

HOW DIVIDEND POLICY AFFECTS THE VOLATILITY OF SHARE PRICES: A STUDY ON A-CATEGORY SHARES LISTED IN DHAKA STOCK EXCHANGE (DSE)

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Abstract

The purpose of this paper is to investigate the impact of dividend policy on the volatility of share prices with a focus on A-category companies listed in Dhaka Stock Exchange (DSE) Limited. A cross sectional regression analysis has been applied to explore the statistical association between volatility of share price and both the dividend yield & the dividend payout ratio. The empirical test of this study reveals significant positive association between dividend yield and stock price volatility, and also a negative relationship between dividend payout and stock price volatility. It finds that the dividend and dividend related issues are relevant in explaining share price changes. In addition, the study reveals that the asset growth rate, earnings volatility, debt to asset ratio and firm size also affect the changes in share price.

Keywords: Share Price Volatility, Dividend Policy, Dividend Payout, Dividend Yield

1. Introduction

When investors want to invest in shares, they face very crucial decisions regarding their portfolios. First of all, they have to decide the proportion of fund allocated to different shares while in the second level they have to contend with keeping or selling some shares. At this point they face the volatility in share price which 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 from year to year. Numerous factors may cause volatility of share price. There are some fundamental factors like financing decision, investment decision, and dividend decision which are responsible for volatility in share prices. 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.

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 return on investment in shares and also contributes to the capital gains. 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.

Dividend payout ratio is the amount 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.

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A dividend policy is a company's approach to distributing profits back to its owners. If a company is in a growth mode, it may decide that it will not pay dividends, rather re-invest its profits (retained earnings) in the business. Issues of dividend policy range from its puzzle by Black (1976) to its irrelevance by Miller and Modigliani (1961) then to its relevance by DeAngelo, and Skinner (1996). Other issues include theories on dividend payment such as the stakeholders' theory, pecking order theory, agency cost, signaling 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 macro and microeconomic factors affect share price volatility. In this paper, some fundamental and financial factors have been included based on the 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 share price of a particular company.

Several studies regarding dividend related issues have been conducted on the stock exchanges of Bangladesh. 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 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. Objective of the study

The main objective of the study is to critically examine the influences of dividends in explaining the fluctuation of share price. In establishing a relationship between dividend policy and stock price volatility, the study will consider the following objectives:

- 1 To examine how dividend and dividend related issues exert influence on share price volatility;
2. To find out the way in which dividend policy affects volatility of share price;
3. To reveal the influencing power of other fundamental and financial factors on share price volatility.

3. Rationale of the study

Investment in stock is always been an attractive one among all other investment areas. Stock market is one of the most important financial institutions of any economy as well as of Bangladesh. It creates opportunity for companies to raise huge

amount of capital from a lot of individual investors inside and outside of a country. Again through buying and selling ownership of a company in the capital market, investors make tremendous return for themselves.

A vibrant capital market is likely to support economy to be strong 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 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 signaled 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 examined. The scenario of stock price volatility and the reasons behind the volatility for five 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 has contribution in share price volatility. And for these reasons the studies have been made to seek the relationship between share price volatility and dividend policy.

4. Review of literature

The earlier work on dividend-yield and stock price-volatility was 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 United States. Outside the United States, such study was conducted by Ball, Brown, Finn, and Officer (1979) and Allen and Rachim (1996) in 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 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 share 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 a numerous studies are conducted in the area of dividend policy in Bangladesh context, 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 relationship between the stock price volatility and dividend policy in Bangladesh, by using the cross-sectional regression analysis after controlling for earning volatility, payout ratio, debt, firm size and growth in assets.

Ali & Chowdhury (2010) examined stock price reactions of listed Private Commercial Banks (PCBs) in Dhaka Stock Exchange (DSE) surrounding 44 days of the dividend announcement dates. The empirical part of this study employs a standard event study methodology to analyze the stock price reaction for dividend announcement. Out of 25 listed sample banks in the observation period, market adjusted stock price declines for 11 banks, rises for 6 banks and no changes for 8 banks and statistical pooled t-test also reveals that stock price reaction to dividend announcement are not statistically significant.

Kabir *et al.* (2013) found that the percentage of shares held by public, and bad news about a particular pharmaceutical company in Bangladesh negatively influence the market prices of shares of that particular company. Masum (2014) analyzed to identify whether dividend policy affects the shares market price of listed commercial banks in Dhaka Stock Exchange and found that there was a significant negative relation between dividend yield and stock price while retention ratio has a negative but statistically insignificant relationship with Stock Market Prices. He further showed that return on equity and earnings per share have statistically significant positive impact on stock price and profit after tax has a significant negative impact on Stock Market Prices of the commercial banks of Bangladesh.

Uddin (2009) found a significant linear relationship between market price of stock and net asset value per share; dividend percentage; earning per share. Islam & Hossain (2015) applied structural equation modeling and found that the DPS, EPS, and PE have impact on the market price of share. Their findings supported the relevancy theory of dividend policy.

There are diverse arguments among the researchers regarding the impact of dividend policy on changes in share price. Some of them found that dividend policy is relevant; however, the other argues that there is no such impact can be strongly supported. There are very few papers are found in Bangladesh perspective. This paper may contribute to some extent to reduce the dearth of studies on dividend policy and stock price volatility in the context of Bangladesh.

5. Methodology of the study

A cross sectional research design considering secondary data from Dhaka Stock Exchange (DSE) has been used. Regression model has been used to find the statistical significance of selected independent variables on the volatility of share price.

5.1 Research questions

- i. Whether the dividend and dividend related issues exert significant influence on the share price volatility?
- ii. What are the other factors that may exert influence on share price volatility?

5.2 Research Hypothesis

This paper examines the two null hypotheses to answer the research questions. The hypotheses are:

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

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.

For this study 15 A category shares randomly out of 290 all category shares have been chosen with a five-year time span ranging from 2012-2016. Here, Table: 1 depicts the selection of 17 sample companies from 14 different industries from Dhaka Stock Exchange (DSE).

Table 1: Selection of Samples

Sl 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	Grameen Phone	1
16	Travel and Leisure	No	0
17	Miscellaneous	Berger Paints Bangladesh Ltd.	1
		Total	15

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

5.3 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:

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

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

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

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

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 obtain from the original model. Nonetheless, all the result has been presented in this paper.

Definition of variables

The variables of this study is 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.

i. 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;

$$\sqrt{\frac{\sum_{i=1}^5 \left((H_i - L_i) / \left(\frac{H_i + L_i}{2} \right) \right)^2}{5}}$$

In the above equation,

H_i : Highest stock price for year i ;

L_i : Lowest stock price for year i .

ii. *Dividend Yield (Dyld)*

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

The calculation is as follows;

$$Dyld = \sum_{i=1}^5 \frac{D_i}{MV_i}$$

Here,

$Dyld$: Dividend yield;

D_i : Dividend Paid in year i ;

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

iii. *Earnings Volatility (E.vol)*

It is the standard deviation of the ratio of company's operating earnings before interest and tax (EBIT) to total assets.

This has been calculated using the following equation;

$$E. vol = \sqrt{\frac{\sum_{i=1}^5 (R_i - \bar{R})^2}{5}}$$

Here,

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

$$\bar{R} = \sum_{2016}^{2012} \frac{R_i}{5}$$

iv. *Payout Ratio (Payout)*

It is the ratio of 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;

$$Payout = \sum_{i=1}^5 \frac{D_i/E_i}{5}$$

Here,

D_i : Dividend Paid in year i ;

E_i : Net profit after tax for the year i ;

v. *Debt To Total Asset (Debt)*

It is the ratio of 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;

$$\text{Debt} = \sum_{i=1}^5 \frac{LD_i / \text{Asset}_i}{5}$$

Here,

LD_i : Long-term debt at the end of year i ;

Asset_i : Total Asset at the end of year i

vi. Firm Size (Size)

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

This is calculated in the following way;

$$\text{Size} = \ln\left(\sum_{i=1}^5 \frac{MV_i}{5}\right)$$

Here,

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

vii. 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;

$$\text{AsGRt} = \frac{\sum_{i=1}^5 (\Delta \text{Asset}_i / \text{Asset}_i)}{5}$$

Here,

AsGRt = Asset growth rate

ΔAsset_i : Change of total asset in year i

Asset_i : Total Asset at the beginning of year i

6. Analysis of the Result

Table 2 depicts the estimates of descriptive statistics of all the selected variables under consideration. As observed in the table that 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 0.9729013, 0.046986 and 0.550021 respectively. 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 0.085522 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.

Table: 2 Descriptive statistics

	<i>Volatility</i>	<i>Dyld</i>	<i>Payout</i>	<i>Size</i>	<i>Debt</i>	<i>E.vol</i>	<i>AsGRt</i>
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
Std. 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

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

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.

Pearson correlation is used to examine whether there is a multicollinearity problem among the explanatory variables or not. Anderson *et al.* (1990) states that any correlation coefficient exceeding (0.7) indicates a potential problem of multicollinearity. Results in Table 3 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 3 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).

Table 3: Correlation Matrix among Selected Variables

	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

Regression Analysis

In the model summary as shown in the Table 4 reveal that the $R^2=.529$ which means 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. Here, Adjusted R Square is 0.476 which explain the net explanatory strength of the selected independent variables to explain any variation in the dependent variable.

Table 4: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.727 ^a	0.529	0.476	0.080591899877804

Note: a. Predictors: (Constant), AsGRt, E.vol, Size, Debt, Payout, Dyld

Regression Coefficient

In the Table 6 the *t-values* are given. Besides this significance level for each *t* value is given. And from the coefficient table it is evident that b_1 , b_2 , b_3 , b_4 and b_5 are insignificant because all of them are significant at levels which are higher than .05 or 5% level. Only b_6 is statistically significant because it is significant at .03 or 3% level which is below 5% level.

Model	Standardized Beta Coefficients	<i>t-stat</i>	Sig.	
1	(Constant)		2.335	0.048
	Dyld	0.279	0.585	0.574
	Payout	-0.456	-1.043	0.328
	Size	0.073	0.260	0.801
	Debt	-0.026	-0.087	0.933
	E.vol	0.050	0.179	0.862
	AsGRt	-0.772	-2.628	0.030

Note: Author's own estimates

Due to the multicollinearity problem between dividend yield and dividend payout, the latter 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.

Table 7: Comparison between Yield Model & Payout Model

Model	Original Model		Yield Model		Payout model	
	Beta	Sig.	Beta	Sig.	Beta	Sig.
(Constant)	0.517	0.048	0.406	0.067	0.510	0.040
Dyld	1.589	0.574	-0.563	0.758		
Payout	-0.176	0.328			-0.101	0.364
Size	0.002	0.801	0.005	0.539	0.002	0.777
Debt	-0.010	0.933	0.014	0.903	0.015	0.886
E.vol	0.350	0.862	0.289	0.886	0.148	0.938
AsGRt	-1.210	0.030	-0.999	0.040	-1.066	0.019

Note: author's Own estimates

Independent variables:

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 a higher volatility in share prices.

Hooi *et al.* (2015) has shown that there is a relationship between dividend yield and share price volatility. The findings about dividend yield are in line with the research Baskin (1989) who has stated that coefficient of dividend yield is large and highly significant. However, the findings in this model about dividend yield is quiet inconsistent with two studies made by Zakaria, Muhammad, and Zulkifli (2012) on 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.

Asset Growth Rate: In the 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 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. In that study it was shown that the asset growth rate had a positive relationship with share price volatility although the result was statistically in significant at 5% and 10% level. Hooi *et al.* (2015) has also concluded that there is no significant relationship is developed between growth in assets and price volatility in the Malaysian market.

Rate of growth on firm assets are highly dependent on their life cycle. Firms that are on the startup or rapid growth stage are foreseen to experience a high growth in assets. Firms which experience higher growth opportunity tend to reduce their

dividends per share, since there is a negative relationship between 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 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).

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 coincides 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 the found a negative relationship between Earnings Volatility and Share price Volatility.

Dividend payout: Dividend payout is the fourth independent variable influencing the share price volatility. The model has revealed a negative beta of -.176 which means that there is a negative relationship existing between dividend payout and share price volatility.

Generally, the dividend declaration exerts positive impact on share price and dividend payout impacts negatively. Thus, I can say that dividend payout increases the 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.

Debt and firms' size: Debt is found to have the fifth largest beta in this model which is -.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 Bangladeshi market.

Firm size has the least beta coefficient in the model of this paper. The beta is .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 has proved that the changes in firm size demotivates the share price volatility.

7. Findings of the Study

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

- i. 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.
- ii. Unexpectedly, the dividend payout affects the share price volatility negatively having a beta coefficient of -0.18.
- iii. The firm size has a very insignificant positive impact on share price volatility with a beta coefficient of 0.02.
- iv. It is 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 rate.
- v. Expectedly, earnings volatility was found to have a positive relationship with share price volatility with a beta of 0.35.
- vi. The asset growth rate has a very significant relationship with the share price volatility. It is statically significant at 0.03 or 3% level reporting a beta coefficient of -1.21. The growth rate in asset decreases the share price volatility.
- vii. There is high correlation between dividend yield and dividend payout. Thus they can cause the problem of multicollinearity if used as independent variables in a model like the one used in this paper.

Conclusion

The main objective of this paper is to investigate the impacts of dividend and dividend related issues on the stock prices in Dhaka Stock Exchange (DSE) Limited. There exists a positive relation of dividend yield and a negative relation of dividend payout with the share price volatility. Asset growth rate is the most significant factor to demotivate 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 are firm size, debt to total asset ratio and earnings volatility also contribute on the share price volatility to some extent. This test evidence fails to accept the null hypothesis and based on this it can be concluded that the dividend and dividend related issues exert influence on the share price volatility in DSE. There might be some other variables that could be used to better describe the volatility in stock prices at DSE.

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