



FIRM LEVEL CHARACTERISTICS AND STOCK RETURNS: EVIDENCE FROM SELECTED INSURANCE COMPANIES LISTED ON THE DHAKA STOCK EXCHANGE



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ABSTRACT

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This study focuses on investigating several firm level characteristics that determine the stock returns of forty-five insurance companies listed on the Dhaka Stock Exchange (DSE), Bangladesh. Very few studies have been conducted using panel data analysis on the DSE, or other emerging stock markets, compared to developed stock markets. Being a country facing huge risks caused by numerous natural disasters throughout the year, Bangladesh has the opportunity to overcome these risks through both life and general insurance. This study aims to investigate the impact of six firm level characteristics on the stock returns of selected insurance companies listed on the DSE from 2009 to 2019. To analyze the influences of these factors, panel data analysis for balanced panel data (5,577 observations) has been applied while incorporating some relevant tests, which confirm that the fixed-effect model is more suitable than the random-effect model. The study revealed that the positive influences of turnover by value and volume of shares traded are significant, and the negative influence of firm size is also significant. However, the positive impact of highest closing price per month, firm beta and liquidity factors on stock returns is insignificant. The results of the study will add to the existing literature by supporting or contradicting different facts.

Contribution/Originality: This study is one of very few studies that have investigated firm level characteristics influencing the stock returns of selected insurance companies listed on the DSE. This industry was chosen for its potential prospects and opportunities to impact the stock market in the near future.

1. INTRODUCTION

The stock market in Bangladesh is a less liquid and less researched market compared to stock markets in developed countries and other emerging markets. Many of the emerging markets are attracting more researchers to conduct significant studies that suggest different internal and external factors that determine stock returns. But no defined or fixed combination of internal factors has been suggested to date that can determine the changes that have occurred in the stock market. To evaluate the impact of such significant factors, more research needs to be done on the stock exchange in Bangladesh. Most of the existing research on the stock returns of the DSE has applied time series and/or cross-sectional analysis, but it is worth stating that panel data analysis should be applied to get more significant results using the available panel dataset on the stock returns and relevant firm level characteristics.

A previous study on the stock returns of 123 non-financial companies listed on the DSE from 1988 to 1997 applied both time-series and cross-sectional regression models to investigate the significant determinants. This study contradicted the fact mentioned in the capital asset pricing model (CAPM) that beta influences stock return positively. This study also revealed that the degree and direction of changes that were caused by the selected variables were not always similar to those of developed markets, but were similar to other emerging markets (Mobarek & Mollah, 2005). Another study used the Fama–French methodology (Fama & French, 1992) to show how five variables (stock market return, beta, book-to-market value, size and size 1 (sales)) influence the stock returns of the DSE (Rahman, Baten, & Alam, 2006). Hasan, Alam, Amin, and Rahaman (2015) explained the size and value effects on stock returns of the DSE through applying the three-factor Fama–French methodology. The earlier studies conducted on the DSE applied time series and cross-sectional analysis in most cases, whereas the application of panel data analysis was rarely used. Therefore, this study focuses on panel data analysis for more significant results. It also incorporates one of the least examined industries, which is the insurance industry of Bangladesh.

Given that Bangladesh is an over-populated country that faces frequent natural disasters, more emphasis should be placed on the potential of the insurance industry, which can play a vital role in the development of the economic and financial infrastructure. If the Bangladeshi industry is compared to the same in other Asian countries, it is evident that the market has not grown much considering lower insurance premiums per capita (Khan & Uddin, 2020). Being a country facing huge risks caused by numerous natural disasters throughout the year, Bangladesh has the opportunity to improve and overcome these risks through both life and general insurance. Due to lack of awareness among the majority of the population of the country, this industry is lagging behind. But nowadays, the prospects and opportunities to be acquired from the insurance industry are creating more awareness among the people. Researchers are also becoming more interested in investigating the related factors that may determine the prospects of the insurance industry of Bangladesh.

In line with related research, the purpose of the study is to investigate whether the selected firm level characteristics can significantly influence a positive or negative direction of stock returns of forty-five insurance companies listed on the DSE, Bangladesh, from 2009 to 2019. The specific objectives of this study are:

- To examine the influence of the highest closing price of each share per month on stock returns.
- To investigate whether firm beta is significant enough to determine stock returns of selected firms.
- To identify the degree of influence that liquidity level of a firm might have on stock returns.
- To examine how firm size can influence the variation in stock returns.
- To determine the extent to which turnover by value (liquidity proxy) can influence stock returns.
- To investigate how volume of shares transacted per month can affect the variation of stock returns.

2. LITERATURE REVIEW

According to an initial study in line with this research, stocks with high beta give better returns while being transacted in an upward trending market and give lower returns while being transacted in a downward trending market compared to stocks with low beta. This study also mentioned firm size as the only significant determinant of stock returns (Lakonishok & Shapiro, 1984). Another study also incorporated a combination of market beta and firm size that may have a collective effect on stock returns (Fama & French, 1992). A study re-examined and concluded that size effect does not occur due to the relation between return and firm size; rather it occurs due to the relation between market value and discount rate (Berk, 1993). A panel data analysis on Malaysian stock returns shows that firm size is the best possible determinant of stock returns. It also explained that beta influences stock returns in a positive direction consistently, but it has less power to determine stock returns compared to firm size (Pandey, 2001). Drew and Veeraraghavan (2003) revealed that beta alone cannot explain the cross-section of returns while incorporating markets from Hong Kong, Korea, Malaysia and the Philippines. It contradicted the concept of the

CAPM, which showed the positive impact of beta on returns. It suggested that size and book-to-market equity also explain the changes in returns beyond the overall market factor while applying the Fama–French multi-factor model to compare with the one-factor CAPM (Drew & Veeraraghavan, 2003).

One study suggested multi-factor models that incorporate how stock return is influenced by beta, firm size and other internal factors of a firm. It contradicts the concept of the capital asset pricing model, which represents risk mentioned as beta alone. Rather it suggested that risk can be multidimensional beyond considering beta as the only measure of risk (Drew & Veeraraghavan, 2003). A study on the Romanian stock market did not support the idea that beta is the only measure of risk, which is systematic, but rather beta lacks the power to explain returns in the Romanian stock market. It also suggested size as the most significant determinant that influences returns in a negative direction (Tudor, 2010). A study on the Istanbul Stock Exchange revealed how beta influences the variation in stock returns in a positive direction (Chambers & Karaaslan, 2013).

According to another study conducted on the Karachi Stock Exchange, liquidity influences the variation in stock returns negatively, whereas the effect of firm size is insignificant (Ahmad, Fida, & Zakaria, 2013). To compare several firm-sized proxies, the study analyzed how different sized proxies may influence future stock returns, and it showed that market value had a negative influence on stock returns (Wakil, 2013). The ordinary least square (OLS) regression model was applied on panel data of a sample of 63 companies listed on the Karachi Stock Exchange between 2006 and 2011 (Hunjra, Ijaz, Chani, Hassan, & Mustafa, 2014).

The well-known Fama–French three-factor model was applied to investigate the size and value effect on the expected returns on the DSE. It showed that there was a higher average monthly return in small-sized firms with a high book-to-market ratio compared to the returns in big firm with a low book-to-market ratio (Hasan et al., 2015). To evaluate how different firm level characteristics influence the financial performance of insurance firms listed on the Nigerian stock market, random effect estimation explains that the negative influence of firm size is significant, whereas positive influence of liquidity ratio is significant (Kazeem, 2015).

Both the CAPM and Fama–French model were applied to identify the determinants of stock returns of banks in the MENA countries. It found that the risk from size effect (SMB) had a positive impact on small banks and a negative impact on large banks, and the risk related to the market value (HML) had a positive effect on both small and large banks (Ltaifa & Khoufi, 2016).

If considered from a macro level, the insurance industry of a country helps its financial infrastructure reduce the financial liabilities of a government and make the business environment more stable. The insurance sector of Bangladesh consists of 46 general and 32 life insurance companies along with two state-owned insurance companies. 73.5% of the insurance market of Bangladesh comprises life insurance, whereas the remaining 26.5% comprises non-life insurance. Asia, being an emerging region in this sector, is about to capture a large percentage of total life insurance premiums for the period from 2016 to 2025, rising from 11.6% to 21.7%. The insurance sector of Bangladesh is also about to capture a percentage of this overall growth of the region. A recent report on the insurance industry of Bangladesh explained that it will grow in terms of insurance premiums by 7.04% by 2020 (PwC, 2019). Regardless of the challenges that Bangladesh faces, the insurance sector has huge potential for growth. Having such growth potential in this industry in the coming years, the selected insurance companies also have stock return prospects on the DSE. The majority of research conducted on the DSE has included time series and cross-sectional analyses on external factors, such as inflation, money supply, and exchange rate. This study aims to identify significant firm level characteristics that influence the stock returns in positive or negative directions by following 45 insurance companies listed on the DSE from 2009 to 2019.

3. CONCEPTUAL FRAMEWORK

Apart from the stock markets in developed countries, many of the emerging markets are now attracting more researchers to identify different internal and external factors that determine the stock returns. For several reasons,

no defined or fixed combination of internal factors has been suggested to date by any of the stock markets from emerging markets that can determine reasons for the changes. Since most of the research on the stock returns of the DSE has applied time series and/or cross-sectional analysis, panel data analysis should be applied to get more significant results that can define the correlation among stock returns and specific firm level characteristics. There are six firm level characteristics to be considered as the independent variables, whereas stock return is the dependent variable. The independent variables are highest closing price of each share per month (HCP), firm beta, liquidity (ILLIQ), firm size (MV), turnover by value (VA), and volume of shares traded (VO).

Share prices determine the variation in the total return index, which ultimately influences the stock returns. Here, each share's highest closing price per month (HCP) was considered as one of the explanatory variables because daily or monthly closing prices of shares may not be directly related to the stock returns in a positive or negative direction. Firm beta indicates the volatility associated with a security or a portfolio when it is compared with the overall market. In this study, firm beta was calculated using the slope found between the excess return from a particular stock's total return index and the excess return from its value weighted index. Liquidity also indicates a type of risk or volatility associated with stock returns that defines how low or high liquidity can have different effects on the stock returns. The Amihud illiquidity measure is used here as the liquidity indicator, which was calculated as the price changes per unit of volume in currency.

$$\text{Amihud illiquidity measure: } ILLIQ_t = |r_t| / DVOL_t$$

where r_t is the return on day t , and $DVOL_t$ is the volume in BDT transacted on day t (Nguyen & Lo, 2013). Firm size was calculated as the market price per share multiplied by the total number of a firm's outstanding shares (Tahir, Sabir, Alam, & Ismail, 2013). Turnover by value is another liquidity proxy that indicates the volume of shares transacted per month in terms of the home currency (BDT) or value of that particular share (Nguyen & Lo, 2013). Volume of shares traded is the aggregate number of shares transacted per month (Maddala & Nimalendran, 1995). Based on the literature review, the dependent variable (stock return) and the six aforementioned explanatory variables formulate the conceptual framework of the study.

3.1. Hypothesis Development

The following hypotheses have been developed to examine the impact of the selected independent variables on the stock returns of 45 insurance companies on the DSE.

H₁: Highest closing price per month has a significant influence on stock return.

H₂: Firm beta has a significant influence on stock return.

H₃: Liquidity has a significant influence on stock return.

H₄: Firm size has a significant influence on stock return.

H₅: Turnover by value has a significant influence on stock return.

H₆: Volume of shares traded has a significant influence on stock return.

4. RESEARCH METHODOLOGY

Since the analysis of the study incorporates historical data, its quantitative research design can be mentioned as an ex post facto research design. The secondary dataset was collected from Thomson Reuters Datastream, which was analyzed through the use of STATA. As mentioned in a recent report (PwC, 2019), the insurance industry of Bangladesh is about to grow in terms of insurance premiums by 7.04% by 2020.

The sample of 45 insurance companies includes 32 private general insurance companies, eight private life insurance companies, two private Islamic general insurance companies and three private Islamic life insurance companies. These companies were selected because their data on the six aforementioned firm level characteristics was mostly available from 2009 to 2019 and have up-to-date financial statements in local currency (BDT). Panel regression analysis was applied to examine the influences of these factors on stock returns. Post-residual diagnostic

tests were done to investigate the validity of the model assumptions based on heteroskedasticity and multicollinearity tests.

Table 1. Measurements of Variables.

Variables	Measurements	Expected Sign	Reference
SR	Natural logarithm of total stock return (SR) index at a specific month divided by total return index of the previous month	Not Applicable	
HCP	Highest closing price of each share per month	N/A	
Beta	Slope that exists between the excess return from a particular stock's total return index and the excess return from its value weighted index	+/-	Drew and Veeraraghavan (2003); Pandey (2001); Chambers and Karaaslan (2013); Pan (2012); Mobarek and Mollah (2005); Tudor (2010)
ILLIQ	The Amihud illiquidity measure: $ILLIQ_t = r_t / DVol_t$ where r_t is the return on day t and $DVol_t$ is the volume in BDT transacted on day t	-	Ahmad et al. (2013); Nguyen and Lo (2013)
MV	The market price per share multiplied by the total number of that firm's outstanding shares	+/-	Drew and Veeraraghavan (2003); Tudor (2010); Wakil (2013); Ltaifa and Khoufi (2016); Safdar (2013); Pandey (2001); Pan (2012); Idris and Bala (2015)
VA	Turnover by value per month in BDT (liquidity proxy)	+	Nguyen and Lo (2013)
VO	Total number of shares that are traded per month	+	Pan (2012)

Note: Monthly data has been collected for all the aforementioned variables.

Table 1 indicates the measurements of six firm level characteristics and the dependent variable that have been used to conduct this study. The previous related references were also added for a better view on these variables.

To conduct the panel data analysis, fixed-effect and random-effect model were applied to examine multiple assumptions on these estimations. The Hausman specification test and Breusch–Pagan Lagrange Multiplier (LM) test were run to examine and differentiate the multiple assumptions. From these tests, it was shown that fixed-effect regression was more suitable than random-effect regression. Thus, the results of the study are based on the following regression model that describes the influence of six firm level characteristics on the stock returns of the selected firms:

$$LN SR = \beta_0 + \beta_1 * HCP_{it} + \beta_2 * BETA_{it} + \beta_3 * ILLIQ_{it} + \beta_4 * MV_{it} + \beta_5 * VA_{it} + \beta_6 * VO_{it} + \epsilon_{it} \quad (1)$$

In the above equation 1, subscript (i) represents the cross-sectional dimension, (t) represents the time series effect, ϵ_{it} represents the error term, β_0 represents constant individual effect over time, and β_1 - β_6 represents the coefficients of independent variables.

5. RESULT

Table 2 represents the descriptive statistics summary showing the mean, standard deviation, minimum and maximum values of the dependent and independent variables. Table 2 shows that the natural logarithm of the monthly stock return had a mean of .0292313 over the time period studied, which had minimum and maximum values of -10.40012 and 7.875491, respectively. The minimum value indicates that between 2009 and 2019, some of the shareholders lost approximately 10.4% of their stock returns. This time period also included the stock market crash that occurred in 2009-10 in Bangladesh. MV has a mean of 2194.951 having standard deviation, minimum and maximum values of 3021.047, 0.17 and 29511.88, respectively. These values indicate that there is a considerable dispersion in the values from the mean because standard deviation is slightly higher than the mean.

Table 2. Descriptive Statistics of the Variables.

Variables	No. of Observations	Mean	Std. Dev.	Minimum	Maximum
LN SR	5,587	.0292313	.6839074	-10.40012	7.875491
HCP	5,583	44.93506	44.33315	2.29	520.42
BETA	5,587	1.010417	.4757862	-.7079793	6.012267
ILLIQ	5,582	11.65771	66.64385	1.05e-08	2790.472
MV	5,581	2194.951	3021.047	.17	29511.88
VA	5,582	7.72e+08	5.47e+09	16.33333	2.07e+11
VO	5,582	4235.676	6965.188	3.525	99001.01

Table 3. Pearson Correlation Matrices for Dependent and Independent Variables.

Variables	LN SR	Beta	EPS	MTBV	MV	VO	VA
LN SR	1.0000						
HCP	-0.0069	1.0000					
BETA	0.0767	-0.0238	1.0000				
ILLIQ	-0.0086	-0.0365	-0.0557	1.0000			
MV	-0.0434	0.5904	-0.0221	-0.0073	1.0000		
VA	0.0210	0.1966	0.0497	-0.0247	0.3278	1.0000	
VO	0.3047	-0.0510	0.2015	-0.0753	-0.0196	0.0351	1.0000

According to Table 3, VO has the strongest positive relationship (0.3047) and MV has a significant negative relationship (-0.0434) with the dependent variable. Considering the independent variables, the strongest positive relationship (0.5904) exists between firm size and beta. Following the values of the explanatory variables, Pearson's correlation coefficients range from -0.0073 to 0.5904. Since the difference in this range is minimal, it can be concluded that there is no multicollinearity problem in this model. This correlation matrix was examined to determine the degree of correlation among the dependent and independent variables. To get a more in-depth understanding of the possible presence of a multicollinearity problem, the variance inflation factor (VIF) test was used. To investigate the possible problem associated with heteroskedasticity and multicollinearity, the following robustness tests were conducted:

Table 4. Summary of Robustness Tests.

Tests	Statistics	p-value
Modified Wald test	128.90	0.0000
Mean variance inflation factors	1.24	-

Table 5. Variance Inflation Factors Test.

Variable	VIF	1/VIF
MV	1.66	0.604068
HCP	1.54	0.648568
VA	1.13	0.888057
VO	1.05	0.951689
BETA	1.05	0.954799
ILLIQ	1.01	0.990297
Mean VIF	1.24	

According to Table 4, the modified Wald test for group-wise heteroskedasticity shows a chi-square value of 128.90 and a p-value of 0.0000. This indicates presence of heteroskedasticity, which may cause the standard errors to be biased. To control this bias, the regression was run again with the robust option. If this regression result is compared with the fixed-effect regression done earlier, it can be seen that none of the coefficients has changed, whereas the standard errors and t-values are slightly different. As a whole, the fixed-effect estimation reveals that the most significant determinants of stock returns of the sample firms are MV, VA and VO. Table 5 shows the results of the VIF test, which assists in further explaining the degree of multicollinearity among the independent variables. Here, this VIF test gave a mean value of 1.24, which is less than 2 and, therefore, indicates that there is no existence of multicollinearity in the data set.

Table 6. Hausman Specification Test.

Variables	(b)* Fixed effect	(B)** Random effect	(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
HCP	.0016099	.0007336	.0008762	.0002566
BETA	.051141	.0212974	.0298436	.0046115
ILLIQ	.0000814	.0001717	-.0000904	.0000166
MV	-.0001068	-.0000165	-.0000903	7.20e-06
VA	9.41e-12	3.05e-12	6.36e-12	4.84e-13
VO	.0000329	.0000295	3.44e-06	3.58e-07

Table 6 displays the Hausman specification test results, which indicate a chi-square value of 206.03 and a probability value of 0.0000 (less than the critical value of 0.05). This value indicates that fixed-effect regression is more suitable than random-effect regression. To further check this statement, the Breusch–Pagan Lagrange Multiplier test for random-effects was also run. With a chi-square value of 0.00 and a p-value of 1.0000, the LM test again revealed that fixed-effect regression is more applicable than random-effect regression. OLS regression can also be carried out to check further effects.

Table 7. Panel Regression (Fixed Effect Model).

Variables	Fixed-Effect Panel Regression		
	Coefficients	t-value	p-value
Constant	-.0081162	-0.14	0.886
HCP	.0016099	1.57	0.124
BETA	.051141	1.33	0.190
ILLIQ	.0000814	1.32	0.194
MV	-.0001068	-3.57	0.001
VA	9.41e-12	2.93	0.005
VO	.0000329	7.31	0.000
R ²	0.0967	-	-
Adj. R ²	0.0958	-	-
F-stat	5.15	-	0.0000

Following the results from Table 6 showing Hausman specification test, Table 7 shows the fixed-effect regression model, which incorporates the regression line of $LN\ SR = -.0081 + .0016HCP + .0511BETA + .0000814ILLIQ - .0001068MV + (9.41e-12)VA + .0000329VO$. This indicates that when HCP, BETA, ILLIQ, VA and VO increase, there is also an increase in the stock returns. On the other hand, if MV increases, stock return will decline. The positive effects of HCP, BETA and ILLIQ on stock returns are insignificant because the p-value of these factors are 0.124, 0.190, and 0.194, respectively, which are greater than 0.05. Apart from these factors, three other characteristics explain that the stock returns were influenced by MV, VA and VO in a significant manner. The F-value of 5.15 with a p-value of 0.0000 revealed the fitness level of the model. Thus, it can be concluded that the overall effects of these six firm level characteristics are statistically significant at a 5% significant level. The value of R² (0.0967) reveals that 9.67% of the changes in stock returns of the selected sample firms can be explained by the firm level characteristics (HCP, BETA, ILLIQ, MV, VA and VO). The remaining percentage can be accounted for by other external or internal variables that are not included in the model or could be explained by the relevant error term associated with the model.

6. DISCUSSION

6.1. Highest Closing Price per month and Stock Returns

HCP has a coefficient value of .0016099 while having a t-value of 1.57 and a p-value of 0.124. This indicates that the stock returns are influenced by HCP positively, which means that if HCP per month increases, the stock returns also increase. From the t-value and p-value, it can be concluded that the positive impact of HCP on the stock returns of the selected insurance companies is insignificant.

6.2. Firm Beta and Stock Returns

Firm beta has a coefficient value of .051141 with a t-value and p-value of 1.33 and 0.190, respectively. This explains that the positive influence of firm beta on stock return is insignificant. Many of the studies on different stock markets explain that beta is positively or negatively correlated with the stock returns (Chambers & Karaaslan, 2013; Mobarek & Mollah, 2005; Pandey, 2001). However, this study supports the findings of other studies where evidence shows that beta being the single risk factor is not sufficient to explain the stock returns effectively; one such study was conducted on the markets in Hong Kong, Korea, Malaysia, and the Philippines (Drew & Veeraraghavan, 2003). Though this contradicts the concept of CAPM, this study supports the idea that beta is insufficient to describe the stock returns of the insurance industry in Bangladesh.

6.3. Liquidity and Stock Returns

The coefficient value of the Amihud ILLIQ factor per share is .0000814, which has a t-value of 1.32 and a p-value of 0.194. This indicates that ILLIQ had positive effect on stock returns, but this effect is insignificant considering the other values. A study on the Karachi Stock Exchange explained that liquidity is negatively correlated with stock returns (Ahmad et al., 2013). However, this study shows that the positive influence of ILLIQ on the stock returns is insignificant.

6.4. Firm Size and Stock Returns

Firm size has a beta coefficient of -.0001068 with a t-value and p-value of -3.57 and 0.001, respectively. These values explain that firm size has a significant negative impact on the stock returns, therefore, the bigger the firm size, the lower the stock return. This supports the findings of another study held on emerging markets, such as Hong Kong, Korea, Malaysia, and the Philippines, which revealed that small firms make higher stock returns compared to large firms (Drew & Veeraraghavan, 2003). However, findings of different studies revealed that firm size influences the variation in stock returns in a positive direction (Safdar, 2013), but many of the studies conducted on other emerging stock markets revealed negative influences of firm size on stock returns (Idris & Bala, 2015; Pandey, 2001).

6.5. Turnover by Value and Stock Returns

Turnover by value has a coefficient value of $9.41e-12$ with a t-value of 2.93 and a p-value of 0.005. This variable has rarely been used in previous studies as an indicator of stock returns, which is represented in the form of currency. It is a liquidity proxy, which represents the influence it may have on the fluctuations of stock returns as a whole (Nguyen & Lo, 2013). From the values mentioned here, it can be concluded that VA is one of the significant indicators that influences the returns in a positive direction.

6.6. Volume of Shares Traded and Stock Returns

The volume of shares traded has a coefficient value of .0000329 with a p-value of 0.000. These values represent how VO per month influences the stock returns positively, and its effect is significant while having a t-value of 7.31. This finding supports a previous study on the Shanghai Stock Exchange, where it was mentioned that over a certain time period, this independent variable had a positive influence on the fluctuations of stock returns (Pan, 2012). From the regression result, the F-value of 5.15 having a p-value of 0.0000, revealed the fitness of the model, which explains that the contribution of the explanatory variables to determine the dependent variable is statistically significant at a 5% level of significance. If the overall findings of the study are considered, it can be concluded that the impact of three of the explanatory variables (highest closing price per month, firm beta, and liquidity) is insignificant and the impact of the other three explanatory variables (firm size, turnover by value, and volume of shares traded) is significant enough to explain the stock returns of the selected 45 insurance companies listed on the

Dhaka Stock Exchange. These firm level characteristics should be included in different models and analyses along with other internal and external characteristics to determine how these influence stock returns, and in which direction these firm level characteristics contribute to the determination of stock returns.

7. CONCLUSION AND RECOMMENDATION

Considering the degree of risk associated with environmental, political, and economic issues, and other unpredictable changes, the insurance industry of Bangladesh must develop to minimize the level of risk that may arise from different national issues. After gaining independence in December 1971, the insurance industry of Bangladesh became nationalized in August 1972. Since then, the industry has not developed as required and the government now needs to monitor all possible opportunities to develop this industry. This study focused on determining the significant influences of some specific firm level characteristics on the stock returns of selected general and life insurance companies that are listed on the Dhaka Stock Exchange in Bangladesh.

The results of the study revealed that firm size, turnover by value, and volume of shares traded are significant determinants of the stock returns of selected companies. On the other hand, the impact of highest closing price per month, firm beta, and liquidity are not significant enough to explain the stock returns of the selected companies. Firm size is negatively related to stock return, whereas turnover by value and volume of shares traded are positively related to stock return. This study recommends that the firm beta and liquidity factors that exist in the market should be determined accurately so that investors can analyze and manage their portfolio that incorporates these listed firms, otherwise, the impact of these factors may not be anticipated effectively leading to misguided decisions regarding investment and portfolio management. Beyond this recommendation, some other issues that might arise from the stock exchange itself can manipulate stock returns. The Securities and Exchange Commission along with the government must look into this matter and ensure that there is no unexpected manipulation within the stock market. If there is transparency in the trading activities of the DSE, more people and potential investors will be attracted to invest in the stock market of Bangladesh, which will help to develop the market as a whole.

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