is executed with each of the independent interpreters. Net Profit is the dependent variable of the model and Total Assets, Total Liabilities, Total Equity, Term Deposit, Operating Revenue and Operating Expenses are taken as independent variables. These dynamics are selected in accordance with the prominence that in what degree those can contribute to the determination of profitability. Multitple regression model is also used where dependent and independent variables are kept the same as the simple regression model. The pragmatic study has been done as a whole to treasure the extent of association between dependent and independent variables. After accomplishing the analysis, it will be likely to come to an assumption about the illustrative powers of the Performance representing variables towards the profitability.

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Table 1: Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Variance
Net Profit	60	59741425	4625857226	628929879.68	1008996864.614	1018074672801532420.000
Total Assets	60	525466933	86184166880	17971431074.58	18945680478.809	358938808805124870000.000
Total Liabilities	60	31500000	9824500000	2528872767.22	2768350693.053	7663765559725718500.000
Total Equity	60	275996989	25986968596	3746894242.30	6206455505.504	38520089941805920000.000
Term Deposit	60	778327	47068955362	7554262890.18	9976523251.861	99531016194926150000.000
Operating Revenue	60	168938610	6314102375	1313773028.28	1484751330.841	2204486514434520830.000
Operating Expenses	60	23732161	1697811000	577209244.87	475168471.404	225785076216707872.000
Valid N (list wise)	60					

In the above table (Table: 1) several descriptive statistics such as minimum, maximum, mean, standard deviation and variance of all designated variable has been encompassed.

Table: 2: Correlation Matrix

	Net Profit	Total Assets	Total Liabilities	Total Equity	Term Deposit	Operating Revenue	Operating Expenses
Net Profit	1	.824**	.319*	.926**	.339**	.905**	.034
Total Assets		1	.615**	.863**	.662**	.842**	.214
Total Liabilities			1	.426**	.669**	.481**	.209
Total Equity				1	.358**	.828**	.037
Term Deposit					1	.500**	.143
Operating Revenue						1	.236
Operating Expenses							1

***Correlation is significant at the 0.01 level (2-tailed).*
**Correlation is significant at the 0.05 level (2-tailed).*

In table: 3 the correlation among all variable has been exposed. Particularly the correlation between dependent variable and independent variables has been revealed. All the independent variables are positively correlated with the net profit except operating expense. As the result proposes, the connotation of total equity is the uppermost among all the variables and then comes the position of operating efficiency (operating revenue).

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Goodness of Fit Test

The goodness of fit test applies to position in which we need to decide whether a set of data may be looked upon as a random sample from a population having a given dissemination. Usually it is done to treasure whether values of variable are normally distributed or not. Kolmogorov- Smirnov goodness of fit test is used in the study. From the table below it is shown that the value of all the variables is normally distributed except the value of Operating Expenses.

Table 3: One-Sample Kolmogorov-Smirnov Test

		Net Profit	Total Assets	Total Liabilities	Total Equity	Term Deposit	Operating Revenue	Operating Expenses
N		60	60	60	60	60	60	60
Normal Parameters[a,b]	Mean	628929879.68	17971431074.58	2528872767.22	3746894242.30	7554262890.18	1313773028.28	577209244.87
	Std. Deviation	1008996864.6	18945680478.80	2768350693.05	6206455505.50	9976523251.86	1484751330.84	475168471.404
Most Extreme Differences	Absolute	.321	.194	.219	.288	.224	.249	.163
	Positive	.321	.194	.219	.286	.187	.249	.163
	Negative	-.286	-.179	-.183	-.288	-.224	-.220	-.122
Kolmogorov-Smirnov Z		2.490	1.506	1.700	2.231	1.739	1.931	1.261
Asymp. Sig. (2-tailed)		.000	.021	.006	.000	.005	.001	.083
a. Test distribution is Normal.								

Simple Regression Model

In this portion of the study the researcher will start to estimate simple regression model taking financial enactment i.e. Net Profit of all company as dependent variable and all other financial surroundings indicator as independent variable. Simple regression model will follow the model below:

$$Y = a + bX$$

Where Y = Dependent variable, a = Y-intercept/constant, b = slope, X = independent variable

The results of regression are abridged in the following table:

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Table 4: Regression

Dependent Variable	Independent Variable	Equation	R^2	F-test Value	P Value of the Model
Net Profit(NP)	Total Asset (TA)	NP = -159268314.9 + 0.44 TA	67.8%	122.23	.000
	Total Liabilities (TL)	NP = 334890120.8 + 0.116 TL	10.2%	6.571	.013
	Total Equity (TE)	NP = 64652036.86 + 0.151 TE	85.8%	350.81	.000
	Term Deposit(TD)	NP = 370192383.5 + 0.034 TD	11.5%	7.514	.008
	Operating Revenue(OR)	NP = -178857483.5 + 0.62 OR	81.9%	261.77	.000
	Operating Expense (OE)	NP = 587591048.5 + 0.07 OE	34%	.066	.798

After inspecting the values of R^2 (Coefficient of determination) and P value of F-test in the upstairs table, we can say that Total Equity has the most persuasive influence over Net income. Subsequently Operating Revenue and then Total Assets suggestively affect the company financial enactment. So, it can be decided that, Profitability of NBFIs are mostly influenced by the alterations in different expenses and capital structure along with it operating competence.

Among these six performance representing variables Total Equity have the maximum value for R^2 (85.8%) which designates that this can explain 85.8% of the variations in profitability over these 10 years of time horizon (2005-2014). P value (0.000) of F-test at 95% assurance level states that the result is significant as it is less than .05. Though Total Liabilities has the lowest value of R^2 (10.2%) and P value (.013) of F-test, which indicates that this variable has very lower influence on profitability as a predicator (i.e. independent) variable when used in simple regression analysis.

Multiple Regression Model

Net Profit (NP) = 51061907.686 + .007 TA - .055TL +.072 TE -.007 TD +.379 OR -.215 OE

Table 5: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.974[a]	.949	.944	239547134.087	.949	165.628	6	53	.000

a. Predictors: (Constant), Operating Expenses, Total Equity, Term Deposit, Total Liabilities, Operating Revenue, Total Assets

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Explanation

Profitability associated with other performance indicators in the following ways:

(i) For 1 unit change (increase/decrease) in Total Assets remaining the value of other independent variables constant, Net Profit will increase by .007 unit and vice versa;

(ii) For 1 unit change (increase/decrease) in Total Liabilities remaining the value of other independent variables constant, Net profit will decrease by .055 unit and vice versa;

(iii) For 1 unit change (increase/decrease) in Total Equity remaining the value of other independent variables constant, Net Profit will increase by .072 units and vice versa;

(iv) For 1 unit change (increase/decrease) in Term deposit remaining the value of other independent variables constant, Net Profit will decrease by .007 unit and vice versa;

(v) For 1 unit change (increase/decrease) in Operating Revenue deposit remaining the value of other independent variables constant, Net Profit will increase by .379 unit and vice versa;

(vi) For 1 unit change (increase/decrease) in Operating Expenses deposit remaining the value of other independent variables constant, Net Profit will decrease by .215 unit and vice versa.

The association among the variables in comparative terms can be appraised with the help of coefficient of multiple correlations(R). R = .974 designates that there exists a high degree of association among the variables. From the value of R^2 it can be say that all these 6 predicator variables collectively explain 94.9% of the variance in Net Profit. The P- value (.000) of F-test indicates that the regression is statistically significant.

Findings and Conclusion

From the study it is clear that the designated profitability indicators have influence upon net profit, but among independent variables the Total Assets, Total Equity and Operating Revenue expressively influence the Profitability of Non-Banking segment in Bangladesh. As it is identified that Total asset is considered as one of the most noticeable benchmark of financial steadiness measurement of financial organizations, stakeholders usually observe the financial organizations to be superior over the others if its total asset is upper than other organizations. When an NBFI has enormous Operating Revenue and Total Equity the investors feel safer and approach to this NBFI for their investment. It is also originated that operating revenue is additional variable which has a major influence on net profit. So it is unquestionably accurate that if the revenue increases, eventually it has a positive consequence over the profitability.

The result of multiple regressions recommends that the designated independent variables describe more than 94.90% fluctuations in the net profit. By examining the other statistical outcomes of multiple regressions we originate that the results are very much reliable with the simple regression. All the result except the Operating Expenses are statistically momentous and overall provide an idea that this auspicious and prospective sector in Bangladesh can embellish very fast and augment profitability by enlightening total equity , operating efficiency and liquidity.

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To make the judgments easier to recognize, summary of the investigation can be given as: There was 7 variables. 6 were independent and 1 was dependent. In total 60 yearly data of each variable was occupied for analysis. Except Operating Expenses almost all the independent variables have strong positive relation with the dependent variable. All most all variables have positive influence on net profit except Total Liabilities, Term Deposit and Operating Expense.

These outcomes of the paper cannot be taken as conclusion and it will be incorrect to end here with such an outcome. Because this study provides a simple picture and leaves room for advance study in different extents of NBFI function. However this study affords managers with understanding of actions that would progress their NBFI's financial performance.

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