

## Impact of Dividend Policy on Share Price: A Case Study in Istanbul Stock Exchange (BIST)

Famil Şamiloğlu<sup>1</sup>, Haşim Bağcı<sup>2</sup>, Ali Osman Öztop<sup>3</sup>, Yunus Emre Kahraman<sup>4</sup>

<sup>1</sup>(Department of Business Administration, Muğla Sıtkı Koçman University, Turkey)

<sup>2</sup>(Faculty of Economics and Administrative Sciences, Aksaray University, Turkey)

<sup>3</sup>(Fethiye Business School, Muğla Sıtkı Koçman University, Turkey)

<sup>4</sup>(ph. D. candidate, Muğla Sıtkı Koçman University, Turkey)

Corresponding Author: Famil Şamiloğlu

**Abstract :** The main objective of this study is to investigate the impact of dividend payout policy on selected firms' share price listed in Istanbul Stock Exchange (BIST) for the period 2006 - 2015. Using available financial data, this study focused on 37 regular dividend paying firms that are selected from the different sectors in BIST. Based on the findings of this paper dividend profitability has a negative and significant relationship with share price, while cash dividend amount has a positive and significant relationship with share price. On the other hand, there are no significant relationship between gross dividend payout, net dividend payout and share price.

**Keywords:** dividend policy, dividend profitability, panel regression, share price.

Date of Submission: 15-07-2017

Date of acceptance: 26-07-2017

### I. Introduction

The main objective of financial management in firms is to maximize its value to owners and shareholders (Priya and Mohanasundari, 2016:59, Azhagaiah and Priya, 2008:181). Investment, financing and dividend payout decisions are parameters that determine the wealth of the firm's shareholders. Shareholder wealth is a function of the growth of the firm's sales, profit margin, capital investment decisions and capital structure decisions. (Odesa and Ekezie, 2015:2). The question that firm payout dividend to shareholders every term is one of the important subjects of finance. (Riaz, Liu and Ahmad, 2016:77). Therefore, dividend policy is one of the important management decisions affecting firm value. (Agyei and Yiadom, 2011:203). Dividend payout policy is an indicator of how the firm is managed in the eye of firm's shareholders and potential investors. (Murekefu and Ouma, 2012:5).

Possible affects of the dividend policy on firm performance has received great interest in recent years. (Velnampy et al. 2014:63). Many investors see dividends as a significant indicator of firm performance which is calculated as firm pays out dividends each year divided by its share price (Chenchene and Mensah 2015:52; Masum, 2014:10).

Dividend policy is followed by shareholders, potential investors, employees and financial brokerage services as well as the management of the firm. (Ajanthan, 2013:1). Dividend policy, which determine what amount of the earnings should be invested and what amount should be distributed to shareholders as dividends is very important financial decision in terms of managers and investors of the firm. (Rahman and Takumi, 2012:20). Firms can accelerate their growth by making reinvestments with the amount of earnings they retain in firm. On the other hand, shareholders expect return from firms for their investment. Therefore, it is important to determine the optimal dividend policy that will maximize the earnings expectations of the shareholders (Azhagaiah and Priya, 2008:181).

Dividend payout decision is taken by the management of firm which is an income source of shareholders and an indicator of the performance of firm at the same time. (Huda and Abdullah, 2013:1). As the amount of dividend payout increases, the funds required to finance firm projects will be borrowed (Babatunde, 2015:98). Therefore, the dividend payout policy is regarded as an indicator for investors to evaluate the situation of the firm (Ansar et al., 2015: 89).

There are many empirical studies on whether dividend payments decisions affect the market value of firms (Thafani and Abdullah, 2014:27). According to some economists, the prices of the shares of companies paying regular dividends are rising (Priya and Nimalathan, 2013: 16). According to bird in the hand theory of Gordon and Lintner (1962), dividend payout can be preferred over return on equity because they are seen as guaranteed earnings.

Relevant Theory argued that dividend payout policy affects stock prices. Besides, irrelevant theory states that there is no relationship between dividend payout policy and stock prices. Relevance and irrelevance theory are based on the existence (or inexistence) of a perfect competition market.

Modigliani and Miller (1961) states that the dividend payout policy does not have an effect on the firm value in a perfect capital market. In this theory, it is assumed that the firm's investment and financing decisions are determined independently of the dividend policy (Alim et al., 2014: 20; Priya and Mohanasundari, 2016: 62). Gordon (1959) stated that dividend payout eliminated investors' risk of return on investment. There are also two main theories that explain the relevant theory: (a) Bird-in-the-hand Theory and (b) Signaling Hypothesis. According to bird-in-the-hand theory, investors prefer dividend income to capital gains. On the other hand, signaling hypothesis suggests that decisions on dividend payout provide information to investors about the firm's future profitability (Jakata and Nyamugure, 2013:676).

## **II. Literature Review**

Dividends are rewards, which are, disseminate to shareholders for the time and risks undertaken in doing investment with a firm (Khan et al., 2016:29). Whether the dividend policy affects firm performance has always been an important question of finance. Many empirical studies have examined the relationship between dividend payout and firm performance and have reached different conclusions (Azeez, Muhibudeen, 2015:6; Ikechukwu and Madubuko, 2016:57).

Amidu (2007) examined the last eight years of firms quoted at Gana Stock Exchange (GSE) and investigated whether there is a relationship between dividend policy and firm performance. The study concludes that there is a positive relationship between return on assets, dividend policy, and growth in sales. Similarly, Agyei and Yiadom (2011) used the financial ratios of 16 commercial banks quoted at GSE for the years 1999-2003. The results of the study showed that dividend payouts affected bank performance positively.

Murekefu and Ouma (2012) conducted a regression analysis to determine the relationship between dividend payout and firm performance for firms quoted at Nairobi Stock Exchange (NSE). They found a strong relationship between the dividend policy and firm performance.

Rehman and Takumi (2012) analyzed financial data of 50 companies quoted at Karachi Stock Exchange (KSE) in 2009. According to results of the study, profitability, debt to equity and market to book value ratios are the significant determinants of dividend payout ratio. On the other hand, this study shows that cash flow per share and market to book value ratio has a negative relationship with dividend payout ratio.

Uwuigbe et al. (2012) investigated 50 firms in Nigeria yerars from 2006 to 2010. They found that firm's ownership structure and firm size were among the determinants of dividend. This study has shown that there is a significant relationship between financial performance and dividend payout policy. In a follow-up study, Adediran and Alade (2013) investigated relationship between dividend policy and firm performance of 25 firms quoted at NSE and this study found that dividend payout have a positive affect on investments.

Gul et al. (2012) investigated the relationship between dividend policy and shareholder's wealth of 75 firms quoted at KSE for a period from 2005 to 2010. The results of this study indicate that the difference in average market value (AMV) relative to book value of equity (BVE) is statistically significant between firms that pay dividend and those who do not. Another important finding was that the dividend policy has a significant impact on the wealth of shareholder's.

In a study which set out to determine the determinants of dividend policy, Ranti (2013) used corporate annual reports of 50 firms quoted at NSE for a five-year period from 2006 to 2011. This study investigated the influence of financial performance of firms, firm size, financial leverage and board independence on the dividend policy According to the results of this study, there is a statistically significant relationship between dividend policy and firm performance.

Jakata and Nyamugure (2013) investigated the impact of a firm's dividend policy on share price for a period from 2003 to 2011. The aim of this research is to determine whether the Zimbabwe Stock Exchange (ZSE) was still profitable to invest, in view of the fact that firms' profit distribution policies varies as a result of conjuncture. It determines that the dividend policy does not affect the share price.

Moscu (2014) analyzed 55 firms quoted at Bucharest Stock Exchange for a period from 2010 to 2013. He investigated the relationship between dividend per share, dividend in the previous year, on the one hand and earnings per share, return on assets (ROA), return on equity (ROE), return on the share, Tobin Q, market to book ratio, free cash flow (FCF). In her analysis of correlation between variables, Moscu (2014) identified dividend per share, dividend in the previous year ( $DIV_{t-1}$ ) is the determinant of profit per share.

Doğan and Topal (2014) analyzed the data of 172 firms quoted at Istanbul Stock Exchange (BIST) for a period from 2008 to 2011. In this study they reported that there is a positive and statistically significant relationship between dividend per share and market based performance indicator (i.e. Tobin's q) whereas there is no significant relationship between dividend per share and account based performance indicator (i.e. ROA - ROE).

Babatunde (2015) examined the impact of performance on dividend payout ratio of some selected deposit money banks in Nigeria spanning the periods between 2004 and 2013. Guided by explanatory research design, four deposit money banks were selected and data relating to relevant variables of leverage and profitability and dividend payout ratio were gathered. Correlation analysis and multiple regressions were carried out to analyses the data. The findings revealed that dividend payout ratio is negatively related to banks' leverage and profitability.

Khan et al. (2016) examined either the dividend policy makes an impact on the firm performance in KSE. In this research, data was collected from the annual reports of firms for a five-year period between 2010-2015. OLS technique was used to check the regression analysis. Findings show that there is a positive relation between ROA, dividend policy, and growth in sales. Results show that dividend payout ratio and leverage have statistically significant negative relation with the return on equity found that there is a positive relationship between ROA, dividend policy, and growth in sales, while there is a statistically negative relationship between return on assets and dividend payout ratio, and leverage.

### III. Research Methods and Hypothesis Development

This study employs panel data techniques to estimate the regression models. We focus on two techniques use to analyze panel data such as fixed effects and random effects. Our methodology is based on similar study of Torres-Reyna (2007), and Alipour and Pejman (2015). We used fixed effects and random effects models for panel data enabling and empirical estimate of relationship between Share Price and Gross Dividend Payout, Net Dividend Payout, Dividend Profitability, Net Dividend Amount. The data set was provided from annual financial reports of firms. The sample consisted of 37 firms quoted at BIST using financial ratios for ten year period from 2006 to 2015.

The hypotheses to be tested in the study are:

H<sub>1</sub>. There is a significant relationship between gross dividend payout and market price per share.

H<sub>2</sub>. There is a significant relationship between net dividend payout and market price per share.

H<sub>3</sub>. There is a significant relationship between dividend profitability and market price per share.

H<sub>4</sub>. There is a significant relationship between net dividend and market price per share.

In order to investigate the relationship between share price (i.e. dependent variable) and its explanatory variables, the following model is developed:

$$MPS_{it} = \beta_0 + \beta_1GDP_{it} + \beta_2NDP_{it} + \beta_3DP_{it} + \beta_4CDA_{it} + u_{it} \quad (1)$$

Where,

MPS is market price per share (Closing price of the firm's share at the end of year)

GDP is gross dividend payout

NDP is net dividend payout

DP is dividend profitability

CDA is cash dividend amount

**Table 1.** Descriptive Statistics

Variables	Observations	Mean	Std. Dev.	Min.	Max.
lnmps	370	2.392719	2.06251	-2.120264	10.30895
lngdp	370	-9929174	1.325018	-4.767689	3.407842
lnndp	370	-1.140182	1.327739	-4.866535	3.245323
ln dp	370	-3.372709	.8716874	-6.907755	-1.771957
ln cda	370	16.63255	2.985843	4.094345	20.39476

Descriptive statistics of study are given in Table 1. Table 1 presents a summary of the log transformed variables performed in the study. The values of minimum, maximum, mean, standard deviation of dependent variable (i.e. share price) and independent variables (i.e. gross dividend payout, net dividend payout, dividend profitability, net dividend) of sample 37 regular dividend paying firms are calculated years from 2006 to 2015.

### IV. Analysis

This section includes the results of panel regression analysis of 37 selected firms quoted at BIST during the ten years of period from 2006 to 2015. The interpretations of the empirical findings are also presented in this section. The study used panel data. Stata was used for the data analysis.

In this study, we performed the Hausman test in making a choice between fixed effect model and random effects model. Hausman (1978) adopted a test based on the idea that under the hypothesis of no correlation. The Hausman specification test, tests the null hypothesis that the coefficients estimated by the efficient random effects estimator are the same as the ones estimated by the consistent fixed effects estimator (Ahiamodzi and Sackey, 2008). Generally accepted way of choosing between fixed and random effect model is performing Hausman test (Torres-Reyna, 2007). To run a Hausman test comparing fixed effects model with

random effects model in Stata 14, we need to first estimate the fixed effects model, save the coefficients so that we can compare them with the results of the random effects model. The result of the Hausman test is presented in Table 2.

**Table 2.** Hausman Fixed Random Specification Test

	(b) Fe	(B) Re	(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
lngdp	2.362938	4.209177	-1.84624	.
lnndp	-2.185693	-3.730268	1.544575	.
lndp	-1.034499	-.8891115	-.145387	.0055165
lncda	.780456	.3366069	.4438491	.040701

$$\text{chi2}(4) = (\text{b}-\text{B})'[(\text{V}_\text{b}-\text{V}_\text{B})^{-1}](\text{b}-\text{B})$$

$$= 79.99$$

$$\text{Prob}>\text{chi2} = 0.0000$$

(V<sub>b</sub>-V<sub>B</sub> is not positive definite)

In making a choice, if the p-value is insignificant and larger than .05, then we use random effects model, but if the p-value is significant, then, we choose fixed effects model. Based on the Hausman specification test, fixed effects model was preferred to the random effect model. In order to determine whether there is heteroskedasticity problem or not, we run Wald Test. According to Wald Test, we found heteroskedasticity problem. In order to determine auto-correlation, we run fixed effects model again and we found Durbin- Watson = 1.5911313 and Baltagi- wu LBI = 1.7941326. The values of DW test show that there is a problem of auto-correlation. On the other hand, we found a heteroskedasticity problem. Under this condition, we performed fixed effects model and we found results as follows:

**Table 3.** Results

lnsp	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]
lngdp	2.362938	1.177312	2.01	0.052	-.0247617 4.750637
lnndp	-2.185693	1.143657	-1.91	0.064	-4.505138 .1337516
lndp	-1.034499	.0851652	-12.15	0.000*	-1.207222 -.8617755
lncda	.780456	.1484059	5.26	0.000*	.4794749 1.081437
_cons	-15.245	2.615132	-5.83	0.000	-20.54873 -9.941264
sigma_u	1.3867313				
sigma_e	.51650642				
rho	.87817218 (fraction of variance due to u_i)				

\*. Correlation is significant at the 0.05 level (2-tailed).

P-value is used to measure the overall significance of the independent variables on the market price per share. Two -tail p-values test the hypothesis that each coefficient is different from 0. To reject this, the p-value has to be lower than 0.05. if this is the case then we can say that the independent variable has a statistically significant affect on dependent variable. After determination and measurement of independent and dependent variables, research hypotheses are analyzed. According of findings, there are no significant relationship between gross dividend payout, net dividend amount and share price. Thus, the first (H<sub>1</sub>) and second (H<sub>2</sub>) hypothesis are rejected. Panel regression analysis revealed that there is a negative and significant relationship between share price and dividend profitability. Thus, the third hypothesis (H<sub>3</sub>) is accepted. This indicates that increasing the amount dividend profitability will result in a decrease in share price. On the other hand, there is a positive and significant relationship between cash dividend amount and share price. Thus, the fourth hypothesis (H<sub>4</sub>) is accepted. This indicates that increasing cash dividend will result in a increase in share price. The study concludes that all the variables included as explanatory variables do not have significant impact on market price per share of the firms in BIST.

## V. Conclusion

This paper examines dividend payout policy and its effect on share price of firms quoted at BIST (in Turkey) for a ten year period from 2006 to 2015. Based on the findings of this paper dividend profitability has a negative and statistically significant relationship with share price. The research has also shown that cash dividend amount has a positive and statistically significant relationship with share price. The independent variables; dividend profitability and cash dividend amount significantly affect firm share's price. The research indicated that the subsequent increase in the dividend payments to the shareholders has a negative effect on the shareholders wealth. The result of this investigation also show that there is no significant relationship between gross dividend payout, net dividend payout and share price.

## Disclosure

Part of the work in this paper was presented in Al-Farabi 1st International Congress on Social Sciences on May 11-14, 2017 at Gaziantep / Turkey.

## References

- [1] Alim, W., Arshad, A., Ali, N., Bakhtiar, K. K., and Qureshi, M. I. (2014). Impact of dividend policy on shareholder wealth in Pakistan (Evidence textile industry. perspective). *Gomal University Journal of Research*, 30(1), 18-31.
- [2] Adediran S. A., and Alade S. O. (2013). Dividend policy and corporate performance in Nigeria. *American Journal of Social and Management Sciences*, 4(2),71-77.
- [3] Agyei, S. K., and Marfo-Yiadom, E. (2011). Dividend policy and bank performance in Ghana. *International Journal of Economics and Finance*, 3(4), 202-207.
- [4] Ahiawodzi A., and Sackey, F. G., (2010). Determinants of commercial banks' profitability in Ghana: A Panel Evidence for the Period 1999-2008. *International Journal of Economic and Development Issues*, 9(1-2), 56-67.
- [5] Ajanthan, A. (2013). The relationship between dividend payout and firm profitability: A study of listed hotels and restaurant companies in Sri Lanka. *International Journal of Scientific and Research Publications*, 3(6), 1-6.
- [6] Alipour, M., and Pejman, M. E. (2015). The impact of performance measures, leverage and efficiency on market value added: Evidence from Iran. *Global Economics and Management Review*, 20(1), 6-14.
- [7] Amidu, M. (2007). How does dividend policy affect performance performance of the firm on Ghana Stock Exchange. *Investment Management and Financial Innovations*, 4(2), 103-112.
- [8] Ansar, I. Butt, A. A., and Shah, S. B. H. (2015). Impact of dividend policy on shareholder's wealth. *International Review of Management and Business Research*, 4(1), 89-95.
- [9] Azhagaiah, R., and Priya. S. N. (2008). The impact of dividend policy on shareholders' wealth. *International Research Journal of Finance and Economics*, 20, 180-187.
- [10] Azzez, A., and Muhibudeen, L. (2015). Relationship between dividend payout and firms' performance: Evaluation of dividend policy of Oando PLC. *International of Journal Contemporary Applied Sciences*, 2(6), 56-71.
- [11] Babatunde, Y. (2015). Dividend payout ratio and performance of deposit money banks in Nigeria. *International Journal of Advances in Management and Economics*, 4(6), 98-105.
- [12] Chenchene, J., and Mensah, K. (2015). Dividend policy and its effects on shareholders' wealth: Evidence from UK retail industry. *International Journal of Liberal Arts and Social Science*. 3(2), 52-64.
- [13] Doğan, M. and Topal, Y., (2014). The influence of dividend payments on firm performance: The case of Istanbul Stock Exchange (BIST). *European Journal of Business and Management*, 6(3), 189-197.
- [14] Gul, S, Sajid, M., Razzaq, N., Iqbal, M. F., and Khan, M. B. (2012). The relationship between dividend policy and shareholder's wealth (Evidence from Pakistan), *Economics and Finance Revie*. 2(2), 55-59.
- [15] Hausman, J. A. (1978). Specification tests in econometrics, *Econometrica: Journal of the Econometric Society*, 1251-1271.
- [16] Huda, N., and Abdullah, M. N. (2013, December). Relationship between ownership structure and dividend policy: Empirical evidence from Chittagong Stock Exchange. *Proceedings of 9th Asian Business Research Conference 20-21 December 2013, BIAM Foundation, Dhaka, Bangladesh*.
- [17] Ikechukwu, I. O., and Madubuko, U. C. (2016). Effect of consistent dividend payout on business value in Nigeria oil and gas sector. *International Journal of Managerial Studies and Research*, 4(7), 57-66.
- [18] Jakata, O., and Nyamugure, P. (2015). The effects of dividend policy on share prices: Empirical evidence from the Zimbabwe Stock Exchange. *International Journal of Science and Research*, 4(10), 674-683.
- [19] Khan, M. N., Nadeem, B., Islam, F., Salman, M., and Gill, H. M. I. S. (2016). Impact of dividend policy on firm performance: An empirical evidence from pakistan Stock Exchange. *American Journal of Economics, Finance and Management*, 2(4). 28-34.
- [20] Masum, A. A. (2014). Dividend policy and its impact on stock price – A study on commercial banks listed in Dhaka Stock Exchange. *Global Disclosure of Economics and Business*, 3(1), 9-17.
- [21] Miller, M. H., and Modigliani F. (1961). Dividend Policy, Growth and the Valuation of Shares, *The Journal of Business*, 34 (4), 411-433.
- [22] Moscu, R.G. (2014). Empirical evidences regarding correlation between dividend policy and the performance of companies listed on the Bucharest Stock Exchange. *International Journal of Academic Research in Business and Social Sciences*, 4(12), 445-451.
- [23] Murekefu, T. M., and Ouma, O. P. (2012). The relationship between dividend payout and firm performance: A study listed companies in Kenya. *European Scientific Journal*, 8(9), 199-215.
- [24] Odesa, J. O., and Ekezie, A. (2015). Determinant of dividend policy in quoted companies in Nigeria, *Communication Panorama, African and Global Perspectives*. 1(1), Maiden Issue.
- [25] Priya, K., and Nimalathasan, B. (2013). Dividend policy ratios and firm performance: A case study of selected hotels and restaurants in Sri Lanka. *Global Journal of Commerce and Management Perspective*, 2(6), 16-22.
- [26] Priya, V., and Mohanasundari, M. (2016). Dividend policy and its impact on firm value: A review of theories and empirical evidence. *Journal of Management Sciences and Technology*, 3(3), 59-69.
- [27] Rahman, A., and Takumi, H. (2012). Determinants of dividend payout ratio: Evidence from Karachi Stock Exchange (KSE). *Journal of Contemporary Issues in Business Research*, 1(1), 20-27.
- [28] Ranti, U. O. (2013). Determinants of dividend policy: A study of selected listed firms in Nigeria. *Change and Leadership*, 17, 107-119.
- [29] Riaz, S., Liu, Y., and Ahmad, M. I. (2016). Dividend policy and corporate governance perspective. *Accounting and Finance Research*, 5(3), 77-86.
- [30] Torres-Reyna, O. (2007). Panel data analysis fixed and random effects using Stata (v. 4.2). *Data and Statistical Services*, Princeton University.
- [31] Uwuigbe, U., Jafaru, J. and Ajayi, A. (2012). Dividend policy and firm performance: A study of listed firms in Nigeria. *Accounting and Management Information Systems*, 11(3), 442-454.
- [32] Velnampy, T., Nimalthasan, P., and Kalaiarasi, K. (2014). Dividend policy and firm performance: Evidence from the manufacturing companies listed on the Colombo Stock Exchange. *Global Journal of Management and Business Research: A Administration and Management*, 14(6), 63-67.

FamilŞamilođlu. "Impact of Dividend Policy on Share Price: A Case Study in Istanbul Stock Exchange (BIST)." *IOSR Journal of Economics and Finance (IOSR-JEF)* 8.4 (2017): 49-53.