



The Impact of Dividend and Dividend Related Issues on Share Price Volatility: A Case of Dhaka Stock Exchange

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Abstract

The present study attempts to investigate the impact of dividend and dividend-related issues along with the other important financial factors on the share price volatility at the oldest stock market (DSE) of Bangladesh. A cross-sectional regression model has been used to explore the association between share price volatility and both the dividend yield and the dividend payout ratio. This study has found a positive relation between dividend yield and stock price volatility, and also a negative relationship between dividend payout and stock price volatility. After studying 15 “A” category shares of Dhaka Stock Exchange it has been found that the dividend and dividend-related issues are relevant in determining share price changes. In addition, the study reveals that the asset growth rate, earnings volatility, debt to asset ratio and firm size also help explain stock price volatility.

Keywords: Share Price Volatility, Dividend Payout, Dividend Yield, Dividend Policy and DSE.

JEL Classification: G21, G32, G35, P34 and R53

1.0 Introduction

The volatility of share price a systemic risk faced by investors who possess investment in ordinary shares. It is a rate at which the price of a security increases or decreases for a given set of returns. The price of the security can change dramatically over a short time period in either direction. A lower volatility means that a security's value does not fluctuate dramatically, and tends to be steadier. Volatility is the range of price changes a security experiences over a given period of time. Volatility is measured by calculating the standard deviation of the annualized returns over a given period of time. Numerous factors may instigate the volatility of share price. There are some fundamental factors that might be held responsible for volatility in share price. Corporate financial management involves three important decisions namely; financing decision, investment decision, and dividend decision Baker. The latter is the focus of this study. As the prime focus is on dividend decision the dividend yield, dividend payout, dividend policy comes in the line of discussion.

The dividend yield is the dividend expressed as a percentage of a current share price and it is said to have a salient impact on share price volatility. It constitutes a significant portion of the return on investment in shares and also contributes to the capital gain. Thus, investors are concerned with the dividend yield. As the investors are concerned, they express demand accordingly and their demand pattern exerts an influence on stock price. Due to the influence, the price volatility rises. The dividend payout ratio is the number of dividends paid to stockholders relative to the amount of total net income of a company. The amount that is not paid out in dividends to stockholders is held by the company as retained earnings for growth. The investors are also concerned with the dividend payout ratio because it leaves a signal to them about the company which might create volatility in share price. Dividend policy is a company's approach to distributing profits back to its owners or stockholders. If a company is in a growth mode, it may decide that it will not pay dividends, but rather re-invest its profits (retained earnings) in the business. Issues of dividend policy range from its puzzle by Black to its irrelevance by Miller and Modigliani (1961) than to its relevance by DeAngelo, DeAngelo, and Skinner (1996). Other issues include theories on dividend

payment such as the stakeholders' theory, pecking order theory, agency cost, signalling theory, bird in hand fallacy and clientele effect. The information asymmetry between managers and shareholders, along with the separation of ownership and control, formed the base for another explanation for why dividend policy has been most popular. There is a lot of track of research on dividend-related issues in recent times. Different markets have been studied at different times and the studies produced mixed and controversial results.

The share price volatility might be caused out of numerous reasons. Besides dividend policy, dividend yield there are a lot of macros and microeconomic factors affect share price volatility. In this paper, some fundamental and financial factors have been included based on prior research and studies. They are firm-size, asset growth rate, earnings volatility and debt to asset ratio. A company's financial strengths and conditions can be measured using these factors. So the investors are concerned about these factors. Any change in these factors is coupled with changes in the share price of a particular company.

The number of studies regarding dividend-related issues conducted on the stock exchanges of Bangladesh is not too many. The markets are relatively new and are still growing and have experienced a lot of ups and downs. The stock markets of Bangladesh are still characterized by a semi-strong form of efficiency and markets of asymmetrical information. But the situation is improving gradually. The investors and their knowledge play the most important role in any stock market. But a huge chunk of the general investors in the stock market are still unaware of the fundamental and financial factors.

2.0 Objective of the Study

The prime objective of this research work is to find out the power of dividend and dividend related issues to influence the share price volatility. There are also some other specific objectives of this study. These are as follows:

- To find out the way in which dividend policy affect share price volatility.
- To find out the other fundamental and financial factors that might influence share price volatility.

3.0 Rationality of the study

Among all the investment avenues the stock investment is a lucrative one. The stock market is

one of the most important financial institutions of any economy as well as of Bangladesh. It opens the door for companies to raise a huge amount of capital from a lot of individual investors inside & outside of a country. Investors participate voluntarily to buy and sell ownership of a company in the public market. There is a saying that the stock market is the pulse of the economy.

There is no doubt that a vibrant capital market is likely to support economy to be robust but two major catastrophes in the capital market of Bangladesh within one and half decades do not indicate the existence of a vibrant market; rather these show a highly risky and unstable capital market. Bangladeshi Stock Market has experienced a big crash twice from its inception. In 1996, the market was crashed because of a speculative bubble whereas; it was an asset bubble in the year 2011. The stock price was overvalued this time. Price was inflated about 500-700 percent compare to the face value. DGEN Index climbed at point 8918.51 on December 05, 2010 which signalled a steeper bubble. The volatility in the market resulted from the volatility in the stock prices. In this paper the macroeconomic factors behind stock price volatility have been bypassed, rather some core financial and fundamental factors have been perused. The scenario of stock price volatility and the reasons behind the volatility for six years after the crash of 2010-2011, has been examined in this paper.

Dividend Policy is a financial decision that refers to the proportion of the firm's earnings to be paid out to the shareholders and it contributes to sharing price volatility. And for these reasons, the studies have been made to seek the relationship between share price volatility and dividend policy.

4.0 Scope of the study

Comprehensive knowledge of the stock price volatility and the underlying reasons for volatility will be mainly presented in this paper. This study has considered the following factors;

- The volatility of stock prices at the Dhaka Stock Exchange for the period of 2012-2017.
- The dividend yield and dividend payout trend in Bangladesh.
- The condition of asset growth, earnings volatility, debt to total asset ratio and the firm size of the companies in the country.

5.0 Literature Review

The literature review contains the citation of prior studies done on share price volatility and dividend-related topics and the synopsis of those studies. At first, the study included a summary of the studies that have been made on the Stock Markets of different countries. And then, it has included the studies done in the context of Bangladesh.

The earlier work on dividend-yield and stock price-volatility were conducted by Harkavy (1953); Friend and Puckett (1964); Litzenberger and Ramaswamy (1982); Fama and French (1988); Baskin (1989) and Ohlson (1995) in the context of United States. These studies are largely non-conclusive. Although Friend and Puckett (1964) for example found a positive effect of dividend on share price, Baskin (1989) found an inverse relationship between dividend yield and stock price volatility in the United States. Outside the United States, such study was conducted by Ball, Brown, Finn, and Officer (1979) and Allen and Rachim (1996) in the Australian context. Although Ball et al. (1979) found the positive impact of dividend yield on post-announcement rates of return, Allen and Rachim (1996) failed to find any evidence that dividend yield influence the stock price volatility in Australia. Hussainey, Oscar Mgbame, and Chijoke-Mgbame (2011) found a positive relationship between dividend yield and stock price changes and a negative relationship between dividend payout ratio and stock price changes in the UK stock market. In addition, their results show that the firm's growth rate, debt level, size and earnings explain stock price changes. Hooi, Albaity and Ibrahimy (2015) conducted a study on the Kuala Lumpur stock exchange. In their study, Dividend yield and dividend payout were found to be negatively related to sharing price volatility and were statistically significant. Firm size and share price were negatively related. Positive and statistically significant relationships between earning volatility and long-term debt to price volatility were identified as hypothesized. However, there was no significant relationship found between growth in assets and price volatility in the Malaysian market. Nishat (1992) in a study on Pakistan found that the share price reactions are significant following the earnings announcements. Conroy, Eades, and Harris (2000) in a study found that earnings announcement has no material impact on stock price in Japan. (Ilaboya & Aggreh, 2013) examined the relationship between dividend policy and share price volatility

across companies listed in the Nigerian Stock Market. Their finding indicated that dividend yield exerts a positive and significant influence on share price volatility of firms while dividend payout exerts a negative and insignificant influence on share price volatility.

Although numerous studies are conducted in the area of dividend policy, the study of dividend and stock price volatility on the emerging market is almost absent. Rashid and Rahman (2008) conducted a study on the stock market of Bangladesh. Their study presented the evidence of a relationship between the stock price volatility and dividend policy in Bangladesh, by using the cross-sectional regression analysis after controlling for earnings volatility, payout ratio, debt, firm size and growth in assets. This study seeks to examine if the earnings announcement in the form of dividend influences the volatility of share prices in Bangladesh. This study has an extension of the study of Rashid and Rahman (2008) on the Bangladeshi Stock Market. It may contribute to the finance literature by reducing the dearth of studies on dividend and stock price volatility in the context of Bangladesh.

6.0 Hypothesis of the Study

This study has been conducted on the basis of null hypotheses to answer the research questions. The hypotheses are:

Main Hypothesis:

H₀:1 Dividend and related issues exert significant influence on the share price volatility.

Specific Hypothesis:

H₀:2 Dividend yield, dividend payout, asset growth, earnings volatility, firm size and debt to asset ratio do not affect share prices either individually or collectively.

In this paper, the researcher tries to reject the null hypotheses to meet the objective of this study.

7.0 Methodology

7.1 Research Sample and Data Collection Process

This study has arrayed a cross-sectional research design using secondary data from the Dhaka Stock Exchange (DSE), annual reports from the companies' websites. For the study, researchers have chosen a six-year time span ranging from 2012-2017. I have selected 15 'A' category shares randomly out of

290 all category shares. The shares were selected from 14 different industries. The industries and the selected shares are-

Table3.1 Samples for the study

SI No.	Industry	Name of the stocks	Number of Stocks
1	Banks	City Bank	1
2	Engineering	Rangpur Foundry Ltd.	2
		BSRM Steels Ltd.	
3	Food And Allied	British American Tobacco Bangladesh Company Ltd.	1
4	Fuel and power	Linde Bangladesh Ltd.	1
5	Jute	No	0
6	Textile	Rahim Textile Ltd	1
7	Pharmaceuticals and Chemical	Beximco Pharmaceuticals Ltd	1
8	Paper and Printing	No	0
9	Service and Real estate	DELTA BRAC Housing and Finance Corp. Ltd.	1
10	Cement	Heidelberg Cement Bangladesh Ltd.	1
11	IT sector	BDCOM Online Ltd.	1
12	Tannery Industry	Apex Tannery Ltd.	1
13	Ceramic Industry	Standard Ceramic Industries Ltd.	1
14	Insurance	Green Delta Insurance Company Ltd.	1
15	Telecommunication	Grameenphone	1
16	Travel and Leisure	No	0
17	Miscellaneous	Berger Paints Bangladesh Ltd.	1
Total			15

All the investment companies and corporate bonds have been excluded at the time of preliminary selection.

7.2 The Model Specification

A regression model has been developed. The model examines the relationship between share price volatility and dividend policies. [Dividend yield, Dividend payout ratio], with some other variables: firm size, earnings volatility, asset growth rate, debt to total asset ratio. This model was adopted from Ilaboya and Aggreh (2013).

The model is as follows:

$$\text{Share Price Volatility} = \alpha + \beta_1 \text{Dyld} + \beta_2 \text{Payout} + \beta_3 \text{Size} + \beta_4 \text{Debt} + \beta_5 \text{E.vol} + \beta_6 \text{AsGRt} + \epsilon$$

Where α is the intercept, β is the regression coefficient and ϵ is the error term.

To test the models' result credibility, multicollinearity

has been tested using Pearson Correlation. Due to the high correlation found between two of the independent variables, two separate models have been developed. They are as follows:

1. Share Price Volatility = $\alpha + \beta_1 \text{Dyld} + \beta_2 \text{Size} + \beta_3 \text{Debt} + \beta_4 \text{E.vol} + \beta_5 \text{AsGRt} + \varepsilon$
2. Share Price Volatility = $\alpha + \beta_1 \text{Payout} + \beta_2 \text{Size} + \beta_3 \text{Debt} + \beta_4 \text{E.vol} + \beta_5 \text{AsGRt} + \varepsilon$

The two models were supporting the initial one. The results of the following two models did not differ significantly from the original one. So, the interpretation has been given on the basis of the result obtained from the original model. Nonetheless, all the result has been presented in this paper.

7.2.1 Variables Definition

The variables of this study are derived from the earlier studies such as GORDON (1959), Baskin (1989); Nishat (1992); Allen and Rachim (1996), linking the stock price, dividend, retained earnings and some other variables. These are discussed below.

a) Share Price Volatility

It is a rate at which the price of a security increases or decreases for a given set of returns. Volatility is measured by calculating the standard deviation of the annualized returns over a given period of time.

Here it has been measured using the following equation;

$$\text{Share Price Volatility} = \sqrt{\frac{\sum_{i=1}^6 \left((H_i - L_i) / \left(\frac{H_i + L_i}{2} \right) \right)^2}{6}}$$

In the above equation, H_i : Highest stock price for years; L_i : Lowest stock price for year i .

b) Dividend Yield (Dyld)

The dividend yield is calculated as the ratio of the cash dividend paid to common shareholders and the market value of common stock at the beginning of the year. The calculation is as follows;

$$\text{Dyld} = \sum_{i=1}^6 \frac{D_i}{MV_i} / 6$$

Here,

Dyld: Dividend yield;

D_i : Dividend Paid in the year i ;

MV_i : Market value of the firm at the end of year i

c) Earnings Volatility (E.vol)

It is the standard deviation of the ratio of the company's operating earnings before interest and tax (EBIT) to total assets. This has been calculated using the following equation;

$$\text{E.vol} = \sqrt{\frac{\sum_{i=1}^6 (R_i - \bar{R})^2}{6}}$$

Here,

R_i : Ratio of operating income to total asset for a year i ;

$$\bar{R} = \sum_{i=1}^{2012} \frac{R_i}{6}$$

d) Payout Ratio (Payout)

It is the ratio of the company's total dividend to total earnings. To do so total dividend and total cumulative earnings are calculated for each year. This has been calculated using the following equation;

$$\text{Payout} = \sum_{i=1}^6 \frac{D_i / E_i}{6}$$

Here,

D_i : Dividend Paid in year i ;

E_i : Net profit after tax for the year i ;

e) Debt to Total Asset (Debt)

It is the ratio of a company's long term debt (excluding the liabilities which are due within one year) to total assets. This has been calculated using the following equation;

$$\text{Debt} = \sum_{i=1}^6 \frac{LD_i / \text{Asset}_i}{6}$$

Here, LD_i : Long-term debt at the end of year i ; Asset_i : Total Asset at the end of year i

f) Firm Size (Size)

Firm size is defined as the natural logarithm of the market value of equity at the beginning of the year.

This is calculated in the following way;

$$\text{Size} = \ln \left(\sum_{i=1}^6 \frac{MV_i}{6} \right)$$

Here, MV_i : Market value of the firm at the end of year i

g) Growth in Assets (AsGRt)

The growth is calculated as the changes in assets from the beginning to the end.

This has been calculated using the following equation;

$$AsGRt = \frac{\sum_{i=1}^6 (\Delta Asset_i / Asset_i)}{6}$$

Here, AsGRt=Asset growth rate; Asset_i:Change of total asset in year i

Asset_i: Total Asset at the beginning of year i

7.3 Analysis and Results

This section reveals the analysis results and the interpretation of the results. There will be descriptive statistics, multicollinearity, and regression analysis and their required interpretation of them.

7.4 Descriptive statistics

Descriptive statistics covers mean, median, standard error, sample variance, range, maximum, minimum, summation, standard deviation and sample variance of the variables of the model.

Table 4.1 Descriptive statistics

	Volatility	Dyld	Payout	Size	Debt	E.vol	AsGRt
Mean	0.426441	0.030292	0.528474	21.84557	0.173939	0.022756	0.082298
Standard Error	0.022918	0.004028	0.059278	0.771349	0.059981	0.003283	0.014611
Median	0.411552	0.027007	0.550021	22.34333	0.085522	0.023463	0.110611
Standard Deviation	0.08876	0.0156	0.229582	2.98742	0.232306	0.012714	0.056589
Sample Variance	0.007878	0.000243	0.052708	8.92468	0.053966	0.000162	0.003202
Range	0.361863	0.051429	0.925926	10.12608	0.838105	0.041043	0.167328
Minimum	0.263431	0.009828	0.046986	16.4387	0.005082	0.003674	-0.01872
Maximum	0.625294	0.061257	0.972913	26.56478	0.843187	0.044717	0.148607
Sum	6.396619	0.454383	7.927107	327.6836	2.609087	0.341347	1.234475
Count	15	15	15	15	15	15	15

Source: Annual Reports (2011-2017), DSE

Where, Volatility = share price volatility, Dyld= Dividend Yield, Payout=Dividend Payout ratio, Size= Firm Size, Debt = Debt, E.vol=Earnings Volatility, AsGRt=Asset Growth.

Notes: Data have been compiled by researchers

As observed in Table 4.1, the standard deviation, maximum, minimum and median values for Volatility stood at 0.08876, 0.26343, and 0.411552 respectively with a mean of 42.6411%. The mean value for Dyld stood at 0.30292 and suggests a dividend yield of about 30% over the study period with a standard deviation of 0.0156. The maximum, minimum and median values for the period under review were 0.062157, 0.009828 and 0.027007 respectively. The mean value for Payout stood at 0.528474 which suggest a dividend payout average of about 52.8% with a standard deviation stood of 0.229582. The maximum, minimum

and median values were .9729013, 0.046986 and 0.550021 respectively. The size was observed to have a mean value of 21.84557 and a standard deviation of 2.9842. The maximum, minimum and median values were 26.56478, 16.4387 and 22.34333 respectively. Debt is observed to have a mean value of 0.173939 and a standard deviation of 0.232306. The maximum, minimum and median values were 0.843187, 0.005082 and 0.0085522 respectively. EVOL is observed to have a mean value of 0.022756 which suggest an average earnings volatility rate of about 2.27% and a standard deviation of 0.012714. The maximum, minimum and median values were 0.044717, 0.003674 and 0.023463 respectively. Finally, AsGRt was observed to have a mean value of 0.082298 which suggest an average asset growth rate of about 8.2 % and a standard deviation of 0.056589. The maximum, minimum and median values were 0.148607, -0.01872 and 0.110611 respectively.

7.5 Multicollinearity

Multicollinearity can be defined as the correlations or multiple correlations of sufficient magnitude among independent variables to have the potential to adversely affect the regression estimates.

Multicollinearity can generate misleading results when attempting to examine how well individual independent variables could be used as predictors to understand the dependent variable.

Table 4.2 Pearson Correlation

	Share Price Volatility	Dyld	Payout	Size	Debt	E.vol	AsGRt
Share Price Volatility	1						
Dyld	-0.34225	1					
Payout	-0.24417	0.715823	1				
Size	0.121811	-0.226	-0.4578	1			
Debt	-0.10058	0.425611	0.124638	0.153604	1		
E.vol	0.100517	-0.38677	-0.23854	0.050612	-0.43596	1	
AsGRt	-0.64333	0.321025	-0.07911	0.124226	0.162919	-0.04457	1

Source: Annual Reports (2011-2017), DSE
Notes: Data have been compiled by researchers

Pearson correlation is used to examine whether there is a multicollinearity problem among the explanatory variables or not. Anderson et al. (1990) state that any correlation coefficient exceeding (0.7) indicate a potential problem of multicollinearity. Results in table ** revealed that there is a problem of multicollinearity among the dividend yield and dividend payout. The correlation between them is 0.715823. They are highly correlated and can affect the original model adversely. For this reason, two more models have been created and regression was run further two times separating the two highly correlated variables.

Table 4.2 also indicates the correlation coefficients between other variables are varying. The maximum correlation coefficients are not exceeding .07, which are still in the acceptable range as indicated by Anderson et al. (1990).

7.6 Regression Analysis

Table 4.3 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.727 ^a	.529	.176	.080591899877804

a. Predictors: (Constant), AsGRt, E.vol, Size, Debt, Payout, Dyld
Source: Annual Reports (2011-2017), DSE
Notes: Data have been compiled by researchers

In the model summary as shown in Table 4.3 reveal that the R²=.529 which means that all independent variables can explain only 52.90 percent of the variation in share price volatility. Accordingly, there are some other factors that may significantly influence the share price volatility.

The model R is .727 and it indicates that there exists a high degree of relationship between the independent variables and the dependent variable.

7.7 Significance of results/ Model fitness:

Table 4.4 ANOVA

	Model	Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.058	6	.010	1.497	.291 ^b
	Residual	.052	8	.006		
	Total	.110	14			

a. Dependent Variable: Share Price Volatility
b. Predictors: (Constant), AsGRt, E.vol, Size, Debt, Payout, Dyld
Source: Source: Annual Reports (2011-2017), DSE
Notes: Data have been compiled by researchers

From the ANOVA (Analysis of Variance) table, it is evident that the results are statistically insignificant because they are statistically significant at .291 or 29.1% level which is much higher than that of .05 or 5% level.

7.8 Coefficient

Table 4.5 Coefficients

	Model	Un-standardized Coefficients	Standardized Coefficients	t-value	Sig.	Sig.
		Beta	Std. Error	Beta		
1	(Constant)	.517	.222		2.335	.048
	Dyld	1.589	2.714	.279	.585	.574
	Payout	-.176	.169	-.456	-1.043	.328
	Size	.002	.008	.073	.260	.801
	Debt	-.010	.115	-.026	-.087	.933
	E.vol	.350	1.956	.050	.179	.862
	AsGRt	-1.210	.461	-.772	-2.628	.030

Dependent Variable: Share Price Volatility
Source: Annual Reports (2011-2017), DSE
Notes: Data have been compiled by researchers

In Table 4.5, the t values are given. Besides this significance level for each t value is given. And from the coefficient table, it is evident that b₁, b₂, b₃, b₄ and b₅ are insignificant because all of them are significant at levels which are higher than

.05 or 5% level. The only b_6 is statistically significant because it is significant at .03 or 3% level which is below the 5% level.

7.9 Yield Model & Payout Model:

Table 4.6 Yield Model & Payout Model

Model	Original Model		Yield Model		Payout model	
	Beta	Sig.	Beta	Sig.	Beta	Sig.
(Constant)	.517	.048	.406	.067	.510	.040
Dyld	1.589	.574	-.563	.758		
Payout	-.176	.328			-.101	.364
Size	.002	.801	.005	.539	.002	.777
Debt	-.010	.933	.014	.903	.015	.886
E.vol	.350	.862	.289	.886	.148	.938
AsGRt	-1.210	.030	-.999	.040	-1.066	.019

Source: Annual Reports (2011-2017), DSE
Notes: Data have been compiled by researchers

Due to the Multicollinearity problem between dividend yield and dividend payout, later the two regressions have been run. The following two models were supporting the original model and the results from showed statistical similarity. So the explanation has been given based on the results of the original model.

7.10 Independent variables

a) The dividend yield

The dividend yield is the most important factor that has the highest positive relationship with the dependent variable share price volatility. The beta coefficient of Dividend yield is 1.589 and it means that it has the power to influence share price volatility in my model. If the dividend yield is higher year to year it will exert higher volatility in share prices.

Hooi et al. (2015) have shown that there is a relationship between dividend yield and share price volatility. My findings of dividend yield are in line with the research Baskin (1989) who has stated that the coefficient of dividend yield is large and highly significant. However, the findings in this model about dividend yield are quite inconsistent with two studies made by Zakaria, Muhammad, and Zulkifli (2012) on the Kuala Lumpur Stock Exchange. Allen and Rachim (1996) also observed no relationship between the dividend yield and stock market price even after studying 173 Australian listed stocks. Hashemijoo, Mahdavi-Ardekani, and Younesi (2012) presented that coefficient of dividend yield is negatively significant. The study of Rashid and Rahman (2008) which was conducted on the stock market of

Bangladesh, also supports the results of this paper regarding dividend yield. They have shown a positive relationship between dividend yield and share price volatility.

b) Asset growth rate

In this model asset growth rate has the second highest beta coefficient and it is negative. The beta is -1.210 and it means that the asset growth creates a negative result on share price volatility. The 15 companies used in this model has shown evidence that the growth of asset had made the share prices less volatile. The asset growth rate makes up the confidence of investors and provides a positive signal for the investors and thus the share prices are less volatile. The result of this model is inconsistent with Ilaboya and Aggreh (2013) study. On that study, it was shown that the asset growth rate had a positive relationship with share price volatility although the result was statistically insignificant at 5% and 10% level. Hooi et al. (2015) have also concluded that there is no significant relationship is developed between growth in assets and price volatility in the Malaysian market.

The rate of growth on firm assets is highly dependent on their life cycle. Firms that are on the startup or rapid growth stage are foreseen to experience high growth in assets. Firms which experience higher growth opportunity tend to reduce their dividends per share since there is a negative relationship between the increase in growth and dividend per share Alzomania and Al- Khadhiri, (2013). Firms normally start to pay dividends when they have arrived at the mature stage. At the mature stage, especially for large firms, they may have a better ability to pay dividends due to the stable growth and better profit. Dividend initiators are large firms with relatively high profitability and cash balances and low growth rate Bulan, Subramanian, and Tanlu (2007).

c) Earnings Volatility

The earnings volatility has got the third highest beta coefficient in the above regression model and the beta is .350 and it is positive. This indicates that the companies experiencing volatile earnings also experience a high volatile in shares.

Dividend paid by firms are generated from firms' profit is one of the ways that firms distribute earnings back to the shareholders. Therefore, earnings of the firms are expected to be one of the significant factors that will influence the dividend policy decisions. It is general to assume that the stable earnings will

lead the price of shares to be stable and volatility in earnings will result in volatility in share prices. The findings on earnings volatility coincide with the study of Hooi et al. (2015). The study has shown a positive relationship between earnings volatility and share price volatility. But the result is inconsistent with Rashid and Rahman (2008). Their study was conducted on the Stock Market of Bangladesh and they found a negative relationship between Earnings Volatility and Share Price Volatility.

d) Dividend Payout

Dividend payout is the fourth independent variable influencing the share price volatility. The model has revealed a negative beta of -0.176 which means that there is a negative relationship existing between dividend payout and share price volatility.

Generally, the dividend declaration exerts a positive impact on share price and dividend payout impacts negatively. Thus, we can say that dividend payout increases share price volatility. But in my study the outcome is negative and the dividend payout discourages share price volatility which is in line with the study of Hooi et al. (2015). The result is consistent with the study of Ilaboya and Aggreh (2013). In their study, they have shown that the influence of dividend payout on share price was negative. Rashid and Rahman (2008) also found the same relationship between dividend payout and share price volatility.

e) Debt and firms' size

Debt is found to have the fifth largest beta in this model which is -0.010. This signifies that the increase in debt to total asset lowers the share price volatility. Although the result is inconsistent with the study of Ilaboya and Aggreh (2013). The result is also inconsistent with the study of Rashid and Rahman (2008). They have shown a positive relationship between debt and share price volatility. Their study was conducted on the Bangladeshi market.

Firm size has the least beta coefficient in the model of this paper. The beta is 0.002. This implies that there is a positive relationship between them changes in firm size and the stock price volatility. The result is inconsistent with the study of Ilaboya and Aggreh (2013). This paper has shown that the changes in firm size instigate share price volatility but the cited two studies have proved that the changes in firm size demotivate the share price volatility.

8.0 Findings, Recommendations and Conclusion

8.1 Summary of the Findings

The study was conducted to find out the factor influencing share price volatility and resulted in the following key findings;

- The dividend yield exerts a positive influence on share price volatility. The impact of dividend yield is very high according to the beta coefficient of 1.589 found in the model. Although the beta was statistically insignificant at both 5% and 10% level.
- Unexpectedly, the dividend payout affects the share price volatility negatively having a beta coefficient of -.176.
- The firm size has a very insignificant positive impact on share price volatility with a beta coefficient of 0.02
- The study found out that there is a negative relation between debt to total asset ratio and share price volatility. If the debt to total asset ratio increases by 1 the volatility will decrease at 0.01 rates.
- Expectedly, earnings volatility was found to have a positive relationship with share price volatility with a beta of 0.350.
- The asset growth rate has a very significant relationship with share price volatility. It is statically significant at .03 or 3% level reporting a beta coefficient of -1.210. The growth rate in asset decreases the share price volatility.
- There is a high correlation between dividend yield and dividend payout. Thus they can use the problem of multicollinearity if used as independent variables in a model.

8.2 Recommendations

In light of the findings of the study, the following recommendations are given in order to share price volatility of the stock market in Bangladesh:

- a. The impact of dividend yield and dividend policy on share price is significant. Therefore, the companies should be consciously meticulous in setting their dividend policy.
- b. The asset growth rate helps to stabilize the share price and so the companies must focus on the efficient allocation of the available assets to maximize the companies' wealth besides setting the appropriate dividend payout ratio.

- c. The stock market of Bangladesh experiences a semi-strong form of efficiency and thus the information available is not reflected in the price of stocks. An all-out effort should be made to make the situation better. The market is also characterized by asymmetrical information. So, step should be taken to ensure the information symmetric.
- d. A huge chunk of investors is not well aware of the fundamental factors and invest aimlessly with a view to reaping a profit and find them tantalized. To protect them from the loss of a mass awareness program for the general investors in stocks should be made. It will help to build up the confidence of the investors in the market.

Although regulations and surveillance have been made stronger and more effective from the end of regulatory bodies after the market crash of 2011, it might be made better anyway.

8.3 Conclusion

This study has attempted to find out the impacts of dividend and dividend-related issues on the stock prices at the stock market of Bangladesh. There exists a positive relation of dividend yield and a negative relation of dividend payout with the share price volatility. The asset growth rate is the most significant factor to prevent share price volatility according to the study conducted here. Moreover, there has been found to have a high positive correlation between dividend yields and dividend payouts. Other variables namely firm size, debt to total asset ratio and earnings volatility also contribute to the share price volatility to some extent. So, the null hypothesis can be rejected and it can be concluded that the dividend and dividend-related issues exert influence on the share price volatility at least to some extent at the Bangladeshi stock market. The research findings can also contribute to developing new insights and understanding on share price volatility of the stock market in Bangladesh. 

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