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Relationship between Inflation and Stock Market Returns: Evidence from Bangladesh

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Abstract : *The linkage between stock prices and inflation has been intensively investigated since the 1990s. Most of the studies in the industrialized economies have shown a negative relationship between stock market return and inflation. Thus there is considerable interest surrounding the relationship between stock markets and inflation. This paper investigates the relationship between inflation and stock market returns in Bangladesh using monthly data for the period 2004 to 2013. To test for the order of integration of the variables, ADF and PP tests were used and the results show that all the variables are integrated in the same order I(1). The Johansen test procedure confirmed that there is single cointegration equation at 5 percent significance level and thereby indicating the long run equilibrium relationship between the variables. The findings of the study have showed that the speed of adjustment in the Vector Error Correction model (VECM) is significant and relatively very high. The value of the ECM is -0.9373 which implies that, on average, the system corrects the disequilibrium errors annually by about 94%. The results also indicate that there is a uni-directional short run causal relationship between inflation and stock price index.*

Keywords: *Inflation, Stock market, VECM, Co-integration test, Bangladesh.*

JEL Classification: *E31, G11*

1. Introduction

The relationship between stock market prices and inflation has important implications from the policy point of view. The adaptive expectation school (Birol, 2013) assumes that there is a short –run trade-offs between inflation and unemployment rate in the short run. On the other hand, the rational expectation school (Muth, 1961) rules out this positive impact of price rise on production and employment. Understanding the dynamic linkages between stock prices and monetary variables such as money supply, interest rate and inflation rate are important to policy makers, investment professionals as well as academics. In the developed world, the stock market controls the real sector to a large extent. On the other hand, in the developing economies stock market seems to be quite superfluous as it is controlled by only a few players (Chakravarty and Mitra, 2010).

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The early survey on the behavior of stock market return was initiated by Fama (1981) who posited that markets are efficient as they fully reflect the fundamental macroeconomic behavior. By the term efficiency, Fama (1981) implied that a financial market incorporates all relevant information in the market and thus the observed outcome is the best possible one under the circumstances. He investigated the relationship between stock prices and inflation and his study revealed that there is a negative relationship between the two. Based on this negative association between inflation and stock market return, the study envisaged that high inflation predicts an economic downturn and keeping in view this, the firms start selling off their stock. According to the law of supply, an increase in the supply of stock is expected to reduce the stock prices. As stocks reflect firms' future earning potential, an economic downturn may encourage firms to sell off the financial stocks and thus high inflation and low stock prices tend to go together. On the contrary, we may find a positive relationship between inflation and stock prices as unexpected inflation raises the firms' equity value assuming that the firms' are net debtors (Ioannidis *et al.*, 2005).

Monetary policy also may have a profound impact on the stock market as well. In a study, Ioannidis and Kontonikas (2008) pointed out that monetary policy influences stock returns by influencing the discount rate as well as the future stream of cash flows. If Central Bank tightens the monetary policy by reducing supply of bank loans, it would cause rate of interest to rise and thereby reducing net profits of firms. Given these facts, we may infer that tightening of monetary policy may reduce the inflation rate and also stock prices since under this contractionary monetary policy investors would have less money to demand goods or to buy stocks. From this point of view, inflation and stock prices may move in the similar direction.

In a study, Khan and Yousuf (2013) examined the relationship between stock prices of Dhaka Stock Exchange (DSE) and different macroeconomic forces such as deposit interest rates, exchange rates, consumer price index (CPI), crude oil prices and broad money supply (M2) and their results concluded that inflation does not show any significant impact on stock prices. Our analysis is based on monthly data on inflation rate and stock market return from the period of November, 2004 to July, 2013. Using the data, this paper investigates the relationship between inflation rate and stock market returns. More specifically, we explore the distinct impacts of inflation on the stock market. The outcomes of the study are expected to be of enormous importance to investors to take rational decisions on stock market and advancement of the literature on financial economies.

The rest of the paper is organized as follows: Section 2 briefly reviews some related literatures. Section 3 presents the objectives of the study. Section 4 discusses the

methodology and sources of data. Empirical results are presented in section 5. The last section concludes the paper.

2. Literature Review

Many studies have been conducted around the world to investigate the relationship between stock market return and inflation rate. Fisher (1930) proposed that the expected rate of return should comprise a real return plus an expected rate of inflation. He predicted positive relationships between stock market returns and expected inflation and changes in the expected inflation. On the contrary, Fama (1981) claimed that stock returns are negatively related to inflation. He proposed that high inflation may lead to an economic downturn and may encourage firms to start selling off their stock. An increase in the supply of stock then reduces the stock prices. Since stocks reflect firms' future earning potential, an expected economic downturn prompts firms to sell off the financial stocks and thus high inflation and low stock prices tend to go together.

Choudhry (1999) discovered a positive relationship between stock market returns and inflation rate in four high inflation countries: Argentina, Chile, Mexico and Venezuela and concluded that the stock returns act as a hedge against inflation. Zhao (1999) found a significant negative relationship between stock prices and inflation in Chinese economy which is consistent with the conclusion of Fama (1981).

Using cointegration analysis and error correction model to analyze the impact of the inflation rate on the Egyptian stock market, Omran and Pointon (2001) found that the inflation rate has a long term impact on the Egyptian stock market.

Spyrou (2001) examined the relationship between stock returns and inflation rate of Greece by using monthly data from January, 1990 to June, 2000. The result for the period 1995-2000 showed a negative but insignificant relationship, while for the period 1990-1995 there was a significant negative relationship between the variables.

Wongbampo and Sharma (2002) investigated the relationship between stock market prices and macroeconomic variables including inflation in five Asian countries (Malaysia, Indonesia, Philippines, Singapore and Thailand) and the study reported that there is a negative relationship between stock prices and inflation in all the five Asian countries.

Gunasekarage *et al.* (2004) investigated the impact of macroeconomic variables including inflation on stock equity values in Sri Lanka with the Colombo All Share Index as proxy for stock market and consumer price index as proxy for inflation. Using annual data from 1985 to 2001, the study reported that inflation exerts a negative influence on the stock market in Sri Lanka.

Sohail and Hussain (2009) investigated the relationships between Lahore Stock Exchange and several macroeconomic variables in Pakistan by using monthly data from December, 2002 to June, 2008. The study found a negative relationship between inflation (proxied by consumer price index) and stock returns.

Bhattarai and Joshi (2009) examined the relationship between the stock market and macroeconomic factors in Nepal and reported that there is unidirectional positive short run causal relationship running from inflation (proxied by consumer price index) to stock index but reverse causality in the long run (from stock index to inflation).

Naik and Padhi (2012) examined the relationship between stock index and five macroeconomic variables (industrial production index, wholesale price index, money supply, treasury bills rates and exchange rates) of India from April, 1994 to June, 2011 and they found that short-term inflation is negatively and significantly related to stock market index.

Dasgupta (2012) applied the Johansen and Juselius co-integration test to examine the relationship between stock market returns and macroeconomic variables using data from Indian stock market and concluded that inflation (proxied by wholesale price index) is negatively related to Indian stock market returns in the long run. The study, however, failed to establish short-run relationship between the Indian stock market and inflation.

Akbar *et al.* (2012) explored the relationship between the Karachi Stock Exchange Index and macroeconomic variables for the period spanning from January, 1999 to June, 2008 using cointegration and Vector Error Correction Model (VECM) and reported that there is a negative relationship between inflation and stock prices.

Saleem *et al.* (2013) found a long run relationship between KSE 100 index return and inflation rate of Pakistan by using quarterly data from January, 1996 to December, 2011. Their evidence from cointegration test showed a negative relationship between KSE 100 index return and inflation rate.

Using monthly data from January, 1992 to June, 2011, Khan and Yousuf (2013) investigated the relationship between different macroeconomic forces and stock prices of Dhaka Stock Exchange (DSE) and concluded that inflation does not show any significant impact on stock prices.

The literatures reviewed above regarding the relationship between inflation rate and stock market return of different countries thus exhibited mixed findings. Some literatures showed positive relationship between the variables while the others posited negative relationship. Even, some studies found no significant impact of inflation on stock return. In this backdrop, this paper investigates the relationship between inflation rate and stock market return of Bangladesh.

3. Objectives of the study

The objectives of the present study are as follows:

- (a) To examine the relationship between inflation rate and stock market return of Bangladesh using time series data.
- (b) To understand the response of return of DSE General Index to changes in inflation rate.
- (c) To provide some policy implications that may be helpful in formulating policies.

4. Methodology and Data

4.1 Methodology

In the present study, Johansen's (1988) cointegration and vector error correction model (VECM) have been employed to examine the long run equilibrium relationships between DSE stock return (RDGEN) and inflation rate (INF). Before implementing the cointegration and vector error correction model, econometric methodology needs to verify the stationarity of each individual time series variable used in the study. The cointegration approach requires that all variables in the system are to be integrated of same order. The first step in the analysis is to test for stationarity property of the data series. For this purpose, Augmented Dickey-Fuller (ADF) test (Dickey and Fuller, 1979) and Phillips and Perron (PP) test (Phillips and Perron, 1988) have been used to verify the stationarity of the data series and to determine the order of integration of each of the data series studied. If the selected data series are found to be integrated of same order, Johansen's cointegration test can be employed to examine the long-run (cointegrating) relationship among the selected variables. Johansen and Juselius (1990) provided two likelihood ratio tests to obtain the number of cointegrated vectors which are insignificantly different from unity.

$$\lambda_{trace}(r) = -T \sum_{i=r+1}^n \ln(1 - \hat{\lambda}_{r+1}) \quad (1)$$

$$\lambda_{max}(r, r+1) = -T \ln(1 - \hat{\lambda}_{r+1}) \quad (2)$$

where, $\hat{\lambda}_{r+1}$ equals the estimated eigen value of the characteristic roots, $r = 0, 1, 2, \dots$ and $T =$ number of observations. The null hypothesis of the first test (trace) is to test if the number of distinct cointegrated vectors is less or equal r against the alternative. The null of the second (max) test is the number of cointegrating vectors r against the alternative of $r+1$ cointegrating vectors. The results obtained from this test are used in applying the VECM which measure the long run relationship.

After identifying the cointegration vector among the selected variables, the vector error correction model (VECM) can be employed to establish the modeling of both the short-run and long run dynamics for the variables involved in the model. When these variables are found to be cointegrated then the speed of adjustment of short run dynamics which converge towards long run equilibrium can be tested by applying Vector Error Correction Model (VECM). Engle and Granger (1987) showed that changes in the dependent variable are a function of the level of the disequilibrium in the cointegrating relationships (captured by error correction term) and changes in other independent variables. Assuming that variables in our case are cointegrated, the VECM can be written as:

$$\Delta RDGEN_t = a_1 + \sum_{i=1}^k \alpha_{1i} \Delta RDGEN_{t-i} + \sum_{i=1}^k \beta_{1i} \Delta INF_{t-i} + \rho_1 ECT_{t-i} + u_{1t} \quad (3)$$

In equation (3), RDGEN and INF represent DSE stock return and inflation rate respectively. Δ is the first difference operator. $\Delta RDGEN$ and ΔINF are the differences in these variables that capture their short-run disturbances. ECT_{t-i} is the lagged error correction term, that captures the long-run effects. It refers to the speed of adjustment or correction from the deviation of the dependent variable that will adjust to minimize the long-run equilibrium error. The error correction coefficient, ρ_1 , measures the speed with which deviations from the long run relationships are corrected by changes in DSE stock return and inflation rate. In addition, u_{1t} is a pure white noise disturbance term.

Besides this, the Impulse Response Function (IRF) has been used to understand the response of RDGEN in the VAR system to one-unit shock in INF. It helps to visualize the behavior of a time series in response to various shocks in the system (Enders, 1995). It shows how changes in one variable resulting from external shocks may affect the other variables over time. The IRF equation can be written as follows:

$$\Omega_i = \phi_i B^{-1} \Lambda^{1/2} \quad (4)$$

where, B^{-1} is the coefficients matrix of all the variables at time t , $\Lambda^{1/2}$ denotes lower Cholesky decomposition of the variance-covariance matrix of error term, and ϕ_i shows the effects of a one unit increase in error term at time t on other variable.

4.2 Data

In the present study, we use stock return data from monthly closing stock price indices of Dhaka Stock Exchange (DSE) in terms of DSE General Index (DGEN) and monthly data of inflation rate that spans from the period of November, 2004 to July, 2013. The data of the chosen time periods show some fluctuations in inflation rate, even double digit in some periods. For this reason we have considered the data of the mentioned period in order to investigate the relationship between the variables. The series of DGEN have been transformed into stock market returns, R_t , which is the natural log difference in the

closing market price index between two dates: $R_t = \ln \left(\frac{PI_t}{PI_{t-1}} \right) \times 100$ where PI_t is the price

index at time t and PI_{t-1} is the price index at time $t-1$. The data of DGEN have been collected from different publications of Dhaka Stock Exchange (DSE) and the data of inflation rate have been collected from monthly economic trends published by Bangladesh Bank.

5. Empirical Results

The results of the descriptive statistics of the variables used are presented in Table 1.

From Table 1, it is evident that average inflation rate over the study period is 8.00 percent. It ranges from 2.25 percent to 11.59 percent. The volatility is comparatively high, 1.88 percent. The skewness is negative with test statistic of -0.04 which means that the normality shape is relatively symmetric.

Table 1: Descriptive statistics of RDGEN and INF

Statistics	RDGEN	INF
Mean	0.033000	8.005143
Median	0.043662	7.690000
Maximum	1.320283	11.59000
Minimum	-2.138510	2.250000
Std. Dev.	0.459522	1.882560
Skewness	-1.052186	-0.040614
Kurtosis	7.444857	2.914964

The kurtosis is positive with the test statistic of 2.91. On the other hand, regarding RDGEN, average RDGEN during investigating period is 0.033 percent. It ranges from -2.14 percent to 1.32 percent. The volatility is comparatively low, 0.46 percent. The skewness is negative with test statistic of -1.05 and, the kurtosis is positive with the test statistic of 7.44.

Results of the unit root test for RDGEN and INF are presented in Table 2. The ADF and PP tests are performed to check the possible unit root.

Table 2: Results from the Unit Root Tests

Variables	ADF Test				PP Test				Order of Integration
	Intercept		Trend and Intercept		Intercept		Trend and Intercept		
	Level	1 st diff.	Level	1 st diff.	Level	1 st diff.	Level	1 st diff.	
RDGEN	-9.59**	-9.60**	-9.54**	-9.55**	-9.61**	84.31**	9.56**	86.97**	I(0) /I(1)
INF	-2.78	-10.72**	-2.81	-10.69**	-2.79	-10.79**	-2.81	-10.77**	I(1)

Note: **denotes the rejection of null hypothesis that the time series is non-stationary with 5% significance level

Based on the ADF test and PP test, RDGEN is found to be stationary in both level and first difference (integrated of order zero, $I(0)$ and integrated of order one, $I(1)$). The variable INF are found to be non-stationary in level, but stationary in first difference (integrated of order one, $I(1)$) on the basis of ADF test and PP test. In sum, results from unit root tests reveal that both the variables are stationary in first difference, $I(1)$.

As both the series are integrated of same order, $I(1)$, the Johansen cointegration test has been performed to examine the presence of long-run relationship between the variables. In Table 3, trace statistics and maximum Eigen value statistics reveal that two variables (RDGEN and INF) have one cointegrating relation or long-run equilibrium relationship at 5 percent level. After confirming the existence of single cointegrating vector among RDGEN and INF, we search for proper Vector Error Correction Model (VECM) which contains the co-integrating relations in order to assess the long-run behavior of the endogenous variables to congregate for their equilibrium with short-run speed of adjustment.

Table 3: Results from the Johansen Cointegration Tests

Hypothesized No. of Co-integrating Equation (CE)	H_0 :	H_1 :	Eigen Value	Trace Test			Maximum Eigen Value Test		
				λ_{trace}	5% critical value	Prob.	λ_{max}	5% critical value	Prob.
None	$r=0$	$r>0$	0.325278	48.575	20.262	0.000	40.526	15.892	0.000
At Most 1	$r \leq 1$	$r>1$	0.075174	8.049	9.165	0.081	8.049	9.165	0.081

Source: Authors' calculation.

Note: The ' r ' denotes the number of cointegrating vectors. Trace test indicates 1 cointegrating equation(s) at the 0.05 level. Max-eigenvalue test indicates 1 cointegrating equation(s) at the 0.05 level.

However, the VECM is sensitive to the selection of optimal lag length and the necessary lag length of RDGEN and INF is determined by LR, AIC, FPE, SC and HQ criterion and it reveals that optimal lag is one.

In Table 4, the VECM result shows that the coefficient of the error correction term (ECT_{t-1}), is found to be negative (-0.937) and statistically significant at one percent level and thereby indicating the validity of long-run equilibrium relationship among RDGEN and INF. More specifically, we can say that there is a long run causality running from INF to RDGEN. It also implies that 93.73 percent of disequilibrium in the long run relationship is corrected each period into its equilibrium.

Table 4: Results of VECM

Dependent Variable	Sources of Causation			Short-run Relationship	Long-run Relationship
	Short-run		Long-run		
	Δ RDGEN	Δ INF	ECT_{t-i}		
Δ RDGEN	-	0.082999* (0.0770)	-0.937315*** (0.0000)	INF causes RDGEN	Yes
Diagnostic tests		Result		Remark	
Test for Heteroscedasticity		5.290421 ¹ (0.2588)		There is no heteroscedasticity in the residuals	
Test for Serial correlation		0.00000 ¹ (1.000)		There is no serial correlation in the residual	
Jarque-Bera test for normality		109.0643 ² (0.000)		Residuals are not normally distributed	

Note: * and *** denote that the coefficient is significant at 10% level and 1% level respectively; ¹denotes the non-rejection/acceptance of null hypothesis at 5% level of significance; ²denotes the rejection of null hypothesis at 5% level of significance; corresponding p-values are in parentheses

The coefficient for INF is positive and significant at 10% level of significance. This finding suggests that a short-run causal relation is running from inflation rate (INF) to stock market return (RDGEN). The result is consistent with Fisher (1930), Choudhry (1998) and Bhattarai & Joshi (2009). The diagnostic tests of the model disclose that there is no problem of heteroscedasticity and no serial correlation in the model but the residuals are not normally distributed which is not desirable.

Figure 1 shows the Impulse Response Functions. This function can produce the time path of dependent variable (RDGEN), in the system of equation developed within the VECM framework, to shocks from inflation. The figure reveals that the inflation rate shock causes RDGEN to be negative from 3rd month.

Relationship between Inflation and Stock Market Returns: Evidence from Bangladesh

Response to Cholesky One S.D. Innovations

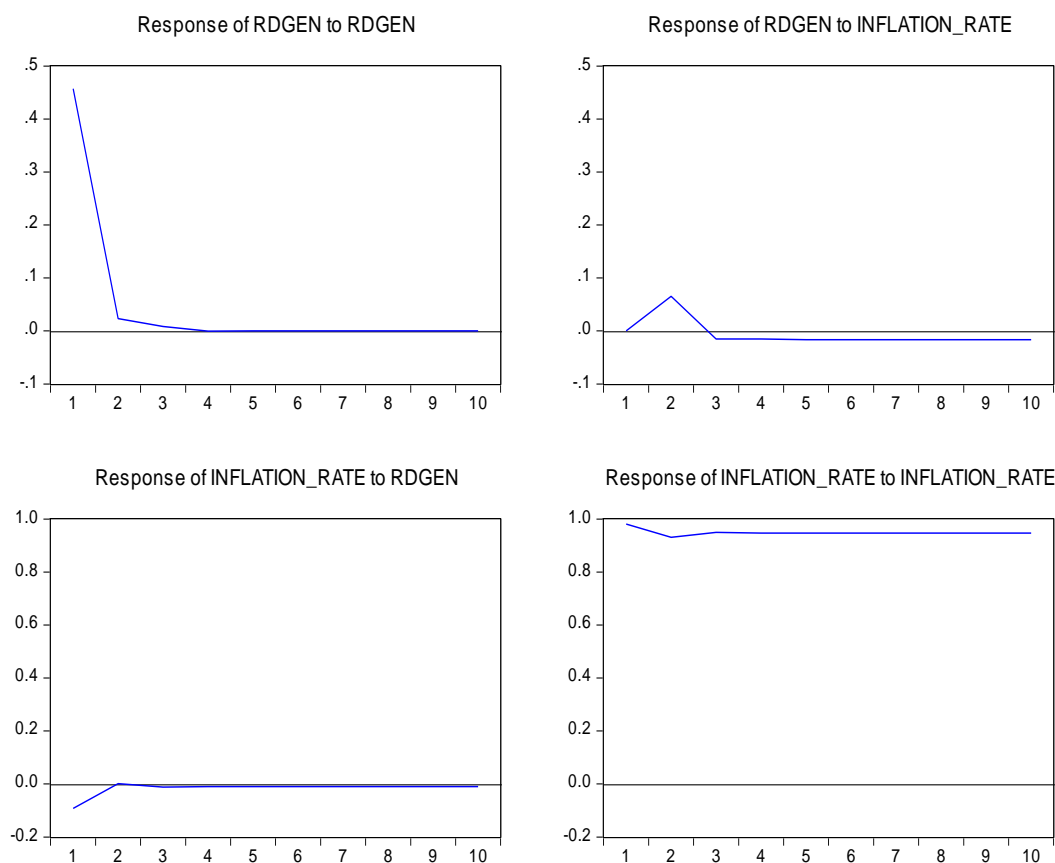


Figure 1: Impulse Response function

6. Concluding remarks

This study investigates the relationship between stock market and inflation rate using monthly data of Bangladesh for the period from 2004 to 2013. To test for the order of integration of the variables (RDGEN and INF) ADF and PP tests were used and the results show that all the variables are integrated in the same order $I(1)$. The Johansen test procedure confirmed the existence of single cointegration equation at 5 percent significance level and thereby indicating the long run equilibrium relationship between the variables. More specifically, the results of this study suggest that there is significant long-run equilibrium relationship between RDGEN and INF. In other words, we can say that there is a long run causality running from INF to RDGEN. It also implies that 93.73 percent of disequilibrium in the long run relationship is corrected each period into its equilibrium. We also find a short run positive relationship between inflation rates with stock market in Bangladesh.

The implication of this positive short-run casualty is that unexpected inflation may raise the firm's equity value if they are net debtor. On the other hand, if the Central Bank

tightens the monetary policy it may reduce inflation and stock prices both which may in turn oblige the investors to buy less goods or stocks as they may be left with less money. We may also hypothesize that stock market returns may be adversely affected by inflation since inflationary pressures may threaten future corporate profits. As nominal discount rate rises under inflationary pressures, it would reduce current value of future profits and thus to stock market return. In view of the above, the government may revise and improve its monetary policy which is consistent with low inflation and inflation expectations. The outcomes of the present study are expected to be of immense importance to investors to reach rational decisions on asset allocation and advancement of the literature on financial economies. At the policy level, the findings of the study may provide some insights of the distinct impacts of inflation on the stock market of Bangladesh so that policymakers especially Bangladesh Bank, the Central Bank, can give special attention on the inflation rate and the behavior of stock market.

However, the present study suffers from some limitations. In the study, data of 9 years have been considered. The study can be more exhaustive if the longer time periods are used. The study can be moved forward further by considering data of longer time periods and the results can be compared to the other countries of the same region as well as developed countries which are left for future research. Moreover, the study comprises only two variables and thereby more variables may be incorporated to bring diversified outcomes in future.

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An Analysis of Day-of-the-Week Effects in Bangladesh Stock Market: Evidence from Dhaka Stock Exchange

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Abstract: *Day of the week effect is an important calendar anomaly that has been observed in many stock markets in all over the world. Investors around the world are more concerned about the day which is best for trading because stock markets are speculative market. The primary objective of this paper is to find out the significant day of the week effect in the emerging stock market of a developing country like Bangladesh. This study tests the presence of the day effect on stock market volatility by using the DSE market index during the period of June 2004 to March 2015. The findings show that the day effect is present in both volatility and return equations. While the highest and lowest returns are observed on Thursday and Monday respectively, the highest and the lowest volatility are observed on Monday and Wednesday respectively. Further investigation of sub-periods reinforces our findings that the volatility pattern across the days of the week is statistically different.*

Keywords: *Bangladesh Securities and Exchange Commission; Day of the week effects; Dhaka Stock Exchange; Returns; Volatility*

1. Introduction

Securities Market anomalies such as, weekend effect, cash dividend announcement effect, turn of the month effect, holiday effect, day of the week effect, and Ramadan effect has been widely elucidated in finance literature. The day of the week effect is a phenomenon that develops a form of anomaly of the efficient market theory. This phenomenon explains that average daily returns at different days which are considered under the same efficient market theory. French (1980) Gibbosn and Hess (1981), Keim and Stambugh (1984), Lakoniskoke and Levi (1982), Balaban (1995), Bayar and Kan (2002), Nath and Dalvi (2004), Basher and Sadorsky (2006), Chukwuogor (2007), Dimitris and Samitas (2008), Hussain, Hamid, Akash and Khan (2011), Rodriguez (2012), Tevdovski, Mihajlov and Sazdovski (2012) are researchers who showed the day of the week effect.

Securities markets are speculative market where return depends on the future course of action rather than past economic activities. Investors are more concerned with the daily movement of the stock prices. Thus, seasonality is a vital factor for predicting the behavior of stock market. The existence of predictable seasonal behavior in stock returns

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may lead to profitable trading strategies and fair returns. The presence of calendar anomalies has been documented extensively for the last two decades in securities market. The most common ones are the weekend effect, cash dividend announcement effect, hartal effect, month effect, Ramadan effect and day of the week effect. The day of the week patterns have been investigated extensively in different markets. The variability of stock returns according to the day of the week is one of the most often analyzed seasonality's in the finance literature. It has been well acknowledged in finance literature that any predictable pattern in asset returns may be exploitable and therefore judged as evidence against semi-strong efficiency of asset markets. One statistically significant pattern in stock market returns stems from seasonality. As such, seasonal effects in securities markets have attracted much interest among both academics and practitioners.

The days of the week patterns have been investigated extensively in different stock markets around the globe. Earlier studies have found the existence of the day of the week effect not only in the USA and other developed markets but also in the emerging markets like Malaysia, Hong Kong, Turkey. Many western economies, (U.S.A., U.K., Canada) empirical results have shown that on Mondays the market has statistically significant negative returns while on Fridays statistically significant positive returns. Even in India also the days of the week effects in the same manner (Sunil, 1996). In other markets such as Japan, Australia, Singapore, Turkey and France the highest negative returns appear on Tuesdays (Nath et al., 2004). It refers to the tendency of the stocks to exhibit a relatively large returns on Thursday compared to that of Sunday. This pattern has been investigated in various stock markets around the world. This difference in the average return across the days of the week leads to changes in the investment strategy, portfolio selection and the profit management of the investors. The distribution of the stock return varies across the days of the week. The average return on Sunday is significantly lower than the average return over the other days of the week. This study concentrates on the day of the week effect on Dhaka Stock Exchange, Bangladesh.

Dhaka Stock Exchange (DSE) was established in 1952, located in Dhaka and regulated by Bangladesh Securities and Exchange Commission (BSEC), which is a statutory body and attached to the Ministry of Finance. BSEC was established on 8th June 1993 under the Securities and Exchange Commission Act, 1993. DSE has played an important role in reforming the Bangladesh securities market with market capitalization of more than US\$50.28 billion and 750 companies listed as of March 2015. There are many domestic and international institutions and companies that hold stake in the exchange. Trading on equities takes place on all the days of the week excluding Friday and Saturday and all the holidays. DSE is open for trading Sunday through Thursday between 10:30am to 2:30pm BST, with the exception of holidays declared by the Exchange in advance. In the month of Ramadan, the exchange is open for trading between 10:30am to 1:30pm BST.

In the various related literatures the most satisfactory explanation that has been given for the negative returns on Monday is that usually the most unfavorable news appears during the second trading day of the week. These unfavorable news influence the majority of the investors negatively, causing them to sell on the following Monday. On the opposite side, the satisfactory explanation that has been given for Thursday's positive returns, that is

effected for the weekend affect of the market which influence positively to the investors to book their profit. The most volatile day for the stock return is refers to the Monday and less volatile on Wednesday.

2. Objectives of the Study

The broad objective is to evaluate the market returns for DSE index on a specific day of the week which influences investor's daily return.

The specific objectives of the study is aimed and purported to find out:

- To check for the normality of the returns for DSE index by the descriptive statistic properties for the day of the week.
- To check the average trade, average volume, average value in taka and average market capitalization by using securities market day of the week effect matrix.
- To evaluate the day of the week effect on the stock market returns with no market risk factors.
- To identify an opportunity for the investors to earn better return by using this market anomaly i.e. the day of the week effect.

3. Literature Review

Extensive literature is available regarding day of the week effect and other market anomalies across the globe. French and Kenneth (1980) conducted a research on stock returns and the weekend effect, the study found most of the period studied, from 1953 through 1977, the daily returns to the Standard and Poor's composite portfolio are inconsistent with both models. Although the average return for the other four days of the week was positive, the average for Monday was significantly negative during each of five-year sub-periods. Gibbons, Michael and Hess, (1981) conducted study on day of the week effects and asset returns and discovered that the expected returns on common stocks and treasury bills were not constant across days of the week. The most notable evidence was for Monday's returns where the mean was unusually low or even negative.

Balaban (1994) elucidated a research for the day of the week effect which was conducted on Istanbul stock exchange for a period of 1988 to 1994. Unconditional log returns more elucidated and regression was run to test whether there was any statistically significant difference every result showed that although the day of the week effects are present in Istanbul securities exchange composite index returns data. The study also showed that major developed markets that reported daily seasonal are not constant in direction magnitude through different time period. Poshakwale (1996) conducted a study on weak form of efficiency and day of the week effect in the Indian stock market. The study performed on Bombay Stock exchange for a period from 1987-1994, which was published in Finance India (pp. 605-616). The results showed that, the day of the week effect and the stock market was not weak form efficient. The day of the week effect observed on the BSE pose interesting buy and hold strategy issue.

Bayar and Kan (2002) had taken 19 countries (Austria, Australia, Belgium, Canada, Denmark, Finland, France, Germany, Hong-Kong, Italy, Japan, The Netherlands, New Zealand, Norway, Spain, Sweden, Switzerland, The UK, and The USA) daily data from July 20, 1993 to July 1, 1998 and examined the daily patterns and observed that it differ for local currency and dollar denominated returns, the latter being exhibiting lower daily means and higher standard deviations compared to the former. In local currency terms, a pattern of higher returns around the middle of the week (Tuesday and then Wednesday) and a pattern of lower returns towards the end of the week (Thursday and then Friday) are observed. In dollar terms, a higher pattern occurs around the middle of the week (Wednesday and then Tuesday) and a lower one was observed towards the end of the week (Thursday and then Friday). The lower patterns were more apparent in both cases. Standard deviations on Mondays were the highest in both local currency and dollar returns. In local currency returns, volatility was the lowest towards the end of the week (Thursday and Friday) whereas the lowest standard deviations of dollar returns were observed on Tuesdays.

Nath and Dalvi (2004) examined the day of week effect and market efficiency evidence from Indian stock market for a period of 1999-2003 by using both high frequency and end of day data for the benchmark. The study used robust regression with weights and dummy variables. It found that before introduction of rolling settlement in January 2002, Monday and was significant days. However Friday has become significant after the introduction of rolling settlement. They also found that Mondays have higher standard deviations followed by Friday and the market is inefficient.

By examining Basher and Sadorsky (2006), the days of the week effect in world's 21 emerging stock markets. The paper covered the period starting from 31 December 1992 to 31 October 2003. However, 5 models estimated in order to fulfill the objectives. The market risk factor incorporated apart from the dummy variables in order to fulfill the objectives. However, different models provided different results but the overall day of the week effect is present in Philippines, Pakistan and Taiwan even after adjusting for market risk.

Chukwuogor (2007) has conducted a study on annual returns analysis, Day of the week effect and volatility of returns of five African stock markets. The study conducted for a period of 1997-2004. The study used closing index values to determine the annual trends in stock market movements and used regression analysis to determine, how much movements relate to each other. It used parametric and non-parametric test to substantiate results. The results show the presence of the day of the week but express insignificant daily returns volatility in most of African markets. There was a high positive correlation of market gains and declines among the markets.

Dimitris and Samitas (2008) documented a study on the day of the week effect patterns on stock market return and volatility. Evidence also exists in Athens stock exchange for a period of 2001 to 2005. They used the conventional OLS methodology on appropriately defined dummy variables and GARCH model was used. Their empirical results showed

that the day of the week effect in both the returns and volatility equations is present for emerging ASE over the period of 1995-2000.

Hussain, Hamid, Akash and Khan (2011) examined the days of the week effect in Karachi Stock Exchange, Pakistan. The data considered the daily stock prices of the KSE-100 Index covering the period January 2006 to December 2010. The analysis was carried out by estimating a Multiple Regression Model incorporating dummy variables. The result concluded that there exists a significant Tuesday effect in the market. Moreover, Tuesday has the highest return and all other days of the week exhibit constant return.

The descriptive study of Rodriguez (2012) evaluated the days of the week effect on return and volatilities in 6 major stock markets of Latin America covering the period 1993-2007. In order to find out the effects of days of the week on average return a Multiple Linear Regression Model had been estimated incorporating dummy variables and lagged value of the return. Moreover, the day of the week effect on the conditional variance had been analyzed by estimating a MLRM incorporating dummy variables. The results concluded that the effect in volatilities was more frequent than the return. However, volatilities were higher on Monday return than on any other days of the week. Further, the weekend effect was prevalent in the Latin American Stock Markets.

Tevdovski, Mihajlov and Sazdovski (2012) explained about the day of the week effect on selected stock markets of South Eastern Europe taking into account Bosnia and Herzegovina, Bulgaria, Croatia, Macedonia and Serbia. The study covered the period from 2006 to 2011. However, the paper had gone through a multiple regression analysis incorporating Dummy variables. The result said that the average return on Monday was negative lower than that in any other days of the week. However, none of the days of the week was statistically significant in explaining variation in average return.

4. Research Design

This is an exploratory study on the day of the week effect based on Dhaka Stock Exchange where the data consist of DSEX, trade, volume, value and market capitalization for the period of June 06, 2004 to March 30, 2015 i.e. 2592 days. The data are collected from the official website of Dhaka Stock Exchange (<http://www.dsebd.org>).

This paper considered T+2 settlement system for calculation of return from 16 April 2014 to 30 March 2015 i.e. 228 days and T+3 settlement system for calculation of return from 06 June 2004 to 15 April 2014 i.e. 2364 days. Most of the data are in Taka so that the investment decisions are from the perspective of Bangladeshi investors who has BO (Beneficial Owner) account.

Dhaka stock exchange deals with 280 stocks and 41 Mutual Funds on date of 07 April 2015. There are 5 categories of stock i.e. “A category³ – 272 stocks”, “B category⁴ – 15 stocks”, “G category⁵”, “N category⁶ – 6 stocks” and “Z category⁷ – 28 stocks”. There are four types of settlement system in DSE i.e. T+0, T+1, T+2 and T+9. T+0 and T+1 consider for the spot market. T+2 consider for A, B, G and N categories of stocks from 16 April 2014, previously T+3 considered for A, B, G and N categories of stocks. T+9 consider for Z category of stocks.

The calculation The DSE Index data is converted in order to obtain the daily returns. This has been done according to the following formula:

$$R_t = 100 \times \ln \left(\frac{I_t}{I_{t-1}} \right)$$

Where,

$$\begin{aligned} R_t &= \text{return at period } t \\ I_t &= \text{stock indices at period } t \\ I_{t-1} &= \text{stock indices at previous day return at period } t-1 \end{aligned}$$

The data has been converted into day of the week, where the average trade, average volume, average value, average market capitalization has been considered. To prepare the securities market day of the week effect matrix has been considered average trade, average volume, average value and average market capitalization for the period of June 2004 to March 2015. The calculation has been done by using statistical tools of Microsoft office and considered the average return for the high and low.

5. Findings and Discussions:

The study has conducted this study to investigate the day of week effect in Dhaka stock exchange. The calculation on daily market returns for each day of the week, by using DSE index daily data.

The calculation has taken place on the basis of the DSE Index of Dhaka Stock Exchange from 16 April 2014 to 30 March 2015 i.e. T+2⁸ settlement considered for return and from

³ Companies which are regular in holding the annual general meetings and have declared dividend at the rate of ten percent or more in the last English calendar year.

⁴ Companies which are regular in holding the annual general meetings but have failed to declare dividend at least at the rate of ten percent in the last English calendar year.

⁵ Green-field companies of which shares are listed with the DSE before the company goes into commercial operation and prior to listing the said company declares the year of first declaration of dividend.

⁶ Newly listed companies except green-field companies which shall be transferred to other categories in accordance with their first dividend declaration and respective compliance after listing of their shares.

⁷ Companies which have failed to hold the annual general meeting when due or have failed to declare any dividend based on annual performance or which are not in operation continuously for more than six months or whose accumulated loss after adjustment of revenue reserve, if any, exceeds its paid up capital.

⁸ Trading plus 2 days settlement.

06 June 2004 to 15 April 2014 i.e. T+3⁹ settlement considered for return. The result of return has been considered on both of T+2 and T+3 settlements.

Table – 1 : Summery Statistics					
	Sunday	Monday	Tuesday	Wednesday	Thursday
Mean (\bar{X})	0.11	-0.14	-0.04	0.22	0.61
Standard deviation (σ)	2.79	3.10	2.73	2.52	2.65
Variance (σ^2)	7.81	9.65	7.46	6.35	7.02
Kurtosis	3.19	10.36	7.79	6.81	8.85
Skewness	-0.40	-0.95	0.53	0.64	0.29
Minimum	-12.22%	-20.13%	-11.37%	-8.55%	-15.37%
Maximum	13.35%	19.22%	20.43%	18.67%	15.49%
Sum	54.06%	-69.39%	-22.81%	113.41%	303.58%
Count	497	510	510	518	500

Source: Author's own computation and the data taken from recent market information (06 April 2004 to 30 March 2015) in Dhaka Stock Exchange (DSE) official website (<http://www.dsebd.org>).

5.1 The day of the week: Sunday

Sunday is the very first trading day of the week. This day provides positive return with 0.11% on an average to the investors and high volatility¹⁰ according to standard deviation (σ) of 2.79 and variance (σ^2) of 7.81, which refers to high risk associated in the market on this day with a positive return. This day portrays a chart with fat tails i.e. 3.19 on kurtosis¹¹ which indicates the high volatility of volatility. The negative or left skewness¹² shows on this day i.e. -0.40. Minimum return has been provided by -12.22% and maximum return consists 13.35% on this day. The total return during the duration considered is -54.06% where positive and negative return has been considered. Number of days considered for the calculation of return is 497 days from 06 June 2004 to 30 March 2015.

⁹ Trading plus 3 days settlement.

¹⁰ Volatility refers to the amount of uncertainty or risk about the size of changes in a security's value.

¹¹ Kurtosis is a statistical measure used to describe the distribution of observed data around the mean. It is sometimes referred to as the "volatility of volatility".

¹² Skewness is described asymmetry from the normal distribution in a set of statistical data. It can come in the form of "negative skewness" or "positive skewness", depending on whether data points are skewed to the left (negative skew) or to the right (positive skew) of the data average.

5.2 The day of the week: Monday

Monday is the second trading day of the week. This day provides negative return with 0.14% on an average to the investors and high volatility according to standard deviation (σ) of 3.10 and variance (σ^2) of 9.65, which refers to high risk associated in the market on this day with a negative return. This day portrays a chart with fat tails i.e. 10.36 on kurtosis which indicates the high volatility of volatility. The negative or left skewness shows on this day i.e. -0.95. Minimum return has been provided by -20.13% and maximum return by 19.22%. The total return during the duration considered is 69.39% where positive and negative return has been considered. Number of days considered for the calculation of return is 510 days from 06 June 2004 to 30 March 2015.

5.3 The day of the week: Tuesday

Tuesday is the middle trading day of the week. This day provides negative return with 0.04% on an average to the investors and high volatility according to standard deviation (σ) of 2.73 and variance (σ^2) of 7.46, which refers to high risk associated in the market on this day with a negative return. This day portrays a chart with fat tails i.e. 7.79 on kurtosis which indicates the high volatility of volatility. The positive or right skewness shows on this day i.e. 0.53. Minimum return has been provided by -11.37% and maximum return by 20.43%. The total return during the duration considered is -22.81% where positive and negative return has been considered. Number of days considered for the calculation of return is 510 days from 06 June 2004 to 30 March 2015.

5.4 The day of the week: Wednesday

Wednesday is the second last trading day of the week. This day provides positive return with 0.22% on an average to the investors and high volatility according to standard deviation (σ) of 2.52 and variance (σ^2) of 6.35, which refers to high risk associated in the market on this day with a positive return. This day portrays a chart with fat tails i.e. 6.81 on kurtosis which indicates the high volatility of volatility. The positive or right skewness shows on this day i.e. 0.64. Minimum return has been provided by -8.55% and maximum return by 18.67%. The total return during the duration considered is 113.41% where positive and negative return has been considered. Number of days considered for the calculation of return is 518 days from 06 June 2004 to 30 March 2015.

5.5 The day of the week: Thursday

Thursday is the last trading day of the week. This day provides positive return with 0.61% on an average to the investors and high volatility according to standard deviation (σ) of 2.65 and variance (σ^2) of 7.02, which refers to high risk associated in the market on this day with a positive return. This day portrays a chart with fat tails i.e. 8.85 on kurtosis which indicates the high volatility of volatility. The positive or right skewness shows on this day i.e. 0.29. Minimum return has been provided by -15.37% and maximum return by 15.39%. The total return during the duration considered is 303.58% where positive

and negative return has been considered. Number of days considered for the calculation of return is 500 days from 06 June 2004 to 30 March 2015.

5.6 Other conditions

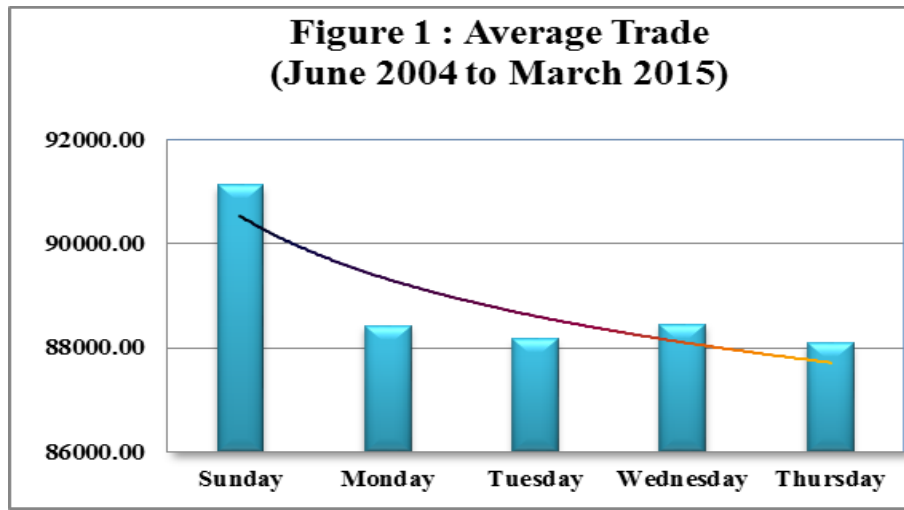
The securities market consists the day of the week effect which has been shown into a matrix and the charts followed by the average into consideration.

Table – 2: Securities Market Day of The Week Effect Matrix				
Trend	Average Trade	Average Volume	Average Value in Taka (million)	Average Market Capitalization in Taka (million)
High	Sunday	Wednesday	Sunday	Sunday
Low	Thursday	Monday	Thursday	Tuesday

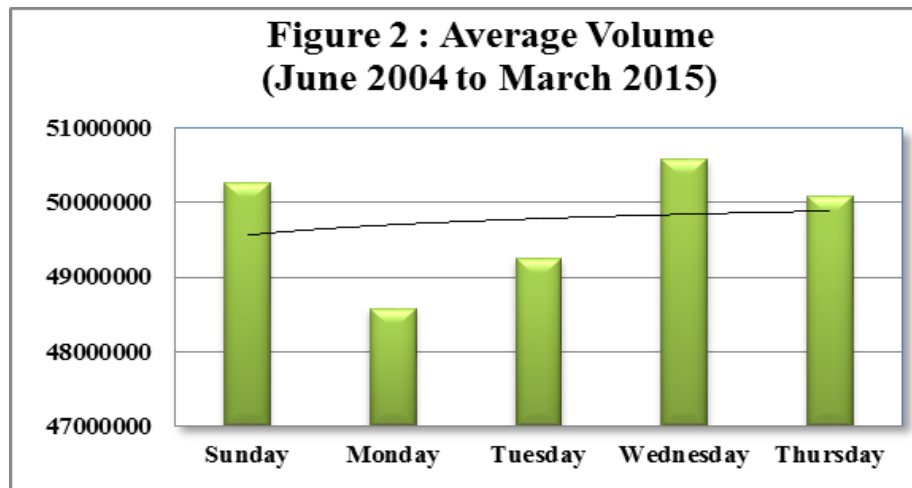
Source: Author's own computation and the data taken from recent market information (06 April 2004 to 30 March 2015) in Dhaka Stock Exchange (DSE) official website (<http://www.dsebd.org>).

After analysing the market sentiment this research finds a norm in the market that, investors want to book profit on Thursday and reinvest on Sunday. Average trade, average value and average market capitalization are high in Sunday. Average return has been given in Thursday and low in Tuesday. The investors are more active on Sunday and low activity exits on Thursday. The market is more volatile on Monday and the low volatile on Wednesday. The other conditions are to be considered as constant in this study. The exploratory research has been shown on the market conditions.

Trade in stock markets means the transfer for money of a stock or security from a seller to a buyer. This requires these two parties to agree on a price. Highest average traded day in the period of 06 June 2004 to 30 March 2015 is Sunday i.e. 91128.99 and lowest average traded day is Thursday i.e. 88095.01. The number of shares traded in a security or an entire market during a given period of time. Highest average Volume in the period of 06 June 2004 to 30 March 2015 is Wednesday i.e. 50267594.99 and lowest average traded day is Monday i.e. 48579159.15.



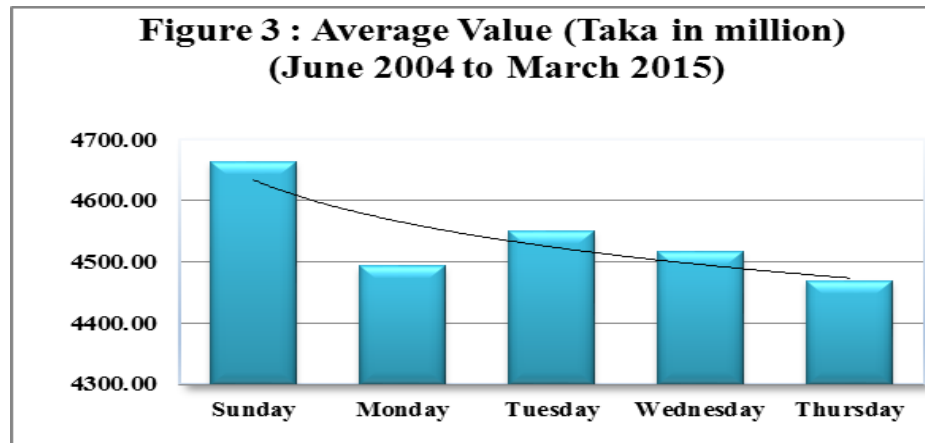
Source: Author's own computation and the data taken from recent market information (06 April 2004 to 30 March 2015) in Dhaka Stock Exchange (DSE) official website (<http://www.dsebd.org>).



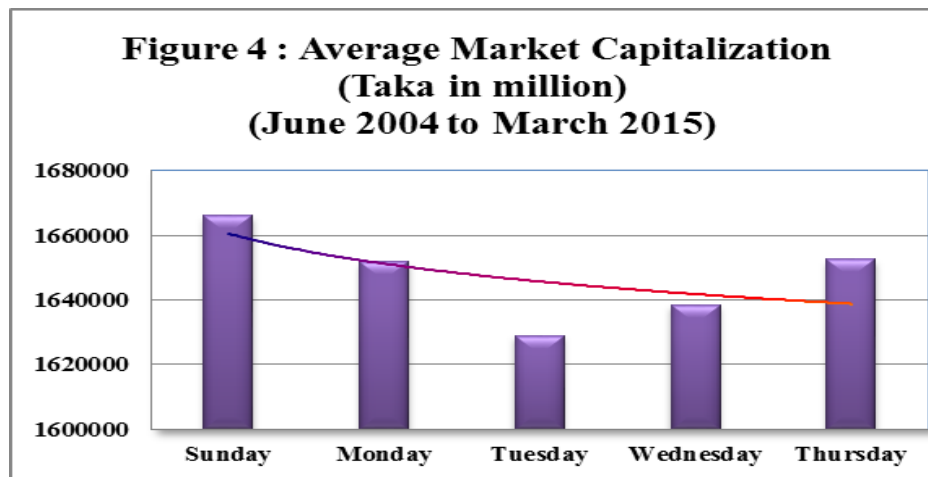
Source: Author's own computation and the data taken from recent market information (06 April 2004 to 30 March 2015) in Dhaka Stock Exchange (DSE) official website (<http://www.dsebd.org>).

The amount traded in taka (BDT) in a security or an entire market during a given period of time. Highest average Value in the period of 06 June 2004 to 30 March 2015 is Sunday i.e. 4664.01 and lowest average traded day is Thursday i.e. 4469.18.

Market capitalization is calculated by multiplying a company's shares outstanding by the current market price of one share. Highest average Market Capitalization in the period of 06 June 2004 to 30 March 2015 is Sunday i.e. 1666045.09 and lowest average traded day is Tuesday i.e. 1629021.87.



Source: Author's own computation and the data taken from recent market information (06 April 2004 to 30 March 2015) in Dhaka Stock Exchange (DSE) official website (<http://www.dsebd.org>).



Source: Author's own computation and the data taken from recent market information (06 April 2004 to 30 March 2015) in Dhaka Stock Exchange (DSE) official website (<http://www.dsebd.org>).

6. Recommendations

The return which has been considered for this paper is resulted with the higher return provided by Thursday and lower return provided by Monday. The investors in the securities market always focus on the purchase of stock on the best price and booking profit, where this analysis helps to the investor for taking the best decision on the day of the week. The return of the stocks depends on the market sentiment which reflects the investor's confidence and average trend on the securities market by the evidence of the past data. This study helps to identify the day which is best for the investors and to identify the overall performance of the market on daily return. The following point to be considered for this study:

- i. The securities market considers the day of the week effect where investors book profit on Thursday where the maximum return has been provided.
- ii. The volatility of the stock is higher on Monday as well as market provides negative return to the investors.
- iii. The condition of the market reflects on Sunday and Thursday because of the opening and closing of the week in Bangladesh stock market.

The following are some recommendations for the investors in the stock market:

- i. The investors have to ensure the confidence on the return from the stock which is mainly depending upon the fundamentally good stock, here is the limitation of the study.
- ii. The market behaves according to the past evidence and proper handling of the market sentiment. The investors must ensure the proper knowledge before investing in any stock of the securities market.
- iii. This study followed by the past data, so in future uncertainty might happen.

7. Conclusion

This paper investigates empirically the day-of-the-week effect anomaly on stock returns for the period from 06 June 2004 to 30 March 2015 using both high frequency and close to close returns calculated using the main market index of Dhaka Stock Exchange. Moreover, Tuesday is the day of lowest return and highest volatility. However, in certain cases, Thursday also suffers from the lowest return indicating presence of reverse weekend effect in the stock market. The reason behind this may be that stock market is still in emerging stage in Bangladesh which is suffering from informational insufficiency. However, we can go for further research on the paper by testing for the presence of volatility in the data series by incorporating ARCH, GARCH, E-GARCH and TARCH models.

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Appendix

Table: 1

Day	Average Trade	Average Volume	Average Value (Tk. in mn)	Average Market Capitalization (Tk. in mn)
Sunday	91128.99	50267594.99	4664.01	1666045.09
Monday	88424.11	48579159.15	4493.36	1651754.50
Tuesday	88177.36	49250084.19	4550.57	1629021.87
Wednesday	88457.72	50585137.31	4516.40	1638590.30
Thursday	88095.01	50095887.95	4469.18	1652699.88

Source: Author's own computation and the data taken from recent market information (06 April 2004 to 30 March 2015) in Dhaka Stock Exchange (DSE) official website (<http://www.dsebd.org>).

Housing Finance Institutions in Bangladesh- A Comparative Study on BHBFC & DBH

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Abstract: Bangladesh is one of the promising housing markets with considerable growth potentials though it has been experiencing slow growth since 2010 due to some major problems. To resolve the housing shortage and revive the growth potentialities, providing housing finance is one of the important aspects that must be considered to meet housing needs. Though there has been continued expansion of the financial system, the need for housing finance remains inadequate. Many initiatives have been taken, including government-subsidized housing finance to help people to own a house, yet, low and middle-income groups have been confronting difficulties to get housing finance. This paper presents a comparative study between two specialized housing financial institutions in the development of housing sector in Bangladesh. It has been found that BDH is doing much better than that of BHBFC though it's the pioneer specialized housing finance institution in Bangladesh. There is also a discussion about factors affecting housing finance by these two specialized housing finance institutions. Data are collected from secondary sources and analyzed by using qualitative analysis and regression analysis by using SPSS software.

Keywords: Housing Finance, Housing Loan, Specialized Financial Institutions

1. Introduction:

The significance of housing must not be overlooked. Now-a-days it is treated as a critical necessity and in some countries, it is equated with a human right (World Bank, 2010). In Bangladesh housing is also treated as a basic right in our constitution. Housing not only provides shelter, but also housing may have a significant impact on the lives of the inhabitants as it is the cornerstone of community life, it bring societal esteem, it is a source of income generation, the center of family activities and most valuable asset for the households (Sarker et al., 2008; and World Bank, 2010). Bangladesh, one of the most densely populated countries in the world, is the home of over 160 million people of whom around 31.5% are poor. Yet, making shelter available to all is increasingly becoming a big challenge in Bangladesh (Mohidul C. Haque, 2013). Like many other developing countries, Bangladesh also faces an acute housing supply shortage both in urban and rural areas. Housing shortage was estimated to be 3.10 million units in 1991 out of which 2.15 & .95 million units in rural & urban areas respectively. Estimates also suggest a shortage of about 5 million houses in Bangladesh, where 1.0–1.5 million needed in urban areas, with as many as .50 million houses added in urban and 3.5 million

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added in rural regions annually (National Housing Authority, 2004). Statistics & studies show that the urban population constitutes almost 32% of the total population (World Bank) and expected to be 34% at the end of 2015 with an urban growth rate expected to be on an average of 3.7% annually. In South Asia, Bangladesh holds the second position in terms of urbanization rate and proportion of urban population and that is why Bangladesh is one of the most attractive real estate markets in South Asia (Barua et al., 2010).

In Bangladesh, real estate sector is one of the fastest growing thrust sectors as there is a huge shortage of housing for both urban and rural areas. Besides aspiration and societal dignity of owning a house or apartment, abnormal profitability aspect of the housing companies, urbanization and other factors have led to a rapid expansion of the Real Estate industry in Bangladesh (Das S. Micheal, 2014).

Bangladesh has excellent institutional infrastructure for housing finance. Both public and private sector, institutions came forward to contribute in the housing sector. Still, there are huge challenges in the housing finance system. Government-subsidized housing finance through the Bangladesh House Building Finance Corporation (BHBFC) did not succeed to address its targeted groups, at the same time Nationalized Commercial Banks (NCBs) are also comparatively reducing their focus on housing loan portfolios (see table 01). Development of the sector has to come through private financial institutions and specialized housing finance institutions like Delta-BRAC Housing Finance Corporation Ltd (DBH) that recently have started to operate in this market (World Bank, 2010).

2. Rationale of the Study:

The comparative study between specialized housing finance institutions named BHBFC & DBH and especially factors affecting housing finance by these institutions have received limited attention though there are enormous studies on factors affecting housing financing. This study focuses on both comparative study between two housing institutions named BHBFC & DBH & factors affecting their financing. Our study will contribute to further research in this area. Though our study focuses on a comparison between two housing finance companies and also tries to figure out the factors affecting housing financing demand, academic experts will be able to use this one as a basis for further study in this field.

3. Objectives of the Study:

Though housing financing is not a new concept, research on this issue is new in our country as only a few comparative studies have been conducted. In the light of rapid development and importance of real estate financing, the main objective of the present study is to describe a comparative study on two specialized housing financing institutions of Bangladesh. To accomplish this objective, following specific objectives have been covered:

1. To give a brief idea of the housing financing condition in Bangladesh.
2. To provide a comparison between two housing finance companies.

3. To identify the financial institutions involved in the house financing sectors.
4. To evaluate factors affecting housing financing by these two companies named BHBFC & BDH.

4. Methodology:

This study has been conducted to compare the two specialized housing finance institutions in Bangladesh and to identify the factors affecting housing finance by these two institutions named BHBFC & BDH. The real estate financing issues have been reviewed by providing updated data and literatures considering both developed and developing real estate financing markets. Information has been gathered from secondary sources like journals, working papers, World Bank report, annual reports, industry news and developments. For better understanding of the topic, a critical assessment of the existing literatures on the issue is provided.

5. Literature Review:

A large number of the population of developing countries is keen to get access to housing finance to fulfill their fundamental need of shelter. Providing shelter to all the people are one of the fundamental responsibilities of the state. Hoek-Smit found that one of the major obstacles in improving the housing conditions for middle and lower income households is government's indifference to figure out available and accessible housing finance (Hoek-Smit, 1998). Many studies showed that Bangladesh will need to construct 4 million houses annually to tackle the housing demand in the next 20 years (Karim et al, 2010). According to a study by the World Bank, in South Asia, there is a shortage of 5 million houses annually in Bangladesh in spite of existing housing added .50 million in urban areas and 3.5 million in rural area in a year (World Bank, 2010).

According to Renaud, housing finance systems in emerging economies share almost same and several characteristics. Most real estate finance systems are "institutional patchworks" that comprise public (government-subsidized housing finance institutions) & private sector institutions/ specialized housing finance institutions (Renaud, 1997). Housing finance plays a vital role in the development of an economy by supporting strong housing markets. Strong housing and real estate finance markets bring many social and economic benefits like increased investment, savings, employment and more social and labor mobility (WB, 2010).

According to a research titled 'A comprehensive study on the Real Estate sector of Bangladesh', it has been found that 80% of almost 700 households surveyed in the Dhaka city have declared the bank loan as a major source of fund for apartment purchase and 19.91 % only depends on government-subsidized housing finance institutions and specialized private sector housing finance institutions. According to the Bangladesh Bank's data, in last 5-year specialized housing finance institutions' contributed only 22.16%, 19.61%, 16.42%, 21.70% & 19.67% in 2009 to 2013 respectively out of the total housing loan portfolio (REHAB, 2012; Bangladesh Bank). Still the availability of housing finance is crucial for overall economic development as well as for a household's welfare and its quality of life (Nadler, 2006).

Housing Finance Group of the International Finance Corporation (IFC) stated that housing finance contributes to societal dignity and social stability by facilitating inhabitants to purchase a real asset which will represent most valuable asset for the households. In addition, housing represents 15 to 40 per cent of the monthly expenditure of households worldwide. Housing sectors also accounts for 15 to 35 percent of overall investments globally (Housing Finance Group, 2006). Although the classification of house financing is not essentially a proposition for funding money by the middle and lower classes of people for their living, lack of effectiveness of the proper authority makes it difficult for the public to get a moderate home loan from financial institutions. Dr. Bhattacharya, an economist, also focuses the significance of real estate sector in the economy of Bangladesh. He also added that real estate sector plays a vital role in the awareness creation regarding pertinent issues of housing sector, and he mentioned that shelter is a fundamental right of a citizen. He stated that the importance of housing financial institutions in the economic development of Bangladesh can hardly be overemphasized (CPD, 2003).

Though there are many available sources of housing finance for different class of people (according to income level) yet lower –middle and low class peoples’ demand still received limited attention. Government-subsidized housing finance institutions and Government subsidies tend to be insufficient or inappropriate. Private sector mortgage markets serve only 10-20 per cent of the population. Besides, housing microfinance is still an emerging industry in spite of its strong value proposition and informal systems are not yet well-organized (De Soto, 2003). In addition, the need for the improvisation in the housing finance system and the role of specialized housing finance institutions have been articulated in numerous studies and by different government and international agencies.

6. Real Estate Sector of Bangladesh at a glance:

Though the real estate sector of Bangladesh has experienced slow growth since 2010, it had been witnessing an increasing pace since its inception in the late 70s. The sector took off with only five registered firms, but from the early 1980s the business started to grow and demonstrated robust growth. By 1988, there were 42 developers in the business. In the late 90s, the sector gathered the highest pace and a large number of real estate developers entered the market. At present, more than 1650 companies are active in the real estate sector with 1192 of them registered with REHAB. The slowdown in growth of this sector can be attributed to policy limitations and unstable political situation (REHAB website, 2015; The Financial Express, 2015). According to Rahman and some other researchers, the main reasons for the development of real estate sector are increasing number of population, rapid urbanization, scarcity of land, high price of lands, Profit motives of the land owners, re-structuring of family formation (single units), security and social esteem, etc. In the last four decades private developers have supplied more than 100000 units of apartments to the nation and will be supplying 25000 more units in the next three years (Sheltech, 2011; Rahman, M., 2011). Bangladesh, like many other developing countries, has been facing huge shortage of affordable housing both in urban and rural areas (Sarker et al., 2008) and that is why it received enormous attention by developers. Massive demand exists for plots and flats. The private real estate developers have a modest contribution to decrease in demand and supply gap in national housing. The Real Estate and Housing Association of Bangladesh (REHAB) is the sole regulatory organization of the real estate agents, developers and builders (Amin S., 2008).

According to REHAB, the apex housing body, apartment and plot sales registered a 60 per cent drop in 2013 from the previous year mainly due to political unrest and high lending rates. The sector also faced a huge decline of new project registration, approximately 75% decline of new projects undertaken by developers in 2013 compared with the previous year. Lately, a study of REHAB stated that a total of 22, 572 units of flats are unsold worth BDT 21506.26 billion from total 338 housing companies. According to General Secretary of REHAB “The housing sector has plunged into crisis because of prolonged political turbulence”. But political unrest is not the only contributing factor. Higher lending rates, accessibility of housing loan, availability of specialized housing institutions, non-availability of electricity and gas connections, etc. are the other contributing factors of slow growth of this sector. In spite of decrease in sales, the apartment price is not coming down to the affordable zone of middle and low income group of the population (The Daily Star, 2014; The financial Express, 2015).

7. Housing Financing Market in Bangladesh:

Bangladesh has well-developed financial sector, though it is mainly dominated by banking sector. The sector comprises of 56 commercial banks, 31 non bank financial institutions, 62 insurance companies, 599 micro finance institutions (Bangladesh Bank). The housing financing is also dominated by banks, besides, there are some specialized financial institutions like BHBFC- a government-subsidised entity that pioneered housing finance in the country and until recently, was one of the major sources of housing finance in the country. Dhaka is the major market for housing finance as recent estimates indicates that over 80% of housing loan was disbursed to Dhaka city based developers and purchasers. Due to limited sources of funds and high interest rate, there is inadequate financial intermediation in the housing sector (Bhattacharya D-CPD, 2003).

Total Housing Loans

Lenders	Outstanding Housing Loans (in Billion TK)				
	2009	2010	2011	2012	2013
A. Specialized Housing Finance Providers	39.9	44.9	48.3	51.3	55.4
i. HBFC	25	25.1	25.1	25.8	28.2
ii. Delta-Brac Housing Finance	12.9	17.4	20.7	23.1	24.4
iii. National Housing Finance	2	2.4	2.5	2.4	2.8
B. Banks	123.6	162.4	220.9	286.8	349
i PCBs	74.9	99	147.6	191.8	229.8
ii. SCBs	36.8	48.1	53	63.4	73.1
iii. Other Banks (Foreign and Specialized)	11.9	15.3	20.3	31.6	46.1
C. Other Financial Institutions	7.2	9.2	11.3	13.8	16.7
D. Micro-Credit lenders					
i. Grameen Bank	0.2	0.2	0.09	0.06	0.04
Total	170.9	216.7	280.6	352	421.1
Growth Rate	25.20%	26.80%	29.48%	25.44%	19.66%

**Source: Bangladesh Bank

Table 01: Outstanding Housing Loans (In Billion BDT)

As of June 30, 2013, the total housing loan from banks and other financial institutions stood at TK 421.1 billion, a 19.66% increase over that of end-June 2012 (see Table 01).

Table 2 shows housing loans given by all banks, including specialized housing finance providers, State-owned Commercial Banks, Private Commercial Banks, Foreign Commercial Banks, Specialized Banks, other financial institutions and micro-credit lenders. Of the total loans, private commercial banks were expanding their housing loan portfolios as they have huge deposits sources. Here it is shown that PCBs dominates market share with take 229.8 billion in outstanding housing loans not only in 2013 also in last 5 consecutive years. The second position is held by SCBs with Taka 73.1 billion loans. The state owned Bangladesh House Building Finance Corporation (BHBFC) has the third largest market share with TK 28.2 billion in outstanding housing loans as of end June 2013. The sources of BHBFC's fund are paid-up capital and sale of Government guaranteed interest bearing debentures to different organizations. However, the second source of funding is unavailable these days. Besides, two private sector specialized housing finance companies also provide a significant amount loan.

An overview of Housing loans growth since 2009 to 2013

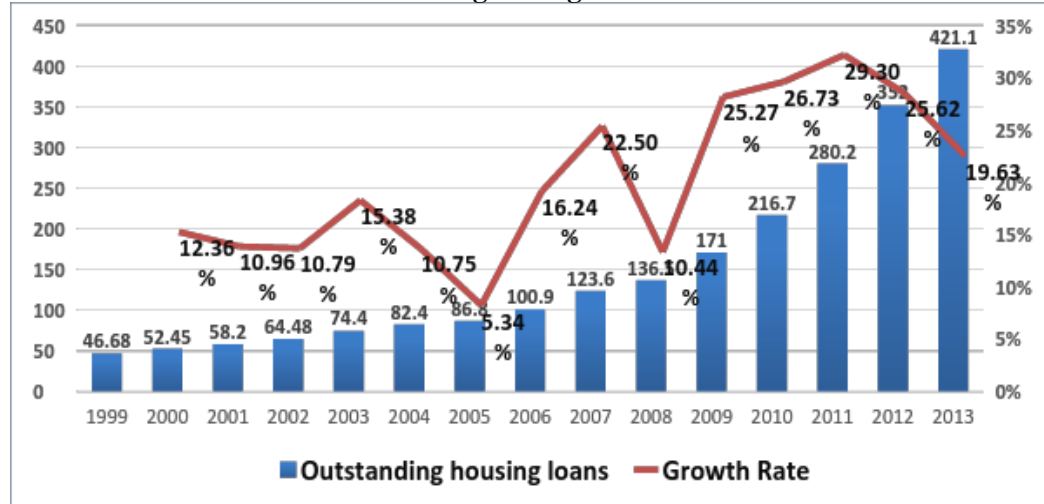


Table 02: Housing Loans & Growth Rate in last 15 Years

Total loans have essentially grown up over the time that basically reflects the steady rising demand for housing, and thus loans for availing those of individuals and institutions. From the table, it can be seen that total outstanding loans in 1999 were only TK 46.68 billion, which stood 421.1 billion in 2013 with average 17.24% growth rate. In this rapid change in total housing loans, major contributor is now PCBs whereas specialized government housing finance authority (BHBFC) is losing its market share due to lack of efficiency, and availability of funds etc.

Besides banks, other sources of housing finance currently available in Bangladesh are BHBFC, DBH, NHC, insurance companies. In the rural sector, the housing cooperatives are the major providers of housing finance. The state-owned Bangladesh House Building Finance Corporation (BHBFC) was the market leader in 1999's and it has given less

loans in recent years and also is burdened with bad loans. NGO collaborated Delta-BRAC Housing came into the market, but it has been facing some hurdles due to higher interest rates since its inception. The major housing loan provider is BHBFC and commercial banks and other organizations like DBH, NHF and Micro-credit lenders are insignificant. But now a days, DBH- a private sector specialized company is doing much better and also disbursed a huge amount of money in real estate sector. The table shows the outstanding housing loans disbursed by the two specialized housing finance institutions of Bangladesh in 1999 to 2013.

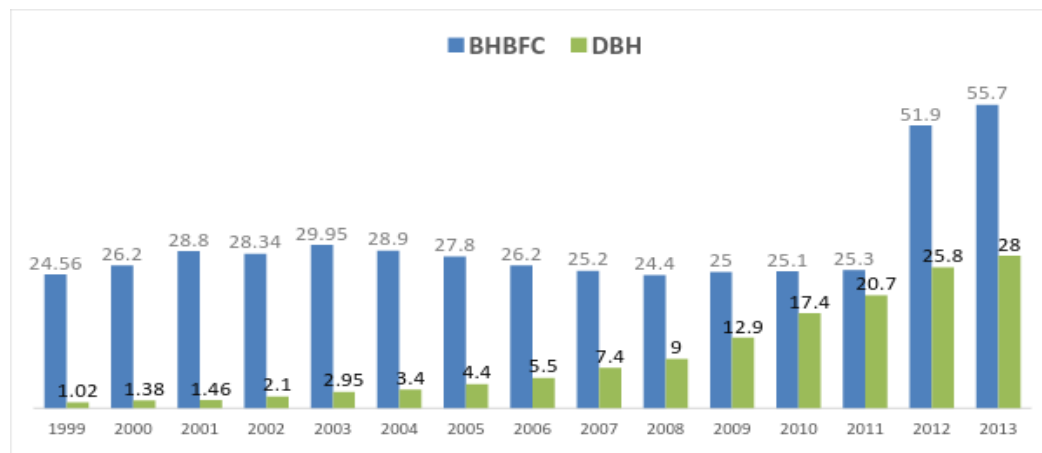


Table 03: Total Outstanding housing loans by BHBFC & DBH

8. Specialized Housing Institutions: BHBFC & DBH

A. Bangladesh House Building Finance Corporation (BHBFC)

To provide the housing finance assistance, House Building Finance Corporation was established in 1952 which was reconstituted as Bangladesh House Building Finance Corporation (BHBFC) after independence. BHBFC is a traditional specialized housing finance company, it still dominate the housing market as a 3rd largest player. It provides housing loans facilities to the dwellers of urban areas, mostly for construction, repair and remodeling of houses. BHBFC offers 15–20 year mortgages to individual households at commercial interest rates that increase as the loan amount increases. The institution is getting back due to poor governance, operational inefficiency, huge non-performing loans, loans approval times were exceptionally long- sometimes as much as a year from application to approval and reduced government subsidies. In spite of these limitations, still BHBFC is the only institution serving the middle and low-income people for their housing needs in a wider geographic area beyond Dhaka (Green and Wachter, 2007; World Bank, 2010). Lately it has taken initiatives to bring its services to the people of rural areas. So far, it has financed 125,000 units since its inception, of which more than 30,000 since 1992, mostly for higher income households (Hoek-Smit, 1998). BHBFC basically provides five types of loans- i) general loans, ii) group loans, iii) apartment loans, iv) adjustment loans for the completion of an under-construction house and v)

loans for constructing houses in the district and selected upazila. BHBFC was the market leader with a share of 52 percent, but now it has lost its market leader position. The amount of loan sanctioned by the corporation in 2009 was TK 247 billion, against which it disbursed TK 233 billion and Non-performing loan was 14.82%. In 2013, total loans sanctioned was 285 billion TK which is 46.62% lower than 2012 though NPL has been reduced to 6.50% in 2013 from 9.25% in 2012. (See details in appendix).

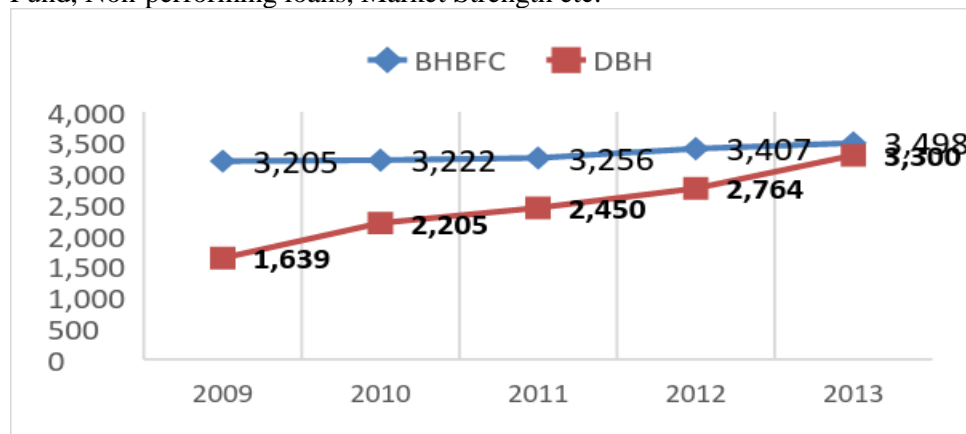
B. Delta-BRAC Housing Finance Corporation Ltd. (DBH)

NGO collaborated specialized housing finance institution DBH has started its journey in the early 1997. It's the pioneer and largest private sector housing finance institution in Bangladesh. It provides loans for the construction, the acquisition of flats and houses, the extension and improvement and the purchase of housing for lower and middle income households. In the first year of its operation, 230 individual loans were sanctioned for a total of BDT 208 million. In 2009, total loan sanctioned by the company was TK 520 billion, against which it disbursed TK 533 billion and loan sanction was increased by 34.8%, 12.53%, 6.05% and 6.11% respectively from 2010 to 2013. Total loan disbursement was TK 716, 646, 590 and 536 billion, respectively from 2010 to 2013. Operational efficiency reflects through loan recovery of DBH as it has 12% in 2009 & 26% non-performing loans in 2013.

9. Quantitative Analysis: Comparative study between BHBFC & DBH

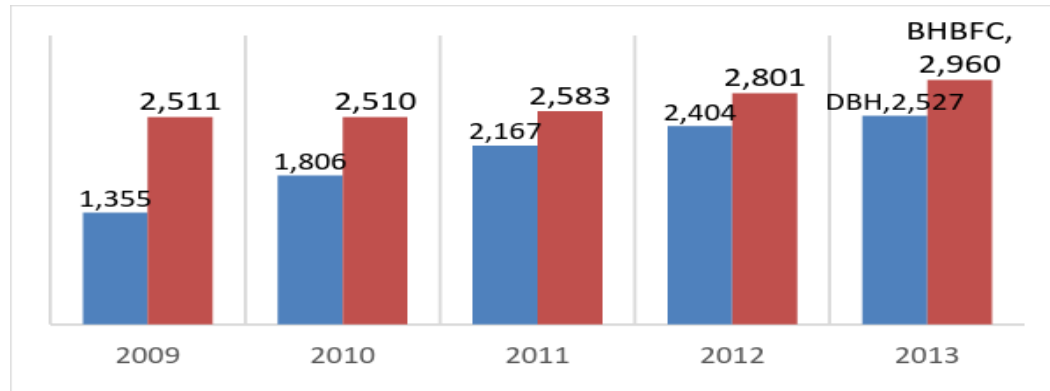
The primary purpose of the study is to identify and analyze the two dominant specialized real estate financing companies in Bangladesh. We will compare the two companies using the following criteria: Total assets, Total Loans & Advance, Market Share & growth, ROI, ROA, Rural Contribution, loan processing, fund deficiency, Tenure, Cost of

Fund, Non-performing loans, Market Strength etc.



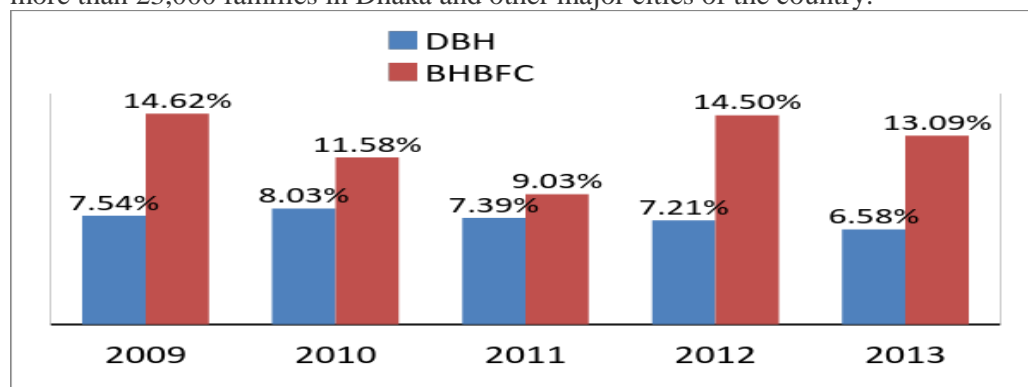
9.1 Total Assets: The graph shows basically total asset of BHBFC and DBH in last five years from 2009 to 2013. It may also be seen that overall % changes in total assets of two competitors over time and we have found that DBH's total assets increased dramatically compared with BHBFC. From the graph we see that total assets of BHBFC in 2009 was

3205 million BDT and steadily increased to 3498 million in 2013 with 2.22% average increase in each year. Whereas total assets of DBH increased by 101.42% increase with an average 19.48% per year from 2009 to 2013. In 2009 total asset was 1639 BDT in million and increased to 3300 million at the end of the 2013.



9.2 Total Loans and Advances: Total loans and advances of both BHBFC and DBH gradually increased in last five years. But BDH's overall loans and advances increased by 86.46% with average 17.33% in each year where as BHBFC's loans and advances increased 17.88% only with an average 4.25% in each year. So far, BDH is doing fine in sanctioning loans to the borrower over BHBFC due to smooth operation and decision making process.

9.3 Tenure: HBFC was established in 1952 to provide financial assistance in the housing sector and after independence, the corporation was reconstituted as BHBFC in 1973. The DBH is the pioneer, largest and specialized institution in the Housing Finance sector in the private sector of the country. After commencing operation in the early 1997, the company has registered a commendable growth in creating home ownership among more than 23,000 families in Dhaka and other major cities of the country.



9.4 Market Share & Growth: Total outstanding housing loans in 2009 to 2013 was 170.9, 216.7, 280.59, 351.96 & 421.14 billion TK respectively, where BHBFC's market share was 14.62% in 2009 and it gradually declined to 13.09% and DBH's market share

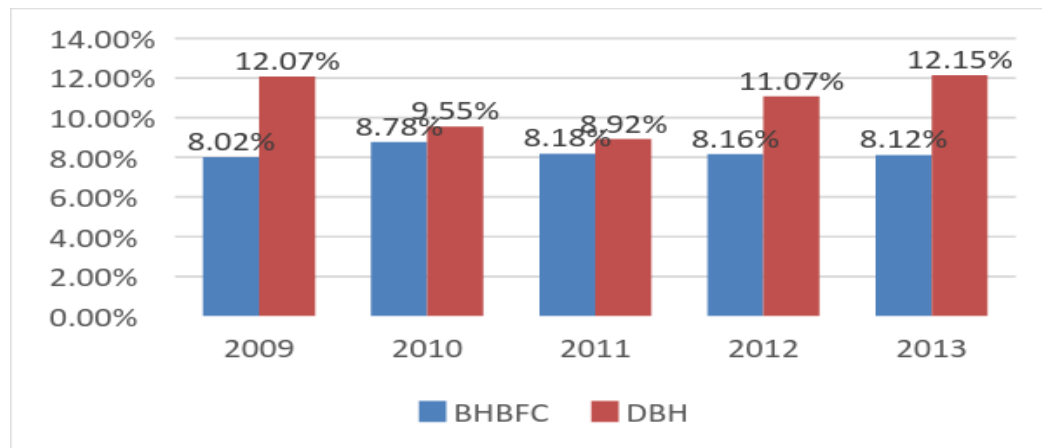
also decreased by .96% in last 5 years. The bar chart shows the market share of two specialized housing finance companies in 2009 to 2013. There has generally been a small decrease in market share of both companies from 2009 to 2013.

9.5 ROI & ROA: Return on investment is one of the major indicators that an organization must count on to get an idea about its invested capital's outcome. From the table it can be seen that compared with DBH, BHBFC's ROI is lower in each year since 2009. Both the companies saw a decrease in the percentage of ROI in 2009 to 2013. It can also be seen that the asset utilization capacity of BHBFC is much better than DBH. We have seen that DBH's ROA slightly declined to 1.74% in 2013 but in 2010 BHBFC's ROA increased a bit and then decreased in 2011 & 2012.

	BHBFC						DBH				
	2009	2010	2011	2012	2013		2009	2010	2011	2012	2013
ROI	12.4%	13.2%	10.7%	11.5%	11.6%		45.3%	53.9%	32.8%	20.7%	22.9%
ROA	7.34%	7.69%	6.38%	6.66%	7.19%		3.16%	3.33%	2.16%	1.55%	1.74%

Table: ROI and ROA of BHBFC & DBH

9.6 Fund Deficiency: BHBFC is getting a serious problem due to inadequacy of fund these days compared with DBH. BHBFC, which has traditionally dominated the housing finance sector, is now a declining player due to government diminished support and operational ineffectiveness. Besides, BHBFC is not in a position to collect money by selling different financial products to general people, whereas DBH has been offering different products like fixed deposits to collect money from people. DBH collected 59.2% & 63.48% in 2012 and 2013 as their sources of fund as fixed deposits from the general people.



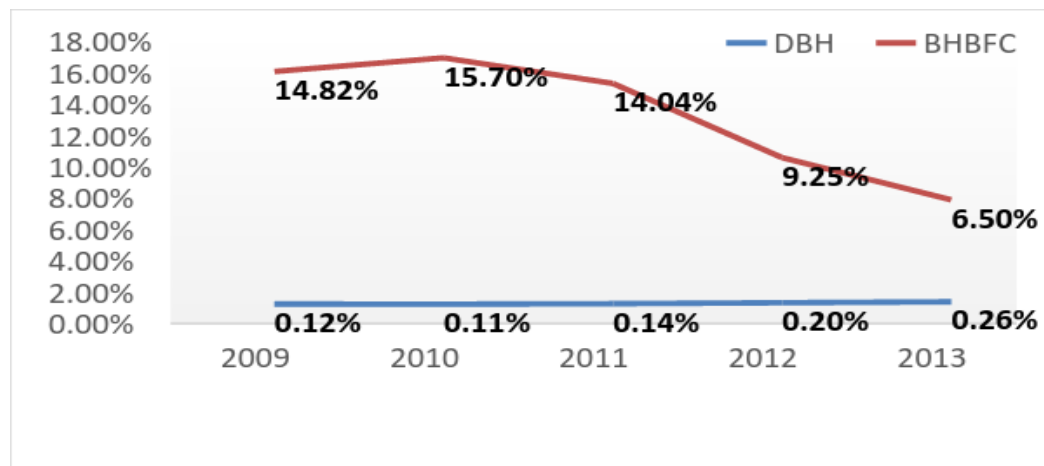
9.7 Cost of Fund: The bar chart illustrates the total cost of funds of BHBFC & DBH from 2009 to 2013. Overall, it can be seen that the total cost of funds of both the

companies increased a little in these five years. The cost of fund of DBH is almost 4% greater than that of cost of BHBFC. BHBFC cost of funds is low because they get funds from the government and it's attributed as an important reason. Whereas, DBH collects

fund from competitive market i.e. its cost of funds is higher than BHBFC.

9.8 Rural Contribution: The contribution towards rural housing is only boosted when the government takes necessary actions. BHBFC is planning to move to rural area for financing in the housing sector though till now DBH financed a more than 23,000 families in Dhaka and other major cities of the country but yet they have not thought about rural needs. DBH sanctioned its total loan in Dhaka, Chittagong and Sylhet only.

9.9 Loan Processing: Loan processing at BHBFC is more time consuming and customers are dissatisfied with it. Whereas at BDH, as it's a private sector housing finance company, loan processing is smoother and less time consuming and customers are more satisfied with the services of DBH.



9.10 Non-performing loans : The line graph compares the Non-performing loans of the outstanding loans of both companies from 2009 to 2013. Overall, it can be seen that NPL was far higher in BHBFC than in DBH throughout the whole time frame. NPL of BHBFC was dramatically decreased to 6.50% in 2013 from 14.82% in 2009 and the overall loan sanctioned also decreased. It can also be seen that NPL of DBH was extraordinarily lower in all the years, shows an operational efficiency of DBH.

9.11 Market Strength: Market Strength of BHBFC is much better than DBH as BHBFC's total number of branches is 31 all over Bangladesh and DBH's number of branches is 6 (4 branches located in Dhaka and one branch in Chittagong and one branch in Sylhet).

9.12 Customer Satisfaction: Customer satisfaction is better in all aspects including services rendered by institutions, loan application process, loan sanction difficulties,

availability of loan, post sanction issues, etc. with private sector housing finance institution (DBH) than the public institution (BHBFC).

9.13 Area Covered: BHBFC has already taken initiatives to make available housing loan facilities to the rural areas as it's the only government-subsidized housing finance institutions for middle and lower income group. So far, DBH provided housing loan to 7500 families only in urban areas especially in Dhaka city.

10. Factors affecting housing finance by BHBFC & BDH's:

The housing supply depends on various factors and finance is one of the major factors. Indeed, finance is not the only factor that drives the housing supply, but it surely brings us to the solution (Atati O. F., 2014). In Bangladesh, still there is a huge gap between demand and supply for real estate finance. Housing finance is the major factor that determines the quality and tenure of housing consumption. In both developed and emerging economies, the government has taken initiative for setting up institutions which are specialized for housing finance. But financing by the specialized housing finance institutions depend on various factors. An attempt is also made, besides a comparative study between BHBFC & DBH, to develop an empirical model to reveal the underlying factors affecting housing finance by specialized housing finance institutions in Bangladesh.

In order to check factors that affect the financing by specialized institutions, eight variables have been taken into consideration. The variables are derived from the various writings (articles), newspaper write-up and other literatures on related subject matter. These variables include Housing Loan disbursed by BHBFC & BDH (Dependent variables) & Independent variables are Population, Population growth rate, Unemployment Rate, Gross Domestic Product, Per Capita GDP, Unemployment, Interest Rate, Inflation Rate and Interest Rate.

Table: Model Summary & Beta Coefficients

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.984 ^a	.968	.925	4.77412	.968	22.631	8	6	.001	2.847

Beta Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-469.590	324.057		-1.449	.197
	Population	2.177	2.117	1.029	1.028	.134
	Population Growth Rate	5815.140	2528.728	1.041	2.300	.046
	Unemployment	9.834	7.950	.313	1.237	.026
	GDP	2.067	3.533	4.020	.585	.095
	GDP Growth	4.496	3.367	.173	1.336	.230
	Per Capita GDP	-.300	.515	-3.704	-.583	.228
	Inflation Rate	-.612	.798	-.087	-.767	.092
	Interest Rate	4.709	2.599	.245	1.812	.012

From the above table it can be seen that value of R is 0.984 that indicates the very high relation between the independent variables with the dependent variable. The value of R Square is .968 which indicates that the variance in independent variables will account for 96.8% variation in the dependent variable and vice-versa. Even if the result is adjusted with new samples and new independent variables, the result 92.5% changes drastically. The beta coefficient and the significance levels in the table above indicate that 3 out of 8 are significant at 5% level. Thus, it can be said that the above factors are affecting housing financing by BHBFC & BDH.

10. Findings & Conclusion:

From the study, it can be stated that government backed housing finance institutions fail to address the targeting of lower- and lower-middle income groups. For this reason, large lower-income housing market is hardly addressed through private sector institutions like DBH. Fund deficiency of BHBFC is higher compared to DBH but the cost of fund of public institutions is lower than that of private institutions although Private sector housing finance is available at competitive interest rate for short period. Rural contribution by BHBFC is much better as they have started focusing on rural areas. Though loan processing, non-performing loan is better for DBH but BHBFC's market strength is better. Customer satisfaction of private housing finance institution is better and market size of BHBFC is higher than that of DBH but the overall growth rate is much better that of DBH. In fact, BDH is doing much better than that of BHBFC though it's the pioneer in specialized housing finance institutions and we found three factors to

be significant among the factors affecting housing finance by these two specialized housing finance institutions.

Based on the findings derived from the study, we recommend the following suggestions: (i) Subsidizing Housing Finance institution should reach the low income group; (ii) private sector institution (DBH) should increase access to formal mortgage finance to lower and middle income households; (iii) operational efficiency by BHBFC should be improvement and government should also give funds and create opportunity to collect funds by selling financial products for BHBFC; (iv) review of the Restrictive Lending Criteria and processing time should be reduced; (v) government Support is required to Informal and Newly Established Housing Finance Institutions; (vi) Government should take steps to establish a Secondary Mortgage market in future.

The housing sector plays a major role in the context of both fulfilling fundamental right of shelter to the inhabitants and for economic development of a country. It can be concluded that housing finance is a key factor in determining the quality and tenure of housing consumption. The role of housing finance companies, especially specialized housing finance institutions are very crucial in achieving the above objectives.

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Perceptions of the Qualities of a Model Teacher in the Minds of Newly Recruited Teachers at a Private University

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Yousuf M Islam³

Abstract: *Teaching involves a number of qualities of a teacher that the teacher must possess; it is not simply the human figure that matters. Rather the inherent qualities of the individual that count the most if the teaching is to be successful and effective. The article attempts to bring forth the rare and valuable qualities that an individual must aspire to achieve and cultivate in practical situations. Out of the immediate experience obtained from the bunch of newly recruited faculty in Daffodil International University (DIU) the paper has been conceived and designed. It may be hoped that the article will reveal a fresh perception at least in the mind-set of the newly recruited faculty, who aspire to stick to teaching career for their life. Every semester, DIU arranges an orientation cum training program for newly recruited faculty members. During the training session for the semester of Spring 2015 there were 46 teachers. The session dug into the perception of these teachers on their impression of the qualities of a teacher, i.e., what qualities would a model teacher have. A questionnaire was uploaded in Google Classroom for the participants to decide the qualities of a model teacher, taken from their own experiences as students. The results showed that about 50% of the newly recruited faculties were influenced by the teaching of their own university teachers. Participants wrote about the teacher with most influential characteristics. Among the qualities of the teachers that they felt contributed to model teaching practices were giving theory followed by examples, creating groups, asking back to back questions, encouraging students to predict (empowering students) and giving pictorial view of every lesson as well as by the personality of teacher, which included friendly behavior and the ability to motivate. From the view of the newly recruited faculties, it is found that one needs to be friendly with a stable teaching technique in order to become a successful teacher.*

Keywords: *Google classroom, model teacher, personality of a teacher, teaching techniques*

1. Introduction

Teaching is a complex and multidimensional process. It needs to synchronize deep knowledge and application of the knowledge in different situations, under varying conditions with a wide diversity of groups and individuals. In quality teaching,

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knowledge is applied in ways to provide equitable access and opportunities for all students.

The Teacher has significant influence on students' achievement that is well established (Rockoff, 2004). From the beginning of civilization, scholars have attempted to define model teachers (Schacter&Thum, 2004). Walberg (2003) presented that model teachers are efficient to achieve goal of the students. A series of studies (Haycock, 1998; Jordan, Mendro, &Weerasinghe, 1997; Rivkin, Hanushek, & Kain, 2001; Sanders & Horn, 1995, 1998; Thum, 2003) confirmed that effective teachers are highly influential factors in enhancing knowledge. Orlando (2013) offered nine characteristics; Azer (2005) and Strauss (2011) mentioned twelve characteristics of a great teacher.

Most of the studies are on primary and/or secondary level teachers and the characteristics of a model teacher are described based on authors' perception. This study considers teachers from all levels and based on the responses from newly recruited teachers in DIU. The objective of the study is to find out teaching techniques and personal quality of a model teacher in the minds of newly recruited teachers.

2. Literature Review

Quality teachers are considered to be an essential element to maintain quality education (Driscoll and Pianta 2010; Buyse et al. 2008). Kennedy (2010) proposed a tacit model of teaching in which teacher's characteristics and situational characteristics have impact on teaching practice, which has impact on student's learning. Wang et al (2011) suggested three criteria for a model teacher. First, they linked quality teaching with competence as demonstrated on academic and professional tests; second, the model teacher has his own credentials for teaching and third, the criteria for a model teacher is his knowledge, skills and dispositions. Teaching techniques in classroom are also an important factor in evaluating and certifying teachers (Ladson-Billings & Darling-Hammond, 2000). Some scholars also have proposed that approaches to identifying quality teaching are problematic because quality teaching in one cultural context may differ from or even be contradictory to that in other contexts (Fenstermacher & Richardson, 2005). In the cultural context of Bangladesh, there is no available literature to find out related research on the criteria of a model teacher, for ensuring quality education. This research may claim the first attempt to find out criteria for a model teacher.

3. Material and Methods

This study is a qualitative research. There were 46 participants in the training which was organized by Daffodil International University, for the newly recruited faculty member in semester Spring 2015. Data were collected from the participants of the training using the following open-ended thinking questions: (1) Who was the best teacher in your life, with a brief description. (2) In which way did the best teacher change you? What exactly changed you? (3) What are the key qualities found in the best teacher? (4) Which qualities do you want in yourself to be a model teacher? (5) What are the Participant Engagement Techniques? (6) Which techniques does he want to apply in his subject?

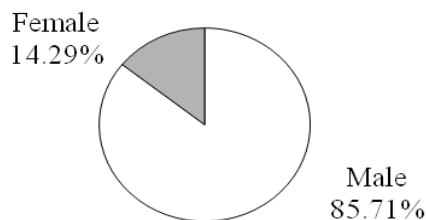
These questions were uploaded in Google classroom, to answer in a tabular format as follows: (1) Write a brief description of the teacher whom you feel is/was the best teacher in your life to answer question (1). (2) Read what you answer for question (1) and decide in what way the teacher changed you and exactly what did the teacher do to change you for answering question (2).

The Participants were allowed to respond to question (1) and (2) within 24 hours. (3) Read all stories written by your colleagues, chosen any two stories other than yours to find out key qualities of the best teacher. After another 24 hours, (4) Read all the stories and write what type of teacher you yourself would like to become. And at the end of the training the participants were asked to reply question (5) and (6) in a form of open questionnaire. This study figured out quality of a model teacher based on frequency distribution from the perception of the participants.

4. Results

Figure1 shows the demographic characteristics of the teacher who inspired students. Among the teachers who inspired students, 86% are male. The percentage of female teacher to be a model is low (14%); may be because of the fact that female teachers are lower in number engaged in education. In Bangladesh, the figure of female teacher is around 31%, as obtained from 2000 (UNESCO, 2015).

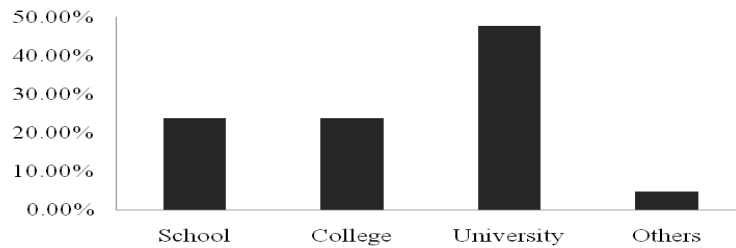
Figure 1: Demographic Characteristics of the Teacher who inspired



(Source: Authors' calculation)

Figure 2 is to show the academic level in which students are influenced. About half of the respondents are influenced by university level teachers. The percentages of school and college level teachers are almost the same: (about 24%), by whom the respondents are motivated or think of their models. About 5% the respondents are found having their model teachers other than institutional academicians such as house tutors or teachers from coaching centers.

Figure 2: Institutional Level of the Teacher Who Inspired the Students

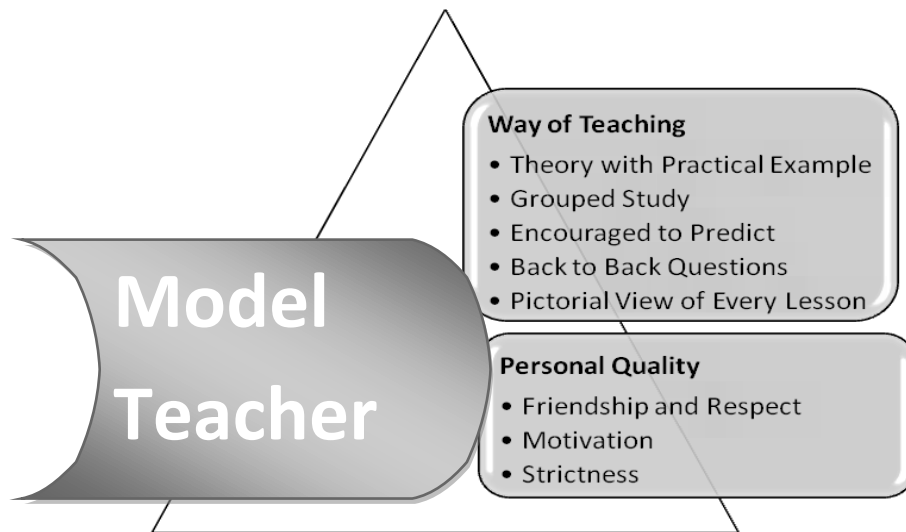


(Source: Authors' calculation)

The students are inspired by the teaching techniques or the personal quality of a teacher (Figure 3). In the study, it is found that half of the respondents chose their model teachers for their teaching techniques and the rest of them for the personal quality. The way of teaching which are remarkable to the respondent student, is Theory with practical examples.

Grouping students, Encouraging students to predict before elaborate topic, Back to back question on topic, Pictorial view of every lesson definitely play significant roles. But the personal qualities such as friendly behavior with students and respect their opinion are potential ingredients, no doubt. Providing the proper Motivation to students and enabling them to design their study and future planar the most appreciable qualities that an ideal teacher possesses. Above all, an ideal teacher is expected to be in possession of his moral and professional strictness that invisibly plays a magical role on the character of a student: no doubt the ultimate aim of all education is to mold the moral character that renders greater benefit to human society as a whole.

Figure 3: Techniques of a Model Teacher



From Table 1, among the ways of teaching, giving contemporary and practical examples is the most popular teaching technique which is followed by encouraging students to predict.

Table 1: Popular Techniques of Teaching: The Way of teaching preferred by students

Way of teaching	Percent (%) of students preferred
Contemporary and practical example, (compare and contrast)	50%
Grouping among students	10%
Encouraged to predict	20%
Back to back questions	10%
Give a pictorial view of every lesson	10%

(Source: Authors' calculation)

It was found that Contemporary and practical examples (compare and contrast) 50%, Grouping among students 10%, Encouraged to predict 20%, Back to back questions 10% and Give a pictorial view of every lesson 10% stood in the concluding status.

Table 2 and 3 are to present the non-technology-based and technology-based things engaging teaching techniques respectively. Non-technology based techniques those are proposed such as group discussion by 27.40% participants, examples from real life by 19.18%, flexibility on mistakes from students by 12.33%, question and answer method by 24.66%, guess by students by 5.48%, role play by 1.37% and Q card technique by 9.59%. The newly recruited faculties mostly want to apply group discussion technique (38.89%) to engage their students which is followed by examples from real life (22.22%), questions and answering process (16.67%).

Table 2: Non-Technology- Based Techniques Engaged

Engaging Techniques	Perception of Percentage (%) of participants	Percentage (%) of participants want to apply
Group Discussion	27.40	38.89
Real life example	19.18	22.22
Flexibility	12.33	5.56
Question Answer	24.66	16.67
Guess by students	5.48	5.56
Role play	1.37	0
Q card	9.59	11.11

(Source: Authors' calculation)

Visualization by 31.03% participants, Google classroom by 44.83% participants and Social Network by 24.14% participants are proposed technology based techniques to engage students. However, none of them wants to use social Network in classroom.

Table 3: Technology Based Engaging Techniques

Engaging Techniques	Perception of Percentage (%) of participants	Percentage (%) of participants want to apply
Visualization	31.03	36.36
Google classroom	44.83	63.64
Social Network	24.14	0

(Source: Authors' calculation)

Figure 4 presents the key characteristics of a model teacher. The key characteristics of a model teacher are friendly or cooperative behavior, unique teaching techniques, honesty, motivational ability, skilled and deep knowledge of the subject, punctuality, charismatic presentation and overall personality.

Figure 4: Key Characteristics of a Model Teacher as perceived by New Teachers

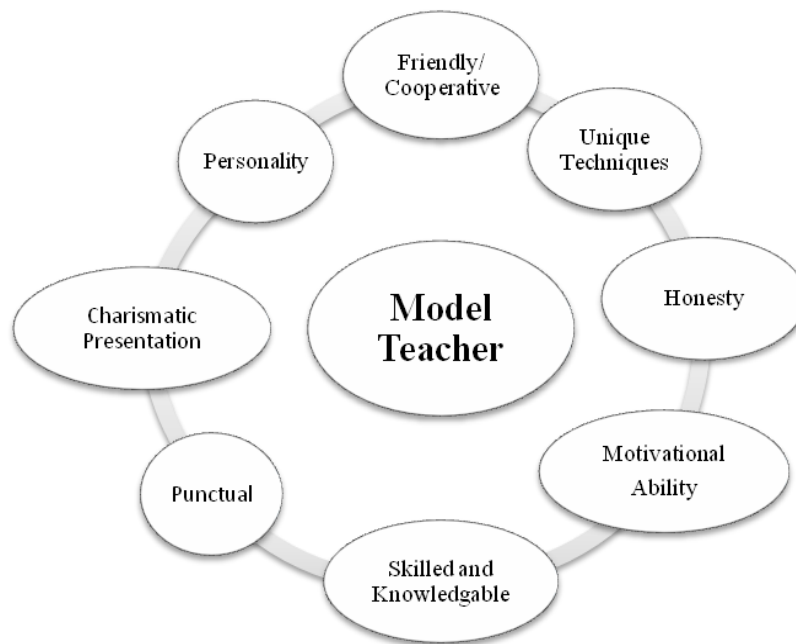


Table 4 presents a comparison of quality of model teacher of the study with literature. In this study, the qualities are presented in concise way.

Table 4: Compare quality of model teacher as perceived with available in literature

Quality of model teacher as perceived by New Teachers	Quality of model teacher from Orlando (2013)	Quality of model teacher from Azer (2005)
1. Friendly/ Cooperative	1. A great teacher respects students. 2. A great teacher collaborates with colleagues on an ongoing basis.	1. Emphasizes teamwork 2. Interacts and communicates respect
2. Personality	3. A great teacher is warm, accessible, enthusiastic and caring. 4. A great teacher sets high expectations for all students. 5. A great teacher can “shift-gears” and is flexible when a lesson isn’t working.	3. Fosters critical thinking
3. Motivational Ability	6. A great teacher has his own love of learning and inspires students with his passion for education and for the course material.	4. Encourages and appreciates diversity 5. Motivates students and co-workers 6. Provides positive feedback 7. Encourages creative work 8. Encourages an open and trusting learning environment
4. Honesty		
5. Punctuality		9. Committed to the work
6. Charismatic Presentation/ Unique Teaching Techniques	7. A great teacher creates a sense of community and belonging in the classroom.	10. Demonstrates leadership in teaching
7. Skilled and Knowledgeable	8. A great teacher is a skilled leader. 9. A great teacher maintains professionalism in all areas	11. Brings a wide range of skills and talents to teaching 12. Seeks continually to improve teaching skills

Table 5 presents the proffered personal quality of a model teacher. Half of the respondents have opinion that ability to motivate students is the highly influential quality of a teacher which is followed by friendly behavior with students and respect their opinion. Strictness is also a quality of a model teacher to some students.

Table 5: Preferred Personal Quality of a Teacher

Personal quality	Percent (%) of students preferred
Friendly with students and respect opinion of students	40%
Ability to motivate	50%
Strictness	10%

(Source: Authors' calculation)

5. Discussions

This study argues that to provide quality education for students it needs to consider teaching techniques as well as personal quality, which is important for recruiting faculty in the university. To this extent, the research is able to identify a set of teaching techniques and personal quality that should be used as a floor for teacher employment. In other words, these criteria would set the bar for a “minimally qualified teacher.” For the study, data were collected from 46 participants in the training of newly recruited teacher for the semester Spring 2015 at Daffodil International University. The newly recruited faculty found the characteristics of their model teacher which are mentioned in Figure 4 and most of the characteristics (Friendly, Motivational ability, Knowledgeable, charismatic presentation and personality) are also mentioned by Orlando (2013). Group discussion, examples from real life, flexibility on mistakes from students, question and answer method, guess by students, role play and Q-card technique are the non-technical students engaging teaching techniques. Smith (2010) suggested that an example from real life is a motivated way to gain a realistic picture of what teaching entails. Most of the newly recruited teachers want to apply group-discussion to engage their students. Interest in topic, involve students to classroom excellence are mentioned by Weimer (2009). And from the technology-based students engaging techniques, they want to use Google classroom to engage their students. Among the Characteristics of a model teacher (friendly or cooperative behavior, unique teaching techniques, honesty, motivational ability, skilled and deep knowledge on subject, punctuality, charismatic presentation and personality), ability of motivation is the most influential.

6. Conclusion and Implications

The study shows the awareness of new teachers in the with qualities of a model teacher. There are the qualities that are mentioned by Orlando (2013), Azer (2005), Weimer (2009) and Smith (2010). It is also interesting to note that “subject skills” account for only one out of the eight qualities of a model teacher as perceived by the trainees. The limitation of the study is the small number of respondents. Hence further study can be carried out with a large number of respondents to conduct qualitative analysis.

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Borrowers' Perception: SMBEs Financing by the Banking Sector of Bangladesh

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Abstract: Bangladesh is trying to transform her economy from low income group to upper middle income group economy. Small and Medium Business Enterprises (SMBE) will be the key driver, steering this transformation of the Bangladesh Economy. This is due to the fact that Small and Medium Business Enterprises (SMBEs) can not only be enterprising and innovative, but also create employment, purchasing power capability, raise overall per capita income, empower the owners of SMBE- specially women and improve standard of living. Though SMBEs operate directly in the formal sector, but they also form indirectly a part of the informal sector and have a multiplier effect on the formal sector. The main purpose of this study is to investigate whether SMBEs financing through the formal banking sector, to the borrowers, is supportive as per their perception? Quantitative and Qualitative methodology were adopted to analyse both, the primary and secondary sources of data. Time period of the study was from 15th November, 2014 to 31 March, 2015. A questionnaire was prepared which was divided into three parts: demography; simple binary data and Likert Scale were applied. Total numbers of respondents were 308. On the basis of binary data, logit regression model was also tested. Result shows that SMBE loan has positive impact on creation of employment opportunity and income generation. From the Likert scale we observed borrowers' perception and mindset. Further, we analysed the secondary data which indicated that there was a direct positive relationship between the number of women entrepreneurs' and the recovery rate- that is lower the number of women entrepreneurs, lower is the recovery rate. The paper suggested a model for SMBEs. This paper further provides few policy implications and recommendations such as; policy makers of the country ought to keep supporting SMBEs through enhanced institutional support, infrastructural support, ease of application procedure of SMBEs. SMBEs financing should be raised in the green business and environmental friendly industries, creation of more women entrepreneurs, corruption free banking system, corporate governance and favourable guidelines and policies regarding SMBEs funding and expansion of businesses at domestic and international level.

Keywords: Formal sector, Informal sector, Entrepreneurship

JEL classifications: O17, L26

1. Introduction

Small and Medium business enterprises (SMBEs) are playing vital role to expedite the process of economic growth and fulfillment of basic needs of Bangladesh. The country became lower middle income country recently as recognized by the World Bank (2015).

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When Bangladesh became independent, private enterprises were confined only two percent of the total population. It was irony that the at that time non-Bangles especially West Pakistanis largely controlled industries-banks-insurances etc. Bangladesh was called as Second colonial era from 1947 to 1971 by Faaland and Parkinson (2003). To achieve low income group of middle income country, most important part of contribution is small and medium businesses. This is due to the fact that SMBEs can create employment generation. Currently banking sector of Bangladesh is trying to work as a connecting hub on SMBE financing to create proper industrial sector of the country. International Finance Corporation (2010) described that if very few SMEs have a positive awareness of a bank, capturing large segments of the market may be more of a challenge. More broadly, each of the activities of the competitor landscape evaluation will deepen a bank's competitive and client intelligence, and enhance its ability to position itself strategically and develop a tailored customer experience for the SMBE client.

Wibe (2015) described that United Nations expected to launch a ground-breaking set of global Sustainable Development Goals (SDGs) in 2015, business will have a newly relevant framework to guide their strategic priorities and efforts towards society – representing a huge opportunity to drive sustainable business. Bangladesh is trying to achieve target and focused oriented development procedure for which SMBEs can be utilized as an important tool and can act as a vehicle for attaining sustainable development goal starting from reducing worse effect of climate change or skill manpower etc.

After independence of Bangladesh in 1971, small and medium enterprises are gradually functioning with more zeal, creativity, innovativeness, and dynamic characteristics, which contribute economically both rural and urban areas of the country. Governor of Bangladesh Bank Rahman (2015) commented that Micro, small and medium enterprises (MSME's) contribution to GDP is 30 percent. 90 percent of private sector enterprises are MSMEs, employing 25 percent of the total labor force covering 80 percent of industrial jobs and hence, reducing rural-urban gap with faster poverty reduction. Virtually, Small and Medium Enterprises (SMEs) are generating employment opportunities and contributing in the economic benefits of the country (Islam et al.,2008). Banking sector of the country is now trying to expedite the process of SMBEs. SMBEs can help both formal sector and informal sector of the economy as they can act complementarily. Bangladesh Bank is now giving importance on financial inclusion which has positive impact on the formal economy of the country. However, shadow economy is still playing vital role in the economy.

Watson (2010) remarked that variety of SMEs definition of success and failure creates confusion. He opined that actually SMEs varies from country to country a regulated by each countries rules, regulations, financial institutions approaches, social attitude, and breadth of the economy etc. Definitely definition of SMEs of Bangladesh and UK won't be the same. Successes of SMEs are largely related to failure provided cost of failing is bounded (Watson, 2010). However, banking sector of Bangladesh as a whole is trying to finance SMBEs for expansion of employment generation as Bangladesh bank as a central bank is trying heart an soul to encourage financing in this sector and to create new

entrepreneurs .Environment friendly SMBEs are being required for which green financing by the banking sector in practice should rise. As per Bangladesh Bank's SME(Small and Medium Enterprises) definition we have adopted following table from their publication:

Table: 1: Different criteria of Small Enterprises

Serial No.	Sector	Fixed Asset other than Land and Building (Tk.)	Employed Manpower (not above)
01.	Service	50,000-50,00,000	25
02.	Business	50,000-50,00,000	25
03.	Industrial	50,000-1,50,00,000	50

(Source: <https://www.bb.org.bd/sme/smepolicye.pdf>)

From Table:1 we observe that both service and business sector employed member will be maximum 25 while for Industrial sector it will be 50.

Table 2: Different criteria of Medium Enterprises

Serial No.	Sector	Fixed Asset other than Land and Building (Tk.)	Employed Manpower (not above)
01.	Service	50,00,000-10,00,00,000	50
02.	Business	50,00,000-10,00,00,000	50
03.	Industrial	1,50,00,000-20,00,00,000	150

(Source: ibid)

From Table:2 we observe that both service and business sector employed member will be maximum 50 while for Industrial sector it will be 150.

SMBEs are contributing in the economic development of the country. However, there is a general belief that SMBEs help poverty reduction and create ability to purchasing power. SMBEs mostly run under private sector. Lion shares of the owners of SMBEs are private entrepreneur. Women at the grass root level are being capable to do non-farm activities, getting benefits and have the ability to raise purchasing power. Proper SMBEs financing will help to achieve women empowerment. As such the study intends that whether borrowers' are satisfied with SMBEs. However, the study will try to cover both male and female borrowers to assess whether SMBEs financing through the banking sector is actually helpful for them?

Asian Development Bank (2014) urged that increasing bank efficiency is a common shared problem in Asian and OECD countries, although the problem is more acute in Asia. Nevertheless, both areas present the challenge of improving the instruments and enhancing the supply of bank options for SMEs.

Since SMBEs financing is gradually becoming important through the banking sector, the study intends to know what borrowers are thinking about the SMBEs loan. As a resultant factor, research question of the study intends whether SMBEs financing through the banking sector is supportive to the borrowers as per their mindset.

The study has been undertaken with the following objectives:

- i) To assess the present SMBEs loan system as per the perception of the customer;
- ii) To evaluate borrowers satisfaction on the SMBEs loan system;
- iii) To examine impact of SMBEs through the banking sector in the economy;
- iv) To provide some implications of the findings.

The reminder of the study is organized as follows: Section 2 depicts Review of the Literature; Section: 3 explains Methodology of the study; Section 4 consists of analysis of primary data; Section 5 demonstrates the empirical results ; Section 6 describes analysis of the findings; Section 7 illustrates a model for SMBEs and Section 8 provides conclusion and recommendations.

2. Review of the Literature:

Wennekers and Thurik (1999) described that entrepreneurs need a vehicle transforming their personal qualities and ambitions into actions. Small firms where the entrepreneur has a controlling stake provide such a vehicle.

Abdullah (2000) commented that if government policies were more favorable and if adequate financing, technical assistance, extension and advisory services as well as infrastructure support were available and economical, a more prosperous growth and development of individual small-medium enterprises in the Asia-Pacific region should be expected.

Chowdhury (2001) depicted that in Bangladesh, importance of women's entrepreneurship development will lead to women's development in general and their participation in income generating activities in particular.

Hisrich and Peter (2002) argued that each entrepreneur needs to establish both a moral and a professional support network. These contacts provide confidence, support, advice and information.

Ali (2003) mentioned that price should be fixed on the basis of analyzing the international market properly. Costing, promotional campaign should get wider recognition. When international contract is made at that time information regarding legal, ethical, and socio-cultural background of the investing country also may be collected.

Hoque (2004) found that Bangladesh Shilpa Bank as a development bank was delivered industrial credit but the bank was not accompanied by adequate and efficient entrepreneurial guidance, supervision and direction.

Jahur and Azad (2004) mentioned that in Bangladesh, small business enterprises are believed to have employed 87% of the total working forces and to produce large number of goods and services.

According to Khan and Hyder (2006) small enterprises are the lifeblood of any economy and are at the forefront of Govt. efforts to promote entrepreneurial activities, innovation and increased productivity.

Khanka (2006) argued that creation of infrastructural facilities involves huge funds which the small entrepreneurs do lack.

Moazzem (2006) argued that Government has to adequately distribute its resources through different budgetary measures in different sectors, preferably on SME-related and employment-enhancing activities. Considering the extent of importance of various sectors, priority is usually given to some important sectors, such as RMG, agriculture, livestock, agro-based industries, textiles, and jute industry etc.

Susman (2007) argued that small and medium-size enterprises were trying to raise economic productivity and benefits through changing in traditional role as well as increasing competitiveness in the global economic process. Virtually, after 2015 when millennium development goal will be expired then sustainable development goal will start.

Ganbold (2008) described that in developing countries, many of the innovations were originated in serving clients at the lower end of the private sector spectrum using microfinance technologies. These innovations consisted of providing small, uncollateralized working capital loans; promising access to larger amounts for longer terms based on repayment performance; and permitting small savings accounts that were safe, convenient, and flexible in terms of withdrawal. The key characteristic cutting across developing country commercial banks applying microfinance principles to SME finance is that they have focused on relationship-intensive banking rather than more traditional transactions banking.

Musonera (2008) commented that cheap labor is available in Rwanda which is an opportunity but can exploit lots as there is a tendency of shifting manual operations ,which requires less skills by the developed/developing countries to the poorer countries.Negrusa and Ionescu (2009) argued that Romanian SMEs need help for improving their knowledge of foreign markets, in attracting funds and also in improving their competitiveness to face to strong and global competition. Despite of limited resources, lack of production and marketing capabilities many entrepreneurs are interested to expand their involvement in international operations.

Harif et al. (2010) observed that in Malaysia that the range of financial management tools used by SMEs in Malaysia still low. Many of the SMEs still use only predictable and often used components such as financial accounting and working capital management. Out of the six components of financial management, only the financial planning and control, financial accounting, and working capital management tools were being practiced by a high percentage of the SMEs in the study.

Punyasavatsut (2011) depicted that SMEs perceived that important obstacles to their financial access are lack of information and advice from financial institutions, complexity and cumbersome processes in loan applications and inadequate collateral. Financial institutions identify the main obstacles for SME lending as follows: inadequate collateral, lack of business experience, lack of sound business plans, non-performing loan history, and high transaction per loan application. In addition, Thai banks have traditionally had collateral-based lending system.

Teng (2011) opined that an important element or aspect of good critical success factors (CSFs) emerges from the role being played by the government. The existence of good government or public policies that are pro-business is vital for the success of firms.

Calice, Chando and Sekioua(2012) argued that at East African countries were given the crucial importance attributed by banks to SME -specific constraints, priority might be given for example to the collection of statistics and data on their characteristics in order to better understand the demand-side perspective, which is equally important in the development of the SME lending market. Measures in this domain might include the scaling up of capacity building programs and the introduction of incentives for SMEs to formalize.

Nowduri (2012) described that more or less all SMEs are regional specific. In general, they design, develop and serve according to the local community needs and demands. Attitudes to sustainable SMEs development are varying significantly from region to region. At the same time, one cannot conclude that opportunities are not available for some SMEs. This is because the local priorities and pressures play an important role in the particular benefits being experienced in those regions.

World Bank (2012) argued that SMEs play a key role in economic development and make an important contribution to employment. Financial access is critical for SME growth and development, and the availability of external finance is positively associated with productivity and growth. However World Bank (2012) also argued that more work is needed to evaluate the wide variety of SME finance policies, and international organizations are well suited to fill in these knowledge gaps.

Saravanan (2013) argued that in the growth and progress of any country, its small scale sector is of equal importance as of other large scale sectors because a country cannot progress in its true sense unless its small scale sectors progress. Be it a developed country like Japan and USA or a developing country like Thailand and India, they form the backbone of the economy.

Asian Development Bank (2014) described that SME access to banks has gradually improved because of the various government support measures such as credit guarantees and mandatory lending in Asia and the Pacific. Among participating ASM countries, the lending scale to SMEs is relatively large (double-digit ratio to GDP) in the Republic of Korea (38.9%, 2012), Thailand (33.7%, second quarter of 2013), and Malaysia (20.1%, 2012). Bank lending to SMEs is still small (single-digit ratio to GDP) in Cambodia (7.8%, third quarter of 2013), Bangladesh (6.7%,2012), Indonesia (6.4%, 2012), and Kazakhstan (4.7%, 2012).From aforesaid study we observe that Bangladesh needs to

push SMEs through the banking channel so that lending scale to SMEs in Bangladesh can be double digit ratio to GDP rather than 6.7% in the year 2012.

Islam , Yousuf and Rahman (2014) commented that though conventional banks provided most of the SME loans to the entrepreneur but in recent time Islamic banks are also investing SME sectors .However, SME investment is mainly concentrated in Dhaka division, but out Dhaka there are many potential areas where raw materials for Small and Medium Enterprises are easily available to set up SME organization.

Looi (2014) argued that international entrepreneurship is not necessarily driven by both desirability and feasibility. The path coefficients from control belief strength to export intention between Malay and Chinese SMEs are significantly different, thus in the research framework this path is not generalizable across the two ethnic groups. Overall, Malay SMEs reported significantly higher level of motivations and export intention than their Chinese peers.

Mills and McCarthy (2014) observed that in USA fast funding and online and mobile applications are crucial competitive advantages of the alternative lending business model, desired credit from banks are turning to alternative sources of credit.

Uddin (2014) described that small and medium enterprises are recognized as a ‘thrust sector’ by the Ministry of Industries because of the contribution of this sector in the social advancement and economic growth. Though it is highly labor intensive but still major portion of job opportunity is generated by this sector. For the balance development of all over the country it plays a vital role. As a result the standard of living in country areas is increased.

Qamruzzaman (2015) observed that SMEs have noteworthy contribution to GDP, employment generation, poverty alleviation and women empowerment. He also opined that performance of SMEs did not fulfill the expectation of the country may be due to merely to lack of access to institutional financing, lack of consumer base market for SMEs products and non-availability of formal SMEs entrepreneur development .

From aforesaid analysis we observed that there is a gap between the borrowers’ perception about the effectiveness of SMBEs loan provided by the banks. Specifically borrowers’ perception regarding SMBEs loan taken from overall banking system of Bangladesh has not been studied earlier. As such to fill up the research gap, we have undertaken this study.

3. Methodology of the Study:

The researcher will undertake the study based on both primary source and secondary sources. Quantitative and Qualitative methodology will be adopted to analyze both, the primary and secondary sources of data. For primary sources, a questionnaire has been prepared. Questionnaire tries to cover objectives of the study. In the questionnaire there are three parts: i) Demography of the borrowers’; ii) Four questions based on the binary system i.e. yes or no; iii) Eleven questions measured in the Likert scale. In the Likert scale we use strongly agreed= 5, agreed=4, neutral=3, disagreed=2, strongly

disagreed=1. We shall also do Reliability test to observe internal consistency of data. Demography will be reported as a tabular form in the Empirical results and analysis part.

Total number of distributed questionnaires is 400 out of which we received 308 questionnaires from the borrowers' of the SMBEs loan, who have taken loan from various commercial banks of the country. Respondents will be selected by taking random sampling technique and following eight districts have been chosen randomly: Tangail, Jessore, Sylhet, Rangpur, Patuakhali, Rangamati, Bagarhat and Gazipur to collect data from the SMBEs borrowers'.

Logit model is a regression model where the dependent variable is definite and in the data set of the questionnaire, independent variables results as binary. The single period logit model tries to predict the probability of success of SMBEs loan with a binary dependent variable y_i , which takes the value 1 for firm i if its loan helps fostering the business and 0 if firm i fails, conditioned on a set of covariates z_i . Time period of the study was from 15th November, 2014 to 31 March, 2015.

Regression equation:

For binary data based questions, the study will do Logit model. This model will assess whether success of SMBEs loans have been prevailing or not. The study will consider dependent variable as SMBEs loan has positive impact (SMEL).

Hypothesis Testing:

We assume following hypothesis:

Ho: SMBE Loans of the banks have positive impact on the economy

Ha: SMBE Loans of the banks have negative impact on the economy

Logit Model:

The study will examine following logit model:

$$SMEL = f \begin{matrix} - & + & + \\ (PSLC, IRR, SMESE) \end{matrix}$$

Where SMEL= SMBEs loan of the banks

PSLC= Procedure of sanctioning loan is cumbersome

IRR= Interest rate is reasonable

SMESE= SMBEs loan helps to achieve self-employment

A priori relationship of the aforesaid model is that cumbersome loan procedure (PSLC) will have negative effect, reasonable interest rate (IRR) should exert positive effects, and creation of self-employment opportunity (SMESE) will have a positive effect on success of SMBEs loans of the banks (SMEL).

With the help of Likert scale type of questions, the study will examine eleven questions in the line of objectives of the study and summary of the findings will be reported in the Empirical results and corresponding figure will be given in the Appendix.

We have also used published data from the secondary sources. Exact source will be mentioned. Moreover, from internal sources of the Central Bank of Bangladesh, we have collected data which was from SME and Special Programs Dept. of Bangladesh Bank.

Further, a model will be suggested for SMBEs.

4. Analysis of primary data

SMBEs are growing impetus in Bangladesh as Bangladesh bank is trying to emphasis on financial inclusion. Banking loan is required not only for doing business but helps to get logistic services. Bangladesh Bank has identified total numbers are 132 sectors as SMBEs as main sectors (<https://www.bb.org.bd/sme/smesector.pdf>-Baangladesh).

Below in Table: 3, we have shown size and growth rate of GDP at manufacturing sector in Bangladesh.

Table 3: Size and growth rate of GDP at manufacturing sector in Bangladesh
(In Crore Taka)

Industry	2009-10	20010-11	2011-12	2012-13	2013-14 (provisional)
Small and Cottage industry	20039.0 (8.17)	21176.0 (5.67)	22569.1 (6.58)	24557.9 (8.81)	26179.4 (6.60)
Medium and large industry	79631.4 (6.26)	88475.3 (11.11)	97998.3 (10.76)	108436.2 (10.65)	118364.0 (9.16)
Ratio of Medium and large industry in terms of Small and Cottage industry	3.97	4.18	4.34	4.42	4.52

(Source: Bangladesh Arthanaitic Samikhya ,2014, p.108)

Note: Ratio (Fourth Row) is calculated by the author

From Table :3,it is observed that while in the year 2009-10 ,contribution of Small and cottage industry is 8.17% while in the year 2013-14 (Provisionally) it is 6.60%. But small and cottage industry has relatively labour intensive and generates employment opportunities specially poorer section of the society. On the other hand for 2009-10,meium and large industry has 6.27% which is estimated to become 9.16% in the year 2013-14 (provisionally).Ratio of medium and large industry in terms of small and cottage industry in the year 2009-10 is 3.97 while it is estimated as 4.52 in the year 2013-14 (provisionally).

Bangladesh Arthanaitic Samikhya 2014 (p.109) described that, in the bank and non-bank financial institutions, up to December 2013 at total number of 6,42,674 organizations total 177,020,05 crore taka was disbursed as SME loan. On the other hand in favor of women Entrepreneur through total number of 89,874 organizations total amount of BDT 6,078.03 crore was disbursed.

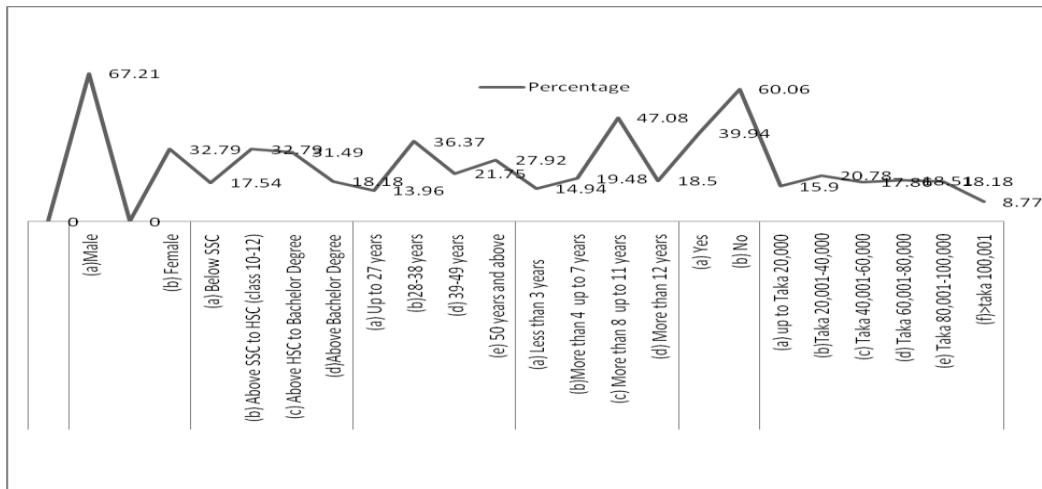
According to the Perspective Plan of Bangladesh 2010-2021(2012), the poverty profile measured by head count ratio using the cost of basic needs approach revealed that 31.5 per cent of the 2010 population lived below the poverty line. The projected higher growth of around 9.2 per cent during FY 16 and FY 21 is expected to reduce head count poverty rate at about 13.5 per cent of 2021 population. Actually to reduce poverty SMBEs should be given more emphasis so that starting from possessing low education to higher education so that job seekers can get alternative source of income becoming self-employed and creating new jobs through not only bank financing but also getting appropriate knowledge, skill and training for doing businesses at domestic and global level from the bank. Role of financial intermediaries including banks must be positive and effective implementation of the strategy should be done.

We have given summary of SMBEs loan disbursement from 2010 to 2015(Jan-March) in Table:1 in appendix. In the Table, we have shown a brief description of SMBEs loan disbursement, creation of new entrepreneurs including of women entrepreneurs and recovery rate etc. From the Table, it is observed that both banking sector and other financial institutions both are trying to encourage financing of SMBEs. It is interesting to point out that in case of providing SMBEs loan, amount of loan is being provided is higher than target amount. Highest sector of loan is disbursed in business sector which is 62.72% in 2015(Jan.-March) where as in the industrial sector it is 25.84% and in the service sector it is 11.44% during the same time period. During the period of 2010 to 2015(Jan. to March) amount of loan disbursed to new women entrepreneur is Bangladesh Taka (BDT) 1545.42 crore. Total numbers of new Entrepreneurs of SMBEs (From 2012 to 2015 Jan.-March) were 208433 out of which number of new women entrepreneurs were 10050 i.e. only 4.82% new women entrepreneurs in terms of total number of new entrepreneurs were created. Total amount of recovery for the period of 2011-2015 (Jan.-March) was BDT 216444.31. Classified loan of SMBEs sector in the year 2014 is 13.09% while in the year 2015(Jan.-March) is 12.66% but in the year 2011 it was 3.61% only. Rate of classification loan should be decreased for which proper monitoring and supervision and efficient banking system are required.

5. Empirical Results:

The study has summarized demographics of the SMBEs borrowers' from the banking sector who responded the questionnaire in the Table:2 in the appendix. However, we have shown below corresponding Figure: 1 of demographics of the SMBEs Borrowers' (Respondents) from the Banking sector:

Figure 1: Demographics of the SMBEs Borrowers' (Respondents) from the Banking sector



Source : Drawn on the basis of the Survey

From the Table: 2 in appendix, we observed that out of 308 respondents, male borrowers are 67.21 percent while female borrowers are 32.79 percent. In case of level of education highest ranking falls within the range of above SSC to HSC which is 32.79 percent. Second highest is above HSC to Bachelor degree is 31.49 %. In case of the age of the respondents, highest number of response we get for the criteria of the age in between 29 and 39 years i.e. 36.37 percent. In case of experiences more than 8 years up to 11 years, respondents are 47.08 percent. 39.94 percent thinks that social prestige rises due to SMBEs business while 60.06 per cent does not think so. In case of net income received per month we observed that in between Taka 20,001 and 24,000 respondents are 20.78 percent.

Logit Model

Our logit model result as estimated is placed below in Table:4

Table 4: Result of the Logit model

Dependent Variable: SMEL				
	C	PSLC	IRR	SMESE
Coefficient	1.29	-2.09	0.47	2.63
Std. Errors	0.78**	0.77*	0.38***	0.32*
McFadden R-squared	0.304712	LR	statistic	118.7589
Total obs		308		

*p=.001, **p = .09. ***p = .20

(Source: Estimated)

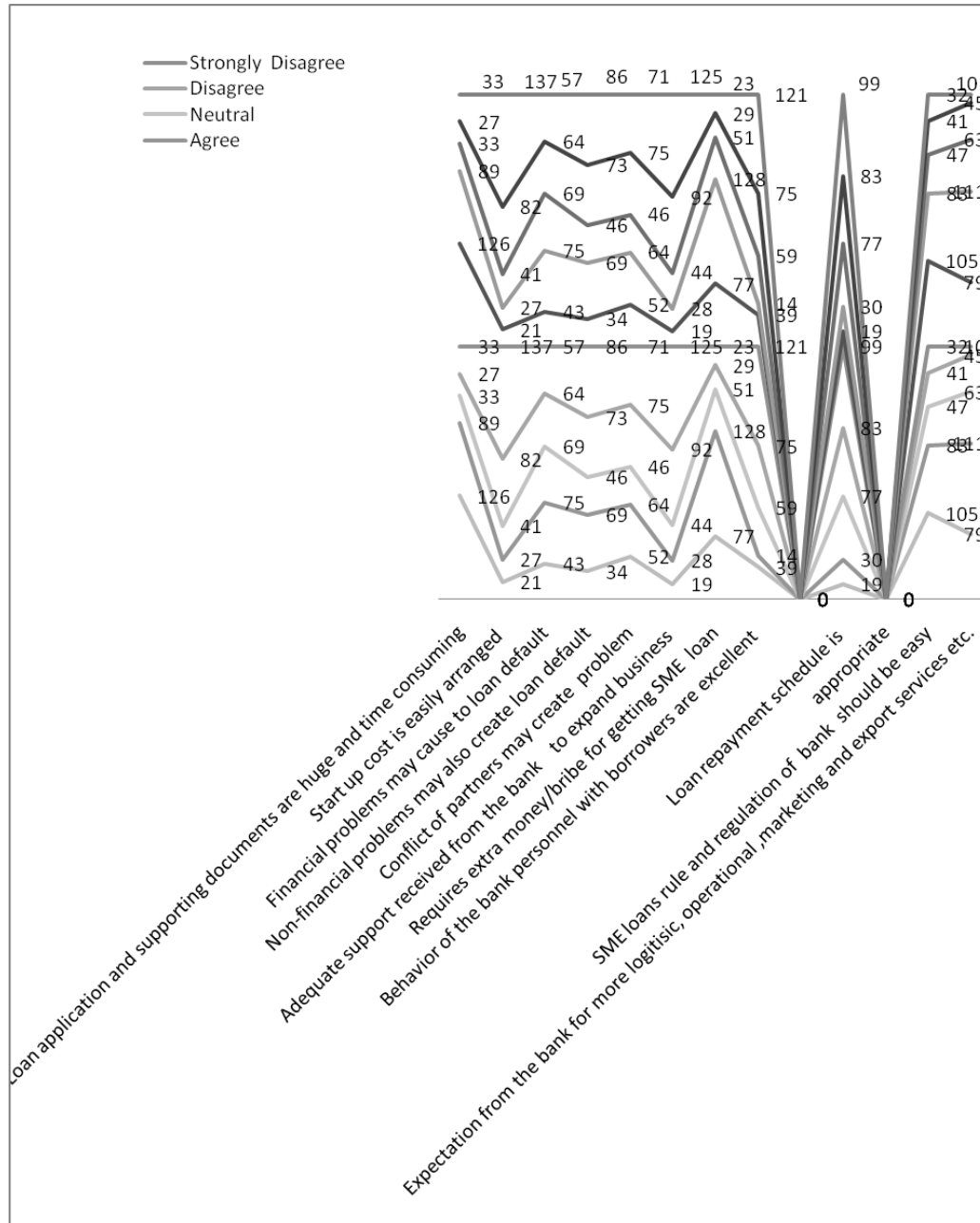
Our results at Table: 4 show that cumbersome loan procedure is notably hindering success of SMBE loans, while reasonable interest rate has insignificant impact. Further, the results show that SMBE loans are successful in self-employment creation. Probability of success in SMBE loan can be seen from the results shown above.

As such null hypothesis is accepted i.e. H_0 : SMBE Loans of the banks have positive impact on the economy. This implies that due to SMBE loans effective utilization will create employment opportunity and generate income. However, cumbersome loan procedure should be eased which is curtailing good initiatives of disbursement of loan in SMBE sector.

Now we shall present the results of the Likert scale in Table: 3 in the appendix based on eleven questions of the questionnaire. From the table, it revealed that in case of the question on loan application and supporting documents are huge and time consuming strongly agreed was 126 while strongly disagreed 33 respondents. In case of the startup cost is easily arranged was supported strongly agreed by 21 while 137 respondents strongly disagreed. Financial problems may cause to loan default 75 respondents agreed while 68 remains neutral. Non-financial problems may also create loan default disagreed by 73 respondents while 86 respondents strongly disagreed. Conflicts of partners may create problem agreed by 64 respondents while 75 person disagreed. Adequate support received from the bank to expand business strongly agreed by 19 respondents while 125 respondents strongly disagreed that they do not have any support to expand.

In case of the question, whether requires any sort of extra money or bribe for getting SMBE loan were strongly agreed by 77 respondents while 123 respondents were agreed. Behavior of the bank personnel with borrowers were excellent strongly agreed by 39 respondents while 14 only agreed but strongly disagreed by 121. Loan repayment schedule is appropriate is strongly agreed by 19 while 99 respondents strongly disagreed. SMBE loans rule and regulation of bank should be easy is strongly agreed by 105 respondents while 83 agreed. For the question expectation from the bank for more logistic, operational, marketing and export services etc. 79 respondents strongly agreed while 111 respondents agreed. This means that expectation of the borrower is not limited to the access to the loan but also other related services of their small and medium businesses. From table:2 in appendix we observed that borrowers' want more innovative, corruption bribe free services, good behavior, easy loan processing, helping attitude services from the banking sector. In Figure: 2, respondents answer of eleven questions starting from strongly agree to strongly disagree is shown.

Figure 2: Respondents answer of eleven questions starting from strongly agree to strongly disagree.



Source : Ibid

Now we shall see reliability statistics in table:5.

Table:5 Reliability Statistics

Cronbach's Alpha	N of Items
.704	11

(Source: Estimated)

In table: 5 we observed that the Cronbach's alpha coefficient for the eleven items is .704, suggesting that the items have internal consistency.

6. Analysis of the Findings:

Bangladesh economy is still growing. As such proper SMBEs financed by the banking sector may be helpful to reduce poverty, creating employment generation and fulfillment of basic needs along with GDP growth rate. More emphasis should be given on industrial loan under SMEs rather than business sector. In case of financing SMBEs projects banks should be cautious about green business and environmental friendly industry. Furthermore, products of SMBEs may be exported to abroad for which strategic alliance with international companies are required. In this case banks may have special wings so that those who want to export, they can get special advise from the how to export their products at abroad. On the other hand to mitigate the domestic need, import substitution industrialization should be set up under SMBEs. There should be vertical and horizontal coordination between import substitution industrialization and Export led growth strategy. This is vital to achieve upper middle income economy of Bangladesh.

Though Bangladesh Bank is trying hard to expedite the process of financial inclusion as well as creation of new entrepreneurs and also women entrepreneurs, banks ought to be more pragmatic. Banks must have vision, mission and goal oriented activities regarding disbursement and recovery of SMBEs loan. As such conventional banking approach should be replaced by innovative banking. International Finance Corporation's (2010) idea regarding banks to put more emphasis on SMBEs for which using competitive intelligence and rivalry reaction is required. Actually SMBEs should work as a growth of engine. Not only in the domestic sector but also in the global sector through export more income can be generated in the economy. On the other hand in the industrial sector if SMEs can be properly guided they can work as an import substitution industrialization sector. Ganbold (2008) rightly pointed out that SME finance is related to relationship-intensive banking. Banking sector as a whole should undertake holistic approach for entrepreneurs of the SMBEs to provide services starting from the domestic market to the international market. SMBEs should be well acquainted with environmental friendly projects so that green industries can get importance. Under the umbrella of banking services not only providing loan is sufficient but also advices, strategic help as per need based for service/business and industry sector, training, proper monitoring, advocacy ,marketing, channel of distribution, recovery of loan properly in time and if needed then help to do international business etc.

Corruption free society is needed for the nation but at the same time policy makers of the country should be aware that in any transitional period there might be problem especially for the poorer section of the country. SMBEs financing should be required so that to create employment opportunities as well as purchasing power may be raised. If this cannot be arranged then this may create a vicious circle of poverty and lead to remain low level income country trap. As per vision 2021, the country needs to become upper middle income country. Marginal social benefit will have to be outweighed marginal social cost. World Bank (2012) justifiably commented that financial right of entry is serious for SMBE expansion and progress, and the accessibility of outer finance is definitely linked with productivity and development.

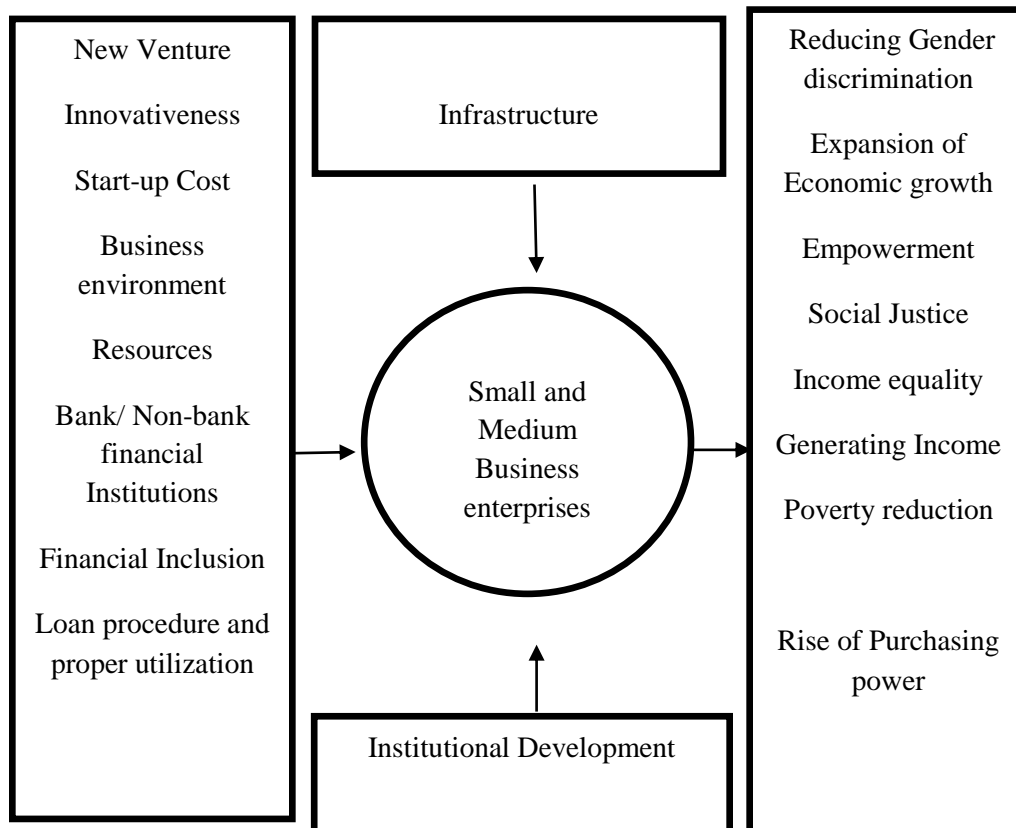
Proper initiatives from the private sector for SMEs financing is required as advocated by Khan and Hyder (2006). Actually, the country faces huge unemployment considering nature of underdevelopment so labour intensive industrial process may get more emphasis. Sardar's (1999) observation is partly accurate as the majority of the government agencies of the country is still suffering from bureaucratic mannerism which has negative cost but unfortunately private sector of the country is also mostly functioning under red –tapism , equally inefficient and corrupt. SMBEs can work more progressively if driven out of inefficiency and dishonesty like public and private sector, regulation control cost can be minimized and, supply chain management can be improved. Moazzem's (2006) observation is very important as not only taking appropriate plan is sufficient for the country but there should be a bridge between planning and implementation of the policy. Govt. has been going to undertake seventh five year plan from 1st of July 2015. Plan should be properly implemented. Remarkable development in the progress of poverty reduction has been occurred which will be below 10% when Vision 2021 will be fulfilled. In spite of the government's several mechanisms to giving more finance in SMBEs, creation of entrepreneurs especially women entrepreneurs are low. As such performance of this sector is still below in comparison to the international level for which policy makers should take more pro-active role under Seventh five year plan.

Chowdhury's (2001) comment is justified, as the country cannot develop its economy without empowerment of women at a larger scale. Women entrepreneurs are getting facilities relatively more than previous period but it will have to be extended as around 50% of the total population is women. However, from Table 1 in appendix, we observed that only 4.82% new women entrepreneurs were created in terms of total number of entrepreneurs during the period of 2012 to 2015(Jan-March). Bangladesh Federation of Women Entrepreneurs, Bangladesh Women Chamber of Commerce and Industry, Women Entrepreneur Association of Bangladesh etc. are claiming that they are encouraging to creation of women entrepreneurs. But real fact is that in practical field their activities are not very much pro- women oriented at grass root level for developing through SMBEs. Besides Govt., private sector must do strategic plan for creating women entrepreneurship at a grass root level. As such contribution towards GDP growth rate by the women entrepreneurs should be raised through public and private partnership.

7. A model for SMBEs:

A model for Small and Business enterprises has been suggested by the author in Chart:1 below:

Chart: 1 Model for SMBEs



(Source: Developed by the author)

Actually New Venture, innovativeness, Start-up Cost, Business environment, Resources, Bank/ Non-bank financial Institutions, Financial Inclusion, Loan procedure and proper utilization have positive impact on raising small and medium business enterprises. Further, infrastructure and institutional development has effective and efficient impact on SMBEs expansion. Growths of SMBEs will lead to following factors: reducing Gender discrimination, Expansion of Economic growth, Empowerment, Social Justice, Income equality, Generating Income, Poverty reduction and Purchasing power will rise.

8. Conclusion and Recommendations:

Policy makers of Bangladesh ought to arrange better institutional support, infrastructure, ease of rules and regulations of lending, corruption free banking system, corporate governance and eliminating gender biasness of SMBEs funding. SMBEs financing should be given more importance to the industry sector than the business sector. Creation of industry under environment friendly atmospheres will help to achieve the target of creating employment opportunities. Mills and McCarthy's (2014) observation for a developed economy has some effective implications for low income middle income country like Bangladesh. Loan application procedure and sanctioning procedure of loan including disbursement of loan may be digitized. A database may be created in all commercial banks for proper monitoring of the SMBE loans. Before classification if feasible proper advocacy, marketing, training and help to build capacity for doing the business may be arranged by the banks at a nominal price. Besides government sector, private sector must encourage small and medium business enterprises so that employment creation and income generation is being feasible.

Bangladesh needs to increase double digit ratio to GDP rather than 6.7% in the year 2012 from the contribution of the SMBEs. Financial inclusion policy of the Bangladesh Bank is quite good. Private sector of the country has under gone through a shift of paradigm especially through SMBEs. Development of legal frameworks and pro SMBE friendly fiscal and monetary policy, modern banking mechanism and infrastructural development are essentially needed. Moreover, public and private partnership should be developed through eradication of bureaucratic mannerism so that SMBEs of the country can be able to contribute in the economic expansion with greater enthusiasm and zeal. By the year 2021, Bangladesh intends to become upper middle income country for which expansion and growth SMBEs financing are vital.

Growth of SMBE financing especially for creating entrepreneur also depends on psychological and behavioral pattern of the society. The society itself is not able to encourage entrepreneurs of SMBEs in true sense as reported by 60.06 % of the respondents. Moreover, the nature of human being in a larger context is individualistic attitude. Both corporate governance and corporate social responsibility in this country is not still practiced in true sense. Service sector requires information about the current and prospective borrowers' needs and demands. Bank should not only provide loan but also assist through providing more logistic, operational, marketing and export services etc. to the entrepreneurs of the SMBEs. As such behavioral and psychological pattern of the society as well as banking services towards pro –borrower and helping attitude should be arranged. Behavioral pattern of the financial institutions especially banks should be changed. They should not only provide with the lending but they should also work as a facilitator i.e. involved in the process of creation of value chain which can be arranged through starting to doing business to product marketing at home and abroad. Effective cell in this regard must set up and in true sense they should systematically work to create new entrepreneurs for doing small and medium businesses especially women starting from grass root level to upper level. Both rural and urban areas should give equal importance of creating new entrepreneurs through SMBEs financing which ultimately

reduce poverty and help to attain employment opportunity, generating income and fulfillment of basic needs. As such integrated policy to achieve the target is being required.

SMBE is the sector which may be driven out disparity between urban and rural and create continuous source of employment and generating income through sustainable competitive advantage and adding value creation. SMBEs sector as a whole has immense potentialities for economic efficiency, localization of economy, cost advantages; superior capability for innovation, and better capacity should be built to the business, industry and also service area. But those who are the entrepreneur as well as bankers should be cautious so that fund cannot be misappropriated, default culture cannot rise, repayment schedule can be tightly maintained and recovery rate can be much higher than current scenario as we observed in Table:1 in the appendix. Argument made by Wennekers and Thurik (1999) to create entrepreneurship through small firms should be considered as a vital factor for economic growth, removing economic vulnerability and improving human development index.

The study was tried to cover only borrowers' perception regarding SMBEs loan disbursed by banks and sample size was only 308 borrowers' from eight districts which were randomly chosen. This method of study was done due to shortage of fund for doing research and time constraint. In future a study may be simultaneously done in the supply side considering view of the lenders including banks, non-bank financial institutions, NGOs and other lending organizations and on the other hand considering demand side such as the borrowers' perception and cognizance. The study may cover all the districts of the country. In-depth study on reason for nature of SMBEs loan with localization of economics may be included. Sample size should be large so that it may represent true population and estimator must be BLUE. Some case studies may also be given how effective and efficient utilization of SMBEs loan along with institutional support including logistic support and supply chain management helps to transform them as successful entrepreneur of the country. A special study may also be done on those entrepreneurs who utilize SMBEs loan for establishing import substitution and export growth industrialization processes. Furthermore, a comparative analysis between borrowers' of SMBE loans perception of Bangladesh and another middle income country can give better idea for the policy makers how to effectively, efficiently and competitively utilize.

To attain international benchmark of SMBEs, pro- SMBE rules and regulations, government initiatives, removal of bureaucratic mannerism, structural barriers of lending will be eliminated, training, capacity building and both physical and social infrastructural development including institutional development are required which will provide sustainable growth of SMBEs. Not only central bank's (Bangladesh Bank) wish and guideline is sufficient but also commercial banks and other financial institutions which deals with SMBEs must be efficient one as Asian Development Bank (2014) advocated for increasing bank efficiency. When integrated way financial sector will be restructured for SMBEs financing then shadow economy of Bangladesh will be decreased and contribution of formal economy will rise, employment will be created, generate income and accelerate the economic growth which must be accompanied by the fulfillment of

basic needs of the poorer section of the country so that poverty can be reduced and ultimately positive impact on economic development of the country can be attained. Post MDG, when sustainable development goal will be started SMBEs may act as a key factor to improve social welfare, ensuring social justice and removing income inequality.

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Appendix

Table 1: Summary of SMBEs loan disbursement from 2010 to 2015 (Jan.-March)
(Crore Taka)

Description	2010	2011	2012	2013	2014	2015 (Jan- March)	Total (2010- 2015)
Target to Distribute Loan (Tk.)	38,858.12	56940.13	59012.78	74186.87	89030.95	104586.49	422615.34
Total Credit Disbursement (Tk.) (Bank and Financial Institutions)	53,543.93	53719.44	69753.42	85323.25	100910.15	26140.08	389390.27
Target in terms of Distribution(%)	137.79%	94.34%	118.20%	115.01%	113.34%	24.99%	--
Distribution in the service sector	3355.68	3530.85	3630.90	4602.89	7896.77	2989.80	26006.89
Distribution in the business sector (Tk.)	35040.53	34382.64	44225.19	56703.72	62767.18	16394.61	249513.87
Distribution in the industrial sector (Tk.)	15147.72	15805.95	21897.33	24016.64	30246.20	6755.67	113869.51
Disbursements in terms of total disbursements (Tk.)							
Service	6.27%	6.57%	5.21%	5.39%	7.83%	11.44%	
Business	65.44%	64.00%	63.40%	66.46%	62.20%	62.72%	
Industry	28.29%	29.42%	31.39%	28.15%	29.97%	25.84%	
Distribution only through Commercial banks (Tk.)	51,847.14	52073.50	68262.46	83437.21	98032.95	25319.73	378972.99
Distribution only through Financial institutions (Tk.)	1696.79	1645.94	1490.96	1886.04	2877.20	820.35	10417.28
Total Number of organizations received loans	308236	319341	462513	746610	541656	210800	2589156

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Service organizations	16033	11964	14722	25758	39181	8450	116108
Business Organizations	228969	243895	290035	630109	440456	113845	1947309
Industrial Organizations	63234	63482	157756	90743	62019	88505	525739
Loan amount Distributed to women entrepreneur (Tk.)	1804.98	2048.45	2224.01	3351.17	3938.75	886.73	14254.09
Service organizations (Tk.)	171.22	198.52	230.21	313.63	489.77	122.58	1525.93
Business Organizations (Tk.)	1258.13	1160.04	1352.27	2061.66	2132.11	357.22	8321.43
Industrial Organizations (Tk.)	1258.13	689.89	641.53	975.88	1316.87	406.92	5289.22
No. of Organizations of Women Entrepreneur	13233	16697	17362	41719	42730	80370	212111
Loan amount disbursed in small organization (Tk.)	23034.89	25856.11	37828.46	44312.32	52584.55	10716.96	194333.29
Disbursement of loan amount in Rural area (Tk.)	---	14390.15	16617.16	19817.41	25412.88	2598.10	78835.70
Loan disbursed among New Entrepreneurs (tk.)	---	----	4835.52	13334.70	17690.30	4687.30	40547.82
Service Organizations (Tk.)	----	----	257.40	1022.74	1426.47	477.22	3183.83
Business Organizations (Tk.)	----	----	3685.23	9850.88	12276.48	3284.97	29097.56
Industrial Organizations (Tk.)	----	-----	892.89	2461.08	3987.35	925.11	8266.43
Loan disbursed amount among new women entrepreneurs (Tk.)	---	----	182.72	395.59	824.04	143.07	1545.42
Number of New Entrepreneurs organizations	---	----	26687	65802	84270	31674	208433
No. of Service organizations	---	---	1277	4181	5598	1718	12774
No. of Business Organizations	---	---	23009	54503	70213	27580	175305
No. of Industrial Organizations	----	---	2401	7118	8459	2376	20354
Number of New	----	---	1273	3322	3673	1782	10050

Women Entrepreneurs organizations							
Cumulative Balance of total loan and advances (Tk.)	329950.31	390728.10	451096.74	485884.57	554635.26	563100	---
Cumulative Balance of SME loan (Tk.)	69526.58	81099.20	100813.20	115884.87	136148.50	132405.63	---
Amount of Recovery (Tk.)	--	34276.20	45452.78	41935.90	69172.31	25607.12	216444.31
Rate of Recovery (%)	---	71.88	84.49	77.37	73.44	61.46	--
Classified loan in SME sector(%)	--	3.61	6.83	7.90	13.09	12.66	--

(Source: SME and Special Programs Dept., Bangladesh Bank)

Table 2: Demographics of the SMBEs borrowers' (Respondents) from the Banking sector

Description	Category	Total Number	Percentage
Gender	(a)Male	207	67.21
	(b) Female	101	32.79
Level of education	(a) Below SSC	54	17.54
	(b) Above SSC to HSC (class 10-12)	101	32.79
	(c) Above HSC to Bachelor Degree	97	31.49
	(d)Above Bachelor Degree	56	18.18
Age	(a) 18 to 28 years	43	13.96
	(b)29-39 years	112	36.37
	(d) 40-50 years	67	21.75
	(e) 51 years and above	86	27.92
Experience	(a) Less than 3 years	46	14.94
	(b)More than 4 up to 7 years	60	19.48
	(c) More than 8 up to 11 years	145	47.08
	(d) More than 12 years	57	18.50
Social prestige rises due to SME s business	(a) Yes	123	39.94
	(b) No	185	60.06
Net income received per month	(a) up to Taka 20,000	49	15.90
	(b)Taka 20,001-40,000	64	20.78
	(c) Taka 40,001-60,000	55	17.86
	(d) Taka 60,001-80,000	57	18.51
	(e) Taka 80,001-100,000	56	18.18
	(f)>taka 100,001	27	8.77

(Source: Survey)

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Table 3 : Compilation of the respondents answer starting from strongly agree to Strongly disagree

Sl. No.	Statement	Strongly agree	Agree	Neutral	Disagree	Strongly Disagree
1.	Loan application and supporting documents are huge and time consuming	126	89	33	27	33
2.	Start up cost is easily arranged	21	27	41	82	137
3.	Financial problems may cause to loan default	43	75	69	64	57
4.	Non-financial problems may also create loan default	34	69	46	73	86
5.	Conflict of partners may create problem	52	64	46	75	71
6.	Adequate support received from the bank to expand business	19	28	44	92	125
7.	Requires extra money/bribe for getting SMBE loan	77	128	51	29	23
8.	Behavior of the bank personnel with borrowers are excellent	39	14	59	75	121
9.	Loan repayment schedule is appropriate	19	30	77	83	99
10.	SMBE loans rule and regulation of bank should be easy	105	83	47	41	32
11.	Expectation from the bank for more logistics, operational ,marketing and export services etc.	79	111	63	45	10

(Source: Survey)

Prospects of Foreign Exchange Reserve - A Study on Bangladesh

Fatema Nusrat Chowdhury¹

Abstract: In recent days rapid accumulation of foreign exchange reserve leads to the rising interest in Bangladesh on the optimal utilization of its backlog. Though our foreign reserve holding is markedly higher which shows the sum of money is equivalent to seven months of import payments and sufficient to handle the country's import bills for more than seven months in case of any emergency, but different approaches for foreign reserve adequacy level suggest the immediate steps to its best use unless it will contribute to a big liability in Bangladesh. There are heaps of investment opportunities in this emerging country, but cost-benefit analysis should be restrained in mind while placing the large store. The prospects of foreign exchange reserve focus in in infrastructural development, Export Development Fund, financial sector reform, limiting exchange rate flexibility, develop a manpower exports fund, liberalize the rules concerning outward FDI, buying gold from the IMF, mobilizing additional FX funds to open FX -dollar denominated- external account. Research on the different aspects of reserve accumulation is vast but little has been done in Bangladesh. Against this background, the purpose of the study is to cater a simple analysis of Bangladesh's foreign exchange reserve, especially centering on the reserve position and prospects of it.

Keywords: Remittance, foreign exchange, current account.

JEL Classification: F24, F32, F34.

1. Introduction

Bangladesh Foreign Exchange Reserve averaged USD 4437.58 million from 1990 until 2015, reaching an all time high of USD 23050 million in March of fiscal year 2015 and a record low of USD 176.47 million in May of 1990. The figure makes Bangladesh's foreign currency reserve second only to India's and far ahead of Pakistan in South Asia. The substitute is equivalent to seven months of import payments and sufficient to handle the country's import bills for more than seven months in case of any emergency. Elevated foreign exchange reserve implies adequate supply in the marketplace. The country's foreign currency reserve increased by about 19.46% or USD 3755.1 million during the financial year 2014-2015 compared to the fiscal year 2013-14 due to rebooted remittance growth and slowed-down import expenditure.

The states which are necessitated with a huge mass of international dealings, observe a high danger of random shock to their external balances for the grounds of temporary or continuous unexpected falls of their foreign exchange profit. Foreign reserve, which is usually taken in the form of short-term, highly liquid and interest bearing securities may used to constitute payment for ordinary government purchases from the ease of the

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universe or to repay loan denominated in foreign currency. The opportunity cost to maintain and manage foreign exchange reserve, insurance premium; simply there are potentially huge payoffs in the course of upgrading macroeconomic outcomes and fiscal stability. Economic policy makers in rising market economies have naturally viewed foreign exchange reserve as money in the bank- the higher, the more adept. From 1973, a transform to flexible exchange rate regimes and a capability to borrow in home currency made easy on developed nations to accumulate reserves. In the meantime, developing nations, like Bangladesh, continued to struggle with maintaining sufficient reserve volumes. Just in recent times has a remarkable scale or foreign currency reserve accumulation in rising markets elevated questions regarding its inevitability. The majority of the experimental researches on international reserve holdings constantly end that there are variables proven to be important while determining reserve holdings. The two mainly vital variables are measure of economic openness and the unpredictability of foreign exchange rates. Nevertheless, it is also a misuse of resources foreign country so increasing the level of holdings in its foreign exchange reserve. On the contrary, if its foreign exchange reserve is also humble, that nation will have complexity intervening in foreign exchange markets and matching the balance of payments, so cutting down on its capability to dispense with the influence of international capital and financial jeopardy. Thus, research on the optimal international reserve is critical for continued growth.

Bangladesh has recently acquired foreign exchange reserves at a good rate in the South Asian region and as an emerging economy. Therefore it is important to look into whether the reserve status of Bangladesh is higher than warranted by fundamentals and the factors actually determining the international reserve demand of Bangladesh. Thus, the paper attempts to analyze the reserve accumulation in Bangladesh context.

2. Literature Review

Summers (2006) think excessive reserves to be uneconomical because of heavy infrastructure and societal demands in emerging markets. Certainly, Bangladesh has huge investment needs for infrastructure and other economic sectors. He also contend that holding dollar denominated reserves is costly as keeping reserves in US treasury gives only a small return and far under the costs of borrowing of the regime. Instead, a higher yield can be achieved by getting actual investment in the economy such as roads, bridges. Then, why should the money be kept as reserves and why should the government pay higher interests for outstanding liabilities. On the other hand, proponents of stockpiling reserves stress more on macroeconomic imbalances such as currency or financial crisis in today's macro environment than the opportunity costs of holding reserves. In the issue of balance of payment crisis, international capital market may keep out their doors and IMF bailout is also not assured. Hence, to forestall or whether such crisis Aizenman and Marion state it is necessary to make a high reserve stock (2003).

But in reality, the 'fear of floating' (Calvo and Reinhart 2002) may keep central bankers stockpiling reserves of foreign currencies. Foreign exchange reserves can also keep the domestic banking sector and the credit sector in particular, from outflows of domestic or external resources (Obstfeld, Shambaugh and Taylor 2007). Foreign exchange reserve is

expected to give important benefits, enabling states to intervene in foreign exchange markets and to regulate the value of their currency. But reserve accumulations also entail certain costs (Goldberg, et al. 2013).

Dash and Narayanan (2010) empirically investigate the post-1991 trade dynamics in India in the light of their influence on foreign exchange reserve by estimating import and export functions for the period of January 1994 to October 2008. The findings of their study revealed that there is a long-run statistically significant association among exports, world exports, and real effective exchange rates in the export function, and among imports, domestic demand and real effective exchange rates in the import mapping.

Ouyang and Rajan (2011) carried a study on Reserve accumulation and monetary sterilization in Singapore and Taiwan. The outcomes of their study showed that high-effective capital mobility has not weakened the power of the central bank in either economic system to sterilize their respective foreign exchange intervention but may cause the process increasingly difficult over time. Yongzhong and Freeman (2013) noted that an international reserve plays a substantial part in minimizing the risks of outside debt and home currency crises, and mitigating the unfavorable impacts of an unexpected fall of capital inflow or capital flight when a financial occurs.

Fukudan and Kon (2007) look into the macroeconomic impacts of foreign exchange reserve accumulation in developing nations. The findings of their study revealed that an increase in the foreign exchange reserve influence of permanent decrease in consumption, depreciation of real exchange rates, and temporal improve in the current bill. Established on the argumentation of these two groups it can be concluded that reserve accumulation to a certain point is a prudent macroeconomic decision while slowing down the rate of reserve accumulation is also advisable as it may contribute to increasing costs beyond a sure point. For effective reserve management, the monetary authority needs to recognize what factors generate demand for reserves in the economy and analyze the level of reserves to recognize whether it is really higher than the safe point. There are five central elements that explain reserve holdings such as economy size, current account vulnerability, capital account vulnerability, exchange rate volatility and opportunity cost (IMF World Economic Outlook 2003). One of the prime motives for which countries hold reserves is to smooth unpredictable fluctuations in consumption and import payments which can be named the 'precautionary motive' of holding reserves (IMF 2003). Countries want to avert the risks of devaluation of domestic currencies and keep up their sovereign risk ratings in the face of macroeconomic imbalances. At the onslaught of severe currency devaluation, the central bank can easily buy its currency with its foreign exchange reserve to maintain the value of the domestic currency at target level. If the monetary approach to the remainder of payments holds for a rural area, then it implies that excess demand for money is associated with an inflow of international reserves. This study intends to recover out whether this theory holds for Bangladesh following Badinger (2004).

Mohammad Mahboob Ali and Anisul Islam (2010) said possible eruption of political and labor unrest, possible fall in exports, remittances, and foreign investments, possible rise

in energy and food prices in global markets, emerging intense competition from other nations (such as China and India), possible rise in protectionism in rich country markets, and continued stronger (appreciated) currency values which may adversely affect exports and remittances are the key threats to Bangladesh. They recommended that the policy makers be more proactive by taking appropriate corrective policy actions ahead of time rather than reactive (waiting to take action until the adverse effects begins to occur) in dealing with the weaknesses and emerging threats. Islam (2009) proves to dissect these issues by holding away some traditional benchmark analysis for reserve adequacy over the period 1997-98 to 2008-09 but fails to apply any econometric model to find the significant factors playing role in reserve demand function of Bangladesh or its adequacy level. The IMF proposed a new metric to assess reserves adequacy in 2011. The metric was based on the careful analysis of sources of outflow during crisis. Those liquidity needs are calculated taking in consideration the relation between various components of the balance of payments and the probability of tail events using ratios. The higher the ratio of reserves to the developed metric, the lower is the risk of a crisis and the drop in consumption during a crisis. Besides that, the Fund does reserves ratios are generally adequate among emerging markets. Reserves that are above the adequacy ratio can be used in other government funds invested in more risky assets such as sovereign wealth funds or as insurance to time of crisis, such as stabilization funds.

Moreover IFM (2011) states that any economy needs to have a foreign exchange reserve equivalent to at least three months' import bill, where, our reserve is enough to meet the import bills for about seven months. The survey finds that Bangladesh's reserve holding is markedly higher than what is required and concludes that Bangladesh's reserve buildup is due to an 'investment drought' in the economy which is due to underdeveloped financial system and infrastructure problem.

3. Research Objectives

The main objective of the study is to identify the best possible use of accumulated foreign exchange reserve of Bangladesh. Moreover, it also aims to:

- To identify the state of the FX Market of Bangladesh along with reserve accumulation
- To chance on the social system of excess reserve of Bangladesh
- To provide some suggestions regarding the utilization of Foreign Exchange Reserve of Bangladesh.

4. Research Methodology

In carrying out the above objective, the researcher examined the status of Foreign exchange reserve of Bangladesh on the standard requirement of IMF such as FX reserve to GDP ratio, FX reserve to current account balance ratio, FX reserve to export ratio and regression analysis using the model of $FER = f(GDP, SIG, NFA)$. The major sources of data include the publications of the International Monetary Fund (IMF), the World Bank (WB), the Bangladesh Bank (BB), and other publicly available sources. The other articles

and publications of various authors and organizations were obtained from academic journals, newspapers, working papers, research studies, and Internet sources. The exact sources will be mentioned in the citations inside the paper as well as in the list of references. The time periods of the study cover up FY 2005-2006 TO FY 2014-2015.

The study is primarily based on secondary data. It doesn't attempt to deal with primary sources such as questionnaire for survey purposes to assess the impact of the crisis at the grass roots level. These grass roots level analysis were deliberately kept beyond the scope of this paper due to time and budget constraints and hopefully be carried out by other researchers in the field.

5. Foreign Exchange Market of Bangladesh

Foreign Exchange Market allows currencies to be exchanged to facilitate international trade and financial transactions. The reserve basket of Bangladesh, like most other countries, consists of different foreign currencies, gold, reserve position in the IMF and special drawing rights (SDR), which are under control of the central bank and readily available for any balance of payments financing. Bangladesh, like other emerging Asian countries, is also stockpiling international reserves and achieved the second position in South Asia in this decade. Evolution of the market in Bangladesh is closely linked to the exchange rate regime of the country. Bangladesh Bank, as agent of the government, was the sole purveyor of foreign currency among the users. It tried to equilibrate the demand for and supply of foreign exchange at an officially determined exchange rate. Immediately after liberation, the Bangladesh currency taka was pegged with pound sterling but was brought at par with the Indian rupee.

The Bangladesh Taka, which is the domestic currency of Bangladesh and the country's foreign exchange, had been strictly regulated until the early 1990s. Bangladesh Bank used to publish a daily foreign exchange rate sheet that had two sets of rates; one being the rates for commercial banks to transact with their customers and the other being rated for the commercial banks to transact with Bangladesh Bank.

In addition to authorized dealers, there are registered money changers to buy foreign currencies from tourists and sell them to outgoing Bangladeshi travelers as per entitlement. Their excess holdings beyond the permitted balance are required to be retained with authorized dealers. Some service institutions like hotels and shops have also obtained limited money changing licenses to accept foreign currencies the foreign tourists, but those are to be sold to authorized dealers. Transactions by customers take place mainly to satisfy customer demand for individual needs and to facilitate export, import, and remittances. The participants in the foreign exchange market comprise: Corporate, Commercial banks and Central banks.

The phenomenal growth of inter-bank transactions was due mainly to relaxation of exchange control regulations and expansion of the activities of the Bangladesh Foreign Exchange Dealers Association (BAFEDA) formed on 12 August 1993. The interbank foreign exchange market of Bangladesh is still at its rudimentary stage. The market is an oligopolistic one and is dominated by a few relatively large banks, which have remained

only as dealers instead of developing themselves into buyers or sellers. The most widely used practice is spot transaction; this covers 95% of the total transactions.

6. Foreign Exchange Reserve in Bangladesh and Invested Sectors

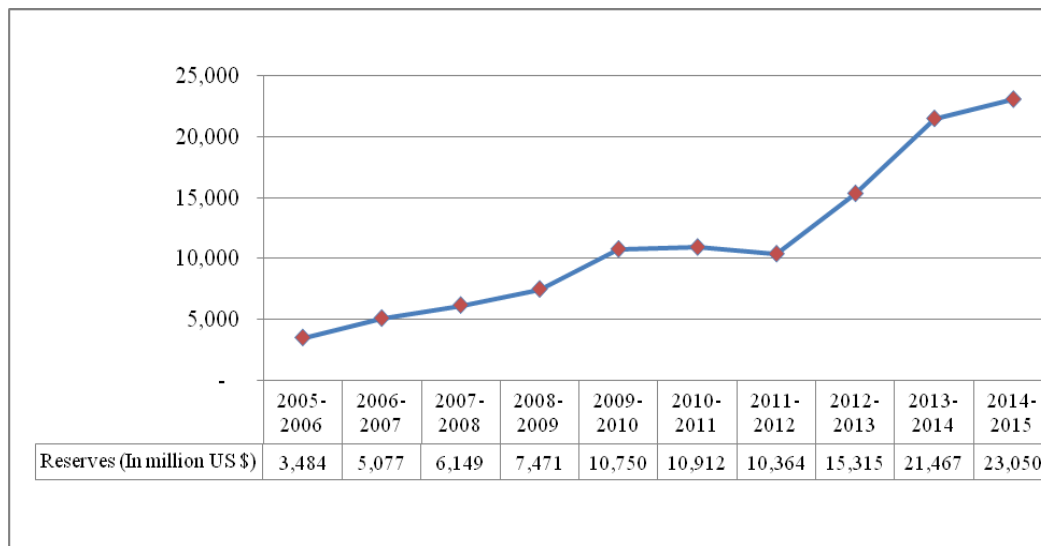
In Bangladesh, Foreign Exchange Reserve is the foreign assets held or controlled by the country central bank. The reserve is made of gold and other specific currency. They can also be special drawing rights and marketable securities denominated in foreign currencies like treasury bills, government bonds, corporate bonds and equities and foreign currency loans. Mainly our reserve constitutes: A fraction of World Investment (Bangladesh in EURO market), Nostro accounts in foreign countries and Gold purchase (Bank of England).

6.1 Foreign exchange reserve, including gold and platinum

Foreign exchange reserve has risen to a record USD 23050 million in March of fiscal year 2014-15 for the first time in Bangladesh on the back of an increase in remittances and exports and low investment. The figure makes Bangladesh's foreign currency reserve second only to India's and far ahead of Pakistan in South Asia. The reserve is equivalent to seven months of import payments and sufficient to cover the country's import bills for more than seven months in case of any emergency. The country's foreign currency reserve increased by about 20% during fiscal year 2014-2015 by rousting remittance growth and slowed-down import expenditure as compared to the previous financial year 2013-2014.

Figure 1 presents the striking point of long continues the growth of the Bangladesh foreign exchange reserve crossed a record USD 11340 million in March, 2011. However, due to soaring import bills for fuel oil to run the costly rental power plants, the reserve declined to USD 9000 million in January 2012 and hovered around USD 10000 million for the last few months of 2011-2012 fiscal years. The declining reserve also affected the value of taka against the dollar with the local currency hitting more than BDT 85 against a dollar in January-February 2013. As soon as the reserve started climbing upwards the taka started getting stronger, with the value standing at BDT 81 per USD. From the beginning of the year 2013, the foreign exchange reserve witnessed upward trend and it stood at USD 13000 million as of January 8. Bangladesh Bank continued to purchase dollars round the financial year to keep the value of the greenback strong against taka to the benefit of exporters, said a senior executive of the bank. According to Bangladesh Bank figures, total foreign currency reserve stood at USD 15300 million as of June 30, 2013; a USD 5000 million increase upon the USD 10300 million the same day of last year.

Figure 1: Bangladesh's reserve of foreign exchange (Million US\$)



Source: Bangladesh Bank

7. The Structure of Accumulated Reserve of Bangladesh

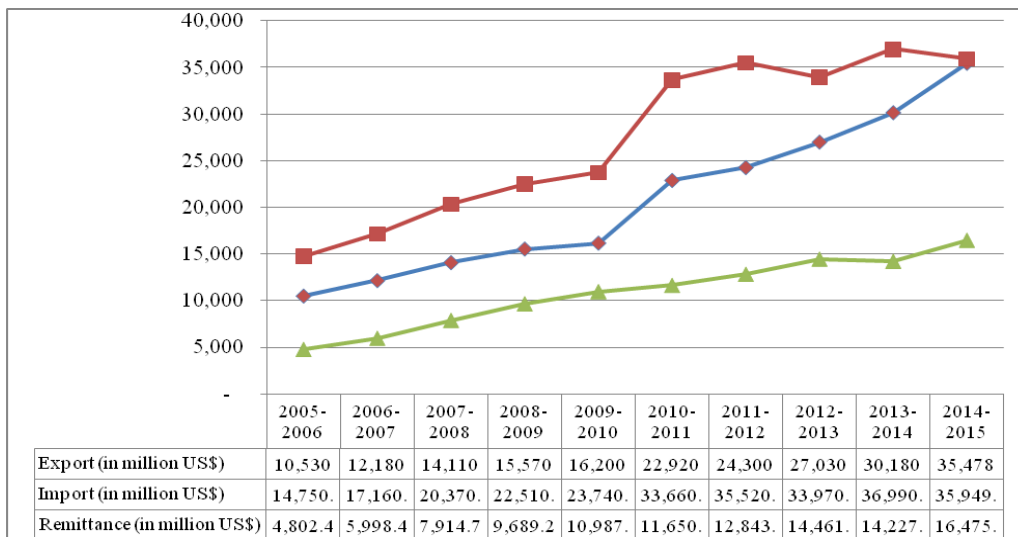
When an economy receives inward capital flows, it could potentially destabilize its domestic monetary and macro stabilities – often by increasing the monetary base, appreciating currency and raising prices. Faced with these situations, the central bank purchases foreign exchange by selling domestic currency (thus resulting in a reserve build-up) to stabilize currency value that generally offsets by open market operations (issuing bonds, treasury bills, etc.) in the domestic market. Every government wishes to keep a satisfactory reserve of foreign exchange for (a) Easy payment of import bills, (b) Repayment of foreign loans, (c) An admirable international credit rating, (d) Preparedness to face any national emergency.

The foreign exchange reserve is the accumulated balance of all receipts and payments of a country. Our major receipts are: export bills, wage earners' remittances and a few other invisible receipts.

Figure 2 states the export import and remittance of Bangladesh. Exports in Bangladesh increased to USD 2444.23 million in January of fiscal year 2014-2015 from USD 2394.94 million in December of 2014. Exports in Bangladesh reached to USD 30180 million in fiscal year 2013-14. From 1995 until 2015, Bangladesh exports stroke an all time high of USD 35478 million in 2015 and a record low of USD 1024.0 million in October of 2009. Bangladesh exports mainly readymade garments including knit wear and hosiery (75% of exports revenue). Others include: Shrimps, jute goods (including Carpet), leather goods and tea. Bangladesh main exports partners are United States (23% of total), Germany, United Kingdom, France, Japan and India. Imports in Bangladesh decreased to USD 35494 million in fiscal year 2014-15 from USD 36990 million in fiscal year 2013-14. From 1995 until 2015, Bangladesh Imports averaged USD 4303.7 million

reaching an all time high of USD 20291.4 million in June of 2009 and a record low of USD 1424.2 million in August of 2009. Bangladesh imports mostly petroleum product and oil, machinery and parts, soybean and palm oil, raw cotton, iron and steel and wheat. Bangladesh main imports partners are China (17% of total), India, Indonesia, Singapore and Japan. Remittance sent home by Bangladeshi workers overseas rose 19.7 percent to a record mark of USD 8720 million in July to January of fiscal year 2014-2015, boosting the country's GDP outlook, bolstering the current account surplus and helping to offset an over reliance on garment exports. Bangladesh, the eighth biggest recipient country in the world, relies on such inflows to drive consumer spending, which accounts for nearly 80 percent of domestic GDP. Moody's projected the remittance inflow will push GDP growth above 6 percent this fiscal year, up from 5.8 percent last fiscal year. The upsurge in July remittance marked a turnaround from the 1.6 percent drop in total inward remittances to USD 14227.94 million during the fiscal year 2013-14, which ended on June 30. However, given that this remarkable increase was the third consecutive month of double-digit gains. So it can be predicted that a new, rebuts phase of payment from migrant workers has begun. Most Bangladeshi migrant workers are in Saudi Arabia, the UAE, Kuwait, Qatar and the Middle East counties. The US and UK are also key destinations for Bangladeshi overseas, which number nearly 8 million according to the Bureau of Manpower, Employment and Training in Dhaka.

Figure 2: Bangladesh export, import and remittance (Million US\$)



Source: Foreign Exchange Policy Department, Bangladesh Bank.

8. Adequacy Level for Excess Foreign Reserve

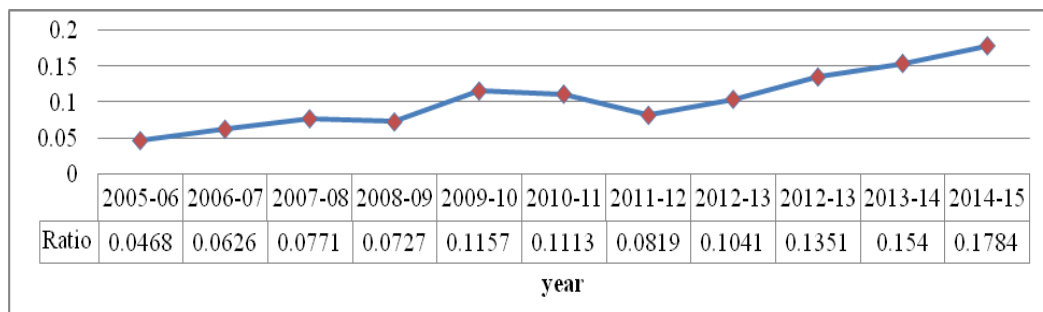
The IMF proposed a new metric to assess reserves adequacy in 2011. The metric was based on the careful analysis of sources of outflow during crisis. Those liquidity needs are calculated taking in consideration the relation between various components of the balance of payments and the probability of tail events using ratios. The higher the ratio of

reserves to the developed metric, the lower is the risk of a crisis and the drop in consumption during a crisis. Besides that, the Fund does reserves ratios are generally adequate among emerging markets. Reserves that are above the adequacy ratio can be used in other government funds invested in more risky assets such as sovereign wealth funds or as insurance to time of crisis, such as stabilization funds. Moreover IFM (2011) states that any economy needs to have a foreign exchange reserve equivalent to at least three months' import bill, where, our reserve is enough to meet the import bills for about seven months. Such a high reserve has facilitated a comfortable financial management since the mid-20s.

8.1 Bangladesh's FX Reserve to GDP ratio

Figure 3 presents the ratio of FX reserve to GDP of Bangladesh since 2005 to 2015 showing that it is moving higher and higher time to time, which shows the efficiency in our macroeconomic condition in overall stage. 2005- 2006 fiscal year was the growing point which continues up to 2008-2009. Then FY2011-2012 stacked on some point and again FY2012-13 holds its growth level. And in FY 2014-2015 ratio stands in 0.1784 which shows quite positive signal to economy.

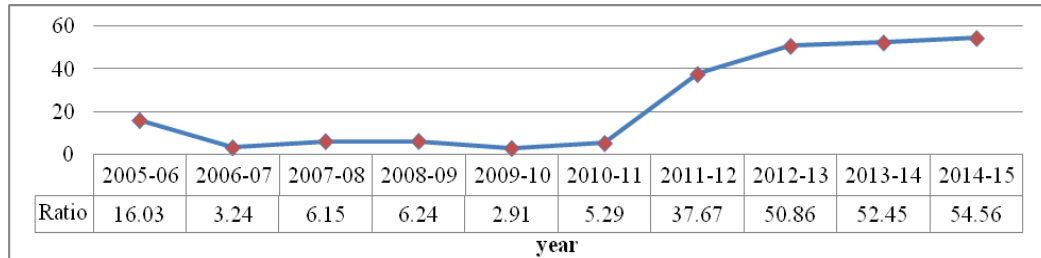
Figure 3: Bangladesh FX Reserve to GDP ratio



Source: World Bank

8.2 Bangladesh's FX Reserve to Current account balance ratio

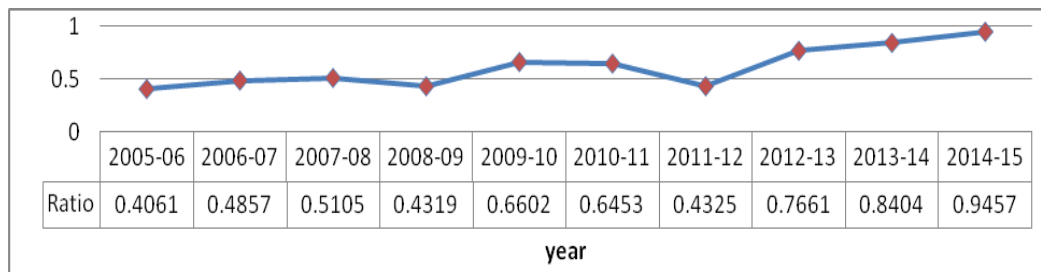
Figure4 states the ratio of FX reserve to Current account balance of Bangladesh since 2005 to 2015 showing that it is moving flat and then higher time to time, which shows the efficiency in our macroeconomic condition in overall stage. 2005-2006 fiscal year was the growing point which drops in FY2006-2007. Then FY2007-2008, FY2009-2010 and FY2010-2011 stacked around same point and again FY2011-2012 and FY2012-13 hold its growth level. And in FY 2014-2015 ratio stands in 54.56 which shows quite positive signal to economy.

Figure 8: Bangladesh Foreign exchange Reserve to Current account balance ratio

Source: World Bank

8.3 Bangladesh's FX Reserve to Export ratio

Figure 5 presents the ratio of FX reserve to Export of Bangladesh since 2005 to 2015 showing that it is moving higher and higher time to time, which shows the efficiency in our macroeconomic condition in overall stage. 2005 - 2006 fiscal year was the growing point which continues up to 2007-2008. Then FY2008-2009, FY2011-2012 stacked on some point and again FY2012-2013 hold its growth level. And in FY 2014-2015 ratio stands in 0.9457 which shows quite positive signal to economy.

Figure 5: Bangladesh Foreign exchange Reserve to Export ratio

Source: World Bank

8.4 Adequacy Level using regression

Before we do a back-of-the-envelope calculation of Bangladesh's foreign exchange reserve, we need to look at some of its key macro variables that have implications for reserve build-up. The Bangladesh economy has demonstrated significant economic growth in the past one and a half decades, owing to marked improvements in its key macro variables including steady development in its external sectors. Its exports and imports are growing steadily, aid flows are waning, and remittances are skyrocketing. As a result the country's major macro variables are relatively better than compared to that of a decade ago. Table 1 presents the GDP, Saving and Investment Gap and Net Asset of Bangladesh since FY 2005-06 to FY 2014-15

Table 1: FX Reserve, GDP, Savings and Investment Gap and Net Free Asset of Bangladesh (Tk. crore)

Fiscal years	FX reserve	GDP	Savings and Investment Gap	Net free asset
2005-06	22112	514865	44795	148,14
2006-07	30348	556865	458215	211,92
2007-08	41309	604585	48455	293,04
2008-09	45300	614943	50364	300,46
2009-10	8094	690570	57286.15	562,84
2010-11	87470	780273.2	69473.32	642,20
2011-12	71815	875782.4	88683.6	601,69
2012-13	99833	979113.6	107038.5	927,00
2013-14	141581	1090267	127111	1,272,57
2014-15	174708	1209242	148901.3	1,600,94

Source: Bangladesh Bureau of statistics, Export promotion Bureau, Finance Division

Table 2 gives the regression the model and analysis summery used for adequacy standard of Foreing exchange reserve taking the dependent variable foreign exchange reserve and independent variable of GDP, Savings and Investment Gap and Net Free Asset of Bangladesh.

Table 2: Regression Model and Analysis Summery

Regression model: FER= <i>f(GDP, SIG, NFA)</i>									
Regression Statistics									
Multiple R			0.167945403477636						
R Square			0.028205658549266						
Adjusted R Square			-0.110622104515125						
Standard Error			244029.809299868						
Observations			9						
			ANOVA						
	<i>df</i>	<i>SS</i>	<i>MS</i>		<i>F</i>	<i>Significance F</i>			
Regression	1	12098894207.847	12098894207.847		0.203170157947325	0.665804505433651			
Residual	7	416853834788.508	59550547826.9298						
Total	8	428952728996.356							
	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%	
Intercept	861239.535352175	118489.809978176	7.2686920854038	0.00016734174148708	581055.657187403	1141423.41351695	581055.657187403	1141423.41351695	
44795	0.30247182023362	0.671059123684209	-0.450744004893302	0.66580450543365	1.88925321629984	1.2843085758326	-1.88925321629984	1.2843095758326	

Source: Calculated by the Author.

Bangladesh's foreign exchange reserve position vis-à-vis the aforementioned criteria are summarized in above. It shows that the country's reserve is higher than average

macroeconomic factors. Therefore, it is the current account-related factors of reserve criteria that are largely relevant for Bangladesh, and based on reserve to import bills, the country's reserve level is marginally higher than what it requires. In summary, Bangladesh's foreign exchange reserve is substantially higher than adequate if one considers all the reserve adequacy measures. Reserve is equivalent to seven months of import payments and sufficient to cover the country's import bills for more than seven months in case of any emergency. Hence, based on these reserve adequacy measures, there is big room to conclude that Bangladesh's reserve holding is much higher than adequate or vice-versa.

9. Suggestions for Utilizing of Foreign Exchange Reserve

As discussed, Bangladesh's FX reserve exceeds its previous records. To the extent Bangladesh's relatively large foreign exchange reserve currently hold does not have immediate productive use. Importantly FX reserve is nothing but a claim on a foreign country. This claims starts from exporter or a remitter. When they earn foreign exchange, central bank takes them away and it become a claim of central bank of other country. To take the claim from people to central bank, the latter has to pay the exporters and remitters in local currency. People either consume this local currency or invest. Having said this, it has alternative choices to make with this reserve:

- Development of infrastructure funds that should include private sector – either local or foreign – stakeholders whereby the government provides funds and the private sectors offer their technical knowhow
- Bangladesh Bank should study the possibility of buying gold from the IMF, worth about \$ 4/5 billion, in a market where it is likely to appreciate further
- Export Development Fund is expected to contribute to a sustained export drive and long-term development of Bangladesh Exports by assuring a continued availability of Foreign Exchange to meet the import requirements of particularly new exporters, exporters diversifying into higher value exports and new markets
- Bangladesh's financial sector may undergo significant reform in years to come through channeling part of its FX reserve to alternative investments
- Using foreign exchange reserve as a buffer Bangladesh Bank staying in the midway of independent monetary policy and limiting exchange rate flexibility can face large and growing international capital flows
- Bangladesh can liberalize the rules concerning outward FDI, and allow some of its local companies to invest overseas as Recently Pran, Baximco Pharmaceuticals, Rahim Afroz etc has already doing business outside Bangladesh
- In a similar mechanism, some reserve can be used to develop a manpower exports fund

- Bangladesh perhaps has possibility of mobilizing additional FX funds to open FX-dollar denominated- external account, giving government guarantee and allowing, perhaps 2/3% higher interest rate compared to the outside market, all flexibilities of remittance.

Bangladesh Bank should study the possibilities in these respects. However, such initiatives should be supported by further research, as the alternative uses of reserve are a tradeoff between high risk and high return.

10. Concluding Remark and Recommendations

The country's reserve is adequate if one considers the reserve adequacy measure of IMF. The current aspect of reserve adequacy benchmark, which is most appropriate for Bangladesh, indicates it is holding excess reserve are equivalent to seven and a half months of import payments and sufficient to cover the country's import bills for more than seven months in case of any emergency. The central bank's statement on alternative uses of reserve is perhaps not a forward-looking one in the sense that it undermines an important aspect of the Bangladesh economy.

It will be able to utilize its surplus national savings due to an investment opportunity. This, in turn, shows bottlenecks in its financial sector and other institutions.

The discussion of the paper highlights the point that Bangladesh should gradually move from autarkic to a relatively open financial system using its growing reserve as buffer. Such a move could possibly address some macroeconomic disequilibrium concerning its savings and investment. The country can expedite its financial sector reform using reserve as insurance. Bangladesh's integration with the rest of the world in terms of trade is substantive but financial integration remains very shallow.

Furthermore, as evident in many emerging markets, successful sterilization needs a deep financial market. If the authorities in Bangladesh do not want to markedly disturb its reform equilibrium, the country could possibly use some of its reserve (in excess of three month import bills) in the infrastructure or similar sectors, although such an initiative should include local or foreign private sectors that have sound managerial skills and technical knowhow.

Export Development Fund (EDF) can be another best option to invest the excess reserve. For the fund it may be recalled to establish jointly by the International Development Association (IDA) and the government of Bangladesh to finance import of raw materials for non-traditional export oriented industries on sight payment basis, Direct exporters would be able to borrow for their imported inputs based on confirmed and Irrevocable L/C opened by an overseas buyer and indirect exporters would be able to borrow for imported inputs based on confirmed irrevocable inland back to back L/Cs opened by direct exporters.

What exactly should be done is beyond the scope of this paper but it recommends that such moves need further research as it is a trade-off between low yield-high liquid assets and high yield-low liquid assets. However, the country can encourage some local investment to "go global" which could ease the pressure on its domestic currency and price level.

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The Necessity of New Commercial Banks in Bangladesh: An Exploratory Study for Evaluating the Need Assessment

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Mohammad Fakhurul Islam³

Abstract: *The issue of granting licenses to new banks caused many to raise their eyebrows in last few years. Questions were being asked by authentic experts, bankers and people about the wisdom of allowing more banks, a sector that had been struggling hard to cope with the versatile problems over the years. The impact of inclusion of more new commercial banks on banking sector has been the focus of considerable scholarly effort during the last few years. Only a few studies have approached the impact of structure on bank performance directly by investigating the question: what has happened to bank performance in communities where the structure of the market has been altered? This paper examines the necessity of the entry of new private commercial banks. To achieve this objective, researchers systematically looked at the sector's current state and future premises through industry analysis. The results indicate that allowing more banks would distort the market, which is already saturated with more than 50 banks in operation.*

Keywords: *Private Commercial Banks (PCBs), Nationalized Commercial Banks (NCBs), Bangladesh Bank (BB), Economic Development, Bangladesh.*

JEL Code: G210

Introduction

After independence of Bangladesh, all banks and financial institutions were nationalized. To ensure smooth competition, to provide better quality services, to make finances available to the individual entrepreneurs as well as to businessmen, and thus to accelerate the growth of national economy as whole, government allowed the establishment of the banks in private sector from 1983. Therefore, we see many new banks in private sector in the late 1980 and 1990s. Now, many of foreign banks and private commercial banks share a remarkable portion of banking sector.

Recently, the central bank has approved nine more banks in addition to existing 47 commercial banks in Bangladesh. Three new NRB commercial banks, sponsored by non-resident Bangladeshis (NRBs), and six private commercial banks (PCBs), have been

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approved aiming to help boost the inflow of foreign exchange and strengthen the ongoing financial inclusion programs through bringing unbaked people under the banking network respectively.

The Central Bank stated, the economic context and rationale behind issuing licenses in favour of new banks. The economy has grown and the banking system has become more competitive but there are still a large number of under-banked people in Bangladesh.

Recent estimates from a survey conducted by Institute of Microfinance (IoF) found that only 45 percent of the nearly 9000 households surveyed do have access to banks and micro-finance institutions (MFIs) for loans. The population per branch of the formal financial sector in Bangladesh is lower than that India (14485 and 124 respectively) and Pakistan (20340 population per branch and 47 loan accounts per 1000), according to the statement of IoF.

Bangladesh Bank assumes that new banks will help increase the quality of banking services by increasing competition in banking sector. They will also be able to meet the unfulfilled demand for credit by the private sector which needs have grown in line with fast expanding economy. The central bank noted that, for new banks the ratio of opening rural and urban branch will be 1:1 which will help increase bank branches in rural and improve financial inclusion. But the home truth is that no bank can expand in rural areas before concentrating and making business in urban areas.

Actually, In the face of pressure from the government high-ups, Bangladesh Bank has approved new private banks against its will. When the issue came up in 2012, the Central Bank, the sole authority to approve new banks, was against the move. It said there was no need for more banks with 47 specialized, public, private and foreign banks already in operation in the country in that time.

Bangladesh Bank (BB) was eventually under political pressure and received 37 applications for new banks till November 30, 2011. BB board then unofficially decided not to approve more than three banks. With time came more pressure, forcing BB to make a big list. As per rules, BB holds the ultimate power to approve new banks. But in reality, it is now allowing banks by those enjoying blessings of the government high-ups. The central bank had faced tremendous pressure from the government high-ups to quickly approve those banks even before it could properly scrutinize the applications. Eventually, The Central Bank gave licenses to nine new private commercial banks, allowing them to commence operations.

The International Monetary Fund and leading economists in the country oppose setting up of new banks at the moment. They argue that more banks in the already saturated market will set off an ill competition and worsen the current liquidity crisis. But the government says it still sees scopes for more banks given the size of the economy and growth in the export-import business. BB under political pressure approves the new PCBs in every government period. Government has further intention to approve new more commercial banks as time progresses.

In such situation, the study seeks to evaluate why the decision will not be logical to allow more commercial banks? Does really new banks works positively to banking sector in Bangladesh? The study intends to examine foresaid questions.

Literature Review

Banking system has become an integral part for operating economic activities in every country. The economic condition of a country depends on the soundness of its banking system (Teker, et al. 2011). The economic development of a country is very much related to the development of banking sector of the country (Nazim & Yousuf, 2003).

There is a consensus regarding the positive role played by the financial sector in promoting economic development (Gerschenkron, 1962; Patrik, 1966; Galbis, 1977).

A comprehensive study on 119 developed and developing countries over the 1960-1989 period by King & Rose (1992) provides impressive evidence that economic growth is dramatically dependent on the size of financial sector, private sector banks, credit to private enterprise and interest rates.

Banking sector is actually fueling the engine of development of a country. Thus any disturbance to this banking sector will surely have a severe impact on the country's economic growth (Aspal and Malhotra, 2013).

Jahan & Nail (2003) examines the difficulties hampering efficient functioning of the banking system in promoting economic and industrial development in Bangladesh. The findings includes a) Legal environment in which banks function is relatively poor, b) Despite financial sector reform programs of the government there is a lack of credit discipline, c) Loan sanctioning is mostly dictated by political decisions, d) Loan taking entrepreneurs are not genuine is serious in utilizing the loan for the purposes for which these are granted and e) A chasm exists between banks and entrepreneurs.

Another study conducted by Kamal (2006) found many problems prevailing in banking sector as undeveloped business environment, lack of sufficient capital, liquidity crisis, loan default, inefficient field of investment and loan, problem in sufficient collection of deposits, corruption & nepotism and limitation of modern information technology etc.

Determining how well an organization is doing is simply its performance evaluation. In other words, setting some standards for performance measurement, comparing the performance of an organization in a certain period of time with respect to some established standards- internal or industry wise and determining how well it has confirmed to those standards along with the reasons for that performance is broadly called performance evaluation. A well guided performance evaluation can bring out the strengths and weaknesses of the organization and it also provides a guideline for future improvements. For being the performance evaluation system efficient, it must cover all aspects of the organization (Almazari, 2011).

As results of liberalization financial markets became progressively integrated, and plenty of transnational banks have expanded their presence considerably in many growing

market economies. In spite of the actual fact that world banks principally improve the potency, stability and competition within the banking sector, such entry might have some harmful facet effects (Veljanoska, 2011)

Banking system has significant role in the economic development, historically (Cameron, 1972). On one hand, banks give the security of savings of the general people; on the other hand, lend money to the entrepreneurs to start a new business or expand an existing business, which ultimately create velocity of money and generation of employment within an economic territory. Modern banking system is involved in numerous financial services activities starting from lending money to exchange money nowadays (Woelfel, 1993).

Guru and Bala (1999) classified the internal determinants into two sub-categories - Financial Statement variables and Non-Financial Statements variables. The Financial statement variables are related to the decisions that directly affect the items of a balance sheet and profit & loss accounts where the nonfinancial statement variables are those factors that do not have a direct impact on the financial statements.

The size of a bank is considered as an internal determinant on the assumption that management of the bank is responsible for expanding their organization by acquiring additional assets and liabilities. Boyd and Runkle (1993) showed that size of a bank is also associated with the concept of economies of scale. Athanasoglou et al. (2006) indicated that as a result of gaining market share, a bank would increase its earnings which would increase its profitability. It is usually assumed that large banks enjoy economies of scale, so they are able to produce their outputs or services more cheaply and efficiently than smaller banks. As a result, larger banks will earn higher rates of profit if entry is restricted.

Edwards (1977) showed that the banking industry is among the most heavily regulated industries in the world. Regulations on the banking system as a whole include regulation on the condition of entry, establishment of new branches, ventures, mergers and acquisitions. Direct regulations on bank management cover the lending policy, deposit policy, interest rates, and liquidity requirements.

Shamsuddoha (2008) argued that currently in Bangladesh, banking industry is mature to a greater extent than in the earlier period. Rahman (2010) argued that Bangladesh Bank has achieved a historic milestone in the trade and business arena, departing from conventional banking with the introduction of e-commerce recently; a giant stride towards digital Bangladesh.

Banks operate with old and outdated banking procedures, lack of coordination between proper manpower planning and bank schemes, lack of market research for customer psychology analysis, inefficient banking services, and lack of long term planning, to name a few, are creating bottlenecks preventing local banks from attaining international standards (Ali, 2005)

Financial institution managers, bank managers in particular, in this country do not properly assess risks as well as the costs of various types of bank sources of fund. While managing their financial assets, they were cautious about handling funds with utmost

care. Lack of ethics in banking sector is a part of wider and long lasting socio-economic and political problems in Bangladesh literature. (Ahmed et al. 2006, Ali 2003, Mian et al. 2005, and Mujeri et al. 2008). Ali (2010) argued that, although online banking has bright prospects, it involves some serious financial risks.

Bangladesh Bank cannot guide commercial banks as evidenced by the fact that commercial banks are charging higher interest rates, even cross the limit margin requirement, taking high spread between buying and selling rate of exchange and devaluation of Bangladesh Taka against US Dollar has been going on. As such inflation rate is rising and purchasing power of the people has been declining. Moreover, Investment opportunities of huge number of banks are becoming limited. Due to pressure of making profit and competition, banks are tending to invest in different risky sectors. Eventually, Commercial banks are investing in the share market to gain short term gain since 2005 making depositors deposit risky as in Bangladesh if any bank fails there is no reinsurance system from which depositors get their money back. (Edi & Etu, 2012)

From the aforesaid literature review, it is evident that the banking sector is already saturated with existing commercial banks. Studies indicated that the new entry of more banks will trigger further deteriorations of the stringent situation already prevailing in the banking sector. These problems cannot be corrected without the infrastructure of the more modernized banking sector and proper staffing, correcting prevailing problems in banking sector.

Objectives of the Study

The main objective of this study is to identify and investigate whether we really need more commercial banks in Bangladesh. As supplement to the achievement of the objective of this research paper, the following specific objectives are being pursued spontaneously:

1. To understand the current state of banking sector of Bangladesh;
2. To understand opportunities and problems of new banks;
3. To visualize Non-Government Organizations (NGOs) and other microfinance institution's services like banks and their operations in rural area all of which are considered supportive to attain the primary objective;
4. To understand the structure and problems associated with banking sector;
5. To suggest some recommendations on the basis of findings.

Methodology of the Study

The present study has been carried out to evaluate the necessity of need assessment for establishing new private commercial banks. To achieve this objective of the study, researchers mainly have used secondary sources. Apart from secondary sources, Researchers used FGD, In- depth interview and telephone interview with some experts of the banking sector as primary sources. Secondary data collected from various publications and annual reports of Bangladesh Bank, annual reports of different commercial banks and statements submitted to Bangladesh Bank, the daily newspapers,

relevant articles ,websites and other publications by different leading NGOs (i.e. BRAC, ASA, Proshika etc.) and developing agencies (i.e. IMF), Bangladesh Economic Survey, Pressure group's report (i.e. CPD). Paper has carefully covered the present situation & performance of existing banking sector to lead the analysis more meaningful and logical conclusion. However, the secondary data have been carefully scanned prior to using them in this study. Finally, data were analyzed, sorted and represented through SWOT, PESTEL analysis, and Confrontation matrix model to represent findings and arrive at a logical conclusion. However, the study is largely qualitative and explorative.

Current Situation in Banking

It is found from the annual report of Bangladesh Bank (BB) that NCBs of Bangladesh perform most of the financial activities of the banking sector. 56 Scheduled banks are operating in the country of which 4 are public (PCBs), 4 Specialized banks (SDBs), 39 private commercial banks (PCBs) of which 31 Conventional & 9 Islami shariah based PCBs and 9 are foreign commercial banks (FCBs). The lion's share (approximately 65 percent) of the aggregate bank activities (deposits and loans or advances) of Bangladesh is held by the PCBs followed by NCBs (approximately 25 percent) and FCBs (approximately 6 percent). The four NCBs have the largest coverage with extensive branch offices in the country and play an important role in the Banking system. The following Table shows the current (September, 2012) banking structure in Bangladesh.

Table-01: Banking structure in Bangladesh

Bank Types	Number of Banks	Number of Branches	% of Branches	Deposits (Crore Tk.)	% of Deposits	Advances (Crore Tk.)	% of Advances
NCBs	4	3455	43.09%	131,089.02	26.01%	83,538.79	20.97%
SCBs	4	1425	17.68%	24,238.62	4.81%	26,304.57	6.60%
PCBs	39	3175	38.45%	316,734.14	62.84%	267,054.70	67.03%
FCBs	9	63	0.79%	31,979.26	6.34%	21,541.08	5.40%
Total	56	8118	100.00%	504,041.04	100.00%	398,439.14	100.00%

Source: Bangladesh Bank Review

Historically, the NCBs were used to offer credit through direct lending programs to certain economic sectors directed by the Government and Bangladesh Bank. However, the NCBs financial performances had run into steep losses with large amount of money still unrealized and many classified loans. These losses were due to poor supervision, unionism, inadequate banking knowledge, not conducive legal environment, governmental bureaucracy and red tapism in administration, etc. A massive booking of poor quality assets still dominate the mix of classified assets and have resulted in continued heavy losses.

All such banks operating in Bangladesh with different paid-up capital and reserves having a minimum of an aggregate value of Tk. 50 lacs and conducting their affairs to the satisfaction of the Bangladesh Bank have been declared as scheduled banks in terms of section 37(2) of Bangladesh Bank Order 1972. In terms of section 13 of Bank Company

Act, 1991, the minimum aggregate value was Tk. 20 crores. From 30th March' 2003 it was Tk 100 crores. From 8th October' 2007 it was Tk. 200 crores . From 11th August' 2011, it has been raised at the minimum of Tk. 400 crores (Source: Bangladesh Bank).

Recent Banking Sector Performance

Total deposit liabilities (excluding interbank items) of the scheduled banks increased by Tk.17633.83 crores or 3.63% to Tk. 504041.04 crores during the quarter July-September,2012 as compared to increases of Tk. 27712.36 crores or 6.04% in the previous quarter (April-June,2012). Banks's advances were increased by Tk.12506.00 crores or 3.24% to Tk. 398439.14 crores during the quarter July-September, 2012 as compared to increases of Tk.19825.80 crores or 5.42% during the preceding quarter (April-June, 2012). Weighted average rates of interest on deposits and advances were 8.33% & 13.68% respectively at the end of the quarter July-September, 2012 as compared to 8.08% & 13.88% in April-June, 2012.

The following Table shows the recent (September, 2012) banking sector performance in Bangladesh.

Table-02: Performance of banks in Bangladesh (Taka in Crores)

At the end of Quarter	Total Deposits	Total Advances	Total Credits	Total investments	Borrowings from BB	Gross NPL to total loans	Rates of interest on deposits	Rates of interest on Advances
Apr.-Jun.	486407.2	385933.3	414699.0	98651.9	21664.7	7.17%	8.08%	13.88%
Jul.-Sep.	504041.0	398439.1	424913.3	99662.8	15290.8	8.75%	8.33%	13.68%
Incr. (Decr.)	3.63%	3.24%	2.46%	1.02%	(29.42%)	22.04%	3.09%	(1.44%)

Source: Bangladesh Bank Review (September, 2012)

Total credit of the Scheduled banks was increased by Tk 10214.24 crores or 2.46% to Tk. 424913.33 crores during the quarter July-September, 2012 as compared to increases of Tk. 19738.27 crores or 5.00% during the preceding quarter (April-June,2012). The Scheduled banks' investment increased by Tk. 1010.96 crores or 1.02% to Tk. 99662.87 crores at the end of the quarter July-September, 2012 as compared to increases of Tk. 5493.95 crores or 5.90% during the preceding quarter (April-June, 2012). The Scheduled Banks' borrowings from the Bangladesh Bank at the end of the quarter July-September, 2012 decreased by Tk. 6373.93 crores or 29.42% to Tk. 15290.81 crores as compared to an increase of Tk. 2572.74 crores or 13.48% during the preceding quarter (April-June, 2012).

Specifically, Risk management comprises capital adequacy, asset quality, non-performing loan, expenditure- income ratio and return on Asset (ROA), return on Equity (ROE) and non-performing loan (NPL) which indicates the lack of presence of prudential surveillance on the financial sector and profitability of bank. Here, ROA is the ratio of

net earnings of a year to average whole assets of a business in a financial year while ROE means the measurement of the rate of return on the ownership interest of the common stock owners and the term NPL refers to the loan that is in default.

High percentage of non-performing loans in the banks generally causes 'credit crunch' i.e. shrinkage in credit flow from the supply side of the bank. At the same time, comparatively poor administration, lack of transparency, weak regulations, weak monitoring cell, interest rate spread and rent seeking behaviour of the politician are also noticeable causes for increasing NPLs. NPLs reduce banks' profitability, as banks cannot take interest income from their classified loans. It also reduces loan able funds by preventing recycling.

Now we assess these indicators by recent data produced by Bangladesh Bank. Increasing of NPLs means the increasing of risk on investment. The new MPS might increase the NPLs and subsequently might be acute for the new banks.

Table 3: Gross NPLs to Total Loans Ratios by Types of Banks (in %)

Year	SCBs	DFIs	PCBs	FCBs	Total
2007	29.87	28.58	5.01	1.43	13.23
2008	25.44	25.45	4.44	1.9	10.79
2009	21.38	25.91	3.92	2.27	9.21
2010	15.66	24.15	3.15	2.99	7.27
2011	11.27	24.55	2.95	2.96	6.12
2012	23.87	26.77	4.58	3.53	10.03

Source: Bangladesh Bank, 2013.

Capital adequacy is determined by Capital to Risk Weighted Assets (CRAR) which is most important. Currently, a banking company is to maintain 10 percent of Risk Weighted Assets (RWA) or Tk. 200 crore whichever is higher as its minimum required capital.

Table 4: Capital to Risk Weighted Assets Ratio (CRAR) by Types of Banks (in %)

Types of Banks	2007	2008	2009	2010	2011	2012
SCBs	7.12	6.93	9.02	8.92	11.68	8.13
DFIs	10.36	-5.29	0.36	-7.25	-4.49	-7.78
PCBs	10.63	11.43	12.12	10.08	11.49	11.38
FCBs	22.73	23.81	28.13	15.63	20.97	20.56
Total	7.37	10.05	11.67	9.31	11.35	10.46

Source: Bangladesh Bank, 2013.

Table: 4 shows that DFIs and SCBs are unable to meet the required capital over the period except SCBs in 2011 and DFIs in 2007. Most of the time SCBs possessed negative capital adequacy due to provision of shortfall, over burden expenditure and write off. The 4 SCBs also fails to meet the capital adequacy requirement. On the other hand, FCBs

acquired 20.56 percent capital to its risk weighted assets in the year of 2012 which is the highest among all. This indicates that state owned commercial banks are in vulnerable situation compared to private and foreign commercial banks.

Return on Assets (ROA) indicates the productivity of the assets i.e. how much income is earned from per unit of assets. According to Basel-accord I, ROA should be more than 1 percent. On the other hand, return on Equity (ROE) is another important measure of earning and profitability determination which indicates net income after tax to total equity. State owned commercial banks (SCBs) have achieved nearly zero percent of ROA over the period of 2007 to 2012. The scenario is much worst in case of Development Financial Institutions (DFIs) while most of the time ROA was less than 1 percent in 2010 to 2012. In 2012, overall ROA in the banking sector was 0.60 percent where as it was 1.3 percent in 2011. If these trends continue then overall ROA in the banking sector might decrease to 0.55 percent in 2013. Insignificant profit during this period has occurred due to the worst ratio of ROA scenario in SCBs and DFIs. The position of foreign commercial banks (FCBs) was strong enough over the whole period. The DFIs' situation is not found better due to the operating loss incurred by Bangladesh Krishi Bank (BKB) and Rajshahi Krishi Unnayan Bank (RAKUB).

Higher value of ROE is an indication of high productivity of equity. Overall ROE in banking sector was 14.3 percent in 2011 which reduced by 6.5 percentage points in 2012. Projection says that if the current trend of ROE in the banking sector persists, then ROE might decrease to 6.80 in 2013. Reduction of ROE ratio in banking sector indicates that share holder profits are declining gradually. In 2010, the position of state owned commercial banks (SCBs) was the worst among the other types of banks and ROE of state owned commercial banks was -11.87 percent. The negative value means huge loss in the business of SCBs. Private commercial banks (PCBs) possessed a good progress of 10.17 percent in 2012. On the other hand, foreign commercial banks (FCBs) hold a consistent level of ROE which was 17.29 percent in 2012. DFIs were also in a worse situation in 2010, probably due to huge provision shortfall and net loss in that year. Higher value of ROE is an indication of high productivity of equity. Overall ROE in banking sector was 14.3 percent in 2011 which reduced by 6.5 percentage points in 2012. Projection says that if the current trend of ROE in the banking sector persists, then ROE might decrease to 6.80 in 2013. Reduction of ROE ratio in banking sector indicates that share holder profits are declining gradually. In 2010, the position of state owned commercial banks (SCBs) was the worst among the other types of banks and ROE of state owned commercial banks was -11.87 percent. The negative value means huge loss in the business of SCBs. Private commercial banks (PCBs) possessed a good progress of 10.17 percent in 2012. On the other hand, foreign commercial banks (FCBs) hold a consistent level of ROE which was 17.29 percent in 2012. DFIs were also in a worse situation in 2010, probably due to huge provision shortfall and net loss in that year.

Expenditures- incomes ratio (EIR) is the indicator of sound management of banking sector. This are explained below by different types of banks. The reason behind high EI ratio of DFI and SCBs are mainly because of loan loss provision, high administrative, overhead expenses, interest suspense for classified loan and the lack of presence of

prudential surveillance of the banking sector. Internal control system and high-quality management contributes to lower the EIR in PCBs; on the other hand, FCBs business is mostly based on important cities and their operating cost is low for which they have low EIR.

Table 5: Expenditure-Income Ratio (EIR) by Type of Banks

Types of Banks	2007	2008	2009	2010	2011
SCBs	100	89.6	75.6	80.7	62.7
DFIs	107.7	103.7	112.1	87.8	88.6
PCBs	88.8	88.4	72.6	67.6	71.7
FCBs	72.9	75.8	59	64.7	47.3
Total	90.4	87.9	72.6	70.8	68.6

Source: Bangladesh Bank, 2013

The gap between required provision and the provision maintained has been experiencing a negative trend over the years since 2005, except in 2009 and 2011. In 2012, required provision was Tk.24239 crore against the provision maintained Tk. 18977 crore results in shortfall was Tk. 5262 crore whereas in 2011, there was surplus in case of loan loss provisioning. A business as usual projection says that in 2013, the shortfall of required provision and the provision maintained might increase which is an alarming situation for the bank's profitability. The sector has been facing several problems in terms of low profitability as Return on Asset (ROA), return on Equity (ROE) and non-performing loan (NPL) after 2010. In 2012 and 2013, the situation continues worsening and projection reveals that in 2014 it might further deteriorate. In addition to that, Loans that are not paid on time and are nominated as troubled assets by banks are classified loans. Classified loans are usually issued according to terms and regulations of the bank. The extent of default loans increased in the third quarter due to tightening the loan classification guideline, sluggish business activities during the political uncertainty and interruption in energy supplies.

The percentage share of classified loan to total outstanding loan has been increasing in every six year. At the end of September 2013, the percentage share of classified loan to total outstanding loan was 12.79 percent, whereas it was 11.91 percent at the end of June, 2013. If the trend remains as usual, the percentage share of classified loan to total outstanding might increase to 14.21 percent at the end of December 2013. The classified loans increased by Tk.4400 crore or 8 percent to Tk.56700 crore in the July-September quarter from Tk.52300 crore of the April-June quarter of this year, according to Bangladesh Bank data. The total classified loan was Tk.51000 crore in March this year, which was Tk.29000 crore in June, 2012. The classified loans increased due to tightening the guideline. Besides, sluggish business during the political uncertainty and lack of gas and electricity pushed the classified loans up. According to the Financial Stability Report (FSR)-2012 brought out by Bangladesh Bank, it seems that the classified loans in the state-owned banks are high due to the nature of their operations (lack of efficiency in fund management, extending obligatory financing towards social and economical priority

sectors and politically motivated lending). The share of percentage of classified loan to total outstanding loan has been increasing in every six months. At the end of March 2014, the share of percentage of classified loan to total outstanding loan was 10.5 percent, whereas it was 8.9 percent at the end of December, 2013.

Recently, there is a revolutionary change in banking services for the introduction of mobile banking technology in our country. In order to ensure the access of unbanked people by taking advantage of countrywide mobile network coverage, Mobile Financial Services (MFS) have been introduced in Bangladesh. Only banks are allowed to lead the mobile financial services. This model offers an alternative to conventional branch-based banking to the customers through appointed agents being facilitated by the Mobile Network Operator (MNO)/Solution Providers instead of bank branches or through bank employees. In so doing, BB allows a customer's account, recognized as 'Mobile Account' to be attached with the bank and be accessible through the customer's mobile device. The mobile account should be a non-checking account classified separately from a standard banking account. BB has fixed the transaction limit for the account holders of MFS at a maximum of Tk. 10,000 daily and a total of Tk. 25,000 on monthly basis.

Table-6 (In appendix) shows the MFS status as of March, 2014. As of March 2014, only 20 banks started offering the services. Consequently, the number of mobile accounts reached 1.5 crore and number of agents went up to 2, 40,000. In March of 2014, a total amount of Tk. 7,849 crore was transacted disclosing a high monthly growth in this sector. There are two leaders in the Bangladesh market: BRAC/bKash and DBBL. Banks offer mobile financial services and mobile wallets. bKash is a joint venture between BRAC Bank and Money In Motion LLC, USA. bKash is a leading MFS in Bangladesh, helping BRAC expand its reach beyond its ATM network and branches, and serving smaller rural villages.

Industry Analysis

The researchers attempted to evaluate the current state of the banking industry through SWOT, PESTLE analysis and Confrontation matrix by which researchers will investigate the logic regarding the setting up more new commercial banks in Bangladesh.

SWOT Analysis

The SWOT is a format to formalize observations and gathered data in a structured way. On top you find the results of an 'internal assessment' of the sector structured in Strengths & Weaknesses. The bottom part structures the 'environmental scan' data in Opportunities & Threats.

The external analysis: is a critical analysis of the evolutions happening around the organization. After analysis of all these factors, the 'results' are summarized under Opportunities & Threats. A popular tool (environmental scan tool) for identifying these external factors is the **PESTLE Analysis**, which can be used to help for considering Political, Economic, Social, Technological, Legal, and Environ-mental issues.

Political factors largely determine the health of financial market that is neither stable nor favorable in our country. Economic factors comprise finance & credit conditions, capital

market, baking sector itself etc. We can see the financial institutions and the economy is also vulnerable. Social issues cover here the ethics in banking which not so well in Bangladesh (Ali, 2005). Technological aspects covers the network of banking coverage, sophistication in baking software, Security in financial transactions, money laundering, Unauthorized access to ATM, Malicious hacking to online banking etc. These are needed to be developed further. Legal aspects as employment is not secured enough, compliances are not strictly maintained yet, Regulatory body like Bangladesh Bank hasn't strong control over banking system, measures against fraudulent are not satisfactory. Environmental aspects are as usually ignorant side of Bangladeshi banking sector though some emerging terms are like Green banking hanging around.

The internal analysis: is looking at the different internal aspects of the sector. Here we can look at the new bank's strengths which give some hope to the new banks to operate. And, we look at weaknesses like high initial capital costs, high administrative costs, lower exposure etc.

We can now summarize the internal and external analysis of the banking sector which concerned with the decisions for new banks approval further in Bangladesh.

Positive	Negative	Internal Analysis
Strengths	Weaknesses	
<ol style="list-style-type: none"> 1. Over 50 banks in operation 2. Most of the banks are trying to achieve competitive advantages 3. Sound compare to other countries after financial recession/shocks 4. Increase the extent of banking services 5. popularity of mobile & online banking 	<ol style="list-style-type: none"> 1. High capital costs to establish new banks 2. Problems of liquidity in the sector 3. Requires high staff resources but exists in few banks 4. High staff costs due to high levels of employee qualification 5.No material client deposits of new approved banks 6. Relatively lower exposure of banks to untapped areas 7.lack of fundamental institutional skill 8. Severely lacking in sales and marketing, service operations, risk management 9.Don't have the advantages of economies of scales 10. Lack of expertise in loan recovery 	

Opportunities	Threats	External Analysis
1.Untapped rural market Banking sector 2.Several new initiatives have been introduced to increase the product range in order to generate more cross selling 3. Unregulated money lenders charge astronomical interest rates on their loans which reflect that there is scope for cheaper and more formal lending in the rural credit market. 4. Unique products & services 5. Emerging financial market	1.Threat security in financial transactions 2.Threat of the stability of the market 3. Limited investment opportunities 4. Lack of trust of customers 5. Lack of deposits of newly approved banks 6. Fraudulent activities 7. lack of funds new banks are failing to provide large industrial loans and corporate loans 8.Popularity of Non-governmental organizations (NGOs) and microfinance institutions 9. money laundering, Unauthorized access to ATM, Malicious hacking to online banking 10. Lack proper mechanism to control market 11. Political interference & pressure 12. instability of political & economic conditions 13. lack of effective legal regulations	

Source: Authors' Compilation

The SWOT creates a ‘confrontation matrix’ between ‘the inside of the organization’ and the environment the organization operates in. That confrontation helps to create a strategic direction for the sector and brings out issues the sector can act upon.

Confrontation Matrix

The confrontation matrix analysis is looking at the ‘match & mismatch’ between the strengths / weaknesses on the one hand and the Opportunities / Threats on the other. The matrix (and certainly the discussion of the matrix with stakeholders) will give a number of possible ‘routes’ for action, which you will lead to strategic choices for the sector.

	Strengths	Weaknesses	Results: S/W
Opportunities	Can we use these strengths to take the advantage of the opportunities?	Can we work on these weaknesses to prevent missing out on opportunities?	There are huge mismatch between strengths & weakness
Threats	Can we use these strengths to likelihood and the impact of threats?	Can we work on these weaknesses to prevent threats to become reality?	
Results: O/T	There are huge mismatch between opportunity & threats		The weight of Threats and weaknesses is much higher compared to strengths & opportunities which indicate that the banking sector is challenged and new bank approval will be luxurious decision.

Source: Authors' Compilation

From above confrontation matrix which is developed through SWOT analysis, we can see what is happening in that sector and what should we do. We can see the weight of Threats and weaknesses is much higher compared to strengths & opportunities.

Findings of the Analysis:

The authors, through a detailed content analysis, SWOT analysis, PESTLE analysis and Confrontation matrix have found the pieces of information that have been placed below which answers the research question, “Do we really need more commercial banks in Bangladesh?”

1. Currently Bangladesh has 65 banks which are operating on 8,118 branches (as on December 2014). The existing banks may easily increase their countrywide network much faster and are more likely to serve the unbaked areas of the country as most of the major urban or semi-urban areas have been covered by extensive networking of existing banks. (Appendix- Table: 7)
2. In Bangladesh there is strong rural financial system comprising of financial services of the postal department (with more than 10,000 branches), non-governmental organizations (NGOs) and microfinance institutions (over 20,000 branches). These institutions mainly cover the areas where traditional commercial banks have not been able to penetrate.
3. Extensive network of existing banks will always be better suited for the purpose.

4. Due to lack of such people and/or high staff costs for hiring such levels of employee qualification, they might be struggled.
5. The current Bangladesh Economic Update focuses that the present situation of banking sector has been deteriorating in terms of growth of credit and disbursement and risk management.
6. Growth in investment exerts impact on the growth in GDP. The decline in the growth in credit illustrates the poor condition of investment which might drag down the current growth in GDP. For example, the government requires investment rate to rise at 32.0 percent of GDP for achievement of 7.2 percent rate of growth in GDP in FY 2013-14. So, current banking sector is still challenging; in that context more banks installation will be luxurious decision.
7. Mobile banking (Viz: BRAC/bKash) has recently showed steady success. Consequently, new commercial banks are found to be redundant since current banks are rigorously seemed capable of serving current and potential customers efficiently.(Appendix- Table: 6)
8. Recent scams in banking industry of our country have proved loopholes which question the integrity and confidence of banking industry. It is substantively feared that more banks will aggravate the situation, bar efficiency of regulators and spawn more opportunists. (Appendix-Table: 8)
9. Through strong management team large-sized banks enjoy some economies of scale by reducing overhead cost and increased efficiency. Because of this reason, countries like Singapore deliberately adopted policies to reduce the number of banks to less than half through mergers and acquisitions. So, new banks will be heavily challenged with their existence.
10. The central bank noted that, for new banks the ratio of opening rural and urban branch will be 1:1 which help increase bank branches in rural areas and improve financial inclusion. But the home truth is that, no bank can expand in rural areas before concentrating and making business in urban areas.
11. There is evidence that in the rural areas, microfinance institutions and banks with concentration on small and medium enterprises' (SMEs') banking services are better suited compared to traditional private commercial banks. Second, no new bank will be willing to open its first five or ten branches to go for underserved rural areas.
12. The International Monetary Fund and leading economists in the country oppose setting up of new banks at the moment. They argue that more banks in the already saturated market will set off an ill competition and worsen the current liquidity crisis.
13. The World Bank (WB) is also concern about the present condition of banking sector of Bangladesh. They argued that, the financial sector has been stressed with deteriorating fundamentals of the banking sector exacerbated by rise in

default risk across the board due to losses inflicted by prolonged disruption in production and trade.

14. The state-owned banks were already negatively impacted by the earlier financial scams. The growing nonperforming loans of private commercial banks are also a matter of concern. In that situation, new entry of commercial banks cannot be welcome.
15. Lastly, the performance of recently approved new banks in the country is not so well, they are just professed. After starting out the license at 2013 all nine new banks cannot collect and lending money properly. (Appendix- Table: 9)

Conclusion & Recommendations

The current situation of banking sector is alarming with existing banks which is clear in our discussion/ analysis; if government allows more banks to operate, it will be simply injurious for this sector as well as our economy. So, Bangladesh really does not need new commercial banks and if we really have to have some, those should be economically strong and managed by technically qualified people with personal integrity. The recommendations of the study are:-

- To establish an internationally competitive, recognized and respected commercial banking system in Bangladesh, we need to have a consolidation of the banking sector with fewer but stronger banks. This should be the focal point of the government.
- One approach that the government may consider is to encourage economically weak and smaller banks with low capital base to accept new sponsors with strong financial backing and technical skills.
- Whether Bangladesh needs more banks or not, should be determined by objective criteria, instead of political preference.
- The initiative taken by Bangladesh Bank regarding conditions for granting license for new banks, backed by its Board of Directors, is appropriate under the circumstances and needs to be strictly adhered to. In particular, a number of requirements are very important for strong and sound management of the new banks which include: a minimum paid up capital of Tk 4.0 billion; sponsors' contributions to the paid-up capital coming out of net worth declared to the tax authorities and not borrowed from other banks; and sponsor directors' competence, integrity and qualifications including qualifying the required criteria applicable for Bank Directors.
- Profitability depends on the size of banks. Total asset of a bank can be considered to measure its size. Large banks can provide services to their customers in cheaper rate than small ones. Through increasing its total assets, a bank can attain more competitive advantages that can help it to earn more profit. So PCBs should concentrate to increase its assets to be more competitive.

- In order to expand the business, it is necessary to increase number of branches also. Through increasing number of bank branches, a bank can expand its services more geographically. PCBs have to find out new avenues of businesses through selecting appropriate locations of new branches to expand the volume of customers.
- Online banking has huge potential to grow although it has some functional risks. So, to cover huge unbanked areas, this service should be more developed.
- Mobile Banking has got huge popularity already. It can be more improved, secured and technically sound.
- Bangladesh Bank (BB) should consider the exact situation of the sector rather than to consider political pressure.

Limitations and Future Research Direction

The major limitations of the study are resources constraints. The study depends on having access to the data of organizations, or documents and, for whatever reason, access was to some extent limited due to the confidentiality of the information. The study is data-driven, but the lack of available and/or updated data were part of limitation to this study. Moreover, lack of prior research studies on the topic was also a limitation as prior research studies construct the basis of literature review and helps to lay a foundation for understanding the research problem.

The present study is mainly secondary data driven. It will be better if any further study is conducted by using ample primary data as primary data has more credibility and reliability though it requires more time and effort.

Further research can be conducted by focusing the way to strengthen commercial banks in Bangladesh as the sector has enough opportunity & scope to do so. Furthermore, study had time and a resource constraint, the future research is expected to take necessary time. Moreover, all the sectors are not equally developed. So, another direction of research can be conducted to assess the need of more specialized banks in Bangladesh.

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Appendix:

Table 6: Overview of Mobile banking in Bangladesh

Issues/Time-Period	March 2012	April 2013	July 2013	November 2013	January 2014	March 2014
No. of Banks Permitted	10	27	27	27	28	28
Live Deployment	5	18	18	19	19	20
No. of Agents	9093	82638	107760	172265	200000	240000
No. of Customers (Crore)	0.04	0.53	0.72	1.15	1.32	1.5
No. of Transaction Per Month (Crore)	0.12	1.51	2.12	2.32	3.01	3.33
Volume of Transaction Per Month (Crore Tk.)	17.2	3634	5350	5533	6630	7849

Source: Bangladesh Bank, 2012-2014

Table: 7: Overview of Bank and related Financial institutions

<u>Regulated Financial Institutions</u>	2009	2010	2011	2014
Scheduled Banks	48	47	47	56
State Owned Commercial Banks	4	4	4	4
State Owned Development Financial Institutions	5	4	4	4
Foreign Commercial Banks	9	9	9	9
Private Commercial Banks	30	30	30	39
Non-Scheduled Banks	3	3	4	4
Non- Bank Financial Institutions				31
<u>Branches</u>	7,095	7,729	8,522	
State Owned Commercial Banks	3,387	3,447	4,148	
State Owned Development Financial Institutions	1,365	1,382	1,388	
Foreign Commercial Banks	58	72	74	
Private Commercial Banks	2,285	2,828	2,912	
<u>Accounts</u>		55 M		
Agents		50,000+		
ATMs		3,000		

Source: Bangladesh Bank, 2014

Table 8: Loan scrap in banking sector

Default company	Amount(T k.)	Name of Branch & Bank
Hall Mark	2554 crore	Ruposhi Bangla branch of Sonali Bank
Bismillah Group	1100 crore	Four private banks(Prime Bank, Jamuna Bank, Shahjalal Islami Bank)
BASIC Bank Limited	1500 crore	By Dilkusha, Gulshan and Shantinagar Branch
Imran Group	101crore	Sholoshahar , Chittagong branch of Bangladesh Krishi Bank
Director of Shahjalal Islami Bank limited	140 crore	Shahjalal Islami bank
Ideal Cooperative society	1000 crore	Directly from 70000 clients
Destiny Group	3800 crore	Directly from clients
Paragon Group	146.60 crore	Sonali bank
T & Brothers	609.9 crore	Sonali bank

Source: The daily star, September, 2013.

Table: 9. Deposits collection by new approved banks

Bank Name	Total deposits (Taka)
Meghna Bank	669 crore & 60 lakh
Midland Bank	542 crore
Farmers Bank	707 crore
Modhumoti Bank	534 crore
NRB Global Bank	649 crore
NRB Bank (lower deposits among all of the new banks)	484 crore & 27 lakh
Union Bank (Higher deposits among all of the new banks)	2033 crore & 24 lakh
NRB commercial Bank	1321 crore
South Agriculture Commercial Bank	1113 crore

Source : The Daily Prothom Alo, October,2014.

A Study on the Dividend Policy of Private Commercial Banks in Bangladesh

Sumaiya Zaman¹

Abstract: *The paper attempts to study dividend policy and size of all 30 Dhaka Stock Exchange listed private commercial banks in Bangladesh during January 2006 - December 2013. Annual total assets of bank is employed as measurement of its size. Statistical analyses, applying tools as correlation and regression, indicate a negative correlation between size of commercial banks and their respective dividend policy in 2006 and 2007, but it turns positive from 2008 onwards. The paper, however, shows that dividend policy changes in banks cannot be adequately explained by variations in their respective size over the period of study. The size of a private commercial bank, therefore, may not be a prime indicator of its dividend policy in the capital market of Bangladesh.*

Keywords: *Private commercial banks, Dividend policy, Bank size.*

JEL Classifications: *G21 G35.*

1. Introduction

Bangladesh surfaced as an independent nation in the world map in the year 1971. After independence, the Government took over all the banks operating at that time and nationalized them through the Bangladesh Bank Nationalization Order, 1972. Over the next few years, the new born nation witnessed several changes in state principles. One such change was the replacement of “Socialism” by “Social Welfare” in 1975. The result was the denationalization of some nationalized banks and therefore, the birth of a substantial number of private commercial banks

The banking sector of Bangladesh, at present, is comprised of the central bank of the country and the commercial sector. The central bank of Bangladesh, known as the Bangladesh Bank, is the chief regulatory body of this sector. The commercial banking sector consists of fifty-six scheduled banks which operate under the supervision of the Bangladesh Bank. The scheduled banks are comprised of thirty-nine private, nine foreign, three specialized, and five state-owned banks.

Since the inception of the nation, private commercial banks have not only shown an increase in their number, but have also exhibited better performance in terms of their equity position, deposit-mobilization, loan and advances, and investment of fund both in nominal and real terms (Chowdhury & Ahmed, 2009). The growth of the banking sector is an indicator of the economic development of a country as have been shown by several studies (The World Bank, 1996). The speedy growth and substantial contribution of

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private commercial banks to the economy of Bangladesh have proved to be an incentive for further studies and understanding of the bank performances. The paper, therefore, seeks to study the performance of the private commercial banks of Bangladesh by analyzing, if an increase in the size of a bank over time indicates an increase in its dividends. Rise in dividends will increase wealth of the investors of the capital market, which in turn, will contribute to the economy of the nation.

2. Literature Review

Academic researchers have varied in results on the impact of firm size on its dividend policies. A study based on 945 firm year observations of 63 nonfinancial firms in Greece which paid dividends annually from 1993 to 2007, shows that size along with other factors increase the probability to pay dividends (Patra, Poshakwale, & Ow-Yong, 2012). Another paper finds that the dividend policy in Jordan, as a developing country, is influenced by factors similar to those relating to developed countries such as firm size. Furthermore, the factors affecting the likelihood of paying dividends are similar to those affecting the dividend policy (Al-Najjar, 2009). Firm size has a significant impact on the dividend payout of firms; shows a study done on 50 listed firms in Nigeria during the period of 2006 to 2010 (Uwuigbe, Jafaru, & Ajayi, 2012). Another paper using a sample of 1035 Taiwanese firms from 2000 to 2005 finds that firm size along with other factors to considerably influence payout decisions (Wu, Kao, & Fung, 2008). Another study in the UK, however, shows an overall declining propensity among firms to pay dividends over the 1998–2002 periods, after controlling for firm size and profitability (Ferris, Sen, & Yui, 2006). A paper examining the patterns in payout policies worldwide utilizing data from a sample of more than 17,000 companies from 33 different countries, finds evidence in support of a significant worldwide decline in the propensity to pay dividends. Most of the decline is due to the payout policies of smaller and less profitable firms with comparatively more investment opportunities. Larger firms, those with higher profitability, and firms with low growth opportunities have a greater propensity to pay dividends. The proportion of dividend payers varies substantially across industries as well. However, the proportion of firms paying dividends has declined over time, even after firms' characteristics have been controlled for (Fatemi & Bildik, 2012). Dividend-paying companies are likely to be larger and more profitable than nonpaying companies, finds a paper examining the dividend behavior of Indian corporate firms in an emerging market (India) from 1991 to 2001 (Reddy & Rath, 2005). Dividends in Japan, however, are positively related to firm size along with other factors (Aggarwal & Dow, 2012). An analysis based on a sample of 136 firms listed on the Bursa Malaysia Index over a period of six years, from 1990 to 1996, finds firm's size not to be statistically significant, but provides some explanation for the dividend policy choice (Ahmed & Shaikh, 2008). A study on the dividend policy of 48 firms listed on the Tunisian Stock Exchange during the period 1996-2002, shows size negatively impacts the dividend payment (Naceur, Goaied, & Belanes, 2006). An examination on the payout policy of U.S. firms over the period 1980-2008 reveals that the evolution of firm characteristics, including the average firm size, age, and volatility of earnings over time best explains payout policy (Krieger, Lee, & Mauck, 2012). A study investigating the factors determine the dividend payout decisions in the case of Pakistan's engineering sector by using the data of thirty-six firms

listed on Karachi Stock Exchange from the period 1996 to 2008, suggests that the previous dividend per share, earnings per share, profitability, cash flow, sales growth, and size of the firm are the most critical factors determining dividend policy in the engineering sector of Pakistan (Imran, 2011). The proportion of U.S. firms paying dividends drops sharply during the 1980s and 1990s. No matter what their characteristics, firms in general have become less likely to pay dividends (Fama & French, 2001).

Size of a firm can be measured through a number of indicators. One of the many commonly used indicators is the firm's total assets. Total assets are the combined value of all the assets possessed by a firm at a given point of time.

Two main types of dividend policies are cash dividend and stock dividend (Besley & Brigham, 2008). Private commercial banks in Bangladesh have mostly given stock dividend in the past few years. One reason behind the policy is the implementation of Basel-II framework. The accord requires banks to comply with the minimum capital requirement (MCR) of eight percent from January 1, 2010 to June 30, 2010; while a rate of nine percent from July 1, 2010 to June 30, 2011. The rate has been set at nine percent with the risk-weighted assets of the banks or Bangladesh Taka four hundred million of total capital, whichever is higher. The minimum capital requirement is ten percent of risk-weighted assets with a five percent of core capital or Bangladesh Taka four hundred million, whichever is higher, from July 2011. The accord has been adopted to be in line with the international standard. The frame-work motivates banks for distributing stock dividend rather than cash dividend.

Reviewing literature from various parts of the world shows company size has a substantial role to play to contribute to company dividend policy. The paper aims to find out if firm size is an important indicator of dividend policy in the capital market of Bangladesh. The study wants to know if higher dividend payers are bigger in size than low or non-payers in the private commercial banking sector of Bangladesh.

3. Objectives

The objectives of the study are, therefore:

- i. Estimating changes in total assets of 30 private commercial banks of Bangladesh listed in the Dhaka Stock Exchange over the period of January 2006 till December 2013.
- ii. Studying dividend policies of these banks during the period of January 2006 till December 2013.
- iii. Determining if a relationship exists between changes in total assets and dividend policies of the private commercial banks and to what extent, total asset changes can explain dividend policies.

4. Methodology

The paper aims to investigate the relationship between dividend policy and size of private commercial banks in Bangladesh that are listed in the Dhaka Stock Exchange (DSE). There are 30 private commercial banks listed in the Dhaka Stock Exchange during the

period of January 2006 to December 2013 in Bangladesh. The study is conducted on all 30 banks. The banks are: Arab Bangladesh Bank Limited, Al-Arafah Islami Bank Limited, Bank Asia Limited, BRAC Bank Limited, The City Bank Limited, Dhaka Bank Limited, Dutch Bangla Bank Limited, Eastern Bank Limited, Export Import Bank of Bangladesh Limited, First Security Islami Bank Limited, ICB Islamic Bank Limited, International Finance Investment and Commerce Bank Limited, Islami Bank Bangladesh Limited, Jamuna Bank Limited, Mercantile Bank Limited, Mutual Trust Bank Limited, National Bank Limited, National Credit and Commerce Bank Limited, One Bank Limited, The Premier Bank Limited, Prime Bank Limited, Pubali Bank Limited, Rupali Bank Limited, Shahjalal Islami Bank Limited, Social Islami Bank Limited, Southeast Bank Limited, Standard Bank Limited, Trust Bank Limited, United Commercial Bank Limited, and Uttara Bank Limited. Data for the research have been extracted from audited annual reports of private commercial banks of Bangladesh. Websites of the banks under study have been visited to acquire required information. Large amounts of data have also been gathered from the Dhaka Stock Exchange. Relevant articles and literature in this context have also been discussed.

Bank Size

The paper aims to understand the size of the banks under study by looking into their annual total assets. In order to compute the annual change in total assets, the total assets of each bank at the end of each year have been identified over the period of study. The annual change in bank size for each bank has, then, been computed by the following procedure:

$$\text{Annual change in bank size at year "t"} = \frac{(\text{Total assets at the end of year "t"} - \text{Total assets at the end of year "t-1"})}{\text{Total assets at the end of year "t-1"}}$$

Dividend Policy

Dividends declared by all 30 private commercial banks for the years 2006 to 2013 have been determined for study. Dividends for a particular year are declared, recorded, and distributed in the following year. For example: dividends for the year 2006 are declared, recorded, and distributed in 2007. Most of the banks have declared stock dividend over the period of study. There are 54 cases out of 240 observations, when banks declared cash dividend along with stock dividend. Cases where there are cash and stock dividend, the rates of each dividend are added up to come to a single value. For example: the Arab Bangladesh Bank Limited declared cash dividend of 5% and stock dividend of 7% for the year ended 2013. These two rates are added up to come to a single value of 12% for ease of analysis.

Various statistical measures like the Karl Pearson's coefficient of correlation (r), the coefficient of determination (r^2), and regression analysis, have been applied to study the relationship between size and dividend policy of the Dhaka Stock Exchange listed private commercial banks in Bangladesh.

5. Empirical Findings

Summary statistics of the dividends declared by the 30 Dhaka Stock Exchange listed private commercial banks from 2006 to 2013 are given in Table 1. Average dividend of banks ranges from 14% to 46% in eight years. Dispersion relative to the mean in dividend is seen to be the highest in 2007, as suggested by the coefficient of variation. The year 2007 further witnesses the highest dividend of 395%.

Table 1: Descriptive Statistics of Dividend Declared by 30 DSE Listed Private Commercial Banks of Bangladesh for years 2006 - 2013

<i>Measures</i>	<i>Div-06</i>	<i>Div-07</i>	<i>Div-08</i>	<i>Div-09</i>	<i>Div-10</i>	<i>Div-11</i>	<i>Div-12</i>	<i>Div-13</i>
Count	30	30	30	30	30	30	30	30
Mean	0.25	0.46	0.26	0.29	0.31	0.24	0.14	0.15
Median	0.245	0.25	0.245	0.3	0.3	0.24	0.13	0.13
Mode	0.25	0.25	0.3	0.3	0.3	0.2	0.1	0.1
Sample variance	0.06	0.59	0.03	0.02	0.03	0.01	0.01	0.01
Sample standard deviation	0.24	0.77	0.18	0.13	0.17	0.11	0.07	0.07
Minimum	0	0	0	0	0	0	0	0
Maximum	1.2	3.95	1	0.55	0.95	0.65	0.4	0.4
Range	1.2	3.95	1	0.55	0.95	0.65	0.4	0.4
Skewness	2.24	3.73	2.29	-0.42	1.82	1.13	1.46	1.33
Kurtosis	7.22	15.46	9.06	0.4	6.59	4.51	4.37	4.4
Coefficient of variation	0.96	1.68	0.7	0.45	0.54	0.46	0.03	0.03

(Source: Estimated)

The paper aims to find out the degree of association or the strength of the relationship between size and dividend policy of DSE listed private commercial banks in Bangladesh. Table 2 and Table 3 report the results of correlation and linear regression analysis, respectively, between size and dividend of Dhaka Stock Exchange listed private commercial banks of Bangladesh during the period of January 2006 to December 2013.

Table 2: Correlation Matrix between Size and Dividend of 30 DSE Listed Private Commercial Banks of Bangladesh over the Period of 2006-2013

	Size-06	Size-07	Size-08	Size-09	Size-10	Size-11	Size-12	Size-13
Dividend-06	-0.05							
Dividend-07		-0.198						
Dividend-08			0.018					
Dividend-09				0.074				
Dividend-10					0.214			
Dividend-11						0.045		
Dividend-12							0.385	
Dividend-13								0.128

(Source: Estimated)

It is seen that a negative correlation exists between size and dividend in 2006 and 2007. The correlation, however, becomes positive from 2008 onwards. The association between the variables is seen to be weak throughout the period of study. The association is the

strongest in 2012 during the study period but again loses strength in 2013. The results suggest that the relationship between the concerned variables becomes positive from negative with time but is not statistically significant.

Table 3: Regression Analysis between Size and Dividend of 30 DSE Listed Private Commercial Banks of Bangladesh over the Period of 2006-2013

Year	Estimated Regression Equation	R-Sq	F	P-Value
2006	Dividend-06 = + (0.27) - (0.07) Size-06	0.25%	0.07	0.79
2007	Dividend-07 = + (0.75) - (1.21) Size-07	3.94%	1.15	0.29
2008	Dividend-08 = + (0.25) + (0.03) Size-08	0.03%	0.01	0.92
2009	Dividend-09 = +(0.27) + (0.07) Size-09	0.54%	0.15	0.7
2010	Dividend-10 = + (0.24) + (0.25) Size-10	4.56%	1.34	0.26
2011	Dividend-11 = + (0.24) + (0.04) Size-11	0.2%	0.06	0.81
2012	Dividend-12 = + (0.14) + (0.27) Size-12	15%	4.86	0.04
2013	Dividend-13 = + (0.08) + (0.1) Size-13	1.6%	0.46	0.5

(Source: Estimated)

From the estimated regression equations given in Table 3, it is be seen that the estimated regression coefficients are statistically insignificant (close to 0) at 5% level of significance, throughout the period of study. An analysis of R-sq reveals that a small amount of variation in dividends can be explained, or accounted for, by the variation in the bank size during the period of 2006 to 2013. The insignificant values of F from 2006 to 2013 give cues that regression equation might not help to understand the relationship between bank size and dividend. The high p-values (92% in 2008 and 81% in 2011) provide cues that there might be a big chance that any association observed between bank size and dividend could be the result of chance.

From the findings, it is observed that company size is insignificant in explaining the dividends of the banking stocks. Thus, larger banks might not be an indication of future higher dividends in the capital market of Bangladesh.

6. Conclusion and Recommendations

The paper has determined annual change in size of all 30 private commercial banks listed on the Dhaka Stock Exchange from 2006 to 2013. It further examines the strength of association between dividend and size of the private commercial banks. Results show a negative and statistically insignificant relationship between dividend and size in the first two years of study. Though the relationship becomes positive with time, it still remains weak. This proves that size of a bank might not be a major indicator of dividend in the capital market of Bangladesh. The paper, thus, recommends that investors should not look into the size of a private commercial bank in Bangladesh to get an idea of its dividend policy. They should look for other dividend policy indicators to make investment decisions.

The study has been conducted on eight years' data. Extending the study to cover a longer time period might give different results. Also simple regression analyses have been done on individual years on cross-sectional data taking bank size as the only independent variable. Multivariate regression run on panel data could have given a clearer picture.

This opens up scope for further studies to identify, analyze, and control indicators that can give significant signal about dividend in the private commercial banking sector of Bangladesh. The result will help to build banks that are better market performers and are, therefore, better contributors to the growing economy of Bangladesh.

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Analyzing the Factors Influencing Employee Turnover in Private Commercial Banks in Bangladesh

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Abstract: *Employee turnover turn into central issue to focus for organization's workforce development and strategy. Almost all private banks of Bangladesh have superior formation with excellent benefits but employee turnover occurs regularly. There are some factors that influence employee to leave the organization. The purpose of this research is to analyze the factors that influence employee turnover in private banking sector in Bangladesh. Time period of this study is from 01 March, 2015 to 31 May, 2015. A total of 16 variables responsible for influencing employee turnover are selected from related literature. Factor analysis has been conducted to reduce the number of total variables. Bartlett's test of Sphericity has been used along with the Kaiser-Meyer-Olkin (KMO) statistic. SPSS 16.0 has been used to analyze the data collected from primary sources through random sampling technique. This analysis reveals that tangible and intangible Compensation, physical stress out of organizational support, inconsistency of supervision and business status, underprovided hygiene factor, lack of proper training and development and transfer of jobs are the most important factors that may influence employee turnover. From this study the private Commercial banks of Bangladesh can get a clear view about the factors that may influence employee turnover of their respective organization in order to reduce turnover.*

Keywords: *Employee Turnover, Causes of Employee Turnover, Private Commercial Banks, Factor Analysis.*

1. Introduction:

Employee turnover takes place due to resignations, transfers, retirements, dismissals, or the completion of fixed term contracts. It can be defined as employee movement surrounded by the organization.

Determining the impact of employee turnover is essential in every organization. It is found from the research study that intense employee turnover frequently stimulates influential consequences which may endanger the efforts to attain organizational objectives (Abbasi and Hollman, 2000).

Since organization spends much on their employees in terms of orientation and training, developing, preserving them, so managers have to control the cost of employee turnover. Although, there is no common framework for understanding the procedure of employee turnover in a holistic manner but now a wide range of features have initiated (Kevin et al. (2004).

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Since a key barrier to high quality service may be caused by excessive employee turnover hence it is necessary to identify the reasons of employee turnover and what the employer can do to retain the best (Branham, 2005).

Employee turnover ratio can be illustrated by the number of organizational members who have left during the period being considered divided by the average number of people in that organization during the period. The key stone and primary reasons of turnover take place out of the frustration related to budget cutting, hiring freeze, layoffs, and lack of development funds and opportunities, are more likely to be sown at such times (Price, 1977).

It is discovered by some researches that at time of economic recession majority of the employee have the tendency to stay in the organization. Conversely, once the economy recovers employees will begin to leave their organization which is found by the analysis of the correlation between voluntary turnover (quits) versus unemployment and voluntary turnover versus consumer confidence (Chafetz, Erickson and Ensell (2011).

In the organizational turnover literature, a focus on determining the causes of employee intention to stay or leave have been appeared one of the recent research approaches. This paper focuses on the factors that persuade employee turnover in private banking sector in Bangladesh. Moreover, the purpose of this paper is to present the reader an extensive idea about the different factors that cause employee turnover in selective private banks in Bangladesh.

The study is considered with five sections. Following from the introductory chapter in One, section Two will review existing literature. Section Three will delineate the research methodology and statistical model which will be tasted. Section Four will present the findings of the study and section Five concludes the study.

2. Research Question:

What factors may influence employee turnover in private Commercial banks of Bangladesh?

3. Objectives of the study:

The main objective of this study is to analyze the factors that influence employee turnover in private Commercial banks of Bangladesh and the specific objectives are:

- To identify the wide-ranging causes that may influence employee's decision to leave the organization.
- To examine the most important factors among redundant factors by using factor analysis that influence employee turnover in the private Commercial banks of Bangladesh.
- To recommend some feasible strategies for organizations on the basis of current scenario.

4. Research Methodology

The present study has been conducted to analyze the factors that influence employee turnover in private Commercial banks of Bangladesh. This research is a quantitative research and is arranged by survey strategy. To conduct the study both primary and secondary data have been used. To collect primary data a structured questionnaire has designed on the basis of the objectives of the study. The copies of the questionnaire have given to the respondents physically. The secondary data was collected using publications, research studies, books, websites and articles on employee turnover and their causes, intentions and retention strategies of private and public banking industries, hospitals, financial institutions and other sectors.

The target populations of this study cover employees from private commercial banks of Bangladesh and time period covered in this study from 01 March, 2015 to 31 May, 2015. A sample of 117 (n=117) employees are selected purposively from 14 private commercial banks (Among 39 registered private commercial banks) of different areas of Dhaka cities in Bangladesh. The sample size is 117 considering 99% incidence rate and 95% completion rate. The sampling technique used in this research was simple random sampling for the selection of different private commercial banks. A structured questionnaire has been used to collect the opinion regarding the factors that influence them to leave particular organizations. The questionnaire constituted of 7-points likert scale (where 1 indicated strong disagreement and 7 indicated strong agreement) along with some multiple choice questions (MCQs) and dichotomous questions. The collected data have been analyzed using SPSS 16.0 and MS Excel 2007 for factor analysis and some frequency distributions. In this study, 16 variables have been taken into consideration. The variables are derived from reviewing the literature on related subject matter. And for the factor analysis to be appropriate, the variables must have to be correlated. These variables are as follows: V1- Pay packages are not attractive, V2- Due to work life imbalance, V3- Travelling distance to work, V4- Having huge pressure on work, V5- Relocation of jobs, V6- Lack of career advancement, V7- Partiality and favoritism by authority, V8- Lack of proper training and development, V9- Due to conflict with supervisor or coworker, V10- Because of long working hour, V11- Having unrealistic target, V12- Lack of job security, V13- Due to goodwill and reputation of other company, V14- Delay of promotion, V15- Lack of motivation or appreciation, V16- Uncomfortable working condition.

5. Literature Review:

Employee turnover has turn into a significant part of research from both a theoretical and practical perspective. From the theoretical perspective it is important to recognize how the fundamental causes of turnover can be controlled. Alternatively, from practical viewpoint, how much it is important to minimize the turnover of skilled employees to reduce employee replacement costs (Keaveney, 1992).

In the research study it is found that employees begin to evaluate both the job and environments related to job so their decision to continue or quit is highly dependent on the roles played by the respective organization. Eventually, some factors like the pay

package, company policies, rules and regulations, the Herzberg hygiene factors, work monotony and burnouts may influence them to reach in final decision to remain with the present job or move on with the latest one (Mobley, 1977).

Besides these factors, there are some other factors called personal and trait-based factors can manipulate turnover rates. Personal factors comprise things such as changes in family situation, a desire to learn a new skill or trade, or an unsolicited job offer. Excluding these personal factors, there are also trait-based or personality features that are allied with turnover (Mobley, 1977).

From the study of causes of employee turnover, it is confirmed that, turnover has a relationship with the particular situation like demographic and biographical characteristics of workers. This same study played an important role of clearing up the function of labor market and the process of matching workers to firms and on the environment of the employment relationship (Mitra et al. 1992).

Employee turnover model have vital implications in favor of wage determination, work organization, career prospects and the accumulation of firm-specific human capital (ILO, 2001).

Now day's organizations in general identify the important involvement that their employees take part in delivering services. Though, companies try to make all effort as well to downgrade internal costs as part of price commitment. Labor turnover is perceived as key area of cost, which should be considered and benchmarked. Labor turnover is considered as a major factor while measuring organizational performance (White, 1995). Therefore, Low turnover is considered as an asset in the competitive confrontation. High labor turnover is perceived as a problem to be controlled (Bannister and Griffeth, 1986; Glebbeek and Bax, 2004).

A few jobs are inherently more attractive than others. The attractiveness of a job will be affected by including its repetitiveness, challenge, danger, perceived importance, and capacity to bring out a sense of accomplishment. Another factor called job's status is also important as many other factors (Taylor, 2002).

From the researchers argument "pay" appear to be the most critical outcome of organizational membership for employees. To compensate employees with the highest possible wages is the primary and noticeable solution to the need for pay (Gupta and Shaw, 2001).

The most important causes of resistance involving employers and employees are actual and perceived lack of equality in the allocation of wages. To determine the wages, two intense approaches are available. One approach is to maintain the transparency where every employee is able to know what everyone else earns conversely employers should maintain the secret what they pay each employee as well as they should make a condition of the service that staffs should not talked about their salaries. Internally, it is difficult to have a fair system of rewarding wages and salaries to employees and also is matter of expenditure (Kusluvan, 2003).

Afterward, to deal with the specific management problems or goals pay systems plays a vital role. Therefore, it is essential to identify the comparative significance of each job and eliminate every possible causes of dissatisfaction. On the other hand to distribute wages and salaries fairly it is important to develop a logical system of evaluating jobs (Kusluvan, 2003).

When an employee takes delivery of two or more sets of expectations or demands that are ill-assorted and cannot be concurrently satisfied then it is evident that role conflict circumstances is experienced (Churchill, Ford, & Walker 1985).

Another major factor has significantly affected employees' intentions to leave an organization is short of meaningful work and opportunities for promotion. By enhancing job opportunities and job enrichment organization can control employee turnover (Miller and Wheeler, 1992).

There is a higher tendency among those employees to leave their jobs who perceived that the job preview that they received during the interview process were not realistic (Pitt and Ramaseshan, 1995).

From the research studies are focused on HR practices, it is clearly understandable that organization can reduce employee turnover by giving employees a choice of work schedule and shorter work hours, even though in the time of high workload (Bame, 1993).

For managerial trainees in a large merchandising firm found that organizational commitment reduced earlier to the individual's actually leaving the organization. In addition the level of job dissatisfaction diminishes as employers endeavored to contain all logical requests for improving the work situation (Porter, Crampton and Smith, 1976).

Research Gap:

Apart from the above factors mentioned in the literature regarding the factors that may influence employee turnover, the researcher identifies some factors in the context of Bangladesh with time duration of 2015, such as lack of training and development, travelling distance to work, relocation or transfer of job, partiality and favoritism, lack of motivation, lack of working condition and job security etc. By accumulation these factors the researcher may be able to get accurate result in this study.

Extended Results:

Bartlett's test of sphericity has been used to test the null hypotheses that the variables in the study are not correlated. In other words, the null hypothesis states that the population correlation matrix is an identity matrix. In an identity matrix, all the diagonal terms are 1 and all off-diagonal terms are 0. The test statistic for sphericity is based on a chi-square transformation of the determinant of the correlation matrix. A large value of the test statistic will favor the rejection of the null hypotheses. If this hypothesis cannot be rejected, the appropriateness of the factors will be questioned. Another useful statistic is the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy. This index compares the

magnitudes of the observed correlation coefficients to the magnitudes of the partial correlation coefficients. Small values (below 0.5) of the KMO statistic indicate that the correlations between pairs of variables cannot be explained by other variables and factor analysis may not be appropriate.

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.522
Bartlett's Test of Sphericity	Approx. Chi-Square	274.829
	df	120
	Sig.	.000

Consequently, from the above table, it is apparent that factor analysis is appropriate. Here, the KMO value is **.522**, which is between 0.5 and 1.0, and the approximate chi-square statistic is **274.829** with **120** degrees of freedom, which is significant at the **0.05** levels. Therefore, the null hypotheses can be rejected and the alternative hypotheses that all variables are correlated to each other can be accepted. To analyze the variables ranging from V1 to V16, factor analysis has been used for data reduction. This analysis divulges the most important factors that influence employee turnover in private commercial banks of Bangladesh.

Table 1: Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.307	14.419	14.419	2.307	14.419	14.419
2	1.825	11.403	25.823	1.825	11.403	25.823
3	1.590	9.937	35.760	1.590	9.937	35.760
4	1.510	9.438	45.198	1.510	9.438	45.198
5	1.238	7.738	52.935	1.238	7.738	52.935
6	1.111	6.942	59.877	1.111	6.942	59.877
7	1.091	6.816	66.693	1.091	6.816	66.693
8	.889	5.556	72.249			
9	.858	5.365	77.614			
10	.787	4.918	82.532			
11	.612	3.827	86.359			
12	.532	3.326	89.685			
13	.511	3.197	92.882			
14	.448	2.798	95.680			
15	.385	2.408	98.088			
16	.306	1.912	100.000			

Extraction Method: Principal Component Analysis.

From the above table, only 7 factors have been extracted, as cumulative percentage is greater than 70% at this point and eigenvalue is greater than 1.0 (it is recommended that factors with eigenvalues greater than 1.0 should be retained) that indicates the adequacy of the analysis using derived factors.

Table 2: Rotated Component Matrix^a

	Component						
	1	2	3	4	5	6	7
Pay packages are not attractive.	.274	.000	-.271	.625	-.251	-.091	.123
Due to work life imbalance	-.400	.142	-.373	-.227	.242	.252	.232
Travelling distance to work.	-.015	.693	.040	.331	-.141	.000	.380
Having huge pressure on work.	-.088	.706	.114	-.017	.211	-.206	-.189
Relocation of jobs	-.284	-.019	-.058	.000	.052	-.109	.763
Lack of career advancement	.593	.006	.041	-.095	.052	.065	.546
Because of partiality and favoritism by authority	.554	.135	.134	.159	.506	.003	-.079
Lack of proper training and development	.029	-.133	.101	.040	.068	.868	-.077
Due to conflict with supervisor or coworker	-.016	-.055	.766	.022	.264	-.103	-.077
Because of long working hour	-.619	.383	.147	.241	.126	.305	.144
Having unrealistic target	.015	.051	.001	-.071	.789	.063	.064
Lack of job security	-.136	-.606	.155	.510	-.047	-.045	.013
Due to goodwill and reputation of other company	.034	.114	.815	-.141	-.155	.258	.065
Delay of promotion	.115	-.434	.248	-.045	.405	-.396	.062
Lack of motivation or appreciation	.731	.013	.003	-.030	.064	.074	-.153
Uncomfortable working condition	-.172	.087	.017	.759	.097	.116	-.103
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.							

The extracted 7 factors can be interpreted in terms of the variables that load high coefficients. These 7 factors are given below with their components which are found from the rotated component matrix table:

Factor 1 can be entitled to Inadequate Motivation Factors beyond Personal Trouble because this factor contains of high coefficients for Lack of career development (.593), Partiality and favoritism (.554), and Lack motivation (.731) whereas negative coefficient for Work life imbalance (-.400); Long working hour (-.619).

Factor 2 can be labeled as Physical Stress out of Organizational Support due to holding high coefficients for Travelling distance to work (.693), Huge pressure of work (.706) while negative coefficient for Lack of job security (-.606), and Delay of promotion (-.434).

Factor 3 can be tagged as Inconsistency of Supervision and Business Status because this factor holds high coefficients for with supervisors or coworkers (.766), Goodwill and reputation of other company (.815).

Factor 4 can be named as Underprovided Hygiene Factor due to holding high coefficients for Unattractive pay packages (.625), and uncomfortable working condition (.759).

Factor 5 can be entitled as Unrealistic Target because this factor holds high coefficients for Unrealistic target (.789).

Factor 6 can be tagged as Lack of Proper Training and Development due to holding high coefficients for Lack of proper training and development (.868).

Factor 7 can be labeled as Transfer of Jobs because this factor contains high coefficients for Relocation or transfer of job (.763).

6. Analysis of the Findings:

From the analyses conducted in the previous segment, it is apparent that there are some specific factors that influence employee turnover in private banking sector in Bangladesh. Following is further discussion on the extracted factors:

Inadequate Motivation Factors beyond Personal Trouble:

It has been found from the analysis that employees prefer to leave the organization for the reasons which gets high coefficients such as they did not get proper motivation or appreciation regarding their work. Another reason associated to employee turnover is the unsatisfactory career development in the current organization. Then again partiality or favoritism by the authority or supervisors plays the important reason to employee turnover. However, it is also visible from the study that the factors which get negative coefficients like work life imbalance and long working hour are not the reasons behind employee turnover.

Physical Stress out of Organizational Support:

It has been clear from the analysis that when an employee faces travelling distance to arrive at the work station it annoys them most and results come out to a decision to leave the job. On the other hand, having huge work pressure leads them to leave the job commonly. These two reasons of employee turnover hold high coefficients in the analysis. But it is also important to note that a reason which gets negative coefficients such as lack of job security and delay of promotion do not lead them to depart from the job.

Inconsistency of Supervision and Business Status:

It has been found from the research study that once employee engaged with conflict in the company of their supervisors or any coworkers that issue turns to be one of the major reason to employee turnover, this factor grasps high coefficient in the result section as well. One more reason influence most of the employee to leave the job which also holds high coefficients is the goodwill or reputation of other company because everyone wants to engage with the well-known organization.

Underprovided Hygiene Factor:

Since these two factors pay packages and working environment contains high coefficient so it is obviously evident from the study that employees are highly motivated by the attractive compensation packages so if they did not get attractive and desired pay packages, they would prefer leave the job. This factor match Then again with the sound financial condition they also want the comfortable work environment where they spend most of the time of their days, otherwise they feel better to leave the job.

Unrealistic Target:

It has been found from the study that employees having fear for impractical target which may gave them lots of mental pressure is also having high coefficient in the result section. Consequently, employee turnover may increase.

Lack of Proper Training and Development:

Another important factor has been found from the study having positive coefficient that employees want proper training and development from the organization. They feel that it should be the method to increase job related employee knowledge. So if they did not get proper training from the organization, they got frustrated and results come out as employee turnover.

Transfer of Jobs:

One important factor has come out from the study having positive coefficient is the relocation or transfer of jobs. Everyone has their own comfort zone so it is difficult to adjust with a new environment that's why most employees wish to leave their job.

From the above findings of the analysis some of the factors are goes with the literature review such as Gupta and Shaw, 2001 found pay packages are important reason of employee turnover where as in this present paper it is also found as a vital reason. Then again, Pit and Ramaseshan, 1995 found unrealistic target is the reason of employee turnover which matches with the findings with the present paper. According to Kuslvan,

2003 favoritism and partiality is the reason to leave the organization, similar things are found in this study.

Conversely, some of the factors do not go with the literature such as Miller and Wheeler, 1992 found promotions are important reason of employee turnover but in this paper it is found that promotion is not that important reason for employees to leave the organization. On the other hand Bame, 1993 found that it is important to reduce working hour and employees should give the freedom to choose their work schedule but in this study the scenario is just reverse.

7. Conclusions

From this study authorities of any private banks get a clear view by reading its literature and discussion of findings. Since the objectives of the study are to analyze the factors that influence employee turnover in private banking sector in Bangladesh. It is visible from the study that some factors such as unattractive pay packages, lack of training and development, partiality and lack of career development influences employee to leave the job. On the other hand, it is also found that some factors do not influence employee turnover though it seems to be important such as long working hours, lack of job security and work life imbalance etc. Thus, there is a need for awareness and positive attitudes of authorities of private banking sector to control turnover because it also creates lots of expenditure in the organization.

The study has been conducted based on fieldwork through interviewing bankers (male and female) only in Dhaka city. It was a prolonged process due to the direct interview of the respondents for primary data collection. Sometimes respondents were found uncooperative with the interviewer. Making appointments with top ranking employees and taking their time were very difficult task. Sometimes bankers were too much busy with their formal job duties so they did not attend the interviewer. Even the variables used in this study are derived from reviewing the literatures and researchers' own intuition. There can be other significant variables that are not covered in this study.

Implications of the Study:

Based on the results of this study, as well as of previous employee turnover type studies in different sectors, further research seems desirable in this area. The results of this study can be considered as a comprehensible input or sources for advance research on studying the cost of employee turnover in banking sectors, measurement of employee turnover, evaluate the reasons of employee turnover and to develop the retention strategy to reduce employee turnover.

Using motivation, employee participation, proper leadership, compensation and benefits in proper way organization can reduce or control employee turnover. Since workforce is acknowledged as life blood of the organization so it is important to motivate their work by appreciation, take initiative to develop their career and avoid partiality or favoritism by authority. Then again, it will help the decision maker to design their job considering physical stress like travelling distance, huge work pressure and unrealistic target. Private commercial banks can reduce employee turnover by forming attractive and desired pay packages and comfortable work environment. Higher authority should focus on the reputation of the company with harmonious interpersonal relationship among supervisors, subordinates and coworkers.

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Bangladesh, China, India and Myanmar Economic Corridor (BCIM-EC): Next Window for Economic Development in Asia

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Abstract: *The objective of this paper is to explore the trade and investment along with geo-political collective potentials of four neighboring countries: Bangladesh, China, India and Myanmar under the realm of sub-regional cooperation called Bangladesh, China, India and Myanmar Economic Corridor (BCIM-EC). The study addresses both intra-BCIM and BCIM trade with world based on the secondary data from various sources for the period during 2005-2013. It also strives to promote economic cooperation based on mutual complementarities among the BCIM countries by making the best use of their comparative advantages in terms of the abundant natural, human and other resources. The paper recommends some ways to increase intra-BCIM trade manifold along with enhancing trade outside the block ('one belt, one road' development strategy of China) to become one of the dominant trade and investment blocks in the world. The paper highlights that this forum would help ensure socio-economic development in Asia along with enhancing the share of GDP of BCIM economies compare to world GDP. Following brief introduction of the paper, the evolution, opportunities and geopolitical features of BCIM, country-wise performance, potentials and GDP scenario of BCIM member countries, BCIM trade with world along with intra-BCIM trade, collective prospects of BCIM-EC, recommendations and conclusion have been made.*

Keywords: *Bangladesh, China, India and Myanmar Economic Corridor (BCIM-EC), Trade and investment, Economic cooperation, Comparative advantages, Evolution, Socio-economic development, GDP, One belt, one road.*

JEL Classification: *F55, F59, O2*

1. Introduction:

The BCIM (Bangladesh, China, India and Myanmar) Economic Corridor is a modern version of the Silk Road, and a revision of the 1999 Track II Kunming initiative between BCIM countries. The opportunities of the BCIM corridor among others are: connectivity and infrastructure, energy resources, agriculture, trade and investment etc. The total geographical area of the BCIM is about 9% of world with a population constituting about 40 percent of the world (Table: 9.1). The GDP of these four constituent countries together is around 15 percent of the total GDP of the world (Table: 9.1).

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The BCIM Corridor intends to contribute to socioeconomic development in the region by developing (1) connectivity and infrastructure (road, railways, waterways, and airways); (2) energy resources; (3) agriculture; and (4) trade and investment. With respect to the size of the economies, the total trade turnover of the BCIM countries is reckoned to be rather very low. In 2013, the BCIM trade accounted for only 14 percent of the world trade. Combined shares of the forum in world exports and imports are estimated at 14 percent and 13 percent respectively. In terms of contribution China stands at top followed by India and Bangladesh in terms of both world exports and imports. China stands out as the only net exporter country among the countries of the BCIM grouping. The BCIM EC will let all four member countries exploit the existing complementarities in trade; in terms of both sectors and products. Sub-regional cooperation can collectively be utilized in various sectors; especially energy sector. The data provided in the paper shows that the GDP growth rate of these economies are well ahead compared to the average GDP growth rate of the world (Table 9.1). Both China and India need to show their collective attitude to the LDCs in the block (Bangladesh and Myanmar) rather than dominating attitude to harvest the immense potentials of the block.

2. Literature Review

Jianwu, Shantong, and Polaski (2007) stated that the overall prospects for China's continued growth and development over the medium term are positive although there are several reasons for concern, both in the international and national contexts.

In 2013, the Chinese government initiated "One belt, one road" development strategy to enhance regional connectivity and to integrate the Silk Road Spirit Vision which also addressed BCIM Economic Corridor as "...the Bangladesh-China-India-Myanmar Economic Corridor are closely related to the Belt and Road Initiative, and therefore, require closer cooperation and greater progress".

Connecting South Asia and Southeast Asia (April, 2015), an ADB publication analyzes how closer regional connectivity and economic integration can benefit both regions, focusing particularly on the role of infrastructure and public policies in facilitating this process.

"Developing Economic Corridors in South Asia" (July 2015) showed the key conditions for transforming transport corridors into economic corridors, and associated constraints. It establishes the rationale for developing economic corridors, and related benefits from production value chains along those corridors.

Chinese scholars originally developed the idea of a trade corridor by the Bangladesh, China, India and Myanmar (BCIM) Forum for Regional Cooperation in Kunming at the end of the 1990s, in the name of 'Kunming Initiative'. It is a modern version of the Silk Road, and a revision of the 1999 Track II Kunming initiative between BCIM countries which will run from Kunming (China) in the east to Kolkata (India) in the west, broadly spanning the region, including Mandalay (Myanmar), Dhaka and Chittagong (Bangladesh) and other major cities and ports as key nodes (Minutes of the First Meeting of the Joint Study Group of BCIM EC).

The first joint study group meeting of the Bangladesh, China, India and Myanmar Economic Corridor (BCIM-EC) was held in 2013 in Kunming, China. China Council for Promotion of International Trade and Hangzhou Municipal Government hosted the Bangladesh-China-India-Myanmar (BCIM) Business Forum along with the BCIM Business Council Meeting in 2015 in China. During a meeting with newly-elected Chairman of BCIM Business Council in 2015, the Bangladeshi Premier stressed the need for making Bangladesh-China-India-Myanmar (BCIM) Business Council more effective for boosting relations in the fields of trade and business between the BCIM members.

Bangladesh is the 44th largest economy (GDP, PPP Basis, CIA, World Factbook, 2013), second largest RMG exporter, 68th largest exporter of goods, 64th largest importer in the world (CIA, World Factbook, 2013). It seems that Bangladesh has all the potentials to become one of the largest 30 economies of the world by the year 2030 (Strategy 2030: Dhaka Chamber of Commerce and Industry, 2010).

China has been projected to overtake the US as the largest economy by 2017 in purchasing power parity (PPP) terms and by 2027 in market exchange rate terms (World in 2050: The BRICs and beyond: prospects, challenges and opportunities, PwC Economics, January, 2013).

The government of China has taken some reforms activities to reduce high credit growth, reduce industrial overcapacity, and bring local government debt under control. Other structural reforms include: state-owned enterprise reform, higher prices and/or taxes for primary resources, and a change in how senior local government officials are evaluated that depends less on economic growth. Such reforms have the potential to improve the quality of growth and ensure its long-term sustainability (ADB Outlook, 2014).

As World in 2050: The BRICs and beyond: prospects, challenges and opportunities, PwC Economics, January, 2013 suggest, India should become the third 'global economic giant' by 2050. It has been revealed in the Foreign Direct Investment (FDI) Overview, World Investment Report-2014 that India attracted US\$ 28,199 million in 2013 the figure was US\$ 24,196 million in 2012.

Myanmar's historic move to a market economy is very timely as it is happening against the backdrop of ASEAN integration toward one economic community (Lim, and Yamada (2012), Economic Reforms in Myanmar: Pathways and Prospects). The government has initiated a broad array of reforms: unifying the exchange rate, improving monetary policy, increasing tax collection, reorienting public expenditure toward social and physical infrastructure, improving the business and investment climate, developing the financial sector, and liberalizing agriculture and trade. A new central bank law grants the central bank greater operational autonomy. The Myanmar government has also prepared a strategy for sequenced and comprehensive public financial management reforms. (ADB Outlook-2014)

Total population of BCIM countries constitutes about 2,818 million which is about 40 percent of total world population. This is a clear indication that this BCIM block will further be considered as one of the key controllers of labor market of both skilled and

semi-skilled workers in the world. Demographics are an extremely (Karen Ward, 2012, Global Economics, HSBC Global Research) important driver of growth. There are two effects, first and most straightforward, it is generally easier to produce more stuff when the company has more people on the production line. The second impact is a little more subtle and relates to the ratio of working population to total population. Therefore, demographic dividend can in turn feed back to individual productivity.

Under full tariff liberalization, merchandise trade in the BCIM region will increase by US\$ 5.7 billion and generate welfare effects in the region; therefore, escalating trade is an imperative (Rahman and Amin 2009).

As for the central aspect of physical connectivity, it has been found that improved connectivity and infrastructure boost trade manifold and this applies to the BCIM region as well (Rahman and Amin 2009). Improvement in trade infrastructure is known to promote intra-regional trade and economic development particularly in developing countries (UNCTAD 2013; Menon and Brooks 2008).

3. Objectives of the Study

The objective of the present study is to explore the existing and future trade and investment along with geo-political collective potentials of four neighboring countries: Bangladesh, China, India and Myanmar under the realm of sub-regional cooperation called Bangladesh, China, India and Myanmar Economic Corridor (BCIM-EC). It will highlight the key issues and points of the evolution of BCIM-EC. The study strives to address both intra-BCIM and inter-BCIM trade with the world. It will discuss the opportunities in different dimensions within BCIM countries such as: connectivity, infrastructure, energy resources, agriculture, trade and investment, geographical and geo-political features etc. It also strives to find ways to promote economic cooperation based on mutual complementarities among the BCIM countries by making best use of their comparative advantages in terms of the abundant natural, human and other resources. It will recommend some ways to increase intra-BCIM trade manifold along with enhancing trade outside the block to become one of the dominant trade and investment blocks in the world.

The present study highlights the role of BCIMEC in ensuring socio-economic development in Asia. The paper will scrutinize and analyze the existing individual GDP scenario and future prospects of BCIM member countries as well as collective prospects of the block. It will undertake extensive trade and investment data analysis to recommend further the economic prospects of the BCIM block. No nation would come forward to form a new forum or economic block until it ensures benefits for each relevant nation; BCIM EC is not an exception to this. Hence, the study strives to find out whether the BCIM EC will result in a win-win arrangement for all the four participating nations or not.

4. Methodology

As the paper is based on qualitative analysis, no specific research model has been used. The data of the study have been collected (both intra-BCIM and BCIM trade with the

world) on the secondary data from various sources for the period during 2005-2013. These sources include: various published journals; ADB outlook, 2013 and 2014; CIA World Factbook, 2013; World Investment Report-2014; GDP Ranking, 2013 by World Bank; World Bank Country Data, 2014; WTO Trade Statistics and various official web sites. The collected data have been collated and analyzed by the authors. Based on the data analysis and prospects of BCIM economies, recommendations and conclusions have been made.

5. Evolution of BCIM-EC:

‘Kunming Initiative’, an idea originally developed by Chinese scholars is a modern version of the Silk Road. The ‘Kunming Initiative’ evolved into the BCIM Forum for Regional Cooperation during its first meeting held in 1999 with the objective to create a platform where major stakeholders could meet and discuss issues in the context of promoting economic growth and trade in the BCIM region; identify specific sectors and projects which would promote greater collaboration amongst the BCIM nations; and strengthen cooperation and institutional arrangements among the concerned key players and stakeholders to deepen BCIM ties. During the 2011 meeting, it was agreed that a multi-track initiative was needed, adding track I coordination (government actors), which would entail a “high-level official meeting system and joint government workforce system. With the linkages of transport, energy and telecommunication networks, the Corridor will form a thriving economic belt that will promote common development of areas along the Corridor. These issues were discussed in the first joint study group meeting of the BCIM-EC in 2013. The Hon’ble Prime Minister of Bangladesh was present during the meeting with newly-elected Chairman of BCIM Business Council in 2015. The meeting emphasized the need for making Bangladesh-China-India-Myanmar (BCIM) Business Council more effective for boosting relations in the fields of trade, investment and business among the members within the region.

6. Opportunities:

6.1 Connectivity and infrastructure

The Corridor aims to connect India’s North East, Bangladesh, Myanmar, and the Chinese province of Yunnan through a network of roads, railways, waterways, and airways under a proper regulatory framework. This has potentials to will facilitate growth and economic development.

6.2 Energy resources

Given immense conventional and renewable energy resources in the region, one aspiration of the Corridor is collaboration in the power sector. Hydroelectric resources are abundant in both Yunnan and India’s North East, so the Corridor proposals include proposals for their conservation and development. A number of hydropower stations have already been set up and running in Yunnan. There are opportunities for North Eastern India and Bangladesh if they can cooperate in the hydel resources.

6.3 Agriculture

The BCIM-EC JSG highlights one of the important areas for cooperation in agricultural industries. The BCIM corridor will help the member countries to exploit their factor endowments and build agro-processing industries.

6.4 Trade and investment

Promoting trade and investment in the region through trade facilitation measures and the greater participation of the public and private sectors are the stated objectives of the forum. The BCIM is likely to encourage further the private sectors of the member countries. Thus, BCIM Corridor is likely to present South Asia with an opportunity to secure commercial and developmental gains.

7. Geographical & Geopolitical features of BCIM:

The geo-economic benefits of trading with a greater part of the world are unambiguous. China is the most populous and largest country within the BCIM. China shares 2,185 km boarder with Myanmar, 3,380 km with India and it shares 22,117 kilometers border with other countries. India shares 1,463 km with Myanmar. It shares 2,185 km with China, 1,463 km with India in the northeast sector and 193 km with Bangladesh. Yunnan is a landlocked province in Southwest China, sharing borders with Myanmar, Laos and Vietnam. There are eight provinces in North East India demarcated broadly on tribe and ethnic lines. The complementarities in natural resources and shared history among different ethnic groups in the frontier areas provide scope for cooperation in the sub-region. Given the commonalities in terms of history, culture, and even ethnicities and languages in many cases, the BCIM Corridor is a win-win arrangement, as all four member states stand to gain. Of particular importance to the diplomatic goals of easing political tensions would be the escalation of people-to-people contacts and the BCIM Economic Corridor talks will institutionalize such efforts. Tourism will of course, play into this effort, aside from generating income in its own right. Today, South Asia is nowhere close to the kind of success East Asia has reaped. BCIM might well be the game changer in this regard.

8. Individual Performance and Potentials of BCIM Member Countries

8.1 Bangladesh:

Economy of Bangladesh has been experiencing steady growth over the last decade and prospects are looking better for the coming years, with a booming RMG sector, flourishing remittance flow, record high foreign currency reserve, international investors' interest in FDIs, surplus current account balance etc. Geographic proximity to emerging Asian powerhouses - India and China- will further add impetus to the country's drive towards middle income status by the year 2021. At present, the country is the 44th largest economy (GDP, PPP Basis, CIA, World Factbook, 2013), second largest RMG exporter, 68th largest exporter of goods, 64th largest importer in the world (CIA, World Factbook, 2013). It seems that Bangladesh has all the potentials to become one of the largest 30 economies of the world by the year 2030

(Strategy 2030: Dhaka Chamber of Commerce and Industry, 2010). Moreover, the whole world now agrees that the predictions about Bangladesh as the “basket case” scenario are wrong.

Bangladesh Government has declared private sector as the engine of growth where the government acts as facilitator rather than regulator. The present government has been forming and reforming various policies/acts/laws with a vision to transform the country into a Middle Income Country by the year 2021 and subsequently a developed country by the year 2040. The government has been formulating and/or modifying regulations in line with these visions. The government is also committed to further ease the process of investment to facilitate FDI into the country. The ports of Chittagong and Mongla have huge hinterlands to serve, whose future prosperity hinge critically on their access to ports for purposes of export and import. Improving the state of connectivity within the region, and mobilizing the required resources to build the necessary infrastructure must be seen from the perspective of long term development strategy of BCIM members.

The implementation of the BCIM initiative is potential to help Bangladesh to transform its geographical advantage into economic benefits. Regional connectivity network might help Bangladesh to emerge as the transportation hub in the Asia-Pacific region. Energy cooperation would ease the country from energy and power insufficiency and establishment of special economic zones would attract huge investments from home and abroad and contribute to a more balanced trade for Bangladesh. Furthermore, free trade facilitation will help Bangladesh get easy access to huge markets in China and India. It is estimated that in the next five years, China will invest an additional \$500 billion in other countries, import over \$10 trillion of products and send 400 million tourists abroad. Bangladesh, as China's close neighbor and trusted friend, shall take an even more favorable posture to make good use of “Chinese opportunities”.

8.2 China:

With a population of 1.3 billion, China has recently become the second largest economy by nominal GDP and is increasingly playing an important and influential role in the global economy. It is the world's fastest-growing major economy, with growth rates averaging 10% over the past 30 years. China is a global hub for manufacturing, and is both largest manufacturing economy and the largest exporter of goods in the world. China is also the world's fastest growing consumer market and second largest importer of goods. Since the beginning of Deng Xiaoping's reforms, China's GDP has risen tenfold. After three decades of reform, China's economy experienced one of the world's biggest booms. Despite the dominance of state ownership in finance, telecommunications, petroleum and other important sectors of the economy, private entrepreneurs continue to expand into sectors formerly reserved for public enterprise.

China has been projected to overtake the US as the largest economy by 2017 in purchasing power parity (PPP) terms and by 2027 in market exchange rate terms (World in 2050: The BRICs and beyond: prospects, challenges and opportunities, PwC Economics, January, 2013). GDP growth is officially projected to 7.5% in 2014 and 7.4% in 2015. The government of China has taken some reform activities to reduce high credit growth, reduce industrial overcapacity, and bring local government debt under control. Other structural reforms include state-owned enterprise reform, higher prices and/or taxes for primary resources, and a change in how senior local government officials are evaluated that depends less on economic growth. However, such reforms have the potential to improve the quality of growth and ensure its long-term sustainability (ADB Outlook, 2014). The WTO has calculated that China became the world's biggest exporter in 2009, usurping Germany.

International trade makes up a sizeable portion of China's overall economy. Its global trade exceeded \$4.16 trillion at the end of 2013. The overall prospects for China's continued growth and development over the medium term are positive, although there are several reasons for concern, both in the international and national contexts (Jianwu, Shantong, and Polaski, 2007).

Table 8.2.1: Average GDP Growth Rates and Prospects for China

Particulars	2002-05	2006-10	2011-15	2016-20	2002-20	2006-20
Baseline scenario growth rate	10.1	8.9	8.3	7	8.4	8.1
Optimistic scenario growth rate	10.1	9.5	8.8	7.6	8.9	8.6
Risk scenario growth rate	10.1	8.4	7.1	5.8	7.6	7.1

Source: Average GDP Growth Rates for China, 1980–2020 (Jianwu, Shantong, and Polaski, 2007)

By the year 2020, Chinese GDP would be about \$7.5 trillion and per capita GDP would be about \$5,300. China's high growth rate since 1978 has been marked by bouts of high inflation. Even if there is high inflation, it probably would not slow the overall average growth rate of GDP (Perkins, 2006).

8.3 India:

The economy of India is the tenth-largest in the world by nominal GDP and the third-largest by purchasing power parity (PPP). The country is one of the G-20 major economies, a member of BRICS and a developing economy that is among the top 20 global traders according to the WTO. India was the 19th largest merchandise and the 6th largest services exporter in the world in 2013; it imported a total of \$616.7 billion worth of merchandise and services in 2013, as the 12th largest merchandise and 7th largest services importer.

As World in 2050: The BRICs and beyond: prospects, challenges and opportunities, PwC Economics, January, 2013 suggests that India should become the third 'global economic giant' by 2050. It has been revealed in the Foreign Direct Investment (FDI) Overview, World Investment Report-2014 that India attracted US\$ 28,199 million in 2013 the figure was US\$ 24,196 million in 2012. Since liberalization, the value of India's international trade has increased sharply, with the contribution of total trade in goods and services to the GDP rising from 16% in 1990–91 to 47% in 2008–10. Foreign investment was introduced in 1991 under Foreign Exchange Management Act (FEMA). FDI inflows have targeted a wide range of industries in India. In recent years, services accounted for about two-thirds of FDI inflows to the country, with business activities, construction and finance being the major targets.

8.4 Myanmar:

Business confidence has markedly improved in recent years in Myanmar, as reflected in a rapid increase in new business registrations, which exceeded 5,000 in the 10 months to January 2013, more than in the whole of the previous fiscal year. Registrations of new foreign-owned businesses rose to 375. Private sector credit maintained a rapid growth pace of 46% in FY2013. Gas exports were valued at \$3.6 billion, accounting for almost 40% of all exports. It has a rich resource base that, properly husbanded, can launch the mobilization of international and domestic resources. It also has abundant energy resources, notably hydropower and natural gas. It has the population, properly invested with skills and human capital, to upgrade its trade and industrial structure. It is strategically located on the land-bridge of Asia between the emerging giants of China and India.

The economy of Myanmar is forecasted to post higher growth of 7.8% in both FY2014 and FY2015 (World Bank Country Data), benefiting from rising investment and improved business confidence since the government started to rejuvenate and open the economy 3 years ago. Myanmar historic move to a market economy is very timely as it is happening against the backdrop of ASEAN integration toward one economic community in 2015 (Lim and Yamada, 2012). The government has initiated a broad array of reforms: unifying the exchange rate, improving monetary policy, increasing tax collection, reorienting public expenditure toward social and physical infrastructure, improving the business and investment climate, developing the financial sector, and liberalizing agriculture and trade. A new central bank law grants the central bank greater operational autonomy. The government has also prepared a strategy for sequenced and comprehensive public financial management reforms. (ADB Outlook, 2014)

9. GDP Scenario of BCIM

Table 9.1: GDP and Population of BCIM Countries

Countries	GDP US\$ (billion)	Ranking**	Growth Rate (%)	Population (million)
Bangladesh	129.9	59	6.0	156.6
China	9,240	2	7.7	1357
India	1,870	10	4.7	1252
Myanmar*	57.439	Not included within 192	6.46	53.26
Total BCIM	11,297.339			2818.86
Share of China & India %	98.34			
World*	74,171.72		3.84	7124.54
Contribution of BCIM as % of World	15.23			39.56

Source: All data reflects the year 2013
World Bank Country Data, 2014

*IMF Data,

**GDP Ranking, 2013, World Development Indicators database, World Bank, 22 September 2014

The table 9.1 shows that the four BCIM economies constitute about US\$ 11,297 billion GDP out of US\$ 74,171 billion of world GDP. It is also noticed that the total GDP of BCIM countries accounts for more than 15 percent of the total world GDP. On the other hand, total population of BCIM countries constitute about 2,818 million which is about 40 percent of total world population. From the data, it is clear that the BCIM block will further be considered as one of the key controllers of labor market of both skilled and semi-skilled workers in the world. Demographics are an extremely (Ward, 2012) important driver of growth. There are two effects, first and most straightforward, it is generally easier to produce more products when the organization has more people on the production line. The second impact is a little more subtle and relates to the ratio of working population to total population. Therefore, demographic dividend can in turn feed back to individual productivity.

The table also shows that the GDP growth rate of these economies are well ahead compared to the average GDP growth rate of the world. China was ranked 2nd, India was ranked 10th and Bangladesh was ranked 59th in the GDP ranking prepared by the World Bank. The data indicates the significance of these four economies (BCIM) in the world. It is noteworthy that out of total GDP of BCIM countries, China and India accounted for more than 98 percent in 2005, which clearly indicates the dominance of these two giant economies in the block. Both the countries (China and India) should show their collective

attitude to the LDCs in the block (Bangladesh and Myanmar) rather than dominating attitude to harvest the immense potentials of the block. Both China and India should offer special treatment and trade liberalization along with handsome amount of Foreign Direct Investment (FDI) to ensure level playing field and make the BCIM EC a suitable one for all the participating countries. If they fail to do so, the forum may be turned to a block similar to SAARC and BIMSTEC.

10. BCIM Trade with World:

Table 10.1: Total Export to the World (Million US\$):

BCIM	2005	2010	2013
Bangladesh	9297	19194	29114
China	761953	1577754	2209007
India	99616	226351	313235
Myanmar	3776	8661	11233
Total	874642	1831960	2562589
Share of India and China %	98.5	98.47	98.42
Total World Export	10508000	15300000	18816000
BCIM Export as % of World	8.32	11.97	13.62

Source: WTO Trade Statistics, Time Series on international trade

Table 10.2: Total Import from the World (Million US\$):

BCIM	2005	2010	2013
Bangladesh	13889	27821	36377
China	659953	1396247	1949992
India	142870	350233	466042
Myanmar	1908	4760	12043
Total	818620	1779061	2464454
Total World Import	10870000	15510000	18890000
BCIM Import as % of World	7.53	11.47	13.04

Source: WTO Trade Statistics, Time Series on international trade

Table 10.3: Total Trade to the World (Million US\$):

BCIM	2005	2010	2013
Bangladesh	23186	47015	65491
China	1421906	2974001	4195376
India	242486	576584	779277
Myanmar	5684	13421	23276
Total	1693262	3611021	5063420
Total World Trade	21378000	30810000	37706000
BCIM Trade as % of World	7.92	11.72	13.42

Source: WTO Trade Statistics, Time Series on international trade

The total export of BCIM countries to the world was US\$ 874642 million in 2005 which was about 8 percent of total world export (Table 10.1). The share of BCIM export to the world was increased to about 12 percent in 2010 and about 14 percent in 2013. But the share of China and India in the total BCIM export to world was more than 98 percent since 2005 to 2013. The scenario of import of BCIM countries to the world also shows that the share of BCIM countries in total world import was about 8 percent in 2005 which was increased to about 11 percent in 2010 and about 13 percent in 2013 (Table 10.2).

Total trade scenario shows that BCIM countries constituted about 14 of world trade in 2013 which was about 8 percent and 12 percent respectively in 2005 and 2010 (Table 10.3). This data is based on the individual export and import of each country in the block. The share of BCIM trade to world will be increased manifold as trade liberalization, road and sea connectivity, removal of non-tariff barriers and other prospective positive measures might be taken after forming the BCIM block. These measures will be key driving forces in transforming the BCIM block into one of the next strongest and prospective trade and investment blocks in the world.

11. Intra-BCIM Trade:

Table 11.1: Intra-BCIM Export (Million US\$):

BCIM	2005	2010	2013
Bangladesh	245	585	1323
China	11610	51177	65476
India	9019	20727	23151
Myanmar	822	1516	4137
Total Intra-BCIM Export	21696	74005	94087
Total BCIM Export to World	874642	1627960	2562589
as % of BCIM Export to World	2.48	4.54	3.67

Source: Authors' calculation based on trade data of UN COMTRADE

Table 11.2: Intra-BCIM Import (Million US\$):

BCIM	2005	2010	2013
Bangladesh	3433	8924	8624
China	10778	22080	20429
India	10759	42728	53531
Myanmar	1055	1300	4611
Total Intra-BCIM Import	26025	75032	88195
Total BCIM Import from World	818620	1779061	2464454
as % of BCIM Import from World	3.18	4.21	3.57

Source: Authors' calculation based on trade data of UN COMTRADE

Table 11.3: Intra-BCIM Trade (Million US\$):

BCIM	2005	2010	2013
Bangladesh	3678	9509	9947
China	22388	73257	85905
India	19778	63455	76682
Myanmar	1877	2816	8748
Total Intra-BCIM Trade	47721	149037	181282
Total BCIM Trade with World	1693262	3611021	5063420
as % of BCIM Trade with World	2.82	4.13	3.58

Source: Authors' calculation based on trade data of UN COMTRADE

After analyzing the intra-BCIM export, import and total trade, it is found that share of intra-BCIM export; import and trade did not increase compared to the huge potentials it had (data mentioned in the tables: 11.1-11.3). Intra-BCIM trade was 2.82 percent in 2005 compared to the total export of BCIM countries to the world which was increased to 4.13 percent in 2010 and again declined to 3.58 percent in 2013. BCIM block also has immense potential to increase intra-BCIM trade manifold once it becomes operational.

There is strong need to enhance trade both intra-BCIM and outside the block to become one of the dominant trade and investment blocks in the world. It will be quite possible as two prospective giant economies i.e. China and India are part of this block.

12. Collective Prospects of BCIM-EC:

- The BCIM region has a geographical advantage of connecting South, Southeast and East Asia. This sub-region is viewed as having the potential to promote the economic integration of Asia. The linkages of transport, energy, and telecommunications networks will enable the region to emerge as a thriving economic belt that will promote social development of communities along the Corridor.
- The North-East region of India is all but cut off from the rest of the country. Bangladesh, with which India shares its longest border, can connect the two parts. Meanwhile, access to the large Indian and Chinese markets will make Bangladesh an attractive FDI destination, particularly vertical FDI. It can also benefit from connecting to China through Myanmar and becoming a commercial hub of South and South East Asia.
- Myanmar on its part can benefit from linkages with India and Bangladesh by reducing some of its overdependence on China.
- Bangladesh would benefit from not just access to the large Indian and Chinese markets, but also make better use of the special treatment it is meted out, due to its LDC status. The same applies to Myanmar, which will now access the rest of the Indian market barring North East India to which it is already well connected.

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- By becoming a bridge between South Asia and South East Asia, Myanmar will enable greater trade in the wider Asian region and attract FDI, which can provide work for its abundant cheap labour (ADB Outlook, 2013).

Table 12.1: GDP Growth Prospects:

BCIM Countries	2013	2014	2015^f	2016^f	2017^f
Bangladesh	6.1	5.6	6.3	6.7	6.7
China	7.7	7.4	7.1	7.0	6.9
India	6.9	7.3	7.5	7.9	8.0
Myanmar	8.3	8.5	8.5	8.2	8.0

Source: Economy & Region specific forecasts and data, World Bank

f= forecast

The GDP growth rate of all the four economies in BCIM block shows that Bangladesh will have average 6.56 percent growth in 2015, 2016 and 2017 while China, India and Myanmar will have an average growth rate of 7.0, 7.8 and 8.2 percent respectively during the same periods (Table: 12.1).

- These gains are envisaged to accrue from greater market access for goods, services and energy, elimination of non-tariff barriers, better trade facilitation, investment in infrastructure development, joint exploration and development of mineral, water, and other natural resources, development of value and supply chains based on comparative advantages, by translating comparative advantages into competitive advantages, and through closer people to people contact.
- Under full tariff liberalization, merchandise trade in the BCIM region will increase by US\$ 5.7 billion and generate welfare effects in the region; therefore, escalating trade is an imperative (Rahman & Amin 2009).
- The BCIM Corridor will let all four member countries exploit the existing complementarities in trade—in terms of both sectors and products. Myanmar is a primary goods exporter and has abundant cheap labour; its main exports are natural gas, minerals, rice, and forest and marine products. India has gradually positioned itself as a leading services exporter. China is the indomitable manufacturing exporter of the world. Bangladesh, as many other South Asian countries, engages in both services export and low-end manufactured goods.
- The 312-km stretch of the Stilwell Road, which connects Northeast India with Yunnan through northern Myanmar, could lower transportation costs between India and China through the BCIM Corridor.
- Energy sector could be one of the major potential sectors for greater cooperation among the member countries of BCIM. Sub-regional cooperation can collectively

utilize hydrocarbons in Bangladesh, hydel and mineral resources in North Eastern India, natural gas reserves in Myanmar, and coal reserves in East Indian states. Tripura of India has prospect to export energy to power-starved Bangladesh under the aegis of BCIM's institutional cooperation mechanism. The underdeveloped Yunnan province of China is coal-rich; this potential should be harnessed. India's engagement with Myanmar will also contribute to India's energy security as India is heavily dependent on crude oil imports from the Gulf States. Myanmar will be able to engage in export diversification, as it currently over-relies on China and Thailand for energy exports and will help the country integrate into the regional supply chains.

- As for the central aspect of physical connectivity, it has been found that improved connectivity and infrastructure boost trade manifold and this applies to the BCIM region as well (Rahman and Amin 2009). Improvement in trade infrastructure is known to promote intra-regional trade and economic development particularly in developing countries (UNCTAD 2013; Menon and Brooks 2008).
- Besides benefiting intra-regional trade, the BCIM Corridor has the potential to become a crucial link between South and South East Asia. It can provide Indian goods access to large markets in East Asia through Myanmar, while India's North East will be better connected to the rest of the country overland through Bangladesh. Both Myanmar and Bangladesh can serve to become trading hubs of the greater Asian region through their Chittagong and Dawei ports respectively.
- China and India are two largest emerging economies and Bangladesh and Myanmar boasts rich natural and human resources, this economic corridor could enable the four countries to work with each other's advantages, accelerate economic growth, and open wider to the outside world.

13. Limitations of the Study and Future Agenda for Researchers

The study on the Bangladesh, China, India and Myanmar (BCIM) Economic Corridor is basically a qualitative research. It was undertaken with the help of different published books, journals, meeting minutes, newspaper articles, data from World Bank, ADB, WTO etc. Authors sometime found it difficult to get updated and relevant data in analyzing and forecasting the prospects of trade and investment expansion within and outside BCIM economies. As BCIM-EC is not yet operational, not many articles and journals are found relevant to the topic of this study. It is unanimously acknowledged that the BCIM economic corridor has immense potentials to enhance and promote the regional trade and investment inside and outside the block as well as the individual economic development of each country within the BCIM block.

On the other hand, the prospects and dimensions of economy of all the BCIM countries are becoming widespread and more globalized day by day. So, there is ample scope for

the researchers to conduct more specific studies on trade, investment, cultural, political issues of BCIM economies to find out more prospects and facilitate the development process of the economic corridor within BCIM.

14. Recommendations:

- Experiences of other regional and sub-regional integration attempts suggest that participating countries incur substantial expenditures to develop their infrastructures particularly to develop internal as well as cross-border transportation infrastructure including railways, roadways, airways, bridges and ports. In this regard, Association of Southeast Asian Nations (ASEAN) could be a good example for the BCIM country members.
- Successful implementation of the Asian Highway, completion of the missing links on the Trans Asian Railway route and appropriate facilitation measures could importantly contribute in enhancing economic integration of BCIM member countries.
- Since all BCIM members will stand to gain from such measures, they should be ready to undertake the required investment.
- Proper attention on integrated transportation system ought to be given to the development of a multi-modal transport system linking road-rail-sea transport for seamless movement.
- For easing up cross-border movement and establishing greater connectivity, the existing trans-border formalities, vehicular movement and customs procedures need to be more simplified.
- BCIM visa could also be introduced to facilitate movement of people particularly for the investors and the businessmen.
- Success of regional cooperation largely depends on the existence of a level playing field for trade for all the participating countries. So, China and India should ensure level playing field for other two LDCs: Bangladesh and Myanmar.
- One of the major prerequisites of successful regional cooperation is the hassle free movement of goods across border. This can be ensured by removing all non-tariff barriers to trade. Harmonization of standards, tariff structure, and dismantling of all Para-tariff and Non-Tariff Barriers (NTB) needs to be addressed and resolved.
- Developing the Asian highway will reduce transaction costs and boost trade, and should therefore be a priority for the forum.
- The BCIM forum should emphasize inter-regional road network as roads are the cheapest route of trade among various countries.

- Developing land customs stations with warehouse, weigh bridge, truck-parking area, access to banking and insurance facilities near to the land customs stations, establishing visa offices in the bordering states, and removal of travel tax could significantly lower the costs and enhance trade among the BCIM countries.
- In fact, trade is a natural consequence of investment. For the success of BCIM – EC partner countries must provide adequate incentives to promote intra- and extra-regional investment.
- The major focus of BCIM initiative should be to develop the growth zone that is a relatively underdeveloped area. Attracting investments, both from within and also from outside, to exploit the complementarities of the sub-region, through horizontal and vertical cooperation, should be at the centre of the design of BCIM cooperation.

15. Conclusions:

The Bangladesh, China, India, Myanmar-Economic Corridor (BCIM-EC) may increase socioeconomic development and trade in South Asia. The initiative seeks to improve connectivity and infrastructure, energy resources, agriculture, and trade and investment. It will connect India's Northeast, Bangladesh, Myanmar, and the Chinese province of Yunnan through a network of roads, railways, waterways, and airways under a proper regulatory framework. The current focus of BCIM talks is on an inter-regional road network. This makes sense, as roads are the cheapest route of trade. If the BCIM (Bangladesh-China-India-Myanmar) Economic Corridor is implemented, economies of the region will experience a robust growth. The factors such as adjacency, language and Regional Trade Agreement (RTA) are significant for the development of BCIM-EC and put the positive impact on trade flows among the nations of BCIM. The priorities of the BCIM-EC should focus on, among other things, regional connectivity, including transportation, telecommunication, and power and energy, trade and investment, sustainable development and people-to-people exchange.

The corridor is expected to ease the flow of goods between the world's two largest economies, India and China, and providing greater economic resources to the burgeoning markets of Bangladesh and Myanmar. The BCIM-EC would promote greater trade settlement in local currencies and more currency swap schemes, strengthen bilateral and multilateral financial cooperation, set up financial arms for regional development, and make the region's economy more competitive globally. Bangladesh, in order to benefit from the BCIM road connectivity, needs to prepare itself for the corridor which will facilitate both exports and imports. Both Chinese and Indian markets are so huge that the country's traditional and non-traditional exports can have a good market in terms of their prices. As labor cost is still low compared to that of China and India, Bangladeshi goods can have an easy sailing in those markets. Export product diversification needs to be given high priority with particular emphasis on standardization.

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The BCIM Economic Corridor is a win-win arrangement. The linkages of transport, energy, and telecommunications networks will enable the region to emerge as a thriving economic belt that will promote social development of communities along the Corridor. To date, South Asia has not come close to enjoying the same economic success that East Asia has reaped. BCIM might well be the new window for the economic development in this region. We can dream of a world where one can have breakfast in Kunming, lunch in Dhaka, and dinner in Kolkata.

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Appendix

List of Abbreviations:

ASEAN	Association of Southeast Asian Nations
BIMSTEC	Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation
FDI	Foreign Direct Investment
GDP	Gross Domestic Product
JSG	Joint Study Group
LDC	Least Developed Country
NTB	Non-Tariff Barrier
PSU	Public Sharing Unit
PPP	Purchasing Power parity
RTA	Regional Trade Agreement
SAARC	South Asian Association for Regional Cooperation
TCI	Trade Complimentarily Indices

Total Quality Management (TQM) for Improving Quality Service in University Libraries: A Conceptual View

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Mostafa Kamal²

***Abstract:** Nowadays, libraries are passing challenging time in providing quality services for its users. Libraries are service organizations dedicated to their users and Quality management is the basis for library management in general. Libraries and librarians are required to demonstrate to top management of the university that they are getting a good return on their investments in the library. This paper highlights the importance of total quality management in university libraries, deals with TQM objectives, aims to focus on how they can provide better quality services to its users with limited resources in using TQM effective management tools and principles. As such, a conceptual view has been built for the utilization of TQM in university libraries.*

***Keywords:** TQM, Library Management, Quality Services.*

Introduction:

Library is the heart of any educational institution. The purpose of university libraries are to support teaching, to research and to promote services for enhancing research and development ability. Each university library needs to provide correct, prompt and effective service. Libraries are committed to provide proper and high quality of services to its users at any moment. The goal of university libraries is to maintain a level of service quality and to satisfy readers at all times. Hence, it is necessary to determine the level of technical and reader services, as well as the measurement of service performance and service quality techniques to better understand readers and provide better services. In the past consuming more resources, buying more books and moving to large premises were considered as improving quality. But that approach is not valid today. One of the good solutions to improve quality is to provide right information to the right user at the right time. These require a thorough change in the approach –an approach based on user satisfaction. Libraries are service organizations dedicated to their users. By formulating a strategy plan, and following it with a commitment to continuous quality improvement, library managers can transform and improve their organizations.

TQM is the preferred method to increase the user satisfaction. It is believed that this can be achieved by implementing TQM. So, the tools and techniques of the total quality management can be applied to develop quality services in university libraries. The

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methods of TQM embody the management system of modern university libraries. TQM embodies certain values and approaches which are common and already established concepts in libraries. Nowadays library users demand faster and better service. The success of university libraries depend on delivering excellent service to its users. Total quality management system involves all employees and users for continuous improvement of all aspects of the organization and integrates the quality principles into the culture and activities of the organization. TQM emphasizes the fact that: “prevention is better than cure” constantly watch the problems and prevent them so that there would be no complaint from the user. To accomplish high quality service everyone needs to contribute to the process. TQM is a new management concept wherein quality in university libraries are the driving force of the entire activity cycle from beginning to end.

TQM stands for:

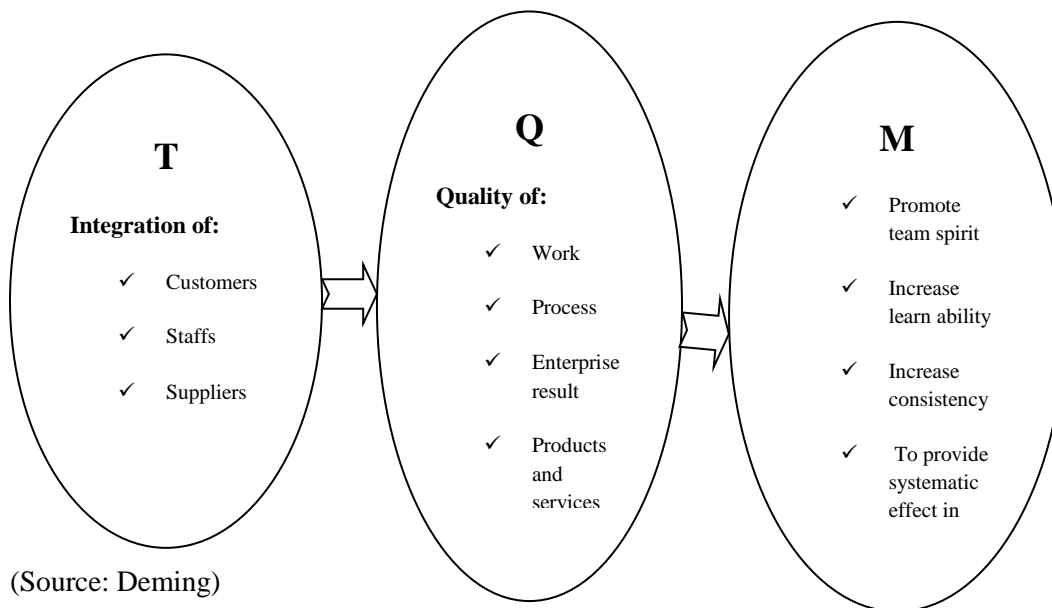
Total: Made up of whole;

Quality: Degree of excellence of a product or service

Management: Manage (art of manner of handling) + Men (users, staffs) +

T (Techniques)

In 1950s, the Japanese asked W. Edwards Deming and American statistician and management theorist rediscovered as(<http://asq.org/learn-about-quality/total-quality-management/overview/overview.html>):



Review of Related Literature

Review of literature plays a vital role and important unrefined materials for building up a total infrastructure of a specific subject area in any type of research study. To determine service quality for a library, it is necessary to understand the characteristics of library services. Einasto (2009) highlighted several features that are shown in the following:

- i. Library services are shifting to the Web environment.
- ii. It is getting difficult to predict what kind of library services will be requested in the future.
- iii. The goal of a library is not to make a profit but to satisfy reader's needs for information.
- iv. Libraries compete with other departments for gaining financial resources.
- v. The financial support of an academic library would depend on the academic communities' satisfaction with library services.
- vi. Library services do not have a measurable price; consequently, libraries can't be compared in price but in their service quality.

Feignbaum (1983) advocates that the development, maintenance and improvement of quality in any types of organization depend on satisfied customer.

Oackland (1989) says TQM is an approach to improve the effectiveness and flexibility of business completely. It is an essential way of putting the entire process in order at every level i.e. individual level, department level and organization level.

As advocated by Tobin (1990), TQM is the totally integrated effort for gaining competitive advantage by continuously improving every facet of the organizational culture.

According to Kanji and Tambi (1999), TQM is a process of continuously satisfying customer requirements at the lowest possible cost by harnessing the capabilities of everyone.

Landrum and Prybutok (2004) suggested three dimensions of service quality as the service environment, service performance, and service delivery or customer care.

According to Horowitz (1990), TQM is not a destination, but a journey towards improvement of the process.

Obaid and Esam (2012) conducted a study entitled application of TQM principles depend on the importance of some of the themes espoused by the total quality management in the libraries and information centers. The awareness of importance of the application of the standards and specifications that urges the quality and work to develop special programs for each of the types of institutions, information and training of all employees of such institutions on the various sections and departments that are closely associated in the development of the work of libraries and information centers.

The aim of this literature is to develop the readers' service quality requirements to link up with improvement techniques as the primary reference sources for university libraries through implementation of the tools and techniques of total quality management.

Objectives of the study:

The study has been undertaken with the following objectives:

- i) To assess use of the TQM by the readers of the University Library ;
- ii) To examine whether quality services for the users of the library can be arranged through implementing TQM;
- iii) To build some concepts for successful implementation of TQM in the Library .

Research Methodology

The study covers working library professionals in the university libraries. TQM system examines the approach, deployment and outcome of results from this mainstream in the libraries (service, process, leaders and commitment). The study deals with secondary sources. It is a qualitative research. The study mainly deals with forming a conceptual view. Exact source from books, journal articles will be mentioned. Time period of the study is from December 2014 to March, 2015.

Pillars of TQM in Libraries

Creech (1994) listed five pillars of TQM that provides a strong foundation for TQM managed organizations. This can become the focus of improvement in technical and vocational education for their transformation. The five pillars are:

1. Product (Service)
2. Process (Library materials process)
3. Organization (University libraries)
4. Leadership (Lead by the librarians)
5. Commitment (Provide proper services)

As an explanation of the five pillars, the product (service) is the focal point for organization purpose and achievement. Quality in the product (service) is impossible without quality in the process. The right organization is meaningless without the proper leadership. Strong, bottom-up commitment is the support for all the rest. Each pillar depends upon the other four, and if one is weak all are weak.

Applicability of TQM

The overall applicability of the Total Quality Management is to satisfy customers /users through its quality of services. To achieve this, the information professional should keep in mind the following steps to the delivery of information products and services:

- (a) Consider from the point of view of users (potential, or actual),

- (b) Provide information products or services according to the users' needs,
- (c) Satisfy an unhappy user, put special effort to make him a friendly and regular user,
- (d) Always treat the user well to ensure his remaining a user for a long time, and
- (e) The whole process by which create and deliver information or services must support the creation of user satisfaction and loyalty.

Benefits of TQM in University Libraries

Since TQM approach identifies the key processes and the key quality characteristics, conduct training for the departmental functionaries in quality improvement tools and techniques, and focuses on removing variations in both special causes and common causes to improve the level of performance and to make the processes error-free, it ensures spontaneous augmentation in the degree of involvement of all the functionaries. (Pradhan, Sribatsa, 2012).

- Incremental changes lead to continuous improvement, quick solutions may yield only partial results
- Provides a method of improving services to users in a period to similar resources
- It helps break down barriers between library departments and improves communication within the organization
- It improves the level of training given to staff thus increasing skills
- Increases staff participation in decision making, thus increasing the feeling of ownership of decisions and directions once charted
- Forces library managers to develop leadership skills interested in replaying power to obtain results.

Principles of TQM in University Libraries

The Principles of TQM are as follows:

1. Quality can and must be managed.
2. Everyone has a customer and is a supplier.
3. Processes, not people are the problem.
4. Every employee is responsible for quality.
5. Problems must be prevented, not just fixed.
6. Quality must be prevented, not just fixed.
7. Quality must be measured.
8. Quality improvements must be continuous.
9. The quality standard is defect free.

10. Goals are based on requirements, not negotiated.
11. Life cycle costs, not front end costs.
12. Management must be involved and lead.
13. Plan and organize for quality improvement.

TQM in University Libraries

TQM has proved very effective in the manufacturing and business environment and it will be profitable if the library profession also rises to the occasion and ponders over the processes and services where TQM can gainfully applied in research oriented libraries. It has been put forward by the proponents of TQM that their principles also hold good for any educational and governmental agencies. Those organizations which intend to achieve excellence in their performance and take pleasure in satisfying their customers will do well in adopting them. In most of the libraries, people are engaged in establishing and restructuring the routines, creating job descriptions, acquiring and organizing materials and doing odd jobs which do not contribute to the information functions.

Many libraries have implemented TQM successfully as Harvard college library created a task force which rewrote the library's statement, and considered changes that would have to be made to order to develop a new organization culture, one that "highlights the changing nature of staff and responsibilities in an era of pervasive change" (Clark 93').

Sirkin (1993) suggests some ways a library might use the principles of TQM to enhance library services:

- ✓ Create services brochures and information kits
- ✓ Conduct a user survey about library services
- ✓ Change hours of operation
- ✓ Provide a more convenient material return
- ✓ Simplify checkout of materials
- ✓ Use flexibility in staff assignment
- ✓ Ask vendors to give product demonstrations
- ✓ Give new staff a thorough orientation
- ✓ Create interdepartmental library advisory groups
- ✓ Improve the physical layout of the library
- ✓ Track complaints
- ✓ Develop an active outreach program
- ✓ Publicize new or changed services
- ✓ Develop user and staff training materials
- ✓ Target services to specific group
- ✓ Offer electronic document delivery
- ✓ Follow the library rules and regulations

Significance of TQM in University Libraries

Libraries are among the most ancient social and cultural institutions in existence. Ancient libraries as well as modern ones have one thing in common: all of them have a body of information recorded on some type of medium and that information could be retrieved when needed. The accessibility of information requires good organizational ability from those who are in charge. The basic concern is to create a structure of the organization where desired information is retrieved and made accessible efficiently and in a timely manner to the users. Creation and maintenance of such a structure requires an effective management process that facilitates work toward that goal.

Over many centuries libraries have adopted many different management principles from business, industry, religion, and government. A library is a business that must be operated efficiently and well. A major difference is that most libraries are non-profit organizations. Management of vast amounts of information stored in different formats - printed, electronic, audio, video - requires use of the most modern management techniques.

Today technologies have changed our social and economic life. In the workplace methodologies change; people work at home or on the web with flexible timetables, and more and more virtual communities are emerging in different fields. The most important stakeholders in the library are customers, the providers of subsidies, staff, and other libraries. These stakeholders are interested, for various reasons, in the introduction of TQM. The introduction of TQM makes great demands on the staff. The following factors in particular need to be taken into account:

1. TQM involves a process of change and therefore requires of staff that they be ready to play a constructive role in that process.
2. TQM requires a basic reorientation from the media stock towards customers and markets. For TQM a result-oriented approach, not the input of resources, is of vital importance.
3. A strongly hierarchical organization with fragmented responsibilities is not well suited to the introduction of TQM since all staff needs to feel a responsibility for influencing quality.
4. The effort necessary for implementing TQM is at the same time rewarding for both staff and the institution: improvement of the institution in which they work a strengthening of that institution's position, and more opportunity of staff to influence their own work (Klaassen & Wiersma,2004).

The management of quality in libraries, a management method that allows the improvement of performance, has been the object of interest for the managers of these services. In this context, the identification of indicators that may take into account the social-economical and political context that permeate the reality of the information services is essential to better adequate the quality proposals.

Quality Component of Library Services

The library committee consisting of the Vice Chancellor as the Chairman, Pro -Vice Chancellor as the Vice-Chairman and all Heads / Deans of faculties as members, with Librarian as member secretary, meets once in four months to review the progress and problems in the library.

Based on the recommendations of the Committee the library conducted surveys on the use of books, journals and documentation reports by the counselors, learners at the Study Centre Libraries. Study revealed certain important points for consideration. These include:-

1. Lack of sufficient infrastructure for maintaining libraries at the Study Centers
2. Irregularities in the receipt of journals at the Study Centers
3. Good use of books / journals and documentation reports by the users and the learners.

Considering the difficulties, library committee has recommended for improvement of infrastructure for libraries at Study Centers and withholding subscription of books temporarily for the Study Centers. Journals for Study Centers are subscribed to improve course material, etc as well as quality research. Only then, it is possible to achieve Total Quality Management of the University, which helps it to achieve its motto of 'Quality Education at doorstep'.

Barriers to the adoption of TQM in University Libraries

Though the advantage of adopting TQM in libraries is well acclaimed yet there are certain barriers to the understanding and acceptances of TQM in the libraries. These are: (a) Vocabulary barriers (b) Commitment barriers, and (c) Professional barriers, etc.

- (a) **Vocabulary Barriers:** TQM uses a vocabulary which belongs to the discipline of publishers and libraries. Use of terms such as quality management, quality improvement, customer's satisfaction, etc. has drawn objections from the academic environments.
- (b) **Commitment Barriers:** Adoption to TQM in libraries is a time consuming process as new areas have to be discovered and new models have to be developed for effecting total quality in various library operations. A considerable amount of time goes in leadership planning, understanding the customers, identifying the products and services to be improved and acquiring skills and training in implementing the plan.
- (c) **Professional Barriers:** Information providers are averse to certain elements of TQM, its focus on information seekers. Library professionals have not taken kindly to the notion of submitting their services and practices which are based on sound tradition and standards to the whims and fancies of the not so informed users.

Conclusion and Implications: University libraries are perfect place to implement Total Quality Management (TQM). They are service organizations dedicated to their customers/users. By formulation a strategic plan, and following it with a commitment to continuous quality improvement, librarians can transform and improve their organizations. It is well known that TQM is a management method, which libraries can benefit from in several ways. Quality can be described right time as well as doing it right the first time and doing it right each time. It requires continuous improvement. In this context of the library, it can be described as:-**Q**– Quest for excellence of knowledge;**U**– Understanding the user's demand;**A**- Actions to achieve user's demand;**L**– Leadership quality for librarian;**I** – Involving all staffs;**T**– Team spirit for achieving common goal;**Y**– Yardstick to measure progress. For the effective utilization of the university libraries, TQM should be properly utilized so that quality of the services towards readers of the library can be attained.

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Implications of Microcredit and Social Business: The Scenario of Empowering Women in Rural Bangladesh

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Abstract: *Social Business (SB) which has brought a new avenue in the modern capitalism becomes a buzzword in the process of globalization. The study is an attempt to understand how social business and microcredit play potential role to empower marginalized people particularly rural women in Bangladesh. Methods of research are mainly based on primary survey thus; it is included field observations, documentary analysis, focus group discussions and semi-structured interviews. The study also extensively tried to make a comparative picture regarding different dimensions of women empowerment involving in microcredit and social business and its aftermath. Hatbati and Hatalbunia villages of Batiaghata Upazila under Khulna District were selected for this endeavor. Hence, the study explores the influencing factors which are responsible for engaging women to Grameen credit and social business. Through the social business and the way of getting capital and investment are they becoming benefited or not? The endeavor also seeks the answers about the potentiality and tangibility of social business and credit programs how far will continue as an effective instrument for the empowerment of destitute rural women.*

Keywords: *Social Business, Empowerment, Rural Women, Grameen Credit*

Introduction

Muhammad Yunus, the founder of the Grameen Bank, undertook a project since 1976 to identify the causes and the extent of poverty of the people living in the surrounding villages of the University of Chittagong in Bangladesh. This 30-year long experience of building firms which purpose is to alleviate poverty has led to the development of a new type of business evolved as social business (SB).

With the idea of social business, Muhammad Yunus has introduced a new dimension for capitalism; a business model that does not strive to maximize profits but rather to serve humanity's most pressing needs (Yunus, 2010). The concept of social business has its origin in microcredit, which grew out and concern about the problems of poor people of Bangladesh. Social business is a much broader concept which neatly includes microcredit that makes a fundamental change and Solving different social problems (Mahmud, 2012).

Yunus has been branding social business in the globalised society with new dimensions. The ethics and concept of social business is collaborative with empowering women. In reality, the concept women empowerment is considered as a process of gaining and controlling material and intellectual resources which will support them to develop their

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self sufficiency and enable them to achieve independent rights and thereby challenging the ideology of patriarchy and speaking for the gender-based discrimination (Batiwala, 1995). Microcredit programs play a significant role in improving the economic status and living standards of households, empowering rural women, creating self-employment, and ensuring better education and healthcare (Haque and Harbin 2009). Culturally, women were confined to houses in domestic sphere until microcredit stepped in and empowered them. Grameen Bank has 8.4 million mostly women borrowers and holds \$1.5 billion in villagers' savings. (Bornstein, 2011).

A social business is a non-loss, non-dividend company designed to address a social objective within the highly regulated marketplace of today (Yunus, 2012). On the basis of seven principles Yunus postulates social business including two categories. Type (I) focuses on providing a product or service with a specific social, ethical or environmental goal. A prominent example is Grameen Danone. Type (II) focuses on a profit-oriented business that is owned by the poor *e.g.* Grameen Bank (Yunus, 2010). Women borrowers of the GB are being empowered to participate in familial decision-making around the management of income and expenditures. With the global vision as the first Social Business Day was observed worldwide on June 28, 2010. Till then, 28 June observes Social Business Day. There are various types of SB Companies in Bangladesh *i.e.* Grameen Bank, Grameen Telecom and Grameen Phone, Grameen Shakti, Grameen Kalyan, Grameen Fisheries and Livestock, Grameen Shikkha, Grameen Uddog, Grameen Danone Foods Ltd. Grameen Intel, Grameen Fund, Grameen Trust and so on are very much prominent (Yunus, 2010). Through these companies various SB projects have been launched in Bangladesh *e.g.* The Grameen Danone project, The first Eye Care Hospital, Grameen Uniqlo Social Business Venture, Veolia Water, Bangladesh Solar, Grameen Credit, Equity projects, Grameen Cyber Net, Grameen Knitware and so on.

Social Business has become helpful for rural women in case of empowerment. Rouf (2011) clarified that the women borrowers of microcredit are being empowered to participate in familial decision-making around the management of income and expenditures. The data suggest that more than 80% of the study's participants led decision making within their family; more than 90% supported their children's education financially. Only 9% of female borrowers who took loan for the first time, exercised full authority over loan funded activities whereas 87% performed their roles as a family partnership (Montgomery 1996). Microcredit helps to empower women as microcredit assists to lessen financial dependency of the women thereby enhancing their autonomy and it helps to enlarge position and cachet of women within the household (Amin *et. al.*, 1998). But most often Grameen credit proves as harmful sanctions for rural women. Goetz and Gupta (1996) presented a negative image of microcredit on women empowerment. Their study reveals that the most of the poor women have little or no control over their loans because of three reasons: i) men's control over credit ii) expansion of credit in household chores iii) violence on women while unable to repay loan.

Grameen Bank has become an international model for microcredit as a poverty alleviation strategy as in Bangladesh. The purpose of this paper was to evaluate the Grameen Bank as a strategy for empowering and improving the socioeconomic status of

women in Bangladesh as well as to identify lessons from the Grameen Bank experience that can inform development policy more generally. Arguments for and against Grameen Bank are evaluated in the light of evidence from studies of the Bank and knowledge of women and development (Bernasek, 2003).

Social business has effective social implications as well as both positive and negative impact. But it has changed the life of women who are involved with social business. It has ensured social status of women both in family and society which assist women to take greater control of decision making and life choices.

Methods and Materials

Methods of research were mainly based on primary survey thus, included field observations, documentary analysis, focus group discussions, case studies and semi-structured interviews. These methods and techniques were applied to collect both qualitative and quantitative data. The research design of the study was based on exploratory as well as explanatory in nature. Primary data were collected from Hatbati and Hatalbunia villages of Batiaghata Upazila under Khulna District. A sample of 120 women were interviewed by using interview schedule. In addition, secondary data from relevant sources were taken to strengthen the rationality of the study. Unit of analysis was poor rural women age between 25 to 30 years. Collected data have been analyzed and interpreted by using descriptive as well as inferential statistical techniques like percentile distribution, average identification and chi-square test.

Result Discussions

According to the study findings most of the respondents (31.7%) belonged to age group 23 to 27 years while the lowest portion of respondents (6.7%) belonged to age group 48 to 52 and thus, constituted the average age of the respondents around 31.70 years with the standard deviation of 9.46. Major portion of the respondents (34.2%) had completed secondary level education but they had no access to income generating activities due to family bindings, lack of access to income generating activities, religious superstition and many other issues. But after involvement in social business about 29 percent respondents were housewife and a major portion of respondents (40.8%) were involved in small business and their income has increased to 3001 to 6000 BDT (35.0%). (Bar Diagram-1, annex). Subsequently, the average income of women was BDT 3918.33 with standard deviation of 6696.69. The respondents were predominantly Muslim (43.3%) and approximately 91 percent respondents were married while only 08 percent respondents were divorced. Although the respondents mostly had larger families (57.5%), nevertheless, a considerable percent of them (42.5%) had nuclear families with average family members 5.708 and Standard Deviation 2.051. Social business introduced by Yunus Centre has made favorable condition for women to get credit in low interest, investing the capital and upgrading their economic condition which has changed the background status of women. Those women who were disadvantaged in society and could not find any way to get rid of the worse situation Social Business has worked as a torch bearer for them to get an improved standard of living, access to income generating activities and above all they have get access to women empowerment process.

About Social Business and Grameen Credit

Though the innovative business concept like social business which branded by Dr. Yunus has changed view of traditional business concept i.e. profit maximization. Social business concerns on providing credit to women and betterment of their condition through using that credit in income generating activities. The study suggests (Bar Diagram-2) that women are taking credit and using it in productive activities but most of the women (53.3%) did not know that they are directly involved with SB. There were many types of Social business i.e. Grameen Dannon, Grameen Shokti, Grameen Vieola, Grameen Credit, Grameen Phone. But most of the women were involved with Grameen Credit as except credit it was not possible for them to run such business. Furthermore, Major portion of women (53.3%) took decision for social business to reduce poverty of their families as well as only 2.5 percent women wanted to increase their social status. Generally, about 49% women got inspiration from Grameen Credit worker to join in Social Business and the credit from Grameen Bank. Though Grameen Bank is the Bank of poor and its interest rate is much higher than any other banks of the country. But 90.8% women were aware of the interest rate and they paid the installment weekly which resulted that due to SB above 87% women were able to pay installments regularly. Additionally, women who were aware about interest rate of credit or not (9.2%) sometimes could not pay installments regularly (12.5%) due to loss in business, sickness of family member, and use of credited money in unproductive sectors, using the credited money in to unexpected sector and so on. Findings of the study describe that only 38.3 percent women could control credit but generally husband (61.7%) used to control the credit. By getting access to Grameen credit most of the disadvantaged women have got source of income and the findings discloses that 71.7% women agreed with extent of increasing income. Social business has opened door for women in case of making their root in society stronger than before through income generating activities which is pushing women to empowerment process.

Conventional Scenario of Women Empowerment

Women are the worst sufferer of patriarchal structure in Bangladesh. They possess very little rights to take any kind of decision about their life. But Social Business has broken down this traditional view and given women floor to upgrade their situation through Grameen credit. The findings in (Bar Diagram-3) indicates that before involvement in SB majority of women (75.8%) had less access in income generating activities which has been changed dramatically after involvement in SB and the worst situation derived women to medium (50.0%) participation in income generating activities. In addition, about (34%) percent respondents had medium control over credit while it was impossible for them to control credited money before involvement in Social Business. The subsequent results of involvement in SB are women's participation in household decision making, participation in social and political activities, mobility of women, exposure to media and all these issues were beyond women's imagination before involving in Social Business. A comparative picture of before and after involvement of women in Social Business (Bar Diagram-3) illustrates that most of the women (84.2%) could not go outside according to their own will or without escorted by male member or without

permission of husband but at present this percentage has increased to (40%) which indicate medium level up gradation. In traditional societies like Bangladesh women have less access to media and communication which creates knowledge gap in present era. While about (78%) women had less access in media before SB this percentage increased to (35%) in moderate level. Hence, in the country women are kept away from political activities as it is thought that women are not fit for political and must keep themselves aloof from social activities. But this scenario has been changed by Social Business. The findings reveal that about (76%) respondents had low access to social and political activities before but after involvement in SB 45 percent women could participate in various kinds of social and political activities i.e. attending wedding, helping neighbors, meeting with political local leaders, attending religious activities and so on. Furthermore, from the past women have no access to household decision making and the study exposes that only (5.8 %) women had higher access to household decision making which has been changed by Social Business radically. At present (36.7%) women could take decision in household activities i.e. education of children, use of contraceptives, buying or selling lands, selection of food value and many other issues.

Additionally, women empowerment is calculated by women empowerment index which reveals the crystal picture of women empowerment. The study indicates that most of the women (78.3%) had low women empowerment index which has been increased to a medium level (35.8%) after involvement in Social Business and it is still deriving to a higher level. Actually, it is true that except SB, it would be very hard for women to get rid of their worse situation of powerlessness and through the ethics of women empowerment SB has proved that women are not puppet of patriarchy and they can contribute in all sectors of country.

Bivariate Analysis of Social Business and Empowerment of Women

Educational status is closely related with status of women rights as well as participation in household decision making ($2 = 31.203$; $p < .000$). The findings suggest that women with higher education were fully aware about their rights and could participate in household decision freely than women with little or no education (Table/Diagram-4). In addition, women with better occupational status had high control over income, expenditure, credit and savings ($2 = 16.310$; $p < .012$) as well as occupational status and participation in household decision making ($2 = 15.009$; $p < .020$) are significantly related with one another. Income is another indicator of women empowerment influential for the women empowerment index. The findings exposes that the relationship with income and women empowerment has significant at the level of ($2 = 41.712$; $p < .000$). Women with no income had low women empowerment index which could be raised with involvement in income generating activities and increasing income level. The findings also indicate that participation in income generating activities and women empowerment index are significantly related ($2 = 27.733$; $p < .000$). As after involvement in income generating activities like small business, tailoring, handicrafts and so on occupational status of women increased which increased the women empowerment index. Woman empowerment index increases with participation of women in social and political activities and their relationship were statistically significant ($2 = 27.733$; $p < .000$). The

findings expose that women empowerment index is also dependent on women's exposure to media and this relationship was statistically significant ($t = 39.580$; $p < .000$). So the subsequent result of women empowerment depends on the independent variables respectively.

Discussions

The study explicit that social business has changed the social status of rural women to a great extent. The main target of SB is to upgrade the socio economic conditions which can be seen in the different studies. As the study reveals, due to early marriage and traditional patriarchy, often rural women cannot continue their education which closes their door for self employment. But social business launched Grameen credit program through Grameen Bank whose beneficiaries are mostly women. Through involvement in SB and by getting GB credit most of the respondents had invested the money directly or indirectly in any kind of productive works by themselves or husband or any other family members which had increased the income level of family and brought economic solvency satisfactorily. Most of them had adopted various dimensions of SB through GC and are aware of the rules and regulations of GC. Subsequently, through profit form productive activities they could pay the installments regularly. But those who could not pay installments regularly had to suffer severely due to their own lacking. Another way the study shows that they could not pay installments due to expense of money in private purpose, fall of crop production or sometimes willingly. In spite of these most of the respondents agreed that by receiving Grameen credit their income has been increasing gradually.

The findings of this study depicts, in case of women empowerment SB has contributed a lot. As it has given women access to income generating activities like small business, tailoring, homestead gardening, cattle or goat rearing. Majority of the respondents were of control over income, expenditure, credit and savings as well as could influence in household decision making i.e. contraceptive prevalence, child education, health, marriage of daughter, daily household expenditure and so on. The data of the study also reveals that after involvement in social business respondent's mobility to outside (e.g. market, hospital or clinic, office of NGO, Upazila or Zila sadar and relatives or parents house) has increased which results the participation of women in various social and political activities. The respondents were destined to exposure to media and communication i.e. meeting with local leaders, NGO workers, group discussion, training program, television programs, radio and newspaper. The overall findings exposes that majority of the respondents were satisfied with their present condition with awareness of women rights and they are hopeful to their own productive works and expected more success in future.

The women who were involved in social business had got better socioeconomic condition than before. Though rural women were rushing towards social business they had low control over credit as most of the respondents' husbands used to control that credits. As a result, in case of women empowerment they had relative access to various sectors of income generating activities, household decision making, social and political activities. Social Business, in addition had given these women access to credit but lack of

monitoring their empowerment has not been ensure yet.

From the above discussions it can be said that though rural women were quite satisfied with their income generating activities *vis-à-vis* trying to be empowered in household decision making, social mobility, control over credit, savings, expenditure and income but still some problems are remaining there which hindering the women to be empowered. Therefore, with proper policy making SB needs collaboration with government as well as civil society to get in effect as the means of women's empowerment in rural Bangladesh.

Conclusion and Implications

At the very outset, it may be concluded that social business is paving the way to uplift the socioeconomic status of rural women whose livelihoods are bracketed together poverty. Though the present study does not cover whole present scenario of women in the country but field survey and observation showed a large proportion of the women still living in rural setting are to someway being oppressed in the patriarchal social structure and often they are unseen and unvocal due to lack of proper education and lower strata of economic and sociopolitical position. The empirical study shows that though interest rate of Grameen Bank is higher than any other traditional banks, it plays a vital role in empowering rural women by creating the new avenue to participate income generating activities, household decision making through providing Grameen credit for their advancement. Another important changes taking place that after involving social business activities, the women started to participate in different income generating activities resulted their income level is also rising gradually high which ensuring women empowerment as they need. Due to lack of proper institutional management of Grameen credit and social business system sometimes women fall in worse situation which must be resolved through pragmatic policy implications. Furthermore, government should trigger infrastructural development through Grameen credit programs in the rural areas in association with social business activities. But keeping in views of reality, regarding empowerment, some of them are now enjoying higher position than before involving in social business. And thus, social business is playing a vital role for empowering women in rural Bangladesh. Furthermore, organizations like GOs and other NGOs should have integrated plan and policies to overcome the frequent adversity of rural women concerning to the empowerment through income generating activities. And hence, the study can play significant role to promote women's livelihood and awaking them in considering the real field situation in a tangible way.

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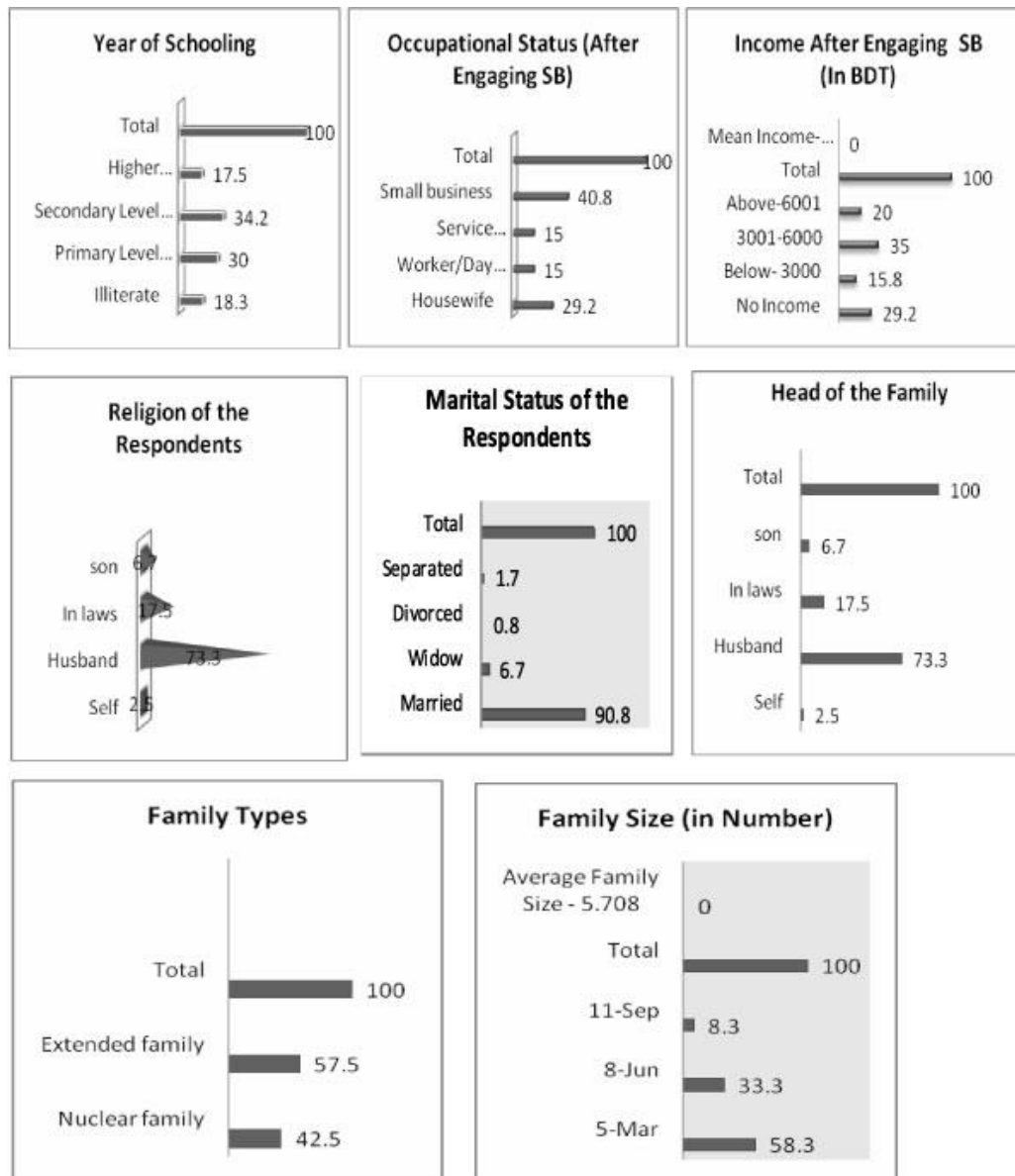
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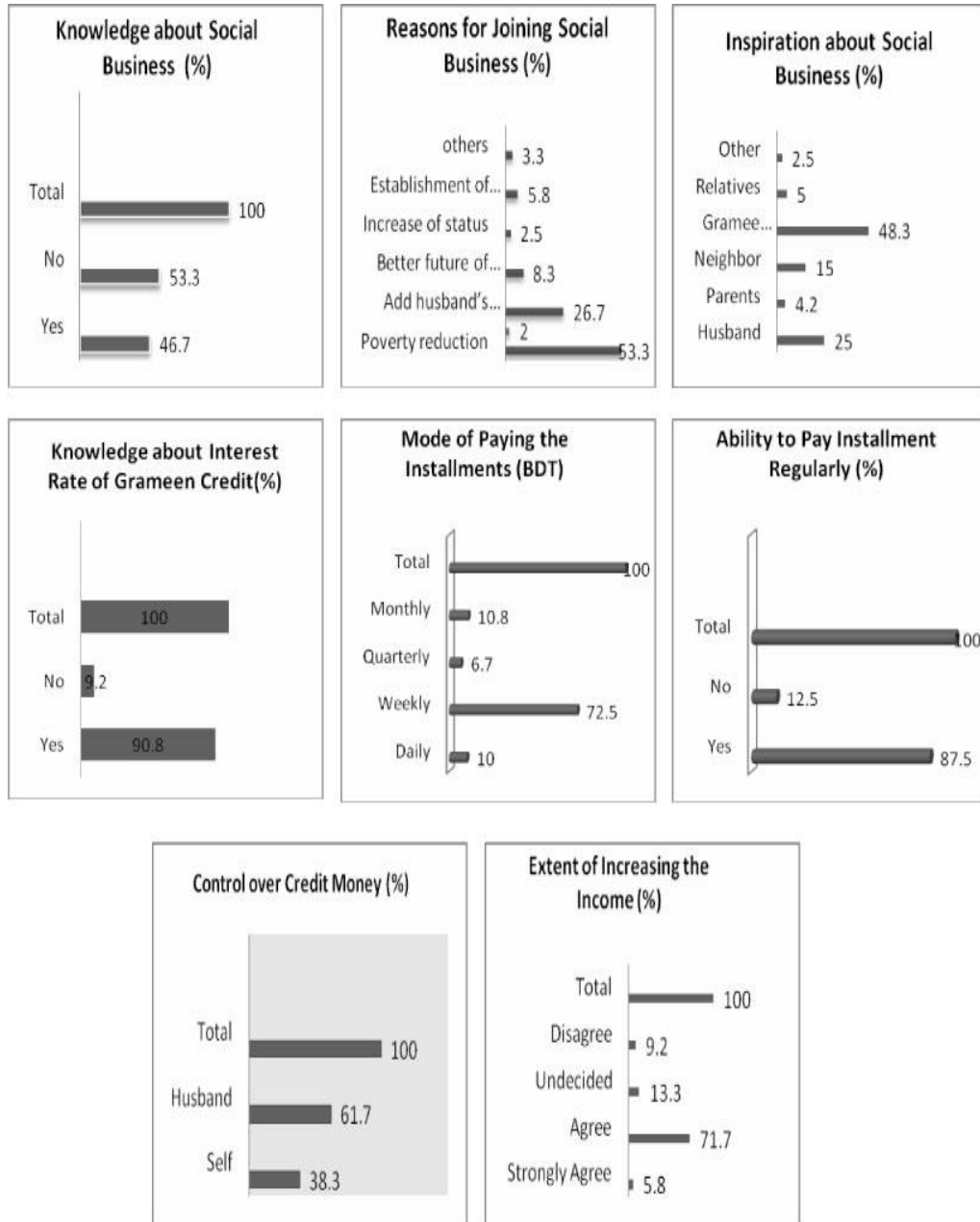
Appendix- 01

Bar Diagram-1: Background Information of the Respondents



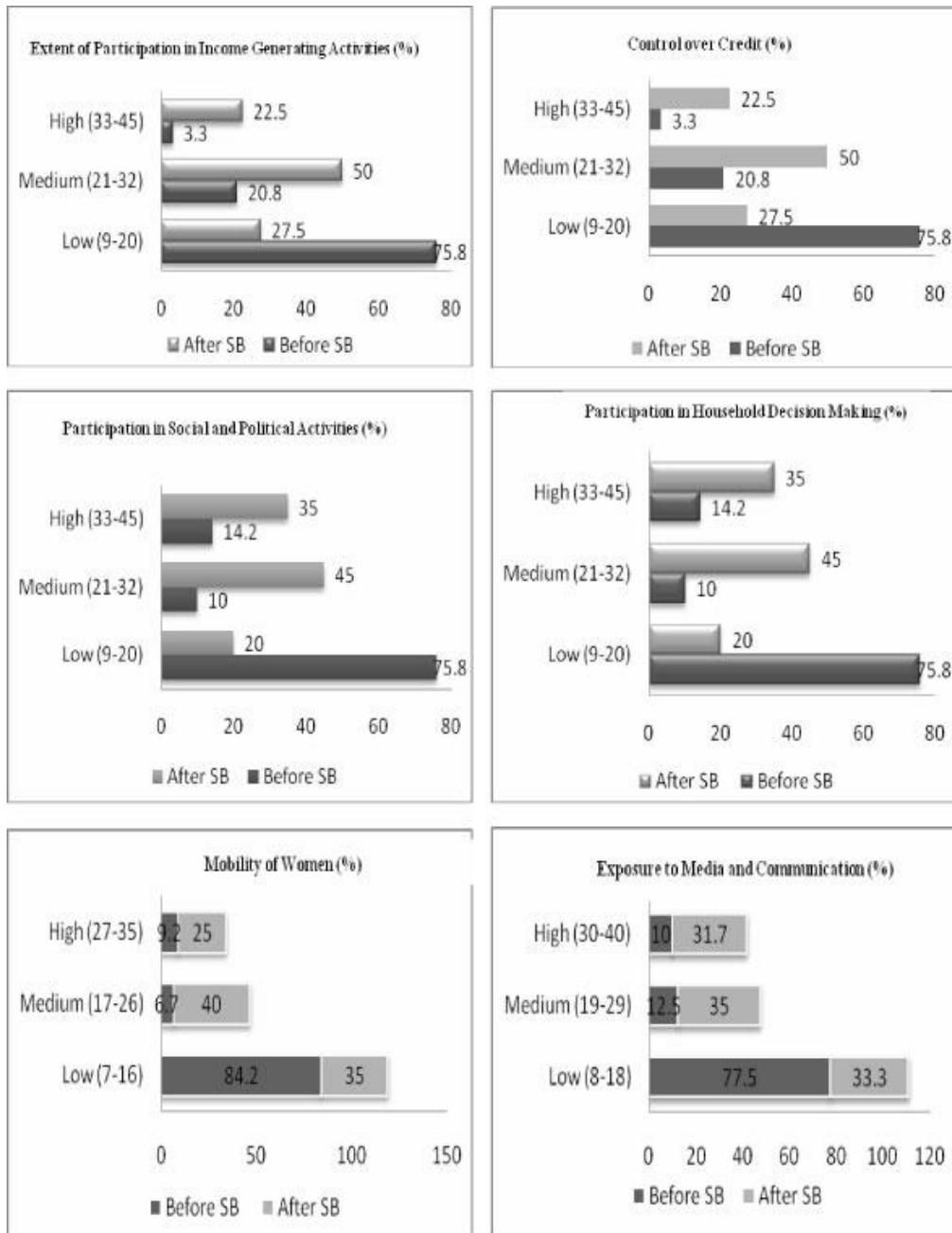
Source: Authors' Compilation Based on Field Survey (2014)

Bar Diagram-2: Information about Social Business and Grameen Credit



Source: Authors' Compilation Based on Field Survey (2014)

Bar Diagram-3: Scenario of Women Empowerment



Source: Authors' Compilation Based on Field Survey (2014)

Implementation of 7 Core Principles of ISO 26000 (CSR) in Bangladesh: A Case Study on Grameenphone

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Abstract: *Corporate social responsibility (CSR) of businesses is getting augmented concentration in recent years and the business leaders have emphasized that the organizations should operate in a socially responsible manner to ensure long term sustainability and economic viability. Internationally, CSR has been evolving from 'one-off feel good projects' and cash donations into something that is vital to the uniqueness and the core activities of the company. Consequently, the CSR of businesses has become a significant part of today's business agenda. ISO 26000 provides guidance on how businesses can operate in a socially responsible way. The paper aims to investigate the CSR practices at Grameenphone inconsistent with the 7 core principles of ISO 26000 in Bangladesh and also identify different CSR activities of GP. There are some major benefits of following the international standard on CSR; GP has been enjoying that privilege as its CSR activities are mostly consistent with ISO 26000. This study has been conducted based on the Secondary data. It can be concluded Grameenphone has believed since its inception that sustainable business success and stakeholder's value cannot be achieved solely through maximizing short term profits, but through socially responsible activities of the business.*

Keywords: *Corporate Social Responsibility (CSR), ISO 26000.*

1. Introduction

Businesses do not run only for the purpose of profit making but are profoundly intertwined with the social milieu and indeed, businesses are inseparable part of our society. Besides economic role in society, businesses also have a number of other roles and responsibilities towards society. In the future businesses will be evaluated for success if they have effectively adopted an approach that combines most favorable returns for shareholders along with a pronounced emphasis on social and environmental performance. Corporate Social Responsibility (CSR) is the very viable and burning issue in the modern business world. The Grameenphone is isolated from the modern business world. The main objective of this paper is to analyze the CSR practices by

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Grameenphone in line with 7 core principles of ISO 26000, a voluntary guidance on social responsibility, evaluate the Grameenphone's CSR policies and figure out the impact of policies on business practices and on key stakeholders. CSR involves the internal and external factors of the business. In brief the corporate social responsibility is the company's sense of responsibility towards the community and environment (both ecological and social) in which it operates. In modern business context the CSR can be define with different meanings in different organization. But there is a considerable common ground among them.

Bangladesh is a sovereign country in South Asia with a population exceeding 150 million where 31.5 percent of the total population lives below the poverty line – including 17.6 percent who are said to be 'extremely poor'(BBS, 2010). Although World Bank has projected that poverty rate in Bangladesh would drop by a level between 23.34 to 26.51 percent (The Financial Express, 2013). But it is much higher than that of many developing countries in the world. Socially responsible businesses should come forward with more CSR activities to reduce poverty level and increase the living standard of mass people. However, CSR is mainly understood as corporate philanthropy but it's no longer like that rather it only small part of social responsibility by businesses. Lately, CSR activities in Bangladesh have risen significantly. It is believed that the concentration in CSR initiatives in Bangladesh has been fuelled by CSR activities of MNCs' (operating in Bangladesh) where local corporate houses also step forwarded inthese initiatives.Grameenphone, the market leader in the telecommunication business in Bangladesh, has already showed the best responsibility for its stakeholders. It has already taken so many initiatives for the betterment of society which are really functioning well in accordance to their CSR vision. This study encourages not only Grameenphone but also other businesses for CSR promotion encompassing education, health, poverty eradication, empowerment, infrastructure, ICT, environment issue, child labor, initiatives for disabled people &etc. It may be helpful for the policy makers at political and corporate level to consider CSR as an investment not an expense because of CSR become the meansof increasing goodwill and image. It will help economy as a whole to increase in the growth rate and strategic CSR at political and corporate level can make the country a better investment destination.

2. Objectives of the Study

The main objective of the present study is to evaluate implementation of 7 core principles of ISO 26000 (CSR) in Bangladesh especially in Grameenphone. To accomplish this objective, following specific objectives have been covered:

1. To evaluate ISO 26000 (CSR) and its core principles.
2. To analyze the CSR activities of Grameenphone.
3. To evaluate how the GP has fulfilled its responsibility towards all stakeholders; what specific activities, programs and strategies it has set and implemented for the same.

4. To make out GP's CSR activities in accordance with the guidelines of 7 core principles of ISO 26000.
5. To recommend some courses of actions to improvise its CSR activities.

3. Literature Review

Though CSR activities of businesses become a significant part of today's business agenda. The roots of CSR certainly extend before World War II, but we will not go back that far. In the 1950s, there was some limited discourse about CSR but it became prevalent in early 1970s. CSR became a matter of utmost importance for different groups demanding change in the business. During the 1980's to 2000, businesses had recognized CSR and started accepting a responsibility to society. A number of definitions have been given by authors, researchers and observers on Social responsibility in different context. Some of those will be discussed in the following section of the study. Bergmann (1975) stated that, literally social responsibility is the responsiveness of business to the expectation of the society. CSR is an organization's obligations to protect and enhance the society in which it functions (Wolf, 2001). Robbins and DeCenzo (1995) were stated that, it is an obligation by the law, society & economics for a company to have a long term clear goals that are good for society.

Corporate Social Responsibility (CSR) requires the company to acknowledge the interests and demands of various stakeholders including owner, managers, employees, suppliers, customers, the government and environment and to behave ethically and responsibly (Kotler and Lee, 2005). The whole society seems the company as the individual member of the community and it has the core responsibility to fulfill their civil duties all time for the betterment of the community.

Though there is a real debate on the present business's role in society, it is very essential to give more priority to the social and environmental objectives than the economic objectives by the businesses. ISO has set a standard on social responsibility where some core principles and seven core subjects are incorporated. ISO 26000 is a voluntary guidance standard on social responsibility designed for use by any company. Business leaders have already taken steps to make plan and implement these to improve their sustainability – economically, socially, and environmentally (ECOLOGIA, 2011).

A number of studies have been done on CSR activities, but a case study has not yet been conducted in Bangladesh about implementation of core principles of ISO 26000, especially in telecommunications. Hence the present study is made on Implementation of 7 core principles of ISO 26000 (CSR) in Bangladesh: A case study on Grameenphone.

4. Methodology

The study has been mainly done through considering secondary sources. In this paper, basically, secondary data sources like books, the corporate social responsibility reports, annual report, websites and various types of journals have been used. The company's

corporate responsibility report provides the most of the information. Time period of the study was from 1st October, 2014 to 31st December, 2014

5. ISO 26000 and its Benefits

The International Organization for Standardization (ISO) has introduced an International Standard that provide guidelines for social responsibility (SR) named ISO 26000 or simply ISO SR. ISO 26000 provides guidance on how a business organization can run its business socially responsible or accepted way for sustainable development i.e. operating business ethically and transparently and that contributes to the welfare of society.

ISO 26000 basically provides guidance not requirements to the companies and subsequently cannot be certified organizations for their CSR activities like some other well-known ISO standards. ISO 26000 provides social responsibility guidance for all types of organizations including corporations, MNCs, governmental and non-governmental organizations, SMEs etc. As business world is so dynamic, now it's moving towards radical transparency, organizations and stakeholders become increasingly aware of the need for socially and environmentally responsible behavior. ISO 26000 is thus a timely and relevant guide to help organizations understand what social responsibility is and what they need to do to operate in a socially responsible way.

By following the international standard on social responsibility, any organization can optimize its process, management systems and activities related to social responsibility and contribute to the society for sustainable development

It provides organizations many positive outcomes such as:

- Get competitive advantage over companies that have not been followed the standard and then unable to prove the extent of their socially responsible behaviors.
- Enhance its reputation over others.
- Improve relationships with stakeholders who will be viewed the company optimistically as a result of its dedication to behave in a socially responsible way.
- Increase employees morale and the ability to draw attention and keep qualified professionals
- Financial communities' perceptions have changed towards the organization due to CSR activities.

If an organization demonstrate its commitment to the society or behave in a socially responsible way will surely get support from the stakeholders. So, it's articulated, extensive benefits would get by company if and only if they behave socially responsible manner.

6. A Brief Profile of Grameenphone

Grameenphone is the leading telecommunications service provider in Bangladesh with more than 50 million subscribers & widest network coverage. Before its inception (March 26, 1997), the phone was for a selected people because cell phone was a luxury product. The technological know-how and managerial expertise of Telenor has facilitated to start an international standard cell phone operation in Bangladesh. Telenor is the pioneers in developing GSM technology in Europe, it also helped to transfer this knowledge to the local employees over the years. GP started its Journey in Bangladesh on March 26, 1997, the Independence Day of Bangladesh. It was the first company to introduce GSM technology in Bangladesh. Grameenphone was also the first company to cover almost 99% people under one network. So far GP has already invested BDT 26,830 crore for better network and its pioneer in developing infrastructure in Bangladesh. GP is one of the largest Tax Payers having contribution BDT 43,890 in direct and indirect tax. There are now more than 1600 GP Service Desks and 94 GP centers in all the divisional cities. There are more than 4500 full and temporary employees are working for GP. In addition, almost .50 million people such as dealers, retailers, flexi load outlets owners, suppliers, vendors and others are directly dependent on Grameenphone for their livelihood.

7. Corporate Social Responsibility (CSR) at

The data reveal a variety of CSR practices by GP, as well as systematic variation in global management of CSR practices. In devising business policy and profitability Grameenphone stated their CSR as:

“Development is a journey, not a destination. Our work is not just about ensuring connectivity; it is about connecting with people and building relationships, based on trust, with our valued stakeholders. We have always believed that good development is good business. While we maintain our business focus, taking the nation forward remains our top priority.” **(Grameenphone’s CSR Policy)**

Grameenphone addresses CSR is a 'complementary' combination of ethical and responsible corporate behavior, as well as pledge towards creating good for the society by considering the development needs of the country. Besides providing Telco services to over 40 million people, direct income-earning opportunities a large number of people and being one of the topcorporate taxpayers in the country, GP takes it CSR activities seriously. This paper organizes discussion arounddifferent dimensions of CSR activities of Grameenphone. GP consolidated its social investment initiatives in five core areas-

1. Healthcare
2. Education
3. Environment
4. Poverty alleviation
5. Empowerment

Healthcare by Grameenphone (Every life counts):

“He, who has health, has hope. And he, who has hope, has everything.” – An Arabian proverb.

Health is, indeed, our greatest capital. Helping and caring for the community is an essential component of Grameenphone's CSR therefore GP's endeavors to make a positive contribution to the underprivileged community of Bangladesh.

- a. **NID Awareness Campaign (Every drop counts)** GP partnering with Bangladesh Government and WHO has been conducting polio vaccination awareness raising campaign since 2007 in order to eradicate the re-emergence of polio from Bangladesh.
- b. **Safe Motherhood and Infant Care Project:** It is thus designed to confirm safe and worthy motherhood and infant care services to underprivileged mothers and their infants throughout the country. 1.7-million maternal and child care services provided to economically underprivileged people. Patiya and Bhola clinics at the coastal belt were upgraded to emergency obstetric care centers. Skilled Birth Attendants (SBA) provided 10 motorized vans to smooth better patients' referral and home delivery (HD) services. Four clinics-on-wheels are used to increase the accessibility of services in the hard-to-reach areas.
- c. **Free Eye Camps (Every sight counts):** Bangladesh has the highest number of blind people compared to its population. There are appx.750000 adults and 40,000 children who are blind due to cataract or other ocular diseases.WHO and IAPB have jointly launched a project in 1999 to eradicate blindness from the world by 2020.Grameenphone has also associated with the country's mission to combat blindness vision 2020. Yet this program provided, free eye care support for around 28,780 people and 3,458 eye sights restored.
- d. **Grameenphone pilot TeleDermatology**Grameenphone is collaborating with the Telemedicine Working Group of Bangladesh to bring quality dermatology care to rural peoples. Approximately 30 percent of the population in Bangladesh will suffer from a skin disease at one point during their lifetimebut, there are fewer than 300 dermatologists in Bangladesh.
- e. **Fight against HIV/AIDS (Every voice counts):** Grameenphone has been jointly working with UNAIDS, an initiative of the United Nations (which carries together the efforts and resources of ten UN agencies i.e. UNHCR, UNICEF, WFP, UNFPA, UNODC, ILO, UNESCO, WHO, and the World Bank), helpsto avert new HIV infections, take care of those who have already suffering.
- f. **Others:** 789 Health line, Blood donation camps for underprivileged Thalassaemia patients; Establishment of Blood Bank at Bogra for underprivileged patients and ensuring safety drinking water.

Education in GP (Funding the Future):

Education is a fundamental right of human being. The Universal Declaration on Human Rights (1948) in Article 26 recognizes education along with other basic needs including shelter, food, and water as a fundamental human right. Education is one of the centers of concentration areas of GP's CSR initiative. Those are -

- a. **Scholarship Program (Every dream counts):** This initiative inspires neglected students and provides them the opportunity to study and grow as real future leaders of Bangladesh by taking such privilege. It was commenced on December 2003. GP, in association with Grameen Shikkha, gives financial support to 100 bright but rundown students through a scholarship at different academic levels per annum. The achievement of this project to till date is 11 students participated in HSC examination last year and all of them have passed with flying colors.
- b. **Online School:** GP has commenced this initiative on 4 October, 2011 with Jaago Foundation (JF), CR activities for education 'Online School'. This initiative offers quality education for rural and sub-urban area including 3 schools for the children who are living at the slums.
- c. **Alokdeep: Non-Formal Primary School cum Cyclone Shelter (Every help counts):** Alokdeep aims to provide shelter when people are in natural disaster. It otherwise will act as a place to provide non-formal primary education to the poor population of the community. Alokdeep project has been successfully operating since October 2009. According to the sketch, constructions of all four Alokdeeps have been completed in Bagerhat and Barguna districts and are open for use whenever it is necessary.
- d. **Earlier projects of GP:** True Liberation War Stories, Partnership with Bishsho Shahitto Kendro (Every mind counts).

Environment

- a. **Click Green:** The purpose of such initiative is to create awareness among the employees of GP about climate and environment issue & persuade them to become active agents of sustainable and equitable development.
- b. **GP Climate Change Program:** GP's has initiated this project since early 2008 with a vision for reducing carbon, being environment friendly and creating a momentum with the community and people.

The goal of Grameenphone's Climate Change Program is to:

- Become the leading company in Bangladesh in climate initiatives within 2015.

- Reduce 15% carbon by 2012 & 40% by 2015.
- Be a 'Green Company' as their corporate transmission.

c. **Community Power Project- A Social Business Approach:** This project plans to develop a powerful and cost effective decentralized mini-grid infrastructure based on renewable energy for rural development in Bangladesh. GP in collaboration with University of Oslo will initiate a ‘community power project’ where a solar power plant will be established and provide power to the Grameenphone base station as well as households and local businesses. The project, achievement to till date, is successfully Delivering power supply on regular basis to 140 households from 5pm to 12 am and to 1 Grameenphone community information center in day time.

Poverty Alleviation (Social Initiatives)

Three major initiatives were taken to seek hand against poverty. Those are - Village Phone (Every freedom counts), Community Information Center (Every opportunity counts), CellBazar (Every enterprise counts). The **village phone (VP)**, an inspiring example, helps to bring both social and economic empowerment to the rural women as they take center stage in earning a living. Connectivity and information is important in this global arena considering this aspects GP setting up **Community Information Centers (CICs)**. It drives people to invest in technology thus helping and connecting individuals and communities for mutual development. Connectivity also helps for making informed business decisions as well as reducing the dependency on middlemen. **CellBazar** – an electronic marketplace – facilitates traders with necessary market information and thus contributes towards business growth.

Empowerment

In CSR journey, GP has proudly involved in several initiatives to empower people of Bangladesh in different phrases. **Those are** -Partnership with Special Olympics Bangladesh (Every win counts), Information Boat Project (Every information counts), Skill Development Center (Every hand counts), and Rehabilitation of Acid Victims (Every confidence counts) project Milestone: → 6 acid victims are now working in Grameenphone and earning their own living.

10. Compare with Peer companies CSR activities (at a glimpse):

Grameenphone	Peer Companies
<p>Health: NID Awareness Campaign, Safe Motherhood and Infant Care Project, Free Eye Camps, Grameenphone pilot TeleDermatology, Fight against HIV/AIDS, 789 Health line, Blood donation camps for underprivileged Thalassaemia patients, Establishment of Blood Bank at Bogra and ensuring safety drinking water.</p> <p>Education : Scholarship Program, Online school, Alokdeep: Non-Formal Primary School cum Cyclone Shelter</p> <p>Environment: Click Green, GP Climate Change Program, Community Power Project- A Social Business Approach</p> <p>Social initiatives: Village phone, Community Information Centers, CellBazar</p> <p>Empowerment: Partnership with Special Olympics Bangladesh, Information Boat Project, Skill Development Center, Rehabilitation of Acid Victims</p>	<p>Robi:</p> <p>Health: Pure drinking Water, blood donation camps, primary health check-up sessions, safe drive campaign for the employees</p> <p>ICT: Basic Computer Training by Robi employee</p> <p>Environment: RobirAlo</p> <hr/> <p>Banglalink:</p> <p>Education: Recycled School Distribution Bag.</p> <p>ICT: ICT support for underprivileged children: computer lab set up</p> <p>Social initiatives: cox's bazar sea beach cleaning project and international coastal cleanup day, donating blankets at orphanages, special arrangements for hajj pilgrims at the hajj camp and etc.</p>

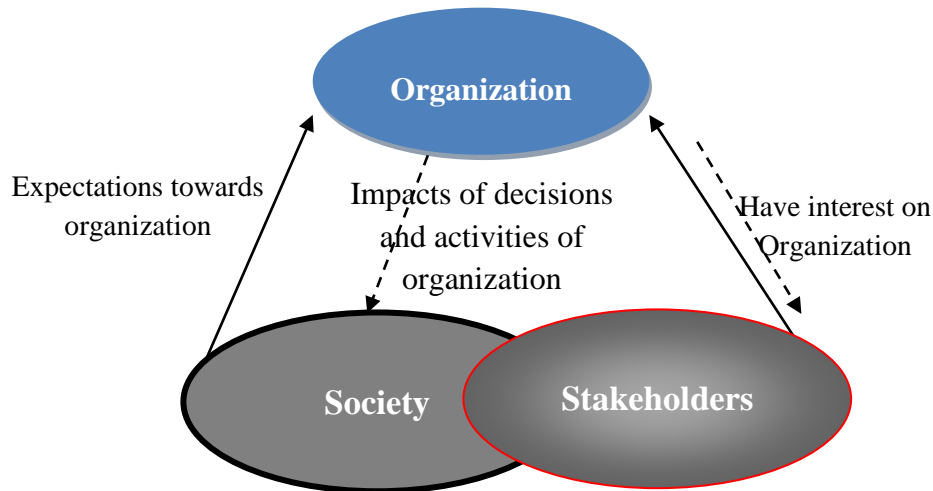
9. Consistency or Inconsistency of GP's CSR practices with 7 principles of ISO 26000

ISO 26000 defines seven principles of social responsibility; here we are going to figure out Consistency or inconsistency of Grameenphone's CSR activities with these principles.

(i) Accountability:

“An organization should account for the results of its decisions and activities on society.”

High Commission of Canada & Reed Consulting BD Ltd. (2013)



Grameenphone is a truly socially responsible company that operates at the highest levels of integrity and accountability on a global standard. Different dimensions of CSR activities of Grameenphone on social investment initiatives including Healthcare, Education, Environment, Poverty alleviation, Empowerment have a good impact on society as a whole directly or indirectly. GP has so far invested more than BDT 26,830 crore to build the infrastructure. 500,000 people are directly dependent on GP for their livelihood. It has been proudly doing business since its inception with a highly accountable corporate house on society.

(ii) Transparency:

“The principle is: an organization should be transparent in its decisions and activities that impact on society and the environment.” High Commission of Canada & Reed Consulting BD Ltd, (2013)

Operating transparently does not mean releasing commercially sensitive information. It does mean communicating openly with the stakeholders about both corporate and CSR vision, goal and objectives. GP is doing its business with a CR vision - To be recognized as the most socially responsible mobile operator in Bangladesh and in the corporate sector. GP has been operating in according to its vision, goal and objectives for sustainable development of society. GP convinced enough their stakeholders by trustworthy story in contributing to sustainable development. Lately, GP has more than 50-million subscribers which is the best reflection of customer loyalty about them. GP maintains adequate transparency and encouraging sound business conduct both in its in-house practices and in its external relationship with the community as well as suppliers, customers and business partners.

(iii) Ethical Behavior:

“The principle is: an organization should behave ethically at all times. An organization’s behavior should be based on the ethics of honesty, equity and integrity. These ethics imply a concern for people, the environment and a commitment to address stakeholders’ interests” High Commission of Canada & Reed Consulting BD ltd, (2013)

GP has adopted Code of Conduct (“Code”) which replicates in GP’s values, integrity, respect, trust and openness. It presents clear direction on how to interact business activities with the stakeholders. As we know that CSR does not wrap up only the corporate philanthropy rather it’s a part of CSR. GP’s norms, values, culture, code of conduct, and etc have a direct and indirect influence on its CSR activities.

(iv) Respect for Stakeholder Interest:

“The principle is: an organization should respect, consider and respond to the interests of its stakeholders.” High Commission of Canada & Reed Consulting BD ltd, (2013)

Grameenphone (GP) throughout its entire business operations puts persistent efforts to ensure stakeholders' trust and confidence as governance and stakeholders' value are consistent. With this end in view, GP has been providing and maintaining innovative, user-friendly and best-value telecommunications services to create sustainable stakeholders' value.

(v) Respect for rule of Law:

“The principle is: an organization should accept that respect for the rule of law is mandatory.” High Commission of Canada & Reed Consulting BD ltd, (2013)

GP has all respect to the rules and regulations of law such as environmental laws, Bangladesh labor Act and other related laws. Recently, GP experienced consequences for the whimsical manpower cut and BTRC had asked for explanation from GP on slashing staff. Finally the riot has been solved by proper initiatives of GP as the company has reputation in the context of employment management and compliance of other regulations.

(vi) Respect for International norms of Behavior:

“The principle is: an organization should respect international norms of behavior, while adhering to the principle of respect for the rule of law.” High Commission of Canada & Reed Consulting BD ltd, (2013)

GP, a truly socially responsible company, has operated at the highest levels of integrity on a global standard. As a MNC, GP always try out to maintain international standard in every sense of business operation.

(vii) Human Rights:

“The principle is: an organization should respect human rights and recognize both their importance and their universality.” High Commission of Canada & Reed Consulting BD Ltd, (2013)

“Human rights” refers to respectful treatment of all individuals, regardless of any of their personal characteristics, just because they are human beings”. GP is undoubtedly branch marking organization in Bangladesh for their respect and foster to the human rights. GP’s all social investment initiatives, including –Healthcare, Education, Poverty alleviation, Empowerment, have justified its venture for respecting human rights.

10. Recommendations

- As a leading corporate house in telecommunication sectors in Bangladesh Grameenphone should give continuous efforts to ensure coherence of CSR activities to build a “CSR brand”
- GP has a project named “Community Power Project- A Social Business Approach” which is a pilot initiative but GP should engage with more social business with the aim of boost up employment opportunity and sustainable social development.
- Lately, GP has consolidated its social investment initiatives in four core areas- Healthcare, Education and Environment and social initiatives. It should diversify the CSR portfolio by involving ICT, initiatives for Disabled group,
- GP should increase its CSR activities by increasing it CSR fund 3 % to 5% of net profit.
- Prioritize product-related CSR activities & Make adequate use of marketing to enhance the customer value proposition of CSR Cause-related marketing that makes a compelling case for the adoption of new social norms can help enhance the customer value proposition of a certain CSR activity.
- Innovation should essentially be a matter of concern; be it searching the untouched areas and scope of CSR or the formulation of CSR strategy or the implementation thereof.

11. Conclusion

The idea of CSR has turn into progressively more common in business practices and stakeholders today almost expect companies to be socially responsible. According to it, every business house owes some responsibility towards the society, nation and world in general. Considering the long run sustainable development following the norms of CSR, developing new policies and effective implementation are inevitable to bring and sustain a balance between corporate world and society. Grameenphone has gone a long way in fulfilling its duty and responsibility towards the society but still many more to do for society. Being a branch marking organization, GP is putting continuous efforts to uphold the sustainable development of society by CSR activities.

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Entrepreneurship and Economic Development: A Discourse on Selected Conceptual Issues

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Introduction

Entrepreneurship and economic development is one of the most widely discussed topics in the recent literature on development economics. This surge of academic interest and policy focus on the subject especially since 1990s underlines its importance as a vital determinant of economic growth. According to Schumpeter, J.A (1934) entrepreneurship is a driving force of innovation and more generally an engine for economic development. Entrepreneurs are believed to contribute to economic development and structural transformation in the economy by reallocating resources from less to more productive uses (Acs and Storey 2004) and by performing “cost cutting”, “gap-filling” and “input-competing” functions in the economy (Leibenstein, et. al. 1968, Hausman and Rodrik, 2003). Many other eminent economists and scholars including Adam Smith, J. B. Say, Alfred Marshall and Frank Knight also emphasize an entrepreneur’s role as a leader and organizer and coordinator of production and recognize entrepreneurship as a fourth factor of production.

Not surprisingly, entrepreneurship development has come to the centre stage of policy making in Bangladesh, a country striving hard to achieve middle income (MIC) status by 2021. The DCCI initiated project of creating 2000 innovative entrepreneurs with financial assistance of Tk. 1.0 billion from Bangladesh Bank is the most notable example in this regard. Indeed, introduction of an undergraduate programme by the Daffodil University authority is a pioneering example of patronizing entrepreneurship education and institutionalizing it at the higher education levels from the private sector. Launching of the “Freelancers to Entrepreneurs Programme” by the Government to develop freelancers engaged in outsourcing IT based jobs, business competition models like “The Startup Cup” by IBA etc. are other examples of encouraging youth entrepreneurship development in the country which also deserve special mention in the right direction towards creating pro-business environment. This exuberance displayed at both public and private sector levels towards entrepreneurship development, while appreciable, caution needs to be urged concerning the following issues. We need to ascertain who are “entrepreneurs” in our context, what type of entrepreneurs are prone to contribute to innovation, and how to support them through policies and institutions to maximize their potential contributions to the country’s overall economic growth. It is to discuss and analyze these issues we turn next.

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Entrepreneurial Typologies and their Relevance in Different Contexts of the Developing Countries

Though entrepreneurship is commonly regarded as an important input of economic development, there is no universally acceptable definition of the term. There are too many definitions which rarely agree with one another and thereby render the task of providing a specific and unambiguous definition of the concept almost impossible. The available definitions vary considerably from country to country and at different stages of development in different countries. Based on a brief review of the existing ones, we try to provide an appropriate definition in the particular context of the developing countries².

The French economist Richard Cantillon is generally credited as being the pioneer to coin the concept in about 1730. He loosely identified entrepreneurship with “self-employment” of any type and the entrepreneurs as “risk-takers” in the sense that they purchased goods at any price in the present to sell at any uncertain prices in the future. It is not, however until 1934 when Joseph Schumpeter identified entrepreneurs as “innovators” who brought entrepreneurial changes within markets having five manifestations: (i) the introduction of new (improved) good, (ii) the introduction of a new method of production, (iii) the opening of a new market, (iv) the exploitation of a new source of supply and (v) the organization of new business management. In sum, Schumpeter’s definition equates entrepreneurship with innovation in the business sense, i.e. identifying market opportunities and using innovative approaches to commercially exploit them.

On a close scrutiny by many contemporary researches (Acs, Z.I. et. al. 2009; Marco Vivarelli, 2012) Schumpeterian entrepreneur is noted to be characterized as a coordinator of production and an agent of change. As argued by Audretsch (1995) entrepreneurship is about change, just as the entrepreneurs are agents of change. They identify opportunities, assemble required inputs and resources, implement an action plan, and raise the harvests in a timely, flexible manner. Innovation for Schumpeter was central to entrepreneurial activity and included the discovery of new products, new processes and new markets in response to exogenous shocks of new information. However, subsequent empirical research (Adam Szirmai, 2011) in the context of both developed and developing countries show that entrepreneurship is a “multi-faceted” process and not necessarily associated with innovation, productivity growth, and economic development.

Schumpeterian “innovative” entrepreneurs also coexist with “defensive” and “necessity” entrepreneurs who enter a new business not because of market opportunities and innovative ideas, but simply because they need an income to survive. This type of “distress pushed” or “survival driven” self-employment is particularly diffused in the developing countries. In these countries, poverty, unemployment and lack of economic opportunities in the formal wage sector often push people into entrepreneurial activities ranging from street vending to traditional and personal services, in most cases within the informal sector of the economy. This leads us to believe that there are alternative ways of

² For a comprehensive review of the major definitions, one may look at Nadim, A. et. al. “Defining Entrepreneurial Activity”, OECD (undated)

looking at the concept of entrepreneurship and binding it rigidly with the notion of entrepreneurship being synonymous with “innovation” will be narrow. In fact, later on (1943) Schumpeter himself modified his position since the generic term entrepreneur may include a population of very heterogenous “agents” consisting of real innovative entrepreneurs bringing in “creative destruction” together with “positive followers” bringing in overoptimistic and even “escapees” (self-employed) from positive unemployment. Hence adopting a provocative and/or rigid stance by regarding radical innovation and entrepreneurship as synonymous may lead to unfavorable consequences of overoptimistic implications (Baoumol, W. J. 1990).

Besides differences in the entrepreneurial types noted above, some other important issues also need to be highlighted which significantly influence entrepreneurial characteristics. At the macro level, three important types of entrepreneurial activities and/or enterprise types are distinguished by three influential sources. The ILO measures “self-employment”, the Global Entrepreneurship Monitor (GEM) measures start-up rates of “new firms”, and the World Bank measures “registration of new firms”. All these databases are noted to be concerned with formal vis-à-vis informal firms and their implications for types of relationship between entrepreneurship and economic development³.

As far as new firm formation is concerned, it is seen to be the outcome of both a host of objective economic pull factors (such as profitability and industry growth) as well as subjective and non-economic push factors including defensive drivers (i.e. uncertain future career prospects, escape from unemployment etc.). In determining new firm formation, these environmental drivers also interact with the potential entrepreneurs personal traits. For example, the potential entrepreneurs tend to be strongly influenced by specific psychological attitudes such as the need to achieve (termed “N-achievers” by David MacLlelond 1965), desire to be independent, a locus of control, a search for autonomy in the workplace, a desire to be socially useful, and to acquire improved social status (Gladwin and others 1989). Batess (1993) held the view that availability of socio-cultural, financial, and educational support tend to determine the extent to which individuals with above traits will emerge as entrepreneurs⁴.

These personal traits are generally found to be strongly associated with entry into self-employment. While new start-ups are important for development of an entrepreneurial economy, one must not be simplistic to believe that all start-ups are successful and drivers of subsequent economic growth. On the contrary, many of them are also doomed to early failure and generate only temporary jobs. That entrepreneurship is more than new venture creation and it is a factor of production in its own right is also strongly supported by Acs and Storey (2004) in the sense that it improves allocation of resources and offers new products and services.

³ For details on these, see Wim Noude (2013)

⁴ For a succinct summary of divergent views on these issues, one may see Acs, Z. J. (2004)

Our discussion up to this point tends to support the view that entrepreneurship is a process or an act in which “the resource, process and state of being through and which individuals utilize positive opportunities in the market by creating and growing new business firms” (Neude, W. 2013). Corresponding to this view, I would prefer adoption of a broad operational definition of the term. It is defined as the process or act of identifying opportunities in the marketplace, mobilizing resources required to pursue these opportunities, and investing the resources to exploit the opportunities for long-term returns. More explicitly, it is the process of creating an enterprise, adding value, devoting necessary time and effort, assuming risks of uncertainty, and detaining rewards of monetary and personal satisfaction and independence.

Entrepreneurship and SMEs

Some SME enthusiasts regard SMEs and entrepreneurship as synonymous. No doubt, SMEs are important vehicles both for Schumpeterian entrepreneurs introducing new products and processes and owning “mom-and-pop” shops for mere survival but they are conceptually different. Entrepreneurial ventures may begin at any level of firm size and may consist of innovative combination of resources for profits (*Carland, J.W., et al. 1984*). As claimed by Schumpeter (1917), during the initial decades of the last century, entrepreneurship and small-scale start-ups tended to overlap, served as important sources of employment and income generation.

Scholars like Gallorath (1967) and Chandler (1977) convinced the economists, intellectuals, and policymakers of the post-war era that the future was in the hands of the large corporations and small businesses would fade away as the victim of their own inefficiencies. This was disproved especially in the entrepreneurial economies of globalized world where knowledge and technology emerged as the main sources of comparative advantage, and innovation and competitiveness became the main sources of economic power. Thus SMEs have always mattered to policymakers, especially in the developing countries confronted with the problems of unemployment, job creation, economic growth and international competitiveness in the global markets. There is ample evidence of economic activity moving away from large corporates to SMEs in the 1970s and 1980s particularly in the European continent⁵. As both causes and consequences of these shifts in policy emphasis towards SME promotion and growth, Acs (1992) identified four important consequences of SME growth:

- a) SMEs are vehicles of entrepreneurship development
- b) SMEs are routes of innovation
- c) SMEs are sources of industrial dynamism, and
- d) They are engines of job creation

⁵ A detailed documentation of this structural shift in the businesses (i.e. employment shares of large and small firms) is available in European Commission 2000, 2002, and Annual Global Entrepreneurship Monitor (GEM)

Evidence in support of these claims are also available from many countries in the developing world. For example, the small-scale artisan producers in Vietnam and microenterprises in the Ethiopian urban informal sector. Voeten et. al. and Gebreayesus et. al. (cited in Szirmai et. Al. 2011) noted that the SMEs possess significant innovation capacities which contribute to enterprise efficiency and economic growth⁶.

Women Entrepreneurship

Women entrepreneurship growth is well rehearsed in the recent literature of development economics (UN ESCAP 2012). Similarly, women entrepreneurs as a group are also demonstrating impressive business performance over the recent years. When given a level playing field, they display entrepreneurship skills and business success. They also share similar strong motivations to perform like their male counterparts.

But until recently, policymakers have not been in a position to remove the economic as well as non-economic barriers they face while starting new businesses and operating them profitably. Evidence to date from global scale tend to suggest that various forms of discrimination and disadvantages still confront them adversely and affect their entrepreneurial propensity and performance, compared to men (Ahmed, M. U., 2014). This situation is particularly serious facing potential as well as existing women entrepreneurs where their participation in business is still marginal and peripheral. Lack of access to adequate credit and other investable resources, adverse cultural and social barriers, laws prohibiting female ownership of properties, overall inferior socio-economic status etc. confront women with serious gender discrimination which stand in their way to excel in business performance. Hence, addressing these impediments will not only enhance women's opportunities to participate in economic pursuits but will also enhance their productivity and improve their general socio-economic status.

Entrepreneurship and Economic Development

A close relationship between entrepreneurship and economic growth is postulated theoretically by noting that it is a crucial driver of economic growth and social change. A vibrant entrepreneurial climate is claimed to provide new jobs, increase competitiveness, and produce novel goods and services. However, it is exceedingly difficult to find a direct and unambiguous empirical evidence on the issue. On the contrary, the relationship between economic growth and entrepreneurship appears to be shrouded with ambiguity.

Many researchers (i.e. Reynolds et.al. 2000, Audretsch, et.al. 2001) conducting empirical research based on a wider variety of countries and using appropriate measurement of entrepreneurial activities come up with positive correlation between the two parameters. In all such studies, a two-way causation between changes in the level of entrepreneurship and those in the level of economic development, called a "Schumpeterian" effect of entrepreneurship enhancing economic growth, particularly in the economically most advanced economies, is observed to exist. But in the cases of the developing countries, it

⁶ For elaborate exposition of the SME and entrepreneurship association debates, the reader is referred to Thurik and Sander (2004)

is seen as a “refugee” or “shopkeeper” effect of growth rates stimulating “self-employment”. This reminds us once again of the caveat that we have to be cautious about taking too simplistic views in the relationship between the rates of new firm formation and subsequent economic growth.

As noted earlier, many “start-up” resulting from “push effects” and low “entry barriers” may provide employment opportunities to their owners, but not to significant employment growth as such, let alone high economic growth. Thus, despite continued research initiatives being taken by various analysts, “remarkably little is known about the relationship between entrepreneurship and economic growth, including how it works, what determines its strength, and the extent to which it holds for diverse countries” (Thurik and Sanders, 2004).

There is, however, no denying the truth that economic growth hinges upon entrepreneurship. The degree of intensity of the correlation between the two forces may vary across countries and at various stages of their levels of development, but the two reinforces each other and helps economic growth and social well-being.

Conclusion and Recommendations

Growth and development of entrepreneurship in any economy and society is critically dependent upon the state of business enabling environment. Hence the central focus of entrepreneurship development policies should be to develop and maintain a business-friendly environment for the potential private sector entrepreneurs which may include the following:

- Reform of business regulatory environment leading to easy and low cost registration, licensing, and other business pursuing processes
- Facilitating easy and cheaper access to sources of seed capital to encourage new start-ups
- Ensuring formal property registration rights
- Simplification of tax policies and tax collection procedures
- Provision of credit information systems to facilitate SME access to credit markets
- Strong investor protection measures to assure safety measures for the potential SME investors such as angel investors and venture capitalists.
- Institutionalization of entrepreneurial education and skill development process through advising all general education and vocational institutes to incorporate entrepreneurship-focused courses in their curricula. Establishment of entrepreneurship development institutes may be more useful for developing countries like Bangladesh
- Paying special attention to the development of innovative and growth-oriented entrepreneurship

- Encourage female, youth, and rural entrepreneurs by running specially tailored courses of entrepreneurship training programmes and making provisions for business development service delivery systems

All these policy measures together aim at developing an “entrepreneurial economy” where entrepreneurship development prospects constantly emerge, create incentives for constantly looking for business opportunities, intensify enterprise education and awareness campaigns among individuals, and develop positive attitudes towards entrepreneurship, innovation, and competitiveness.

True, “entrepreneurs are born, not created”, but proper support and incentive policies can be instrumental in enhancing the supply of entrepreneurial stock in a developing country such as Bangladesh. In particular appropriate training and education facilities can go a long way to encourage growth and development of entrepreneurship and achieve faster economic growth.

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An Analysis of Day-of-the-Week Effects in Bangladesh Stock Market: Evidence from Dhaka Stock Exchange

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Abstract: *Day of the week effect is an important calendar anomaly that has been observed in many stock markets in all over the world. Investors around the world are more concerned about the day which is best for trading because stock markets are speculative market. The primary objective of this paper is to find out the significant day of the week effect in the emerging stock market of a developing country like Bangladesh. This study tests the presence of the day effect on stock market volatility by using the DSE market index during the period of June 2004 to March 2015. The findings show that the day effect is present in both volatility and return equations. While the highest and lowest returns are observed on Thursday and Monday respectively, the highest and the lowest volatility are observed on Monday and Wednesday respectively. Further investigation of sub-periods reinforces our findings that the volatility pattern across the days of the week is statistically different.*

Keywords: *Bangladesh Securities and Exchange Commission; Day of the week effects; Dhaka Stock Exchange; Returns; Volatility*

1. Introduction

Securities Market anomalies such as, weekend effect, cash dividend announcement effect, turn of the month effect, holiday effect, day of the week effect, and Ramadan effect has been widely elucidated in finance literature. The day of the week effect is a phenomenon that develops a form of anomaly of the efficient market theory. This phenomenon explains that average daily returns at different days which are considered under the same efficient market theory. French (1980) Gibbosn and Hess (1981), Keim and Stambugh (1984), Lakoniskoke and Levi (1982), Balaban (1995), Bayar and Kan (2002), Nath and Dalvi (2004), Basher and Sadorsky (2006), Chukwuogor (2007), Dimitris and Samitas (2008), Hussain, Hamid, Akash and Khan (2011), Rodriguez (2012), Tevdovski, Mihajlov and Sazdovski (2012) are researchers who showed the day of the week effect.

Securities markets are speculative market where return depends on the future course of action rather than past economic activities. Investors are more concerned with the daily movement of the stock prices. Thus, seasonality is a vital factor for predicting the behavior of stock market. The existence of predictable seasonal behavior in stock returns may lead to profitable trading strategies and fair returns. The presence of calendar

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anomalies has been documented extensively for the last two decades in securities market. The most common ones are the weekend effect, cash dividend announcement effect, hartal effect, month effect, Ramadan effect and day of the week effect. The day of the week patterns have been investigated extensively in different markets. The variability of stock returns according to the day of the week is one of the most often analyzed seasonality's in the finance literature. It has been well acknowledged in finance literature that any predictable pattern in asset returns may be exploitable and therefore judged as evidence against semi-strong efficiency of asset markets. One statistically significant pattern in stock market returns stems from seasonality. As such, seasonal effects in securities markets have attracted much interest among both academics and practitioners.

The days of the week patterns have been investigated extensively in different stock markets around the globe. Earlier studies have found the existence of the day of the week effect not only in the USA and other developed markets but also in the emerging markets like Malaysia, Hong Kong, Turkey. Many western economies, (U.S.A., U.K., Canada) empirical results have shown that on Mondays the market has statistically significant negative returns while on Fridays statistically significant positive returns. Even in India also the days of the week effects in the same manner (Sunil, 1996). In other markets such as Japan, Australia, Singapore, Turkey and France the highest negative returns appear on Tuesdays (Nath et al., 2004). It refers to the tendency of the stocks to exhibit a relatively large returns on Thursday compared to that of Sunday. This pattern has been investigated in various stock markets around the world. This difference in the average return across the days of the week leads to changes in the investment strategy, portfolio selection and the profit management of the investors. The distribution of the stock return varies across the days of the week. The average return on Sunday is significantly lower than the average return over the other days of the week. This study concentrates on the day of the week effect on Dhaka Stock Exchange, Bangladesh.

Dhaka Stock Exchange (DSE) was established in 1952, located in Dhaka and regulated by Bangladesh Securities and Exchange Commission (BSEC), which is a statutory body and attached to the Ministry of Finance. BSEC was established on 8th June 1993 under the Securities and Exchange Commission Act, 1993. DSE has played an important role in reforming the Bangladesh securities market with market capitalization of more than US\$50.28 billion and 750 companies listed as of March 2015. There are many domestic and international institutions and companies that hold stake in the exchange. Trading on equities takes place on all the days of the week excluding Friday and Saturday and all the holidays. DSE is open for trading Sunday through Thursday between 10:30am to 2:30pm BST, with the exception of holidays declared by the Exchange in advance. In the month of Ramadan, the exchange is open for trading between 10:30am to 1:30pm BST.

In the various related literatures the most satisfactory explanation that has been given for the negative returns on Monday is that usually the most unfavorable news appears during the second trading day of the week. These unfavorable news influence the majority of the investors negatively, causing them to sell on the following Monday. On the opposite side, the satisfactory explanation that has been given for Thursday's positive returns, that is

effected for the weekend affect of the market which influence positively to the investors to book their profit. The most volatile day for the stock return is refers to the Monday and less volatile on Wednesday.

2. Objectives of the Study

The broad objective is to evaluate the market returns for DSE index on a specific day of the week which influences investor's daily return.

The specific objectives of the study is aimed and purported to find out:

- To check for the normality of the returns for DSE index by the descriptive statistic properties for the day of the week.
- To check the average trade, average volume, average value in taka and average market capitalization by using securities market day of the week effect matrix.
- To evaluate the day of the week effect on the stock market returns with no market risk factors.
- To identify an opportunity for the investors to earn better return by using this market anomaly i.e. the day of the week effect.

3. Literature Review

Extensive literature is available regarding day of the week effect and other market anomalies across the globe. French and Kenneth (1980) conducted a research on stock returns and the weekend effect, the study found most of the period studied, from 1953 through 1977, the daily returns to the Standard and Poor's composite portfolio are inconsistent with both models. Although the average return for the other four days of the week was positive, the average for Monday was significantly negative during each of five-year sub-periods. Gibbons, Michael and Hess, (1981) conducted study on day of the week effects and asset returns and discovered that the expected returns on common stocks and treasury bills were not constant across days of the week. The most notable evidence was for Monday's returns where the mean was unusually low or even negative.

Balaban (1994) elucidated a research for the day of the week effect which was conducted on Istanbul stock exchange for a period of 1988 to 1994. Unconditional log returns more elucidated and regression was run to test whether there was any statistically significant difference every result showed that although the day of the weak effects are present in Istanbul securities exchange composite index returns data. The study also showed that major developed markets that reported daily seasonal are not constant in direction magnitude through different time period. Poshakwale (1996) conducted a study on weak form of efficiency and day of the week effect in the Indian stock market. The study performed on Bombay Stock exchange for a period from 1987-1994, which was published in Finance India (pp. 605-616). The results showed that, the day of the week effect and the stock market was not weak form efficient. The day of the week effect observed on the BSE pose interesting buy and hold strategy issue.

Bayar and Kan (2002) had taken 19 countries (Austria, Australia, Belgium, Canada, Denmark, Finland, France, Germany, Hong-Kong, Italy, Japan, The Netherlands, New Zealand, Norway, Spain, Sweden, Switzerland, The UK, and The USA) daily data from July 20, 1993 to July 1, 1998 and examined the daily patterns and observed that it differ for local currency and dollar denominated returns, the latter being exhibiting lower daily means and higher standard deviations compared to the former. In local currency terms, a pattern of higher returns around the middle of the week (Tuesday and then Wednesday) and a pattern of lower returns towards the end of the week (Thursday and then Friday) are observed. In dollar terms, a higher pattern occurs around the middle of the week (Wednesday and then Tuesday) and a lower one was observed towards the end of the week (Thursday and then Friday). The lower patterns were more apparent in both cases. Standard deviations on Mondays were the highest in both local currency and dollar returns. In local currency returns, volatility was the lowest towards the end of the week (Thursday and Friday) whereas the lowest standard deviations of dollar returns were observed on Tuesdays.

Nath and Dalvi (2004) examined the day of week effect and market efficiency evidence from Indian stock market for a period of 1999-2003 by using both high frequency and end of day data for the benchmark. The study used robust regression with weights and dummy variables. It found that before introduction of rolling settlement in January 2002, Monday and was significant days. However Friday has become significant after the introduction of rolling settlement. They also found that Mondays have higher standard deviations followed by Friday and the market is inefficient.

By examining Basher and Sadorsky (2006), the days of the week effect in world's 21 emerging stock markets. The paper covered the period starting from 31 December 1992 to 31 October 2003. However, 5 models estimated in order to fulfill the objectives. The market risk factor incorporated apart from the dummy variables in order to fulfill the objectives. However, different models provided different results but the overall day of the week effect is present in Philippines, Pakistan and Taiwan even after adjusting for market risk.

Chukwuogor (2007) has conducted a study on annual returns analysis, Day of the week effect and volatility of returns of five African stock markets. The study conducted for a period of 1997-2004. The study used closing index values to determine the annual trends in stock market movements and used regression analysis to determine, how much movements relate to each other. It used parametric and non-parametric test to substantiate results. The results show the presence of the day of the week but express insignificant daily returns volatility in most of African markets. There was a high positive correlation of market gains and declines among the markets.

Dimitris and Samitas (2008) documented a study on the day of the week effect patterns on stock market return and volatility. Evidence also exists in Athens stock exchange for a period of 2001 to 2005. They used the conventional OLS methodology on appropriately defined dummy variables and GARCH model was used. Their empirical results showed

that the day of the week effect in both the returns and volatility equations is present for emerging ASE over the period of 1995-2000.

Hussain, Hamid, Akash and Khan (2011) examined the days of the week effect in Karachi Stock Exchange, Pakistan. The data considered the daily stock prices of the KSE-100 Index covering the period January 2006 to December 2010. The analysis was carried out by estimating a Multiple Regression Model incorporating dummy variables. The result concluded that there exists a significant Tuesday effect in the market. Moreover, Tuesday has the highest return and all other days of the week exhibit constant return.

The descriptive study of Rodriguez (2012) evaluated the days of the week effect on return and volatilities in 6 major stock markets of Latin America covering the period 1993-2007. In order to find out the effects of days of the week on average return a Multiple Linear Regression Model had been estimated incorporating dummy variables and lagged value of the return. Moreover, the day of the week effect on the conditional variance had been analyzed by estimating a MLRM incorporating dummy variables. The results concluded that the effect in volatilities was more frequent than the return. However, volatilities were higher on Monday return than on any other days of the week. Further, the weekend effect was prevalent in the Latin American Stock Markets.

Tevdovski, Mihajlov and Sazdovski (2012) explained about the day of the week effect on selected stock markets of South Eastern Europe taking into account Bosnia and Herzegovina, Bulgaria, Croatia, Macedonia and Serbia. The study covered the period from 2006 to 2011. However, the paper had gone through a multiple regression analysis incorporating Dummy variables. The result said that the average return on Monday was negative lower than that in any other days of the week. However, none of the days of the week was statistically significant in explaining variation in average return.

4. Research Design

This is an exploratory study on the day of the week effect based on Dhaka Stock Exchange where the data consist of DSEX, trade, volume, value and market capitalization for the period of June 06, 2004 to March 30, 2015 i.e. 2592 days. The data are collected from the official website of Dhaka Stock Exchange (<http://www.dsebd.org>).

This paper considered T+2 settlement system for calculation of return from 16 April 2014 to 30 March 2015 i.e. 228 days and T+3 settlement system for calculation of return from 06 June 2004 to 15 April 2014 i.e. 2364 days. Most of the data are in Taka so that the investment decisions are from the perspective of Bangladeshi investors who has BO (Beneficial Owner) account.

Dhaka stock exchange deals with 280 stocks and 41 Mutual Funds on date of 07 April 2015. There are 5 categories of stock i.e. “A category³ – 272 stocks”, “B category⁴ – 15 stocks”, “G category⁵”, “N category⁶ – 6 stocks” and “Z category⁷ – 28 stocks”. There are four types of settlement system in DSE i.e. T+0, T+1, T+2 and T+9. T+0 and T+1 consider for the spot market. T+2 consider for A, B, G and N categories of stocks from 16 April 2014, previously T+3 considered for A, B, G and N categories of stocks. T+9 consider for Z category of stocks.

The calculation The DSE Index data is converted in order to obtain the daily returns. This has been done according to the following formula:

$$R_t = 100 \times \ln \left(\frac{I_t}{I_{t-1}} \right)$$

Where,

$$\begin{aligned} R_t &= \text{return at period } t \\ I_t &= \text{stock indices at period } t \\ I_{t-1} &= \text{stock indices at previous day return at period } t-1 \end{aligned}$$

The data has been converted into day of the week, where the average trade, average volume, average value, average market capitalization has been considered. To prepare the securities market day of the week effect matrix has been considered average trade, average volume, average value and average market capitalization for the period of June 2004 to March 2015. The calculation has been done by using statistical tools of Microsoft office and considered the average return for the high and low.

5. Findings and Discussions:

The study has conducted this study to investigate the day of week effect in Dhaka stock exchange. The calculation on daily market returns for each day of the week, by using DSE index daily data.

The calculation has taken place on the basis of the DSE Index of Dhaka Stock Exchange from 16 April 2014 to 30 March 2015 i.e. T+2⁸ settlement considered for return and from

³ Companies which are regular in holding the annual general meetings and have declared dividend at the rate of ten percent or more in the last English calendar year.

⁴ Companies which are regular in holding the annual general meetings but have failed to declare dividend at least at the rate of ten percent in the last English calendar year.

⁵ Green-field companies of which shares are listed with the DSE before the company goes into commercial operation and prior to listing the said company declares the year of first declaration of dividend.

⁶ Newly listed companies except green-field companies which shall be transferred to other categories in accordance with their first dividend declaration and respective compliance after listing of their shares.

⁷ Companies which have failed to hold the annual general meeting when due or have failed to declare any dividend based on annual performance or which are not in operation continuously for more than six months or whose accumulated loss after adjustment of revenue reserve, if any, exceeds its paid up capital.

⁸ Trading plus 2 days settlement.

06 June 2004 to 15 April 2014 i.e. T+3⁹ settlement considered for return. The result of return has been considered on both of T+2 and T+3 settlements.

Table – 1 : Summery Statistics					
	Sunday	Monday	Tuesday	Wednesday	Thursday
Mean (\bar{X})	0.11	-0.14	-0.04	0.22	0.61
Standard deviation (σ)	2.79	3.10	2.73	2.52	2.65
Variance (σ^2)	7.81	9.65	7.46	6.35	7.02
Kurtosis	3.19	10.36	7.79	6.81	8.85
Skewness	-0.40	-0.95	0.53	0.64	0.29
Minimum	-12.22%	-20.13%	-11.37%	-8.55%	-15.37%
Maximum	13.35%	19.22%	20.43%	18.67%	15.49%
Sum	54.06%	-69.39%	-22.81%	113.41%	303.58%
Count	497	510	510	518	500

Source: Author's own computation and the data taken from recent market information (06 April 2004 to 30 March 2015) in Dhaka Stock Exchange (DSE) official website (<http://www.dsebd.org>).

5.1 The day of the week: Sunday

Sunday is the very first trading day of the week. This day provides positive return with 0.11% on an average to the investors and high volatility¹⁰ according to standard deviation (σ) of 2.79 and variance (σ^2) of 7.81, which refers to high risk associated in the market on this day with a positive return. This day portrays a chart with fat tails i.e. 3.19 on kurtosis¹¹ which indicates the high volatility of volatility. The negative or left skewness¹² shows on this day i.e. -0.40. Minimum return has been provided by -12.22% and maximum return consists 13.35% on this day. The total return during the duration considered is -54.06% where positive and negative return has been considered. Number of days considered for the calculation of return is 497 days from 06 June 2004 to 30 March 2015.

⁹ Trading plus 3 days settlement.

¹⁰ Volatility refers to the amount of uncertainty or risk about the size of changes in a security's value.

¹¹ Kurtosis is a statistical measure used to describe the distribution of observed data around the mean. It is sometimes referred to as the "volatility of volatility".

¹² Skewness is described asymmetry from the normal distribution in a set of statistical data. It can come in the form of "negative skewness" or "positive skewness", depending on whether data points are skewed to the left (negative skew) or to the right (positive skew) of the data average.

5.2 The day of the week: Monday

Monday is the second trading day of the week. This day provides negative return with 0.14% on an average to the investors and high volatility according to standard deviation (σ) of 3.10 and variance (σ^2) of 9.65, which refers to high risk associated in the market on this day with a negative return. This day portrays a chart with fat tails i.e. 10.36 on kurtosis which indicates the high volatility of volatility. The negative or left skewness shows on this day i.e. -0.95. Minimum return has been provided by -20.13% and maximum return by 19.22%. The total return during the duration considered is 69.39% where positive and negative return has been considered. Number of days considered for the calculation of return is 510 days from 06 June 2004 to 30 March 2015.

5.3 The day of the week: Tuesday

Tuesday is the middle trading day of the week. This day provides negative return with 0.04% on an average to the investors and high volatility according to standard deviation (σ) of 2.73 and variance (σ^2) of 7.46, which refers to high risk associated in the market on this day with a negative return. This day portrays a chart with fat tails i.e. 7.79 on kurtosis which indicates the high volatility of volatility. The positive or right skewness shows on this day i.e. 0.53. Minimum return has been provided by -11.37% and maximum return by 20.43%. The total return during the duration considered is -22.81% where positive and negative return has been considered. Number of days considered for the calculation of return is 510 days from 06 June 2004 to 30 March 2015.

5.4 The day of the week: Wednesday

Wednesday is the second last trading day of the week. This day provides positive return with 0.22% on an average to the investors and high volatility according to standard deviation (σ) of 2.52 and variance (σ^2) of 6.35, which refers to high risk associated in the market on this day with a positive return. This day portrays a chart with fat tails i.e. 6.81 on kurtosis which indicates the high volatility of volatility. The positive or right skewness shows on this day i.e. 0.64. Minimum return has been provided by -8.55% and maximum return by 18.67%. The total return during the duration considered is 113.41% where positive and negative return has been considered. Number of days considered for the calculation of return is 518 days from 06 June 2004 to 30 March 2015.

5.5 The day of the week: Thursday

Thursday is the last trading day of the week. This day provides positive return with 0.61% on an average to the investors and high volatility according to standard deviation (σ) of 2.65 and variance (σ^2) of 7.02, which refers to high risk associated in the market on this day with a positive return. This day portrays a chart with fat tails i.e. 8.85 on kurtosis which indicates the high volatility of volatility. The positive or right skewness shows on this day i.e. 0.29. Minimum return has been provided by -15.37% and maximum return by 15.39%. The total return during the duration considered is 303.58% where positive

and negative return has been considered. Number of days considered for the calculation of return is 500 days from 06 June 2004 to 30 March 2015.

5.6 Other conditions

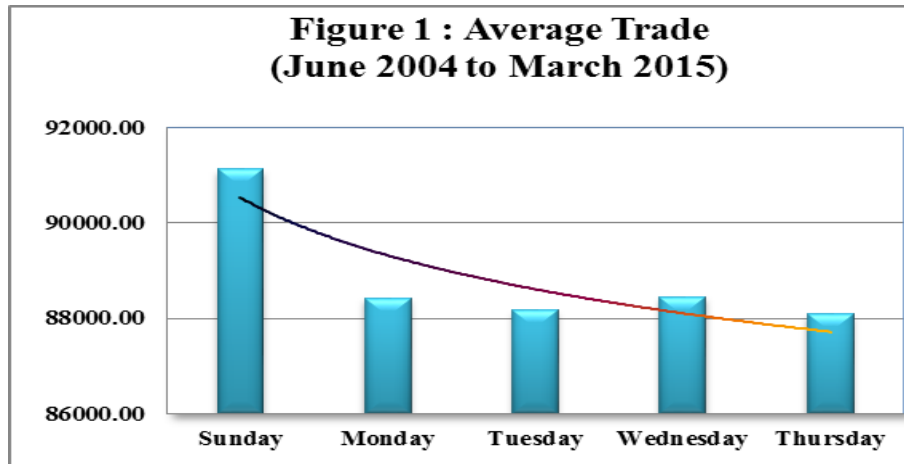
The securities market consists the day of the week effect which has been shown into a matrix and the charts followed by the average into consideration.

Table – 2: Securities Market Day of The Week Effect Matrix				
Trend	Average Trade	Average Volume	Average Value in Taka (million)	Average Market Capitalization in Taka (million)
High	Sunday	Wednesday	Sunday	Sunday
Low	Thursday	Monday	Thursday	Tuesday

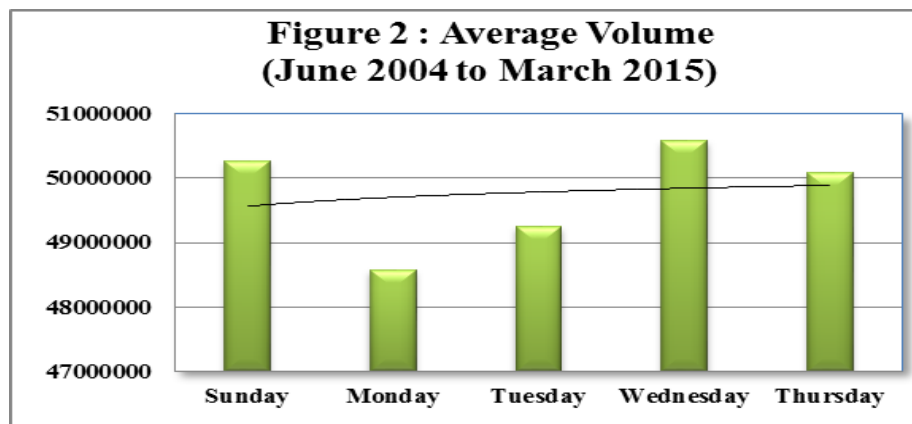
Source: Author's own computation and the data taken from recent market information (06 April 2004 to 30 March 2015) in Dhaka Stock Exchange (DSE) official website (<http://www.dsebd.org>).

After analysing the market sentiment this research finds a norm in the market that, investors want to book profit on Thursday and reinvest on Sunday. Average trade, average value and average market capitalization are high in Sunday. Average return has been given in Thursday and low in Tuesday. The investors are more active on Sunday and low activity exits on Thursday. The market is more volatile on Monday and the low volatile on Wednesday. The other conditions are to be considered as constant in this study. The exploratory research has been shown on the market conditions.

Trade in stock markets means the transfer for money of a stock or security from a seller to a buyer. This requires these two parties to agree on a price. Highest average traded day in the period of 06 June 2004 to 30 March 2015 is Sunday i.e. 91128.99 and lowest average traded day is Thursday i.e. 88095.01. The number of shares traded in a security or an entire market during a given period of time. Highest average Volume in the period of 06 June 2004 to 30 March 2015 is Wednesday i.e. 50267594.99 and lowest average traded day is Monday i.e. 48579159.15.



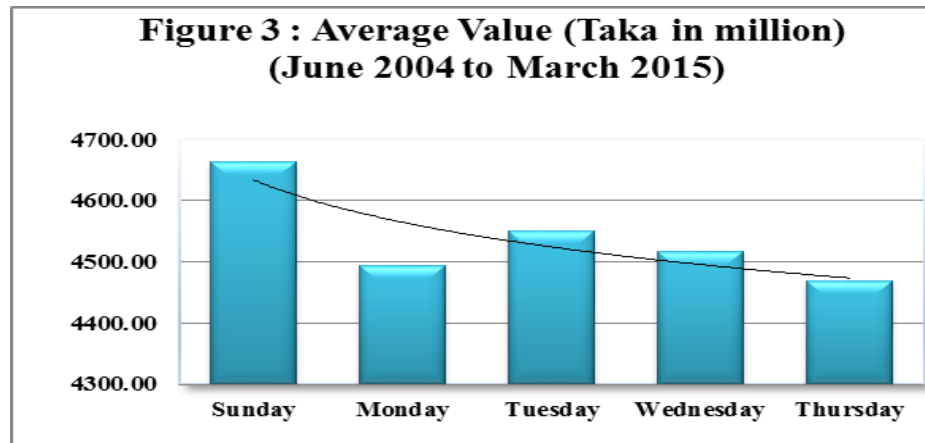
Source: Author's own computation and the data taken from recent market information (06 April 2004 to 30 March 2015) in Dhaka Stock Exchange (DSE) official website (<http://www.dsebd.org>).



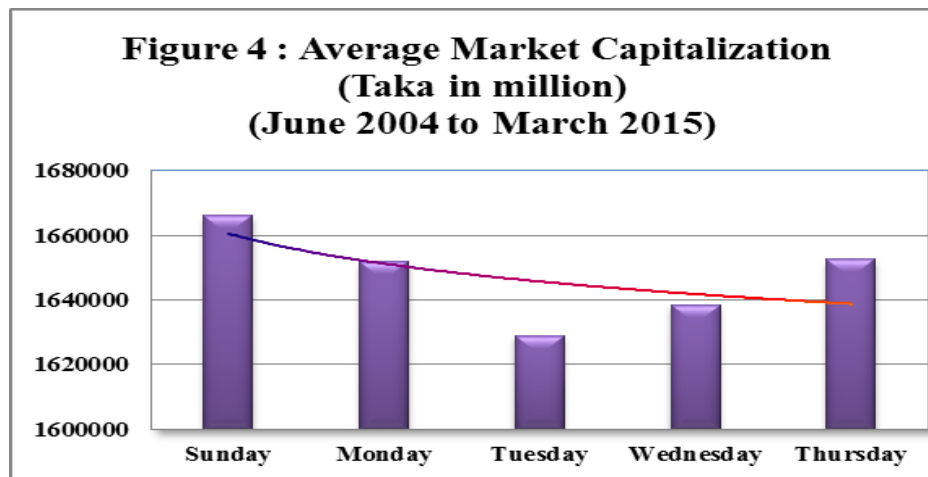
Source: Author's own computation and the data taken from recent market information (06 April 2004 to 30 March 2015) in Dhaka Stock Exchange (DSE) official website (<http://www.dsebd.org>).

The amount traded in taka (BDT) in a security or an entire market during a given period of time. Highest average Value in the period of 06 June 2004 to 30 March 2015 is Sunday i.e. 4664.01 and lowest average traded day is Thursday i.e. 4469.18.

Market capitalization is calculated by multiplying a company's shares outstanding by the current market price of one share. Highest average Market Capitalization in the period of 06 June 2004 to 30 March 2015 is Sunday i.e. 1666045.09 and lowest average traded day is Tuesday i.e. 1629021.87.



Source: Author's own computation and the data taken from recent market information (06 April 2004 to 30 March 2015) in Dhaka Stock Exchange (DSE) official website (<http://www.dsebd.org>).



Source: Author's own computation and the data taken from recent market information (06 April 2004 to 30 March 2015) in Dhaka Stock Exchange (DSE) official website (<http://www.dsebd.org>).

6. Recommendations

The return which has been considered for this paper is resulted with the higher return provided by Thursday and lower return provided by Monday. The investors in the securities market always focus on the purchase of stock on the best price and booking profit, where this analysis helps to the investor for taking the best decision on the day of the week. The return of the stocks depends on the market sentiment which reflects the investor's confidence and average trend on the securities market by the evidence of the past data. This study helps to identify the day which is best for the investors and to identify the overall performance of the market on daily return. The following point to be considered for this study:

- i. The securities market considers the day of the week effect where investors book profit on Thursday where the maximum return has been provided.
- ii. The volatility of the stock is higher on Monday as well as market provides negative return to the investors.
- iii. The condition of the market reflects on Sunday and Thursday because of the opening and closing of the week in Bangladesh stock market.

The following are some recommendations for the investors in the stock market:

- i. The investors have to ensure the confidence on the return from the stock which is mainly depending upon the fundamentally good stock, here is the limitation of the study.
- ii. The market behaves according to the past evidence and proper handling of the market sentiment. The investors must ensure the proper knowledge before investing in any stock of the securities market.
- iii. This study followed by the past data, so in future uncertainty might happen.

7. Conclusion

This paper investigates empirically the day-of-the-week effect anomaly on stock returns for the period from 06 June 2004 to 30 March 2015 using both high frequency and close to close returns calculated using the main market index of Dhaka Stock Exchange. Moreover, Tuesday is the day of lowest return and highest volatility. However, in certain cases, Thursday also suffers from the lowest return indicating presence of reverse weekend effect in the stock market. The reason behind this may be that stock market is still in emerging stage in Bangladesh which is suffering from informational insufficiency. However, we can go for further research on the paper by testing for the presence of volatility in the data series by incorporating ARCH, GARCH, E-GARCH and TARCH models.

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Appendix

Table: 1

Day	Average Trade	Average Volume	Average Value (Tk. in mn)	Average Market Capitalization (Tk. in mn)
Sunday	91128.99	50267594.99	4664.01	1666045.09
Monday	88424.11	48579159.15	4493.36	1651754.50
Tuesday	88177.36	49250084.19	4550.57	1629021.87
Wednesday	88457.72	50585137.31	4516.40	1638590.30
Thursday	88095.01	50095887.95	4469.18	1652699.88

Source: Author's own computation and the data taken from recent market information (06 April 2004 to 30 March 2015) in Dhaka Stock Exchange (DSE) official website (<http://www.dsebd.org>).

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