CAMELS MODEL APPLICATION OF NON-BANK FINANCIAL INSTITUTION: BANGLADESH PERSPECTIVE

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ABSTRACT

NBFI (Non-Bank Financial Institutions) is one of the significant sectors in every economy. NBFIs is one kind of financial institution that provides certain types of banking services, but do not hold a banking license. NBFIs can offer banking services such as loans and credit facilities, retirement planning, money market, underwriting and merger activities. At present, there are 33 NBFIs, three are government owned, eleven are joint venture and nineteen are private owned. The goals of the research are to explore soundness of NBFIs in Bangladesh by using CAMELS model and their future forecast of rating point by CAMELS Model. For achieving these goals we have used most popular methods for the evaluation of NBFIs performance, namely the CAMELS framework. CAMELS' ratio mainly indicates the capital adequacy, assets quality, management efficiency, earnings, liquidity condition and sensitivity of the market risk. After the study we found that out of 33 NBFIs 1 was "1 or Strong", 15 were "2 or Satisfactory", 13 were "3 or Fair" and 3 were "4 or Marginal" according to the CAMELS rating at end of the June 2016.

Keyword: CAMELS Model, Non-Bank Financial Institutions.

INTRODUCTION

By the Bangladesh bank, definition of NBFI is "The institution (other than Deposit Money banks) which mainly carries out the financing business. In Bangladesh, NBFIs are constituted under the Financial Institutions Act, 1993. In Bangladesh, NBFISs they are not a member of clearing house and haven't banking license. Generally, NBFIs provides a loan in the agriculture, commerce, building construction sectors. For the development of every economy, not only bank play roles but also NBFIs play many significant roles. It provides finance to venture capital. At present, investment companies, merchant bank, mutual associations/companies, leasing companies or building societies, etc., are the member of the NBFIs. We may explain CAMELS as "CAMELS ratings are the result of the Uniform Financial Institutions Rating System, the internal rating system used by regulators for assessing financial institutions on a uniform basis and identifying those institutions requiring special supervisory attention."

The six key areas of CAMELS are: Adequacy and quality of bank's Capital, Assets (loans and investments), Management, Earnings, Liquidity and Sensitivity to market risk. It is mentioned here that the rating system had 5 (five) components when it was introduced in 1979. The five components were Capital adequacy, Asset quality, Management, Earnings, Liquidity.

The sixth component sensitivity to market risk was added in 1996. The regulator that year also added an increased emphasis on an organization's management of risk.

Regulator assigns CAMELS ratings both on a component and composite basis, resulting in a single CAMELS overall rating. Thus CAMELS rating system follow two sets of ratings:

1. Each component's key areas individually comprise with numerical point basis. Again the assigned numbers are calculating by given weights which are weighted average of ratio rating. This weighted average of ratio rating treated as performance rating.
2. A comprehensive assessment of the overall condition of the banking company is an overall composite rating.

Further each component of CAMELS is calculated in two ways; such as:

1. Weighted average rating and
2. Questionnaire rating which bearing percentage.

It may be calculated as under:

1. Rating resulting from weighted average of ratio rating ....X ....% =
2. Questionnaire rating ....X.........%=

Component ratio

Banks with a rating of 1 are considered most stable; banks with a rating of 2 or 3 are considered average and those with rating of 4 or 5 are considered below average and are closely monitored to ensure their viability. The ratings range from 1 to 5, with 1 being the highest rating (representing the least amount of regulatory concern) and 5 being the lowest. CAMELS ratings are strictly confidential and may not be disclosed to any party.

The following is a description of the gradations to be utilized in assigning performance ratings for the six components:

Rating"1"-Indicates strong performance; (Strong)
Rating"2"-Indicates above average performance that adequately provides for the safe and sound operations of the banking company; (Satisfactory)
Rating"3"-Indicates performance that is flawed to some degree. (Fair)
Rating"4"-Indicates unsatisfactory performance. If left unchecked, such performance could threaten the solvency of the banking company. (Marginal)
Rating"5"-Indicates very unsatisfactory performance in need of immediate remedial attention for the sake of the banking company's survival. (Unsatisfactory)

In today's business and financial environment, banks are complex and often extremely large institutions. Each, of course, has its own unique relationship with its prudential regulator.

However, whether regulator's overall view of the safety and soundness of the banking company regarding of its size, complexity and scope, is summarized in bank's overall CAMELS rating.

LITERATURE REVIEW

Roy (2016) investigated that selected profitability determinants have an impact upon net profit, the profitability of Non-Banking sector in India significantly manipulated by the total expense. Her regression analysis suggests that the selected independent variable explain more than 99% change in the net profit and liquidity is the basic determinant in NBFIs sector profitability. Profitability influenced by the host independent variable such as Term Deposit, Operating revenue and operational policies, Hossain, Raul and Rahman (2016) examined from 22 companies.

There have the positive correlation to IDFC, HDFC, Reliance capital and Sriram Transport Finance Company Limited and shown that Bajaj Holding Limited, it deficit that has a negative correlation between advance, loans and borrowing of this company. During his study period, net profit ratio changed significantly of HDFC and IDFC and it was high position Bajaj Holding and Investment Limited of this investigation was completed by Kamalaveni (2016).

Mazumder (2015) study on 6 (Six) company examined that designate profitability indicator have the influence upon Net profit, but among independent variable, the total Assets, Total equity and Operating Revenue expressively influence the profitability of Non-Banking Sector in Bangladesh. He also founded that Designates independent variables in the net profit by multiple regression.

Nowadays in India NBFIs play the major role for economy development. Cheryl Shais Pellissery and Koshy (2015) found some selected banking industry is now lower position compere with NBFIs. For their investigation, they used some statistical tools. Thilakam and Saravaran (2014) used CAMELS test to 36 NBFCs in Tamil Nadu. They explored that government company soundness has improved in the past 2017 era compare to the period of 2017. The small company's categories of risk increased 31 to 38 percent in the past period. Top company satisfactory has improved during the period but failure from the peak of 65% of companies 31% to 23% on 2012. All companies risk zone has been decreasing 47 % to 41% after 2017 regulating very status factory zone has been reduced 49% to 46% from 2017. Some company's satisfaction zone has improved 4% to 13%.

In the years of 2007-2012 profitability and leverage is more significantly different of NBFIs. This result was founded from Sowndharya and Sharmugham (2014) of their study selected NBFIs performance evaluation.

Operating efficiency is the key factor of NBFIs financial performance found from CAMELS test application to NBFIs in (2012). For improvement of NBFIs financial performance the manager understanding activity is more important. They also found profitability provides a clue of the effectiveness of firm's operational policies and decision.

Last five years the financial performance indicator from one to another and they are significantly different in the management of financial performance but company performed well. For this study various financial ratios used by Prasanta (2011).

Objective

1. Try to explore soundness of NBFIs in Bangladesh by using CAMELS model.

2. And their future forecast of rating point by CAMELS Model.

RESEARCH METHODOLOGY

Sources of Data

The study is primarily based on secondary data. This study doesn't attempt to deal with any primary sources. This secondary data has been collected from the annual report of the Bangladesh bank 2016. Without this data, we collected other information from different journal, papers and articles.

Tools and Technique

For analyzing NBFIs performance, CAMELS model has been used.

DISCUSSION AND ANALYSIS

For customer demand, NBFIs generally provide diversified mostly long-term financial service, but sometimes this service not provided by the bank. In Bangladesh, recently NBFIs are engaged in capital market and real estate sector. During The FY 2016, NBFIs showed strong performance in term of growth in assets and deposits.

Under The Financial Institution Act, 1993 Bangladesh Bank give license and supervision of NBFIs. Financial Institution Regulation, 1994 tells that the minimum paid-up capital of NBFIs is Taka 1.0 Billion. It got permission for to offer term deposit tenure of at least three months effective from 2 December 2013.

Table 1 STRUCTURE OF NBFIS							
	2010	**2011**	**2012**	**2013**	**2014**	**2015**	**2016***
No of NBFIs	29	31	31	31	31	32	33
Government-owned	1	2	3	3	3	3	3
Joint venture	8	8	10	10	10	10	11
Private	20	20	18	18	18	19	19
New Branches	20	53	8	7	7	15	22
Total Branches	108	161	169	176	183	198	220

*As on 30 June 2016
Source: Bangladesh Bank Annual Report 2016

Table 1 shows that the government owned NBFIs are three in number, joint venture are 11 and the rest of 19 are private owned. Total branch of NBFIs in 2010 was 108, but at the end of the June 2016, it stood at 220.

Table 2 ASSETS, LIABILITIES AND DEPOSIT OF NBFIS (BILLION TAKA)							
Column1	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016***
Total Assets	251.5	288.4	333.9	436.3	520.05	611	672.8
Total Liabilities	206.8	235.7	274.3	350.4	424.24	509	572
Liabilities- assets ratio	82.2	81.7	82.2	80.3	81.5	83.3	85
Total Deposit	94.4	112.6	145.4	198.3	238.5	318.1	351.4
Deposits as % of total liabilities	45.7	47.8	53	56.6	56.2	62.5	61.4

*As on 30 June 2016
Source: Bangladesh Bank Annual Report 2016
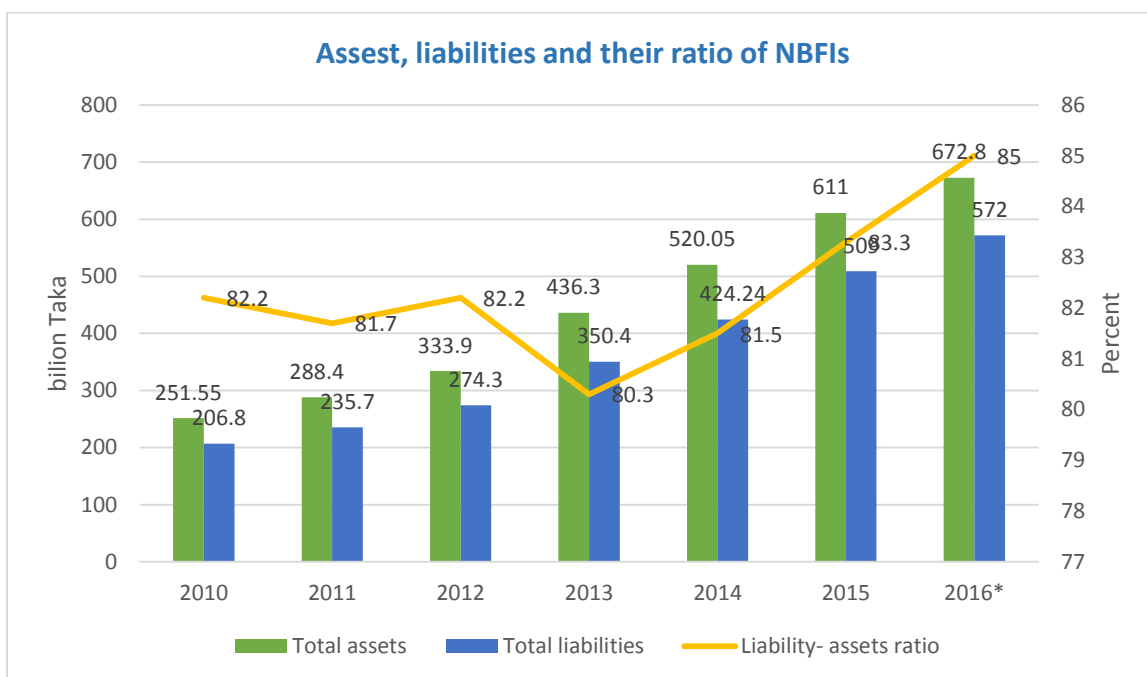
Assets

Table 2 shows the total assets, liabilities and deposit situation. Every year total assets of NBFIS is in increasing trend. In 2010, the total asset was 251.5 billion and at the end of the June 2016, total asset increased at 672.8 billion Taka.

Liabilities

Table 2 shows that total liabilities is also in increasing trend. At the end of the year 2010, total liabilities was 206.8 billion At the end of the month June 2016 it increased 672.8 billion Taka which is 85% of the total assets.

Deposit

In every NBFIs, deposit is one of the main component for their running operation effectively. In 2010 total deposit was 94.4 billion Taka that was 45.7 % of the total liabilities, at end of the June 2016, the total deposit was 351.4 billion Taka which was 61.4% of the total deposit.
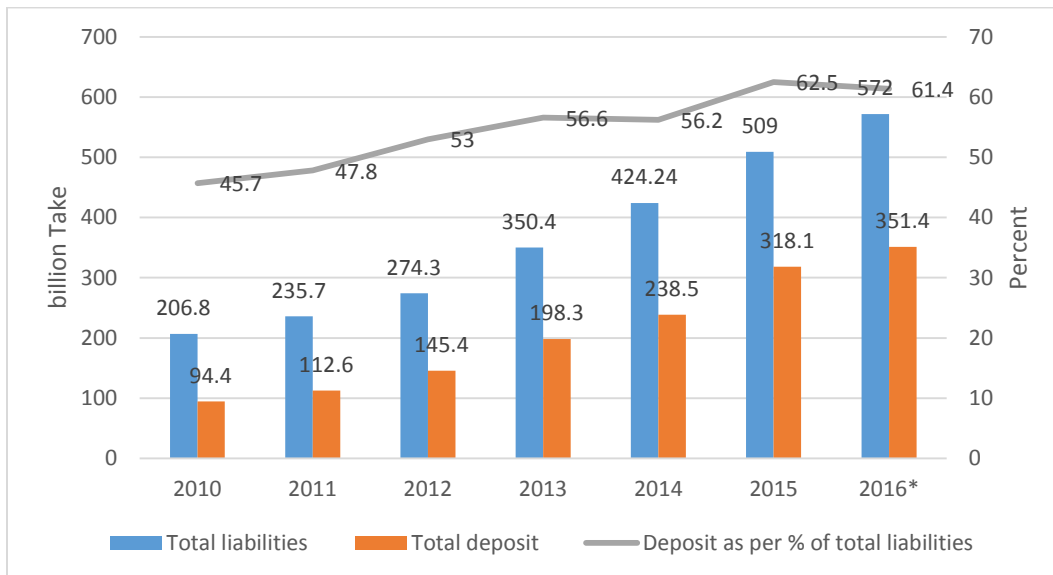

*As on 30 June 2016
Source: Bangladesh Bank Annual Report 2016

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CHART 1
ASSETS, LIABILITIES AND THEIR RATIO OF NBFIS

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Chart 1 shows asset, liabilities and their ratio of NBFIs. Here at the year of 2010, Liability-asset ratio was 82.2% and the next year it became 81.7%. After that it increased at low portion and ratio was 82.2%. But suddenly in the year of 2014, it decreased & the percentage

was 80.3%. But after that the ratio increased every year& at the end of the June 2106 the ratio stood at 85%.

Chart 2 shows the deposit as per % of the total liabilities. At the end of the year 2010, the ratio was 45.7%. At the end of 2014, it the ratio decreased and the ratio was 56.2%. After that, it again increased and at the end of the June 2016, it decreased and the ratio was 61.4% of the total liabilities.

*As on 30 June 2016
Source: Bangladesh Bank Annual Report 2016

CHART 2
DEPOSIT AS % OF TOTAL LIABILITIES
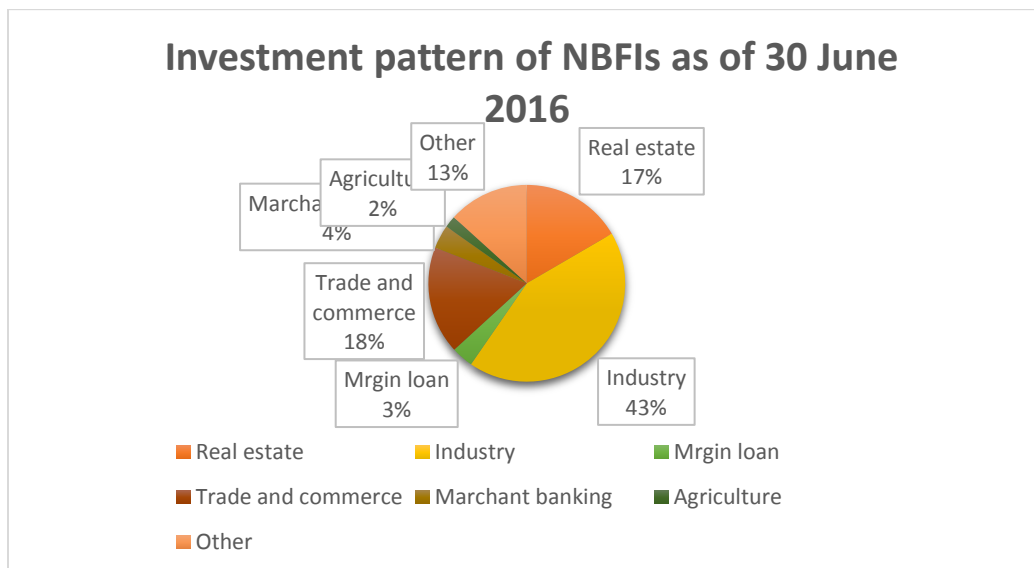
*As on 30 June 2016
Source: Bangladesh Bank Annual Report 2016

CHART 3
INVESTMENT PATTERN OF NBFIS

Investment

Chart 3 shows that industrial sector is the main investment sector for NBFIs which provides term loans. NBFIs provided loan to real estate, industry, margin loan, trade and commerce, merchant banking, agriculture and other sectors at the end of June 2016. The fund allocation is maximum for industrial purpose.

Bond and Securitization Activity

NBFIS issue Zero Coupon Bonds and Assets-backed Securitized Bonds. NBFIS play major roles for developing the bond market in Bangladesh economy. In June of 2016, IDLC Finance Limited took NOC from the department of Financial Institution and market (DFIM) and provided take 2.5 billion IDLC infrastructure and SME Zero Coupon Bond and the Lanka Bangla Finance Limited issued Take 3.0 billion non-convertible Zero coupon bonds whereas Reliance Finance Limited issued Convertible Subordinated Bond.

Performance and Rating of NBFIs

Capital adequacy, assets quality, management efficiency, earning, liquidity and sensitivity to market risk are the six dimensions of CAMELS rating system.

Capital Adequacy

According to Basel in Bangladesh perspective, NBFIs to maintain minimum Capital Adequacy Ratio (CAR) 5% and with maximum 10% of total core capital. At the end of the June 2016, under CAMELS component rating system, 1 NBFI was marginal, 14 were fair, 15 were satisfactory and 2 were evaluated as strong position.

Asset Quality

For judging assets quality, NBFIs use the ratio of gross non-performing loan/lease to total loan and lease. The Non-Performing loan (NPL) ratio for NBFIs was 9.0% at the end of the June 2016. At this time out of 33 NBFIs, 1 evaluated as "1 or Strong", 7 were "2 or Satisfactory", 14 were "3 or Fair", 9 were "4 or Marginal" and 1 was "5 or Unsatisfactory".

Management Efficiency

Table 3
TOTAL LOAN/LEASE AND CLASSIFIED LOAN/LEASE (BILLIONTAKE)

	2010	2011	2012	2013	2014	2015	2016*
Loan/lease	178.1	209.7	252.1	273.6	372.8	448.5	498.6
Classified loan/lease	10.5	10.3	13.7	16.8	19.7	40	45.1
Classified loan/lease as % of total	5.9	4.9	5.4	6.1	5.3	8.92	9

*As on30June 2016
Source: Bangladesh Bank Annual Report 2016

For the judgment of management efficiency, we consider many items like total expenditure to total income, earnings, operation expense to total expense, operating expense per

employee and interest rate speed. From the CAMELS rating ,out of 33 NBFIs, 1 was"5 or unsatisfactory'', 2 were"4 or Marginal'', 4 were"3 or Fair, 21 were''2 or Satisfactory and 4 were evaluated as'' 1 or Strong at the end of the June 2016 (Table 3).
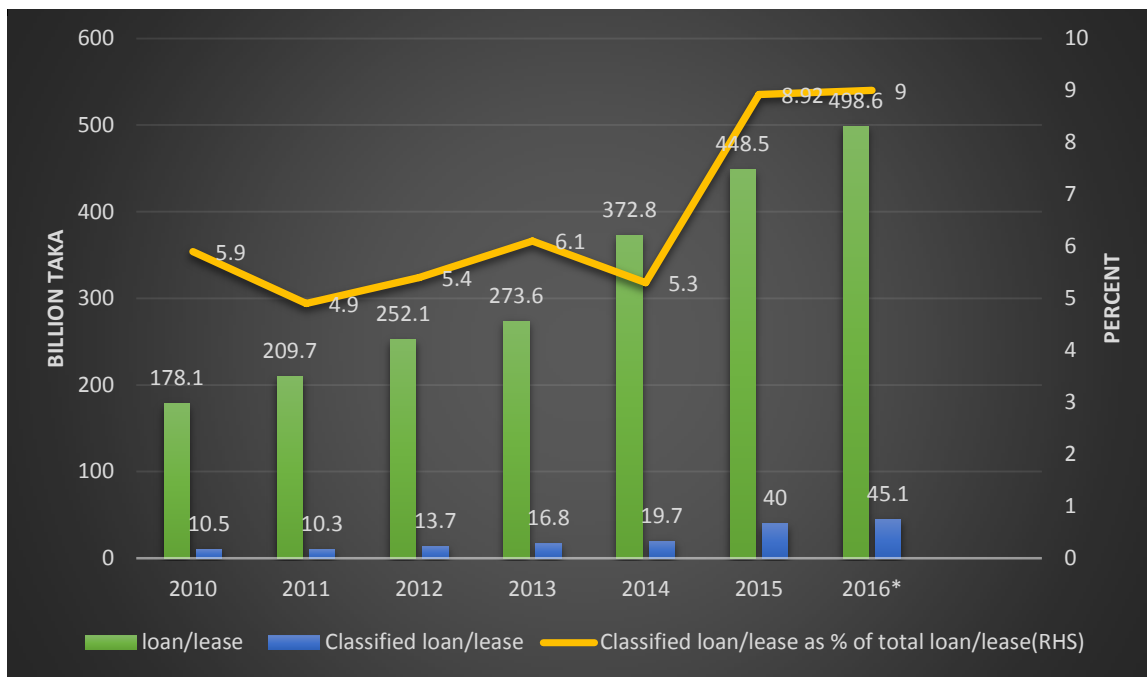
*As on30June 2016
Source: Bangladesh Bank Annual Report 2016

CHART 4
CLASSIFIED LOAN/LEASE AS % OF TOTAL LOAN/LEASE (RHS)

Earning and Profitability

For judging earning efficiency, Return on asset & Return on equity is commonly used. In June 2016, ROA was 0.8% and ROE was 5.6%. Out of the 33 NBFIs, 3 were evaluated as "1 or strong", 16 were "2 or satisfactory", 11 were "3 or Fair" and 2 were "4 or Marginal" in the earnings and profitability component of the CAMELS rating (Chart 4).

Liquidity

Statutory liquidity requirement (SLR) is 5 % inclusive of average 2.5 percent (at least 2% in each day) and cash reserve ratio (CRR) on a bi -weekly basis. Without taking term deposit, the SLR rate is 2.5% for NBFIs. Out of 33 NBFIs, 19 were evaluated "2 or satisfactory" 10 were "3 or Fair", 2 were "4 or Marginal" and 1 was "5 or Unsatisfactory" in the liquidity position component of the CAMELS rating. Mobilized term deposit only is allowed by the NBFIs.

Sensitivity to Market Risk

Sensitivity is the magnitude of a financial instruments reaction to change in the underlying factors. Stocks and bond are the financial instruments that constantly impacted by many factor. The change Interest rate and equity prices can adversely affect and NBFIs assets

liability position by the sensibility to market risk. In many NBFIs, the primary source of market risk sensitivity to market risk arises from non-trading position and their sensitivity to change in interest rate. Out of 33 NBFIs, 3 were evaluated "1 or Strong", 9 were "2 or Satisfactory", 15 were "3 or Fair", 4 were "4 or Marginal" and 1 was "5 or Unsatisfactory" in the sensitivity to market risk component of the CAMELS rating matrix at end of the June 2016.
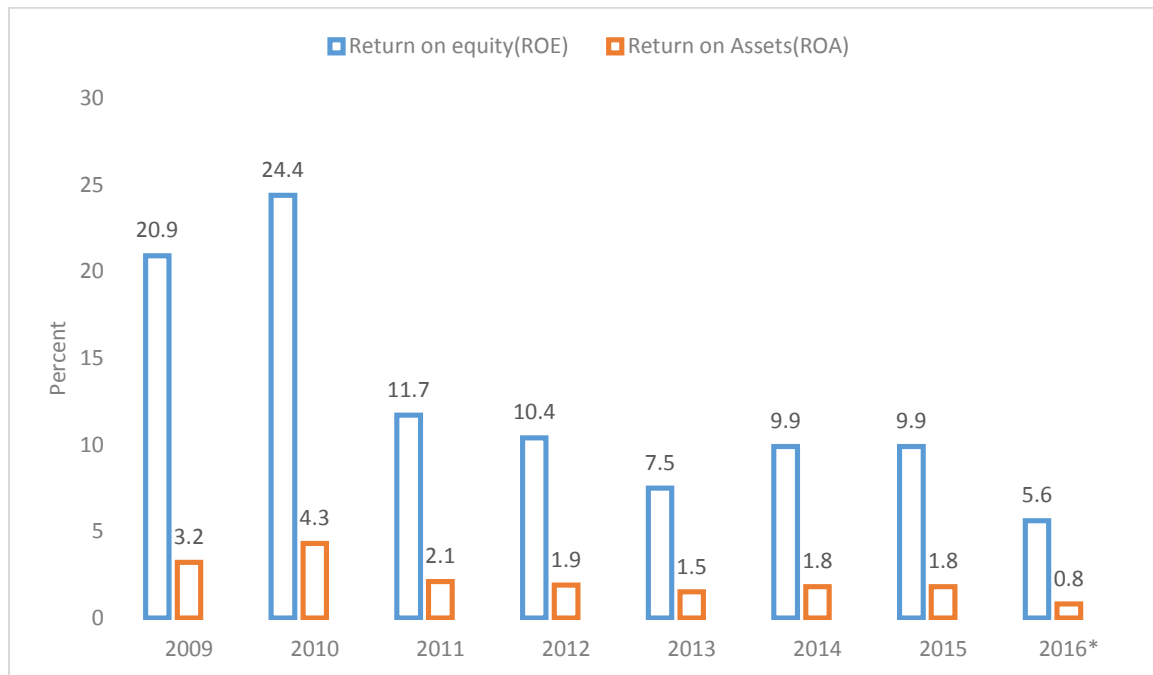
CHART 5
PROFITABILITY OF NBFIS

Composite CAMELS Rating

Out of 33 NBFIs, 1 was "1 or Strong", 15 were "2 or Satisfactory", 13 were "3 or Fair" and 3 were "4 or Marginal" according to the CAMELS rating at end of the JUNE 2016 (Chart 5).

FINDINGS

Assets quality

At the end of the June 2016, out of 33 NBFIs, 1 was"1 or Strong", 7 were"2 or Satisfactory", 14 were"3 or Fair", 9 were 4 or Marginal "and 1 was"5 or Unsatisfactory.

Liquidity

At the end of the June 2016, out 33 NBFIs, 19 were evaluated as"2 or satisfactory",10 were"3 or fair", 2 were"4 or Marginal "and 1 was"5 or Unsatisfactory.

Sensitivity to Market Risk

At the end of the June 2016, out of 33 NBFIs, 3 were evaluated as"1 or strong", 9 were"2 or Satisfactory" and 1 was"5 or Satisfactory

Earnings and Profitability

At the end of the June 2016, out of 33 NBFIs, 3 were evaluated as"1 or Strong", 16 were"2 or Satisfactory", 11 were "3 or fair "and 2 were''4 or Marginal "in the earning and profitability.

Composite CAMELS Rating

At the end of the June 2016, according to the composite CAMELS rating out of 33 NBFIs, 1 was" 1 or strong", 15 were 2 or satisfactory", 13 were "3 or Fair" and 3 were"4 or Marginal".

CONCLUSION

In every economy, NBFIs is very important for sustainable economic growth. So it is very important evaluating NBFIs performance continuously, so that NBFIs get proper direction for future better performance. CAMELS model is the unique system to judge the performance of NBFIs. From the study, we understood the performance of NBFIs by doing some related ratio analysis by which we get idea about capital adequacy, asset quality, management efficiency, liquidly & sensitivity to market risk of Non-Bank Financial Institution of Bangladesh. The limitation of the study is lack of available information. For measure better performance of NBFIs, we may need much available information**.** To improve this sector, Government must come forward with effective rules c & regulations.

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