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# SUSTAINABLE FINANCE FOR GROWTH AND DEVELOPMENT OF BANKING INDUSTRY IN BANGLADESH: AN EQUITY PERSPECTIVE

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### **ABSTRACT**

The present study is about sustainable finance- a prerequisite for growth and development of banking industry in Bangladesh. The study is based on a total number of 20 commercial banks and total 120 respondents consisting the bank owners. This study is an outcome of both the primary and secondary data. The requisite primary data were collected using structured questionnaire. The main objective of this study is to critically evaluate the role of sustainable finance in the growth and development in the banking industry in Bangladesh. This study reveals that the levels of perceptions of the most of the respondents were found to be very high in terms of their awareness, beliefs, attitudes and understanding as regards the dimensions of sustainable finance viz. customers' satisfaction, employees' welfare, contribution to govt. exchequer, generating revenues, cost savings, products or services with rescannable charge, brand awareness and addition to capital and the shareholders' equity representing value of the firm was found to be influenced to the extent of 41.6 percent by the relevant independent variables representing sustainable finance of the sample banks. The major suggestions for addressing challenges put forward by the respondents have been loan sanctioning founding on proper appraisal of loan applications and improving operational efficiency. The relevant bank authorities should implement the suggestions in order to improve the sustainable finance related factors.

**Key words:** Sustainable finance; shareholders' equity; corporate social responsibility; investment; net cash flows; cost savings.

### 1.0 INTRODUCTION

Sustainable finance and sustainable development refer to an evolutionary change from the present situation to a better situation which is a process of building, improving and innovating for ensuring better quality of life of human beings. Therefore, sustainability is a basic to human welfare and it is a never-ending development process. Sustainable development is the optimal and rational use of resources which can bring the long-lasting benefit maximizing the use of development resources but minimizing the damage to the environment (Solaiman and Azad, 2009). In such a context, finance required for maintaining sustainable development may be viewed as sustainable finance.

In its most basic definition, finance is the action of distributing capital to individuals and companies that wish to make productive use of it. In short, finance makes social value (Leon Patrica 2001). The second half of the 20th century can be branded in over-all as an era of strong economic growth. After a recession in the mid-1970s and a moderately small fall in the stock market in 1987, there was a durable bull market until March 2000 (Eke & Olokoyo, 2017).

With the downfall of the Internet exaggeration in the succeeding period, we go in a serious bear market (or a stock market collapse extended over time) with frequent reported fraud cases (more or less). In such conditions, it is not surprising that concepts such as sustainability, social responsibility and business ethics have attracted much consideration (Soppe,

2004). The financial crisis of 2008 is just the utmost recent and most dramatic proof that today's finances acquire a totally different meaning and, according to some, less social awareness.

It is supposed that we have the chance and responsibility to teach, practice and research finances differently. Sustainable financing is the practice of forming economic and social value through financial models, products and markets that are sustainable over time. Accomplishing financial sustainability is a long-standing objective that needs the intensive efforts of the whole organization.

We must recognize that succeeding financial stability is a continuing procedure that can become part of our organization's day-to-day management: strategic planning, administration and finance, fund raising policies, and planning and implementation of policies that empower us to make our own returns. On the edge of the 21st century, in the face of a gradually competitive market, a globalized economy and a context in which variation is an endless rather than a variable, we must use more refined methods to accomplish financial sustainability. The survival of the sector be contingent on our ability to achieve this goal (Leon Patrica, 2001).

We must also remember that creativeness alone is not sufficient to accomplish financial sustainability; it is important that we adopt the most progressive policies and approaches at our disposal to maximize our resources for achievement. Reaching financial sustainability should no longer be an unbearable dream. Attaining this objective is both a requirement and a commitment for organizations, as it guarantees our ability to fulfill our particular assignments.

In case of banking industry in Bangladesh, sustainable finance must be maintained for the smooth running of the banks in one hand, and for the growth and development of the banks, on the other hand. The commercial banking sector does not deliberate poor people primarily because of their incapacity to meet the suitability criteria, including guarantees. Therefore, the poor in Bangladesh have virtually no access to formal financial services (Anwarul Islam & Zaman, 2013). In such a context, the more rational way to help the poor could be the provision of sustainable economic opportunity at a grass root level especially provision required financial services

at competitive rates to support their investment including viable business activities.

Therefore, the question of sustainable finance is obviously related to the growth and development of banking industry in Bangladesh. This situation has motivated the researchers undertaking an indepth study on sustainable finance in the context of banking industry in Bangladesh. So far researcher knowledge goes, no worth mentioning study was done on sustainable finance in the context of banking industry of Bangladesh. However, the present study is an effort to the end.

The main objective of the study is to critically evaluate the role of sustainable finance in the growth and development of banking industry of Bangladesh. More specifically, to measure the perceptions of the selected bank owners regarding various dimensions of sustainable finance and to measure the impact of banks' sustainable finance on the growth and development of the sample during the study period.

For the purpose of the study, the following hypotheses were relevant which had been developed on the basis of the main objective of the study.

1.  $H_0$ : There exists no relationship between shareholders equity representing value of the firm and each of the measures of sustainable finance.

2.  $H_a$ : There exists relationship between shareholders' equity representing value of the firm and each of the measures of sustainable finance.

### 2.0 RATIONALE OF THE STUDY

In Bangladesh, a good number of commercial banks both local and foreign have been providing financial services to the society, generating employment opportunities for the unemployed people and contributing to the government exchequer in the form of tax and vat (value added tax) etc.(Rahman 1996). Hence, the question arises, which banks are bad, good, better and best from the viewpoints of liquidity, profitability, solvency, operating efficiency and in turn, financial sustainability. Since, banks deal in public money, public confidence is a must for sustainable finance of the banks. Of the general public, bank owners and employees, banks clients and customers directly and other businessmen and industrialists and service holders or other professional people

indirectly involve in banking activities. Therefore, the confidences of the agents depend on efficiency, liquidity, profitability, solvency and in turn financial sustainability of the banks with which they are involved directly or indirectly. Financial sustainability of the banks depends on some qualitative and quantitative factors (Adongo and Stork, 2006), of the various quantitative factors, generating revenues, cost savings, risk reducing, addition to capital, economic value added, and contribution to govt. exchequer etc. are the main. Again, of the qualitative factors, employee welfare, building trust, building image, community interest, publicity, product/service with reasonable charge, brand awareness, ethical responsibility, legal responsibility, emission of carbons, bio-gas plan and solar panel, waste management, maintaining ecological balance, environmental conservation are the major. Sustainable finance produces impact on the value of the firms representing shareholders wealth on which the ultimate growth and development of the firms depend.

Sustainable finance- a prerequisite for growth and development of banking Industry in Bangladesh is an effort which would give the answers to those questions. Therefore, the findings of the study would be useful to the bank authorities while making strategic planning for sustainable finance of their relevant banks. The Bangladesh Bank (BB) authority as the regulatory body of the commercial banks would also be able to frame the realistic as well as robust policy as to sustainable finance in the case of the banking industry in Bangladesh. Moreover, the prospective researchers would be benefited out of the findings of the study in order to carry on further researches on this vital issue. Again, both the prospective clients and customers of the banks would also be benefited from the relevant banks if the banks have the financial sustainability for the continuation in the future. Lastly, the study would contribute, to some extent, to the existing stock of knowledge on this vital issue.

### 3.0 LITERATURE REVIEW:

Sustainability in finance is understood as a strategic choice based on normative decisions on how to run a company in the long term. Research on sustainable finance aims to fill the gaps between finance and corporate strategy. Sustainability as a social phenomenon entered economic literature many decades ago. Eke and Olokoyo (2017) exposes

that, primarily, sustainability was launched in strict environmental interpretation during the United Nations conferences in the 1970s and 1980s. Then, during the 1980s and 1990s, sustainability gradually entered into the business ethics literature and management literature as an internal responsibility of corporations and management, designated as Corporate Social Responsibility (CSR). Therefore, in the finance world, current literature on the financial sustainability and its major dimensions are not adequate. However, studies directly related to sustainable finance have been reviewed as follows.

Soppe (2004) presents and demonstrates the concept of sustainable corporate finance. Sustainability is a well-established concept in the disciplines of environmental economics and business ethics. The document uses a broader definition of what is called "the company" to signal sustainability to the financial literature. The concept of sustainable finance is compared to the traditional and behavioral finance. Four criteria are used to systematically analyze the basic difference. First in the order is the theory of the company: the definition of the company is reconsidered by integrating behavioral aspects and expanding the financial analysis to an establishment of three-dimensional objectives. Secondly, the assumed behavior of economic agents and their consequences for the applied methodology are observed more closely. Third, the shareholder paradigm is discussed in the context of the growing importance of stakeholders. Finally, the fourth criterion deals with the different ethical frameworks and their implications for financial behavior.

Similarly Sultana and Akhter (2015) exposed that the most significant factors for sustainability are environmental and social responsibility, customer satisfaction, financial performance, political and economic factors, responsibility and transparency, smart competition, operational efficiency, employee satisfaction and legal factors in the context of Commercial Banks in Bangladesh. In the same way Kinde (2012) in his study agrees that microfinance paradigms focus on poverty reduction through improved access to financial and financial services. However, the optimistic influences of microfinance institutions on the wellbeing of the poor can only be continued if the institutions can achieve good financial performance. The purpose of this study, therefore, was to identify the factors that affect the financial sustainability of microfinance institutions (MFIs) in Ethiopia. The study followed a quantitative research approach using a balanced panel data set of 126 observations from 14 MFIs during the period 2002-2010. The study found that the breadth of microfinance reach, the depth of reach; the dependency ratio and the cost per borrower affect the financial sustainability of microfinance institutions in Ethiopia. Vijfvinkel, Bouman and Hessels (2011) in his study focuses on the relationship between environmental sustainability and the financial performance of SMEs in terms of profit development and income development. The analysis uses a unique data set of 337 Dutch and Chinese companies. The results suggest a significant positive association between environmental sustainability and company performance.

An additional, Peloza and Yachnin (2011) in their study exposed that, no doubt, there is a small and positive relationship between sustainability and the financial performance of the company. This report shows that there are no consistent metrics to measure sustainability, and little attention is paid to metrics that address the causality between investments in sustainability and financial performance. This systematic review of 159 research documents and professional reports identified 39 unique sustainability measures used to examine the relationship between sustainability and financial performance. Rai and Rai (2012) in their study emphasize that millions of people in developing countries have had access to formal financial services through microfinance programs. However, millions of potential customers still do not receive service and the demand for financial services far exceeds the supply currently available. Given the significant capital constraints, the expansion of microfinance programs remains a formidable challenge for the microfinance industry. In addition, it is noted that financial institutions have had varying degrees of sustainability. One of those sustainability is financial sustainability.

### 4.0 METHODOLOGY OF THE STUDY:

The methodology of this study has been discussed briefly as follows:

4.1 Sampling design: At first, the selection of sample units arises. At present, a total number of 47 commercial banks have been operating in the country, Bangladesh. Of the total number of banks, including 4 specialized banks belongs to the public sector and the remaining 39 belongs to private sector. Out of the private sector banks 38 are local and 09 are foreign. Lastly, out of the private sector local banks, 23 are conventional and 8 are Islamic shariah based (Activities of Banks and Financial Institutions 2012-2013).Out of a total of 38 private banks, 20 were selected for the study purpose based on simple random sampling. Thus, the sample size has covered 42.55 percent of the total population. At the next stage, selection of respondents arises.

Three types of **respondents numbering 20** were selected bank owners. Table-1 presents the distribution of total respondents.

**Total** Selected Type of Banks Respondents Local conventional banks 22 15 90 8 5 Local Islamic banks 30 9 0 0 Foreign Conventional **Public Sector** 8 0 0 Total 47(100%) 20 (42.55%) 120

**Table1.** Distribution of Total Respondents

Source: Based on Activities of Banks and Financial Institutions, 2012-2013

It is revealed from Table 1 that the total number of respondents of all types 120 have been distributed as 120 banks owners. These respondents were selected on the basis of convenient sampling considering appropriate answers of the questions from the relevant executives.

### 4.2. Collection of Data:

The requisite primary data were collected by the researchers themselves from the respondents on the basis of direct interview method. The instrument as used was structured questionnaire of direct interview method. The questionnaire was prepared on the basis

of the objectives of the study. Before finalization of the questionnaire, a pilot survey on 15 banks owners was conducted, in order to test the quality and validity of the questions and answers. The main sources of collection of secondary data have been the Annual Reports, Annual Accounts Statements, other relevant statistics and websites of the sample banks. There were collected by the researchers themselves from the relevant sources.

### 4.3. Methods of Analysis of Data:

The primary data were processed with the help of computer MS word & MS Excel. On this context, descriptive statistics like mean score, Standard deviation, Coefficient of variation etc. were used. The secondary data were processed and analyzed by using SPSS (Statistical Package for Social Science) program. In order to show the relationship between the dependent variable & each of the selected independent variables, Pearson correlation technique was used. In order to measure the impact of the independent variables on the dependent variable, regression model was used. For the purpose of hypotheses testing, t test, F test and ANOVA have been applied in the study. Besides, in order to assess the qualitative responses such as awareness, attitudes, beliefs, understanding, rating importance etc.; the qualitative scale has been converted into quantitative by using 5-point Scale (Khaleq et al. 1995) From the hypotheses of the study it can be said that value of the firm represented by shareholders' equity is a function of operating income, total investments, loans & advances, economic value added, total deposits, liquidity position, debt-equity ratio, return on capital, internal fund, net cash flows, contribution for employees' welfare etc.; CSR investment and number of employees and net cash flows. In order to test the hypotheses namely impact of sustainable finance on banks growth and development, the

following model has been developed by using Ordinary Least Square (OLS) method.

$$SE = \beta_0 + \beta_1 OI + \beta_2 TI + \beta_3 EVA + \beta_4 TD + \beta_5 IF + \beta_6 LP + \beta_7 LA + \beta_8 DR + \beta_9 DR + \beta_{10} CSRI + \beta_{11} EWC + \beta_{12} NOE + \beta_{13} NCF$$

Where, *SE*= Shareholders' equity is the proxy of the value of the firm *(VF)* 

 $\beta\theta$ =Intercept of the regression line,  $\beta_1$  to  $\beta_{13}$ =Coefficients of Independents variables

OI =Operating income, TI =Total investments, EVA = Economic value added, TD = Total deposits, IF= Internal funds, LP= Liquidity positions, LA= Loans and Advances, DR = Debt ratio, ROC = Return on capital, CSRI = Corporate social responsibility investment, EWC= Employees' welfare contribution, NOE =Number of employees, NCF =Net cash flows

### **5.0 FINDINGS AND ANALYSES:**

The major findings of the study have been analyzed in the following subsections having considered the objectives of the study consecutively:

The sustainable finance is frequently defined as addressing financial, economic, social, ethical, and environmental and governance impacts of financial services. The sustainability approach is challenging the core business of the financial industry especially banking industry (governance, products, process, operations and logistics). The providers of financial services (banks, intermediaries etc.) increasingly realize that the sustainable practices in this sector have a positive potential: sustainable approaches may save costs, increase revenues, reduce risks, develop human capital and improve access to capital (Sustainability/IFC/Ethos, 2000).

<b>Table-02.</b> Respondents' Awareness Regarding Sustainable Finance and its Various I
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SL	Specific Dimension	Mean Score	Rank
1	Generating revenues	4.53	4
2	Cost Savings	4.40	7.5
3	Risk Reducing	4.32	12
4	Addition to Capital/ Investment	4.50	5
Sl.	Specific Dimension	Mean Score	Rank
Sl.	Specific Dimension Economic Dimensions	Mean Score	Rank
<b>Sl.</b> 5		Mean Score	Rank 6
<b>Sl.</b> 5 6	<b>Economic Dimensions</b>		<b>Rank</b> 6  3

			40
	<b>Social Dimensions</b>		
8	Customers' Satisfaction	4.60	1
9	Employees Welfare	4.58	2
10	Building Trust	4.30	13
11	Building Image	4.33	10
12	Community Interest	4.22	19
13	Publicity	4.23	17
14	Product/Service with reasonable charge	4.33	10
15	Brand Awareness	4.40	7.5
16	Ethical Responsibility	4.20	21.5
17	Legal Responsibility	4.22	19
	<b>Environmental Dimensions</b>		
18	Emission of Carbons	4.27	14
19	Bio-gas Plan and Solar panel	4.25	15.5
20	Waste Management	4.33	10
21	Maintaining Ecological balance	4.25	15.5
22	Environmental Conservation	4.22	19

**Source:** Field Survey (Calculation made by researcher)

From the Table 2, it is seen that according to the awareness of owners tops 1st rank with 4.60 means score followed by employees welfare with 4.58 means score, contribution to government exchequer with 4.57 mean score, generating revenues with 4.53 mean scores, addition to capital/investment with 4.50 mean score, economic value added with 4.42 mean score and so on.

# Beliefs and Attitudes of Respondents Regarding Sustainable Finance:

In order to measure the perceptions of the respondents regarding sustainable finance, their awareness is not enough. The beliefs & attitudes of the respondents are also essential elements of perceptions. The following table-3 shows the levels of beliefs & attitudes of the respondents in case of various dimensions of sustainable finance.

**Table 3.** Showing Beliefs and Attitudes Dimensions on Sustainable Finance:

Sl.	Specific Dimension	Mean Score	Rank
1	Generating Revenues	4.50	3
2	Cost Savings	4.40	5
3	Risk Reducing	4.27	10
4	Addition to Capital/Investment	4.35	6
	Economic Dimensions		
5	Economic Value Added	4.28	9
6	Contribution to Govt. Exchequer	4.43	4
7	Competitive Advantage	4.08	20.5
	Social Dimensions		
8	Customers' Satisfaction	4.60	1
9	Employees Welfare	4.53	2
10	Building Trust	4.23	12.5
11	Building Image	4.25	11
12	Community Interest	4.17	18
13	Publicity	4.20	16
14	Product/Service with reasonable charge	4.33	7
15	Brand Awareness	4.30	8
16	Ethical Responsibility	4.08	20.5
17	Legal Responsibility	4.20	16
	<b>Environmental Dimensions</b>		
18	Emission of Carbons	4.13	19
19	Bio-gas Plan and Solar panel	4.04	22
20	Waste Management	4.20	16
21	Maintaining Ecological balance	4.23	12.5
22	Environmental Conservation	4.22	14

**Source:** Field Survey (Calculation made by researcher)

From Table-3, it is observed that according to belief and attitudes of the owners, customers' satisfaction ranks first position with 4.60 mean score followed by employees' welfare with 4.53 mean score generating revenues with 4.50 mean score, contribution to exchequer with 4.43 mean score, cost savings with 4.40 mean score, addition to capital/investment with 4.35 mean score and so on. The table also depicts that in case of some dimensions of sustainable finance; beliefs & attitudes of clients have been higher and in case of some other dimensions beliefs & attitudes of

owners and bankers have been higher. The common feature of table-3 discloses that in case of most of the specific dimensions mean scores of owners & bankers seem to be higher than that of the clients.

# Understanding of Respondents Regarding Dimensions of Sustainable Finance:

It has been mentioned earlier that the perceptions include awareness, beliefs & attitudes as well as understanding. In table-4 the levels of understanding of the respondents' have been presented:

**Table 4.** Showing the Understanding on Dimensions of Sustainable Finance:

Sl.	Specific Dimension	Mean Score	Rank
1	Generating Revenues	4.53	2.5
2	Cost Savings	4.47	5
3	Risk Reducing	4.25	13.5
4	Addition to Capital/Investment	4.48	4
4	Economic Dimensions	4.40	4
5	Economic Value Added	4.00	20.5
		4.08	20.5
6	Contribution to Govt. Exchequer	4.42	6
7	Competitive Advantage	4.13	18.5
	Social Dimension		
8	Customers' Satisfaction	4.58	1
9	Employees Welfare	4.53	2.5
10	Building Trust	4.23	16.5
11	Building Image	4.26	11
12	Community Interest	4.28	10
13	Publicity	4.30	9
14	Product/Service with reasonable charge	4.35	7
15	Brand Awareness	4.33	8
16	Ethical Responsibility	4.25	13.5
17	Legal responsibility	4.13	18.5
	<b>Environmental Dimension</b>		
18	Emission of Carbons	4.08	20.5
19	Bio-gas plan and Solar panel	4.00	22
20	Waste Management	4.25	13.5
21	Maintaining Ecological balance	4.25	13.5
22	Environmental Conservation	4.23	16.5

**Source:** Field Survey (Calculation made by researcher)

The Table 4 depicts that in terms of the owners and bankers, customers satisfaction also ranks with 4.58 mean score followed by employees' welfare and generating revenues with 4.53, mean score, addition to capital/investment with 4.48 mean score, cost savings with 4.47 mean score, contribution to govt. exchequer with 4.42 mean score, product/service with reasonable price with 4.35 mean score, brand awareness with 4.33 mean score and so forth. From the analyses made so far, it can be said that the levels of perceptions of most of the respondents of both

types have been very high from the viewpoints of their awareness, beliefs and attitudes and understandings in respect of the dimensions: i. Customers satisfactions ii. Employees' welfare iii. Contribution to govt. exchequer iv. Generating revenues v. Cost savings vi. Product/Service with reasonable charge vii. Brand awareness and viii. Addition to capital/investment. Again, the levels of perceptions of the majority respondents' have been high from the viewpoints of their awareness, beliefs, attitudes and understandings in respect of the dimensions: i. Economic value added

ii. Building image iii. Risk reducing iv. Building trust and v. Community interest

### Impact of sustainable finance on bank performance

Before measuring impact of sustainable finance, firstly, we are to examine the relationship of each of the independent variables namely, OI, TI, EVA, TD, IF, LP, LA, DR, ROC, CSRI, EWC, NOE and NCF with the dependent variable SE. The table i (Annex 1) shows the coefficients of such relationship. The table points out that coefficient of correlations (r) between OI and SE, TI and SE, EVA and SE, TD and SE, IF and SE, LP and SE, LA and SE, DR and SE, ROC and SE, CSRI and SE, EWC and SE, NOE and SE and NCF and SE have been found out as 0.144, -0.068, 0.301, 0.276, -0.101, 0.216, -0.109, 0.012, 0.080, 0.169, 0.432, 0.279 and 0.368 respectively. The table also reveals that (r) between SE & EVA, SE & TD, SE and TD, SE and LP, SE and EWC, SE and NOE and SE and NCF has been significant with 2 tailed at 1 percent and 5 percent levels. Thus it can be said that the variables: SE and EVA, SE and TD, SE and LP, SE and ROC, SE and EWC, SE and NOE, SE and NCF have been highly positively correlated. Thus, it is seen that there exists relationship between shareholders' equity representing value of the firm and each of the measures of sustainable finance.

The Table also reveals inter correlation between the independent variables. It revealed that in some cases namely EVA and TD, LP and TD, TI and ROC, EVA and NCF, TD and NCF, LP and NCF, LP and NOE, TD and NOE, TD and NOE, CSRI and ROC, NCF and NOE, there exist multi-collenearity problems since the value of (r) between those variables are found to be more than 0.70. As a result of the existence of such multi-collenearity problems, the value of R2 appears to be high, to some extent. The removal of those problems by dropping those variables from regression model would definitely produce accurate value of R2. In order to measure the impact of the independent variables on the dependent variable, the regression model as specified earlier has been applied. Taking un-standardized coefficients from Coefficient table-ii (Annex 1) the model has been estimated as follows:

$$SE = \beta_0 + \beta_1 OI + \beta_2 TI + \beta_3 EVA + \beta_4 TD + \beta_5 IF + \beta_6 LP + \beta_7 LA + \beta_8 DR + \beta_9 ROC + \beta_{10} CSRI + \beta_{11} EW-C + \beta_{12} NOE + \beta_{13} NCF$$

= -15192.205 -0.003OI + 0.227TI + 0.080EVA + 0.055TD -1.266IF - 0.749LP - 0.012LA +3158.099DR - 274.647ROC - 8894.066CSRI + 490.622EWC -0.873NOE + 1.385NCF

From the regression summary output, the beta-coefficient of TI, EVA, TD, DR, EWC & NCF tend to have positive impact on shareholders' equity. On the other hand, the beta coefficients of OI, IF, LP, LA, ROC, CSRI and NOE tend to have negative impact on shareholders' equity. Here, it is important to determine whether the independent variables' responsiveness is statistically significant or not. From the value of "t" statistics, it is seen that TI, IF, LP, CSRI, EWC and NCF have been significant at 1 percent to 10 percent levels (Table iii, Annex 1).

The coefficient of multiple determinations, herein called R2 indicates that the regression model explains 41.6 percent of the variation of shareholders' equity and from the ANOVA table iv (Annex 1) it is evident that the model is at 0.000 level of significance. Thus, it can be said that the shareholders' equity (Value of Firm) has been influenced by the independent variables namely OI,TI,EVA,TD,IF,LP,LA,DR,DR .CSRI,EWC,NOE and NCF to the extent of 41.6 percent. As a result, it is observed that the hypothesis 4 - the measures of sustainable finance have impact on shareholders' equity- has been proved. Therefore, it can be concluded that the various indicators of sustainable finance have a great influence and role to play in the growth and development of Banking Industry in Bangladesh.

### 6.0 MAJOR CHALLENGES OF SUSTAIN-ABLE FINANCE:

The banking industry of Bangladesh has to face a number of challenges in order to achieve financial sustainability. Before identifying the challenges, it is essential to identify the requirements for acquiring financial sustainability in any organization. Some authors (Leon, Patricia, 2001) have mentioned the following necessary requirements for obtaining financial sustainability. Such as longterm commitment, leadership, investment of time and money, business plan, effective management team, team work. Against the backdrop, the respondents' were asked to identify the major challenges hindering sustainable finance in their organizations. The Table 6 shows the responses in this regard.

**Table 5.** Showing the Major Challenges of Sustainable Finance:

Sl.	Specific factors	Mean Score	Rank
1	Operational Self insufficiency	4.50	2
2	Heavy default culture	4.53	1
3	Poor Corporate governance	4.40	3
4	Lack of adequate Accountability and Transparency	4.37	4
5	Environmental Pollutions	4.25	6
6	Lack of adequate legal responsibility	4.17	10.5
7	Lack of brand awareness	4.17	10.5
8	Ecological Imbalance	4.07	16.5
9	Poor Publicity	4.23	7
10	Lack of adequate ethical responsibility	4.03	18
11	Inadequate employees non- financial welfare	4.30	5
12	Flexibility of Repayment Schedule	4.08	15
13	Lack of cost consciousness	4.07	16.5
14	Inadequate number of borrowers	4.13	12
15	Poor Debt ratio	4.10	13.5
16	Low Debt-equity ratio	3.93	20
17	Low Operational Efficiency	4.22	8
18	Lower competitive advantage	4.10	13.5
19	Excessive Loan Disbursement	4.00	19
20	Improper Appraisal of Loan Applications	4.20	9

**Source:** Field Survey (Calculation made by researcher)

The analysis of Table 5 reveals that the heavy default culture has been identified as the number one challenge having 4.53 mean score followed by operational self-insufficiency with 4.50 mean score and, poor corporate governance with 4.40 mean score, lack of adequate accountability and transparency with 4.37 mean score, inadequate employees' nonfinancial welfare with 4.30 mean score, environmental pollutions with 4.25 mean score, low operational efficiency with 4.22 mean score, improper appraisal of loan applications with 4.20 mean score, lack of brand awareness with 4.17 mean score, inadequate number of borrowers, with 4.13 mean score, and so on.

### 7.0 CONCLUSION

Sustainable finance is one of the most significant prerequisites for the growth and development of any organization, especially banks and financial institutions. Since, the banks deal in public money, the public confidence is essential for smooth running and growth-development of the banks. The public confidence grows in case of such banks whose sustainable finance is remarkable. This study has pointed out that the growth-development of the sample banks, measured in terms of shareholders' equity have been influenced to the extent of

41.6 percent by the sustainable finance oriented independent variables. As a result, the improvement of the existing positions of the variables would definitely lead to increase shareholders' equity in cases of sample banks which in turn, would ensure the smooth growth-development of the banks. Therefore, the interest groups mainly the management of the sample banks should take all possible measures to remove the challenges adversely affecting the sustainable finance. To this end, the suggestions provided by the respondents as mentioned in the study need to be implemented by the relevant authorities without any further delay.

The study is not beyond any limitations, rather it has some limitations. Firstly, the study was limited to only 20 commercial banks out of a total number of 47 operating in the county. Secondly, since, the sample banks have been limited; the number of respondents was limited too. The chief reason for limiting the study was the time and resource constraints at the disposal of the researchers. Thirdly, the desired types of secondary data were not readily available in the published sources such as annual reports; annual accounts statements etc. of the sample banks. The requisite data had to be converted by the researchers themselves for the meaningful use in this study. In spite of these limitations, the outcomes of this study,

however, may be the representative of the banking industry of the country.

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### Appendix-1

**Table i:** Pearson correlation matrix

		1		1	1					ı .	1			
	SE	OI	TI	EVA	TD	IF	LP	LA	DR	ROC	CSRI	EWC	NOE	NCF
SE	1.00													
OI	0.321**	1.00												
TI	-0.07	0.13	1.00											
		2*												
EVA	0.301**	0.353**	0.07	1.00										
TD	0.276**	0.44**	0.212*	0.80	1.00									
IF	-0.10	0.12	-0.20	0.36	0.19	1.00								
				4**	9*									
LP	0.216**	0.32	0.30	0.61	0.81	0.04	1.00							
		1**	4**	4**	5**									
LA	-0.02	0.09	34	0.13	0.02	0.55	0.34	1.00						
			6**			8**	2*							
DR	0.01	-0.08	-0.12	-0.09	30	0.36	-	0.22	1.00					
					4**	2**	.234*	8*						
ROC	0.08*	0.16	0.80	0.31	0.47	23	0.57	588*	0.17	1.00				
			4**	8**	4**	0*	1*							
CSRI	0.17	0.25	0.61	0.44	0.67	0.04	0.02	0.17	0.17	0.11	1.00			
		2*	5**	0**	6**			2**						
EWC	0.432**	0.21	0.15	0.35	0.28	0.02	0.36	58	0.26	0.25	0.41	1.00		
		5*		4**	7**		8*	8*		1*	9**			
NOE	0.279**	0.27	0.04	0.34	0.83	0.12	0.72	.17	0.03	0.37	0.44	0.39	1.00	
		7**		4**	1**		8*	2**		1**	2**	3**		
NCF	0.368**	0.30	0.09	0.82	0.72	0.91	0.36	58	.499*	0.57	0.32	0.499*	0.57	1.00
		5**	9*	8**		4*	8*	8*		9**	5*		9**	
	1	1			I	1		1 -	1			i .	1 .	

Note: \*\*Coreelation is significant at 0.01 level, \* Coreelation is significant at 0.05 level

### Table ii: Coefficients

Model	Unstandarized Coefficients	Std. Error	Standarized Coefficients	t	Sig.
	В.		Beta		
Constant	15192.205	4600.235		-3.302	.001
OI	003	.022	014	134	.894
TI	.227	.124	.483	1.829	.071
EVA	.080	.554	.024	.144	.886
TD	.055	.086	.320	.636	.526
IF	-1.266	.730	214	-1.734	.086
LP	749	.222	866	-3.371	.001
LA	012	.068	037	184	.855
DR	3158.099	2470.852	.163	1.278	.205
ROC	-274.647	209.486	404	-1.311	.193
CSRI	-8894.006	4825.407	403	-1.843	.069
EWC	490.622	123.541	.484	3.971	.000
NOE	873	.629	258	-1.387	.169
NCF	1.385	.392	1.307	3.538	.001

a. Dependent Variable: SE

## Table-iii: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error the Estimate
1	.645a	.416	.328	6077.9911198

a. Predictors: (Constant), NCF, IF, TI, EWC, OI, DR, LA, EVA, NOE, CSRI, LP, ROC, TD

### Table-iv: ANOVA

			a		
Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	2264096533.172	13	174161271.782	4.714	.000 <sub>b</sub>
Residual	3177009940.484	86	36941976.052		
Total	5441106473.65	99			

a. Dependent Variable: SE

b. Predictors: (Constant), NCF, IF, TI, EWC, OI, DR, LA, EVA, NOE, CSRI, LP, ROC, TD