

Dividend Policy and Share Price: Evidence from Some Selected Pharmaceutical and Chemical Companies in Bangladesh

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Abstract: The study examines the impact of dividend policy on share price of pharmaceutical and chemical companies enlisted in Dhaka Stock Exchange (DSE) in Bangladesh. The researchers select six pharmaceutical and chemical companies based on the availability of data to serve the purpose of the study. Secondary data are collected from the different annual reports of these companies, from the websites of DSE and Bangladesh Bank over the period from 2009 to 2018. Panel data is scrutinized and analyzed using E-views 10 software. Correlation matrix is developed to show the relationship between dividend policy and share price. Multiple regression model is developed to examine the impact of dividend policy on share price. To examine the stationarity, panel unit root test is run and to show the long-run relationship, co-integration test is operated. The study investigates that there is a positive and significant relationship between dividend per share, earnings per share and share price. The findings show that the dividend per share and earnings per share have the significant positive impacts on share price, return on equity has the significant negative impact of share price. However, dividend payout ratio and retention ratio have no significant impact on share price of pharmaceutical and chemical companies in Bangladesh. Future researchers can conduct studies regarding dividend policy on share price with extended sample size and timeframe of listed companies in DSE, Bangladesh.

Keywords: dividend policy, market share price, pharmaceutical and chemical companies, Dhaka stock exchange, panel data.

1. Introduction

There are three fundamental disciplines of finance and among them, dividend decision is the last and very important decision of financial management, particularly for the corporate management. It has a historical background relating to the expansion of the business in the world. The first joint stock company, British East India Company, issued shares in 1613 and in 1661 the first dividend on this shares was declared (Davis, 1917). Then the tradition of paying dividend started and the different rules regarding dividend policy developed. There are two most important aspects of dividend policy to determine (i) the amount of earnings to be distributed to the existing shareholders and (ii) the amount to be retained in the firm for further internal financing. Because, retained earnings is the most important source of internal financing (Pandey, 2006). On the other hand, dividend pay be the most expected sources of

return of the shareholders (Pandey, 2006). The investors want to maximize their return on investment while a firm, on the other hand, needs fund for its growth and expansion (Josh & Ghosh, 2012). Therefore, a firm's dividend decision captures two crucial parts in dividing its earnings to retained earnings and dividends and this two aspect influence the share market price.

Each and every organization has three financial decisions like investment decision, financing decision and dividend decision which are very much significant (Haq, 2002). Dividend can be defined as the distribution of the portion of net profits or earnings of a firm among the existing shareholders. The retained earnings, on the contrary, are the portion of firm's net profits or earnings which is kept in the firm for further its growth or expansion. It is very crucial situation for the management that how much of earnings will be distributed among the shareholders and how much will be kept as retained earnings. For the taking of appropriate decision, the management of a firm, while evolving a dividend policy, must strike a proper balance between these two approaches (Pandey, 2006). At present, sound dividend policy is very much important indicator of a firm's growth or survival in a competitive market. If the dividend policy decision is not correctly formulated, the firm may collapse, sooner or later (Haq, 2002). In this framework, the researchers attempt to undertake an in-a-depth study on corporate dividend decision and its impact on stock market price of some selected pharmaceutical and chemical companies in Bangladesh.

2. Literature Review

A. Theoretical Review

To explain the relationship between dividend policy and the value of the firm, some theories are developed. These theories are categorized in two parts: (i) Dividend Irrelevance Theory contributed by Modigliani and Miller (1961), and (ii) Dividend Relevance Theory contributed by Walter (1963) and Gordon (1962).

1) Dividend Irrelevance Theory

When markets are perfect, Modigliani & Miller (1961) claimed that dividend policy is irrelevant, that is, the value of a

firm will not be responded by the dividend policy. This model is based on some assumptions like perfect capital market, absence of taxes, risk etc. Some researchers and scholars also criticize this theory (Amidu & Abor, 2006; Allen & Michaely, 2002).

2) *Dividend Relevance Theory*

Scholar James E. Walter (1963) argues that the choice of the dividend policies always affects the value of a firm. The fundamental idea of this theory is that proper dividend policy will maximize wealth of shareholders. This theory is also consider some assumptions such as retained earnings are the only source of financing in the firm, there is no external finance involved; The cost of capital and the rate of return on investment are constant; the risks of the business remains same and the firm's life is endless.

Another scholar Myron Gordon (1962) develops a very popular theory explicitly relating to the market value of a firm to dividend policy. The basic knowledge of this model is that the proper dividend policy will positively influence the value of a firm. This model is based on some assumptions like all equity firm, internal financing, constant return and cost of capital, perpetual earnings, absence of taxes etc. In Bangladesh even in the world, there is no such company which can fulfill these assumptions.

B. *Empirical Review*

Several studies are established theoretical models to analyze the relationships and the impact of dividend policy on share price. Some researchers find positive relationships, someone find negative relationships and someone find no relationships between dividend policy and share price. Chelimo and Kiprop (2017) attempt to determine the effect of dividend policy on share price performance of insurance companies listed at the Nairobi Securities Exchange (NSE), Kenya. This study establishes that dividend payout, dividend yield, earnings per share and inflation are jointly significant in predicting the value of share price. Mokaya et al (2013) examine the effects of dividend policy on the market share price. The study finds a strong positive correlation between dividend payout, dividend growth rate, regularity of dividend and market price of shares. Many more researchers also explore the positive relationship between dividend policy and share prices (Sharma, 2011; Zaman, 2011; Azhagaiah and Priya, 2008). However, some researchers attempt to analyze the relationship between dividend policy and share price. They find negative relationships between dividend policy and stock prices (Sadiq et al, 2013; Ramadan, 2013). Zaman (2011) also reveals that the correlation between dividend policy of commercial banks and their respective return becomes negative with time changes.

Azhagaiah and Priya (2008) attempt to examine the impact of dividend policy shareholders' wealth in Organic & Inorganic Chemical companies in India. They explore that the wealth of the shareholders is strongly influenced by dividend on equity. They also make public that relationship between dividend policy and shareholders' wealth is positive for Organic

Chemical companies while there is negative relationship between dividend policy and wealth of the shareholders for Inorganic Chemical companies.

Numerous researchers endeavor to find the effects of dividend policy and share price volatility. Ramadan (2013) examines the impact of the dividend policy on the share price volatility for the Jordanian industrial firms. The study discloses the significant negative effect of the two components of the dividend policy: dividend yield and dividend payout, on the share price volatility. Rashid and Rahman (2008) identify that there is an evidence of positive, but insignificant relationship between stock price volatility and dividend yield. Sadiq et al (2013) in their study also explore that there is no relationship between share price volatility and earnings volatility of firms in Pakistan.

Uwuigbe et al (2012) investigate the relationship between financial performance and dividend payout among the listed companies in Nigeria. They find that there is a significant positive association of the dividend payout with the performance of the company. They also discover a significant impact of dividend payout on ownership structure and firm's size. Sharma (2011) also completes his study considering liberal dividend policy, regular dividend payments and market price of shares and explore the impact of these explanatory variables on market price of shares in positive direction. Rashid and Rahman (2008) also provide an implication from their study that the share price reaction to the earnings announcement of developing countries is not similar to that of other developed countries.

From the above literature review, it is clear that the studies provide mixed and contradictory results. Some studies explore the positive relationships, some explore negative relationships and some investigate no relationship between dividend policy and share price. The different studies also analyze the impact of dividend policy on share prices in variation directions. In this situation, the researchers try to design the present study to examine the impact of dividend policy on share market price of some selected pharmaceutical and chemical companies in Bangladesh.

3. **Statement of the Problem**

After review the literatures, it is found that very few researchers conduct the studies regarding the relationship between share price and dividend policy-dividends and retained earnings. The retained earnings should be maintained for further source of internal financing and the dividend should be distributed to shareholders in order to maximize their return as they have invested their funds in the expectation of being made financially better off. Therefore, the researchers conduct the present study to analyze how the dividend per share, the earnings per share, the dividend payout ratio and the retention ratio affect the share market price, particularly in the pharmaceutical and chemical companies enlisted in DSE in Bangladesh.

4. Objective of the Study

The study is designed to show the consequence of dividend policy on the stock prices of pharmaceutical and chemical companies listed in DSE, Bangladesh. The other specific objectives are:

- To show the relationship between dividend per share and share price.
- To confirm the relationship between earnings per share and share price.
- To analyze the relationship between dividend payout ratio and share price.
- To explore the impact of dividend policy on share price.

5. Hypotheses of the Study

The researchers consider the following hypotheses based on the objectives of the study:

- HO1: There is no significant relationship between dividend per share and share price;
- HO2: There is no significant relationship between earnings per share and share price;
- HO3: There is no significant relationship between dividend payout ratio and share price;
- HO4: There is no significant impact of dividend per share on share price;
- HO5: There is no significant impact of earnings per share on share price and
- HO6: There is no significant impact of dividend payout ratio on share price.

6. Methodology of the Study

A. Population and Sample

The target population of this study is the pharmaceutical and chemical companies listed in DSE in Bangladesh. The researchers design the paper containing a sample of 6 (six) pharmaceutical and chemical companies among the population of 31 companies listed in DSE in Bangladesh, among which one company is the chemical company two companies are multinational pharmaceutical companies. These companies are selected for the study because of their data availability.

B. Data and Sources of Data

The timeframe of using the data is ten years from 2009 to 2018. The study is mainly based on secondary data which are collected from the different published annual reports of the selected companies and from the websites of DSE and Bangladesh bank.

C. Theoretical Framework

To fulfill the objectives of the study, the researchers use closing market price per share (MPS) of the selected companies as dependent variable, and dividend per share (DPS) earnings per share (EPS), dividend payout ratio (DPR) and retention ratio (RR) as explanatory variables. The study also considers

return on equity (ROE) as controlled variable, and inflation rate (IFR) as intervening variables to support the multiple regression. The variables mention the figure 1 are explained below:

- *Earnings per Share (EPS)*

Earnings per share is found by dividing earnings available for common shareholders by the number of outstanding common share of a company. It is an indicator of shareholders' wealth maximization. In this study, it is an explanatory variable in this study.

- *Dividend per Share (DPS)*

Dividend per share is the portion of earnings per share which is distributed to the shareholders of an existing company. It is the most important part of dividend policy and it is used as the important explanatory variable in the regression model.

- *Dividend Payout Ratio (DPR)*

Dividend payout ratio reflects the nature of dividend policy followed by the company. It indicates the extent of the earnings after taxes and preference dividend paid out as the dividend to the equity shareholders of a company. It is calculated as, $DPR = DPS/EPS$. In this study, it is considered as the most important explanatory variable.

- *Retention Ratio (RR)*

It is the opposite of dividend payout ratio. It is calculated as, $RR = (EPS - DPS)/EPS$. It is also important factor of share price changes. Therefore, this ratio is considered as important explanatory variable of the study.

- *Return on Equity (ROE)*

Return on equity is the most important variable of measuring performance of a company. It is computed by net profit after taxes by the shareholders' equity capital of a company. It is expected that return on equity is positively related with stock market prices. It is another control variable of this study.

- *Inflation Rate (IFR)*

Inflation is a macroeconomic variable and it decreases purchasing power of a consumer. Therefore, it is negative associated with market price of a share. It is also considered as controlled variable of the study.

D. Statistical Tools and Econometric Models

- *Statistical Tools*

After collecting the necessary data, they have been appropriately arranged, classified, and tabulated as the requirements of the study. Necessary calculations regarding the regression are performed by using E-views 10 software. Different types of tests like stationary test, causality test, co-integration test regarding this study are done through this software.

- *Regression Model for Panel Data*

Panel regression model that envisages for closing market price per share (MPS) as dependent variable, and dividend per share (DPS), earnings per share (EPS), dividend payout ratio (DPR) and retention ratio as explanatory variables, return on equity (ROE) as controlled variable and Inflation rate (IFR) as

intervening variable. The relevant regression model designed for the study is:

$$MPS_{it} = \alpha_0 + \beta_{1t}DPS_{it} + \beta_{2t}DPR_{it} + \beta_{3t}EPS_{it} + \beta_{4t}RR_{it} + \beta_{5t}ROE_{it} + \beta_{6t}IFR_t + \varepsilon_{it}.....(1)$$

Where, MPS_{it} is Market price of the share i at time t ; DPS_{it} is the dividend per share of share i at time t ; DPR_{it} is the dividend payout ratio of the share i at time t ; RR_{it} is the retention ratio of share i at time t ; EPS_{it} is the earning per share of share i at time t ; ROE_{it} is the return on equity of share i at time t and IFR_t is the inflation rate in Bangladesh at time t .

Here, i =shares of company, $\beta_i(1, 2, \dots, 6)$ is coefficient of explanatory variables and ε_{it} is error-term.

7. Empirical Results and Discussion

A. Correlation

From table 1, the study investigates that the market share price per share (MPS) has a positive correlation with DPS, DPR, RR, EPS and ROE, and a negative correlation with IFR. Dividend per share (DPS) has a positive significant relation with market price per share (MPS), it means that if DPS increases by 100%, then MPS will increase by 74.23%. The result is statistically significant at 1% level of confidence. The relationship between MPS and EPS is also significantly positive at 1% significant level.

However, the relationships between MPS and DPR, RR and ROE are positive but they are not statistically significant. Therefore, it concludes that the market price of share can be increased by taking appropriate dividend decision.

Table 1
Correlations

	MPS	DPS	DPR	RR	EPS	ROE	IFR
MPS	1						
DPS	0.74*	1					
DPR	0.03	0.07	1				
RR	0.05	-0.27	-0.09	1			
EPS	0.96*	0.67*	0.01	0.13	1		
ROE	0.21	0.14	0.16	0.20	0.39	1	
IFR	-0.04	-0.12	0.02	0.18	0.00	0.06	1

* indicates the 1% level of significance

B. Descriptive Statistics

The table 2 shows mean, maximum, minimum, standard deviation and Jarque-bera test and its p value of the dependent and independent variables of the study. The descriptive statistic

Table 2
Descriptive Statistic

Variable	Obs	Mean	Max	Min	Std. dev	Jarque-bera	P-value
MPS	56	713.11	12942.75	47.20	1728.31	4793.78	0.000000
EPS	56	32.71	471.06	-52.75	75.22	1429.40	0.000000
DPS	56	13.61	85.00	0.00	19.64	102.93	0.000000
DPR	56	144.17	5740.00	0.00	755.15	6884.16	0.000000
RR	56	53.77	100.00	-74.13	33.50	34.00	0.000000
ROE	56	15.81	35.69	-50.67	12.41	430.66	0.000000
IFR	56	7.03	10.62000	5.37	1.56	12.76	0.001691

states that the mean values of variables MPS, EPS, DPS, DPR, RR, ROE and IFR are 713.11, 32.71, 13.61, 144.17, 53.77, 15.81 and 7.03, respectively. The MPS contains the highest maximum value and IFR has the lowest maximum value. On the contrary, the highest minimum value is found for MPS and the lowest minimum value goes to RR. The standard deviations for all variables except ROE and IFR are large which indicate that data of all variables except ROE and IFR are widely spread. The results of jarque-bera test explain that the values are normally distributed because its p-values are within the 5% significant level.

C. Panel Unit Root Tests

To observe the stationarity of selected data, two types of panel unit root tests are used. One is common unit root process in which Levin, Lin and Chu panel unit root test is used and other is individual unit root process in which the ADF-Fisher Chi-square test is used.

Table 3
Unit Root Test (at level)

Variable	Tests	Statistic	P-value
EPS	Levin, Lin & Chu t	-1.97640	0.0241
	ADF - Fisher Chi-square	23.5282	0.0236
DPS	Levin, Lin & Chu t	-2.16450	0.0152
	ADF - Fisher Chi-square	12.3416	0.4186
DPR	Levin, Lin & Chu t	-121.605	0.0000
	ADF - Fisher Chi-square	31.4516	0.0005
RR	Levin, Lin & Chu t	-3.54609	0.0002
	ADF - Fisher Chi-square	23.5002	0.0238
ROE	Levin, Lin & Chu t	-6.04845	0.0000
	ADF - Fisher Chi-square	36.1661	0.0003
IFR	Levin, Lin & Chu t	-10.7418	0.0000
	ADF - Fisher Chi-square	17.6036	0.1283

** Probabilities for Fisher tests are computed using an asymptotic Chi-square distribution. All other tests assume asymptotic normality.

The results presented in table 3 explore that all variables are non-stationary according to Levin, Lin and Chu at level form 1% level of confidence. Under ADF-Fisher Chi-square it explores that all variables except dividend per share (DPS) and inflation rate (IFR) are non-stationary at level form at 1% significant level. Therefore, it can be concluded that the independent variables used in this study have no spurious problems.

D. Co-integration Tests

The co-integration of data can be checked out. It shows the long-run relationship among the independent variables. Pedroni Residual Co-integration and Kao residual co-integration tests are applied in this study. The results of Pedroni Residual Co-

integration and Kao residual co-integration tests are shown in the table 4 and 5.

The table 4 explains that panel PP and panel ADF within dimension, and group PP and group ADF between dimensions have significant results at 5% level of confidence. However, Panel v within dimension and group rho between dimensions have no significant results. Therefore, it can be concluded that there are long-run relationship among the variables as the maximum variables show significant results.

Table 4
Pedroni Residual Cointegration Test

Alternative hypothesis: Common AR coefficients. (Within-Dimension)				
	Statistic	P-value	Weighted Statistic	P-value
Panel v-Statistic	-0.914771	0.8198	-0.914771	0.8198
Panel rho-Statistic	0.953267	0.8298	0.953267	0.8298
Panel PP-Statistic	-4.136644	0.0000*	-4.136644	0.0000*
Panel ADF-Statistic	-1.632676	0.0513*	-1.632676	0.0513*
Alternative hypothesis: Individual AR coefficients. (Between-Dimension)				
	Statistic	P-value		
Group rho-Statistic	1.430847	0.9238		
Group PP-Statistic	-4.691690	0.0000*		
Group ADF-Statistic	-1.679994	0.0465*		

* indicates the 1% level of significance.

According to the results of Kao residual co-integration test in the table 5, it is investigated that ADF and Residual lag 1 value is strongly significant at 1% level of significance. Therefore, it concludes that the independent variables have long-run relationship between them.

Table 5
Kao Residual Co-Integration Test

	t-Statistic	P-value
ADF	-3.313093	0.0005
RESID(-1)	-5.108935	0.0000
Residual variance	8.951418	
HAC variance	10.82935	

E. Regression Analysis

After getting the satisfactory results of unit root test, the researchers proceed to run dynamic regression model. To assess the impact of dividend policy on the market share of the pharmaceutical and chemical companies in Bangladesh, the study is conducted and explored the results which is presented in the table 6.

The results in the table 6 examines that dividend per share (DPS), the major component of dividend policy, has reject the null hypothesis, i.e., it indicates that there is a positive and significant impact on share price of pharmaceutical and chemical companies in Bangladesh. The earnings per share (EPS) has also the significant positive impact on the share prices. Another two components of dividend policy- the dividend payout ratio (DPR) and retention ratio (RR) have no significant impact on the share prices.

The controlled variable, ROE has significant negative impact on the share price. On the other hand, the intervening variable, inflation rate (IFR) has no significant impact on the share prices

of pharmaceutical and chemical companies in Bangladesh.

Table 6
Results of Panel Regression Model

Dependent Variable: MPS	Method: Panel Least Square		
Sample: 2009 to 2018	Period Included: 10		
Cross-sections included: 7	Total panel (unbalanced) observations: 56		
Variable	t-statistic	P-value	
Constant	1.453750	0.1524	
DPS	3.864355	0.0003*	
EPS	23.52323	0.0000*	
DPR	1.554045	0.1266	
RR	0.627091	0.5335	
ROE	-6.573826	0.0000*	
IFR	-0.721053	0.4743	
R-squared	0.969396	Mean dependent var	713.1062
Adjusted R-squared	0.965649	S.D. dependent var	1728.311
S.E. of regression	320.3266	Akaike info criterion	14.49303
Sum squared resid	5027848.	Schwarz criterion	14.74620
Log likelihood	-398.8048	Hannan-Quinn criter.	14.59118
F-statistic	258.6845	Durbin-Watson stat	0.678485
Prob. (F-statistic)	0.000000		
1. The table reports the results of the following regression model $MPS_{it} = \alpha_0 + \beta_{1t}DPS_{it} + \beta_{2t}DPR_{it} + \beta_{3t}RR_{it} + \beta_{4t}EPS_{it} + \beta_{5t}ROE_{it} + \beta_{6t}IFR_t + \varepsilon_{it}$			
2. * indicates the 1% level of significance.			

8. Conclusion

The objective of the study is the impact of dividend policy on share price of pharmaceutical and chemical companies in Bangladesh. To fulfill this objective, the researchers, use descriptive statistic, correlation matrix and panel regression model. From the analyses and findings of the results, it can be decided that the dividend policy has the impact on share prices, i.e., the results support the Dividend Relevance Theory (Gordon, 1962 & Walter, 1963).

The limitations of the study is that there are problems of data availability of all pharmaceutical and chemical companies listed in Dhaka Stock Exchange (DSE). As a result, the researchers have to choose the selected companies for their consistent data.

The study recommends that the management of pharmaceutical and chemical companies should apply their expert and prudence skills regarding dividend policy. They should seriously maintain regular dividend policy and dividend payment mode so that share prices are influenced by this policy positively.

The further researchers regarding this study are suggested that they should consider many more companies and industries listed in DSE. The timeframe should be expanded. For this change, the result may or might be varied. To conclude, it can be said that the pharmaceutical and chemical companies in Bangladesh can increase their share price by paying more dividends in terms of cash.

References

- [1] F. Allen and R. Michaely, "Payout Policy" *Handbook of the Economics of Finance*. 2002.
- [2] M. Amidu and J. Abor, "Determinants of Dividend Payout ratios in Ghana," *The Journal of Risk Finance*. Vol. 7, pp. 136-145, 2006.
- [3] R. Ashagaiah and N. S. Priya, "The Impact of Dividend Policy on Shareholders," *Wealth. International Research Journal of Finance & Economics*, vol. 20, pp. 180-187, 2008.
- [4] J. K. Chelimo and S. K. Kiprop, "Effect of Dividend Policy on Share Price Performance: A Case of Listed Insurance Companies at the Nairobi Securities Exchange, Kenya," *International Journal of Accounting, Finance and Risk Management*, vol.2, no. 3, pp. 98-106, 2017.
- [5] J. S. Davis, "Essays in the earlier History of American Corporations," *Cambridge: MA: Harvard University Press*, vol. 1, no. 2, 1917.
- [6] M. J. Gordon, "The Investment, Financing and Valuation of Corporation," *Richard D. Irwin*, 1962.
- [7] B.I.A. Haq, "Corporate Dividend Decision_ A Study of Some Selected Private Sector Textile Mills in Bangladesh," *The Chittagong University Journal of Commerce*. Vol. 17, pp. 11-26. 2002.
- [8] F. Modigliani and M. H. Miller, "Dividend Policy, Growth and Valuation of Shares," *Journal of Business*, vol. 24, pp. 411-433, 1961.
- [9] S. O. Mokaya, D. M. Nyangara, and L. T. James, "The Effects of Dividend Policy on Market Share Value in the Banking Industry: The Case of National Bank of Kenya," *International Journal of Arts and Commerce*, vol. 2, no. 2, pp. 91-101, 2013
- [10] I. M. Pandey, "Financial Management", 9th Edition, Vikash Publishing House Pvt. Ltd., New Delhi, 2005 pp. 379-380
- [11] I. Z. Ramadan, "Dividend Policy and Price Volatility: Empirical Evidence from Jordan," *International Journal of Academic Research in Accounting, Finance and Management Sciences*, vol. 3, no. 2, pp. 15-22, 2013.
- [12] A. Rashid and A.Z. M. A Rahman, "Dividend Policy and stock price Volatility: Evidence from Bangladesh," *Journal of Applied Business and Economics*, vol. 8, no.4, pp. 71-81, 2008.
- [13] M. Sadiq, S. Ahmed, and M. J. Anjum, "Stock Price Volatility in Relation to Dividend Policy: A Case Study of Karachi Stock Market," *Middle-East Journal of Scientific Research*, vol. 13, no. 3, pp. 426:431, 2013.
- [14] S. Sharma, "Determinants of Equity Share Prices in India," *Journal of Arts, Science and Commerce*, vol. 2, no. 4, pp. 51-60, 2011.
- [15] U. Uwuigbe, J. Jafaru and A. Ajayi, "Dividend Policy and Firm Performance: A Study of Listed Firms in Nigeria," *Journal of Accounting and Management Information Systems*, vol. 11, no. 3, pp. 442-454, 2012.
- [16] J. E. Walter, "Dividend Policy: Its Influence on the Value of the Enterprise," *Journal of Finance*, pp. 280-291, 1963.
- [17] S. Zaman, "Is Dividend Policy an Important Determinant of Market Performance?" *Journal of Private Banks of Bangladesh. World Review Business Research*, vol.1, no. 4, pp. 135-141, 2011.