International Journal of Engineering Applied Sciences and Technology, 2018
Vol. 3, Issue 7, ISSN No. 2455-2143, Pages 75-78
Published Online November 2018 in IJEAST (http://www.ijeast.com)

MACROECONOMIC FACTORS AFFECTING PERFORMANCE OF NON-BANK FINANCIAL INSTITUTIONS PROFITABILITY IN BANGLADESH

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Abstract— The purpose of this study is to examine the impact of macroeconomic factors on the performance of Non-bank financial institutions in Bangladesh economy. For collecting all types of data here has been used different sources like The World Bank, International Monetary Fund, The central bank of Bangladesh (Bangladesh Bank), selected Non-bank financial institution annual report and different journal from the year of 2006-2017, and for analysis of data, SPSS and Evews-9 software's have been used. NBFIs performance indicate by Return on Assets (ROA), macroeconomic variables measured by gross domestic product (GDP), inflation (Inf) and interest rate (Int). For find out the relationship between financial performance and macroeconomics factor, Pearson correlation coefficient and regression analysis have been used. This study will help to specifically what are the factors that are highly influence to return on Assets (ROA). After study it has found that still there have a relationship between NBFIs performance and selected macroeconomics factors and there have strong influence of macroeconomic factor on ROA. Gross domestic product is negatively correlate with performance (ROA) of NBFIs and its effect was significantly. Inflation and interest are is insignificantly influence on ROA and Interest rate is insignificantly positively correlated with ROA.

Keywords— NBFIs (Non-bank Financial Institutions), Gross Domestic Product (GDP), Inflation (Inf) and Interest Rate (Int).

I. INTRODUCTION

Non-bank Financial Institution (NBFI) is one of the most significant financial sector not only in Bangladesh economy but also all over the world economy. For developing country NBFIs are playing major role in font of Bangladesh. The institution (other than deposit money banks) which mainly carries out the financial business that is called NBFIs by the definition of the central bank of Bangladesh (Bangladesh Bank). NBFIs are regulated under the financial act 1993. All types of Nonbanking activities are controlled by the Bangladesh Bank. NBFIs doesn't hold full banking license. The main business of NBFIs in Bangladesh like as leasing, merchant banking, house financing, venture capital finance, term lending etc. For this paper I have selected this NBFIs in Bangladesh, BD Finance, Islamic Finance and Investment Limited, Bay Leasing and Investment Limited, Delta Brac Housing Finance Corporation Ltd. FAS Finance and Investment Limited. For availability of data paper has selected those companies.

II. LITARATURE REVIEW

On the study of 15 European country's commercial foreign and domestic banks over the period of 1995-2001 have found that banking industry profitability not only depends on internal factor but also macroeconomic factors study conducted by Fotios, Pasiouras & Kosmidou (2007).

Leigh, Maximilian, & Richard, (2015) have found that environmental and market factors are significantly influence on banking technical operating efficiency in China.

Sufian, (2006) examined that in Malaysian Non-banking financial institutions overall efficiency is positively correlated with their other measure result found by Pearson correlation coefficients and Spearman. He also found there have significant positive strong relations between NBFIs total asset and pure technical efficiency.

There has no positive significant relationship between insurance company's profitability with the age of the company and another result also shows that profitability is positively significant with company volume of capital found by Hifza (2011).

Allen, Robert, Hesna & Gregory (2000) have found on their research paper that, on an average foreign banks are unable to get higher profit compare with domestic banks by applying cross border banking efficiency in U.S., U.K, Spain, Germany and France during the 1990.

Worthington (1998) has investigated that in Australia Non-Bank Financial Institution's cost of inefficiency doesn't influence by non-core commercial activity.

Akter, Ahmed, & Islam (2018) used CAMELS rating for analysis overall performance of the Non-Bank Financial

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Institutions (NBFIs) in Bangladesh. Their study found that out of 33 NBFIs, only 1 was strong, 15 ware satisfactory, 12 were fair and 4 were marginal.
Lalon & Hussain (2017) examined the performance of LBFI (Lanka Bangla Finance Limited) by analyzed of lots of ratios. They have found that LBFI's collection of receivables methods is not stronger that's why they faced problem.

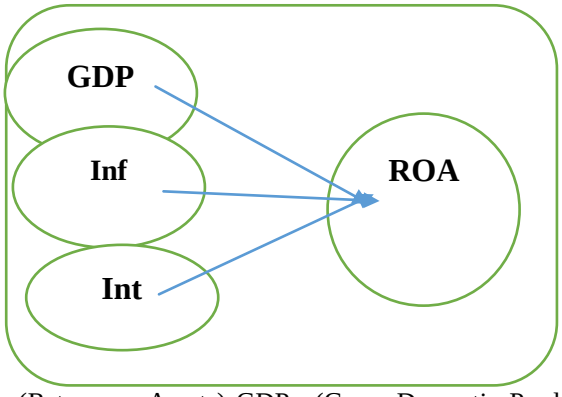
III. Objectives

The objective of this research is to find out the following questions answer:

- What is the relationship between Non-Bank financial Institutions profitability (ROA) with macroeconomic variables in Bangladesh Economy.
- And what are the influence macroeconomic factor on Return on Asset (ROA) of Non-Bank financial institutions in Bangladesh Economy.

IV. Researcher Methodology

Sources of Data:
For this study only secondary data has been used, this paper did not attempt to deal with any primary sources of data. For collecting all types of data here has been used different sources like The World Bank, International Monetary Fund, The central bank of Bangladesh (Bangladesh Bank), selected Non-bank financial institution annual reports, different journals etc. For selecting sample size own judgmental technique has been used.
Tools and Techniques:
For analysis data has been used most popular software Statistical Package for the Social Science (SPSS) version 20 and Evews 9. For find out the paper objective descriptive statistics, Visual Plots for all the Variables has been shown and some test like multiple linear regression analysis and Pearson correlation coefficient has been used.



ROA= (Return on Assets) GDP= (Gross Domestic Product), Int= (Interest Rate), Inf= (Inflation Rate).
Theoretical Framework:
In is paper Gross Domestic Product (GDP), interest rate (Int) and inflation rate (Inf) are representing the macroeconomic variables factor.

$$\mathbf{ROA= \beta_0+ \beta_1 GDP+ \beta_2 Int+ \beta_3 Inf+\epsilon}$$

Where β_1, β_2, and β_3 are the coefficient of all those independent variables. In this model ϵ representing the error term occurrence and β_0 is the y-intercept. This paper has been conducted in this following hypothesis.
$\mathbf{H_0}$= There is no relation between NBFIs performance and selected macroeconomic factors.
$\mathbf{H_1}$= There is relation between NBFIs performance and selected macroeconomic factors.
$\mathbf{H_0}$= There is no impact of selected macroeconomic factors on NOFIs performance.
$\mathbf{H_1}$= There is an impact of selected macroeconomic factors on NOFIs performance.

V. Discussion and Analysis

Table 1: Descriptive Statistics

	ROA	GDP	INF	INT
Mean	0.19789	0.063392	0.072166	0.101165
Median	0.1697	0.06535	0.06878	0.1126
Maximum	0.5332	0.0711	0.10705	0.1377
Minimum	0.037	0.0505	0.05123	0.04662
Std. Dev.	0.131017	0.006188	0.017138	0.032043
Skewness	1.39453	-0.64899	0.617423	-0.63916
Kurtosis	4.67403	2.625262	2.411157	1.970681
Jarque-Bera	5.290616	0.9126	0.935791	1.346796
Probability	0.070983	0.633624	0.626319	0.509973
Sum	2.37468	0.7607	0.86599	1.21398
Sum Sq. Dev.	0.18882	0.000421	0.003231	0.011295
Observations	12	12	12	12

Sources: Estimated (ROA=Return on Assets, GDP=Gross Domestic Product, Inf= Inflation Rate and Int= Interest Rate).
The descriptive statistic result showing that return on assets, gross domestic product rate, inflation rate, and interest rate are asymmetrically distributed. Table 1 also shows positive Kurtosis meaning that all variables' distribution are peaked in this paper.

Figure 1: Visual Plots for all the Variables.

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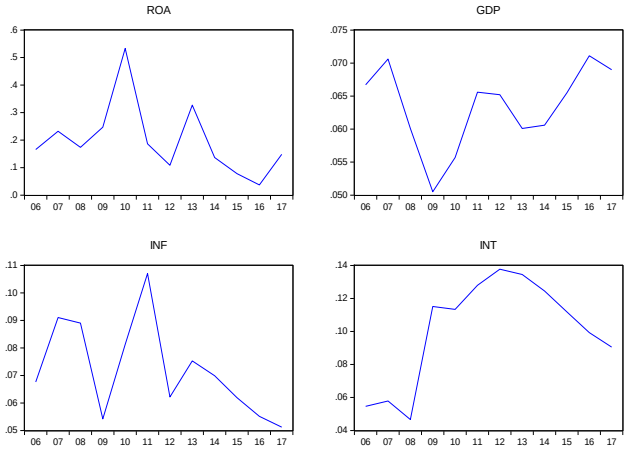

Sources: Estimated (ROA=Return on Assets, GDP=Gross Domestic Product, Inf= Inflation Rate and Int= Interest Rate).

Visual plots are showing all variables graph and their inflows during the year.

Table 2: Multiple Correlation

Pearson correlation of coefficient for ROA		
Variables	**Pearson Correlation Coefficient**	**p-value**
GDP	-0.5829	0.0466
Int	0.1075	0.7384
Inf	0.348	0.2676

Sources: Estimated (ROA=Return on Assets, GDP=Gross Domestic Product, Inf= Inflation Rate and Int= Interest Rate).

From table 1 it is has been concluded that GDP is negatively correlate with return on assets on -58.29. The interest rate is insignificantly positively correlated with return on assets, here that value is 10.75%, and here significant level is also less than p-value. On the other hand inflation rate is insignificantly positively correlate at the 34.8% with return on assets.

Table 3: Statistics Value

STATISTICS VALUE	
Measurement	**Value**
R2	0.714
F-Statistics	1.818
p-value	0.23

Table 2 shows R- squared is 0.714 or 71.40%. This R-squared indicated that only there is 71.40% variance in ROA can be explained by Macroeconomic factor like gross domestic product (GDP), inflation rate and interest rate.

Table 4: Coefficient Analysis

Coefficient Analysis				
Variables	**B**	**Std. Error**	**t-Statistics**	**P-value**
Constant	0.715	0.474	1.507	0.176
GDP	-13.888	6.125	-2.268	0.058
Int	0.003	1.154	0.002	0.998
Inf	3.419	2.248	1.521	0.172

Sources: Estimated (ROA=Return on Assets, GDP=Gross Domestic Product, Inf= Inflation Rate and Int= Interest Rate).

From regression analysis table 3 it has been found that GDP is significantly influence on ROA at the 10% significant level. Unfortunately gross domestic product (GDP) negatively correlated with the company performance during 2006-2017. Here Interest rate & Inflation rate are given less impact on ROA.

In this paper the regression model is:

ROA= 0.715 - 13.88GDP + 0.003Int + 3.419Inf

VI. FINDINGS

After study it has found that still there have a relationship between NBFIs performance and selected macroeconomic factors and there haven't strong influence of macroeconomic factor on Non-bank financial institutions performance. Interest rate is positively correlate with ROA but at the insignificantly level. This research found that Gross Domestic Product is negatively correlate with performance (ROA) of NBFIs and it influence on ROA is at the significant level. Inflation rate is significantly influence on ROA and Interest rate is insignificantly positively correlated with ROA.

VII. CONCLUSION

Non-bank Financial Institutions (NBFIs) is one of the most significant sector, this sector provide different types of services to their customers as customer needs. For obtaining better Non-bank Financial Institutions (NBFIs) performance, management should concentrate to their policy making by considering macroeconomic factor because in every sector and industry economics factors highly influence. There has lots of limitation for conducted this paper.

VIII. ACKNOWLEDGEMENT

The authors would like to acknowledge with deep thanks and profound gratitude to our parents.

IX. REFERENCES

[1] Akter, R., Ahmed, S. & Islam, M.S. (2018). Camels Model Application of Non-bank Financial Institution: Bangladesh Perspective. *Academy of Accounting and Financial Studies Journal*. (Vo.22. No.1).

[2] Allen, N.B., Robert, D, Hesna, G. & Gregory, F.U. (2000). Globalization of Financial Institutions: Evidence from Cross-Border Banking Performance. *Wharton Papers on Financial Services,* 1.

[3] Fotios, Pasiouras. & Kosmidou, K. (2007). Factors influencing the profitability of domestic and foreign commercial banks in the European Union. *Research in International Business and Finance. (*V0l. 21, pp. 222–237).

[4] Hifza, M. (2011). Determinants of Insurance Companies Profitability: an Analysis of Insurance Sector of Pakistan. *Academic Research International.* (Vo.1, No.3).

[5] Lalon, R.M. & Hussain, S. (2017). An Analysis of Financial Performance on Non-Bank Financial Institutions (NBFI) in Bangladesh: A Study on Lanka-Bangla Finance Limited. *International Journal of Economics, Finance and Management Sciences.* (Vo.5, No.5, pp. 251-262).

[6] Leigh, M.D., Maximilian, J.B.H. & Richard, S. (2015). The Impact of Macroeconomic and Regulatory Factors Banking Efficiency: A Non- Parametric Analysis of Honk Kong's Banking System. *HKIMR Working paper No.* 1.

[7] Sufian, F. (2006). The Efficiency of Non-Bank Financial Institutions: Empirical Evidence from Malaysia. *International Research Journal of Finance & Economics*. (Vo.6, pp. 49-65).

[8] Worthington, A.C. (1998). The determinants of non-bank financial institution efficiency: A stochastic cost frontier approach. *Applied Financial Economics.* (Vo. 8, No.3, pp. 279-289).