THE IMPACT OF DIVIDEND POLICY ON STOCK PRICE VOLATILITY: EMPIRICAL EVIDENCE FROM DEVELOPING COUNTRIES. CASE OF TÜRKIYE: 2017-2019

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Abbreviations

TSE Türkiye Stock Exchange	SF Size of Firm	P/E Ratio Price/ Earnings Ratio
DY Dividend Yield	AG Asset Growth	α = Constant
DP Dividend Payout	DL Debt Level	ε = Error Terms
SPV Stock Price Volatility	EV Earning Volatility	β = Regression Coefficient
	EPS Earnings Per Share	

ABSTRACT:

This research paper endeavors to investigate the impact of dividend policy on stock price volatility from the listed companies on Türkiye Stock Exchange. A sample of 30 companies from six major sectors of TSE based upon the consistent dividend paying behavior has been selected for the period of 2017 – 2019. The descriptive statistics, correlation analysis and multiple regression analysis is used for data analysis. The study has used panel data for analysis. Dividend policy is denoted by two main variables i.e. dividend payout and dividend yield. The study has also included some control variables such as size of firm, asset growth, debt level and earning volatility to identify their impact on stock prices.

The study has found a significant negative relationship between dividend yield and stock price volatility and an insignificant relationship between dividend payout and stock price volatility. The study has also found a significant negative relationship between size and volatility, an insignificant negative relationship between earning volatility and market volatility and a significant positive relationship between asset growth and volatility. The findings from this research paper are expected to contribute to the literature of dividend policy by providing empirical evidence from Türkiye Stock Market. The findings from this study also intended to provide useful guidance to individual investors, institutional investors, corporate managers and other potential groups in Türkiye.

Keywords: *Dividend policy, stock market volatility, dividend payout, dividend yield, asset growth, debt level, earning volatility.*

INTRODUCTION

Dividend policy is one of the most important area in corporate finance. Generally, the main motive of every company is to maximize the shareholders wealth by increasing the market value of their share of investment (Hamid et al., 2017). That is why dividend distribution is regarded as one of the major financing decisions taken by the financial managers.

Dividend distribution is a major source of stock return to shareholders. Dividend payment by a company could provide a signal to the market that the company is observing with good corporate governance practices (Sadiq et al., 2013). From investor's perspective, dividend is not only an important source of income for investors but also a way to evaluate a company for investment purposes. (Khan et al., 2017).

Volatility is the rate of change in stock prices over a given period of time and is an important concern for the investors. If a stock is highly volatile, the chance of gain or loss from that stock will be higher in the short run (Zakaria et al., 2012).

The main objective of this research paper is to examine the impact of dividend policy on stock price volatility (SPV) by covering six major sectors from TSE including the financial sector. In addition, this study makes use of most recent years i.e. 2017 – 2019. This research paper is based on the theoretical framework formed by Hussainey et al. (2011) and Shah and Noreen (2016). Dividend policy is denoted by two main measurements: dividend payout (DP) and dividend yield (DY). The correlation analysis and multiple regression analysis on panel data is employed in this study to establish the relationship of DP and DY with SPV. The study has also included some control variables such as SF, AG, DL and EV to examine their impact on stock prices.

To recap, there are a number of dividend policy theories that discuss 26 the issue of dividend policy such as dividend irrelevance theory, bird in hand theory, signaling theory, agency theory, tax preference theory and clientele effect of dividend policy. Most of the research studies found that dividend policy is relevant and has a significant influence on the value of a firm (Ramadan, 2013; Latif et al., 2014; Duke et al., 2015; Shah and Noreen, 2016; Hamid et al., 2017; Khan

et al., 2017). Whereas, some of the studies found no relationship between dividend policy and share prices (Ali and Chaudhary, 2010; Adefila et al., 2013; Abrarul-haq et al., 2015).

1.1. RESEARCH PROBLEM

The main research problem of this research paper is to examine the impact of dividend policy (DP and DY) on SPV from the companies listed on TSE. This main research problem is divided into two main sub problems to better investigate this issue.

1.2. Sub Problems

The main research problem is divided into two main sub problems as follows:

1. Does DP has any impact on SPV? The research hypothesis is as follows: H1 = DP and SPV will have a significant negative relationship.

2. What is the relationship between DY and SPV? The following research hypothesis is: H2 = DY and SPV will have a significant negative relationship.

MATERIALS AND METHODS

This research paper follows the theoretical framework created by Hussainey et al. (2011); and Shah and Noreen (2016). Descriptive statistics, correlation analysis and multiple regression are used for the purpose of data analysis. Descriptive statistics are used to present quantitative description of data in a study in a manageable form. The correlation analysis is used to find the strength and direction of relationships between the different variables included in this study. The multiple regression analysis on panel data is used to establish relationship of dividend policy measures i.e. DY and DP with SPV.

Model

Regression Equation (Model 1) is developed in accordance with the theoretical framework of Hussainey et al. (2011) to examine the relationship between dependent variable which is SPV with two independent variables which are DP and DY.

$SPV_{it} = \alpha0 + \beta1DP_{it} + \beta2DY_{it} + \varepsilon_{it}$ (Model 1)

Regression equation (Model 2) is developed by adding some control variables in the Model 1 in line with the recommendations of Hussainey et al. (2011); and Shah and Noreen (2016) to examine different factors that can also have a considerable impact on share prices. The control variables added in Model 2 include size of a firm, earning volatility, asset growth, and debt level.

$SPV_{it} = \alpha0 + \beta1DP_{it} + \beta2DY_{it} + \beta3SF_{it} + \beta4AG_{it} + \beta5EV_{it} + \beta6DL_{it} + \epsilon_{it}$ (Model 2)

F Test for Overall Model Significance

To check the overall significance of multiple regression model, F test will be used. F test shows that if there is a linear relationship between all independent variables

considered with dependent variable. The above mentioned hypothesis will be tested at 5 % level of significance.

Sub Problem 1

Does DP has any impact on stock price volatility?

H0 = There will be no significant relationship between DP and SPV.

H0: $\beta1 = 0$

H1 = There will be significant negative relationship between DP and SPV.

H1: $\beta1 \neq 0$

Sub Problem 2

Does DY has any impact on stock price volatility?

H0 = There will be no significant relationship between DY and SPV.

H0: $\beta2 = 0$

H1 = There will be significant negative relationship between DY and SPV.

H1: $\beta2 \neq 0$

DATA SOURCES FOR ANALYSIS

This study uses secondary source of data. Data for dependent and all independent variables is collected from Bloomberg database and then managed according to research requirements in order to apply statistical tests. This study uses panel data for analysis. The data analysis is done by using STATA software (a statistical package) to determine the relationship of dividend policy with stock prices.

POPULATION, SAMPLE SIZE AND SAMPLING METHOD

The target population for this research paper consists of all the companies listed on Türkiye Stock Exchange (TSE) during the period of 2017 – 2019. A total of about 570 companies from about 35 different sectors were listed on TSE during the period of this research paper. A sample of 30 companies is taken from the total population. Only those companies are selected who paid regular dividend between the periods of this research paper. The sample of companies 36 is taken from 6 major sectors including oil and gas, commercial banks, food and personal care products, automobile, cement and pharmaceutical sector.

RESULTS AND DISCUSSION

The descriptive statistics has provided mean values, standard deviation, maximum and minimum values of the all the variables under study. SPV and DY faced a small deviation from their mean values but DP faced a bit large deviation. The range value of DP also showed a huge dispersion. The reason for high standard deviation and range values of DP is that some of the

companies paid large portion of their earnings as dividend and some companies only paid small portion of their earnings as dividend during the period of study due to which DP is showing huge fluctuations.

The standard deviation and range value of SF, AG and EV showed a small deviation and dispersion during the period of study but DL showed a moderate deviation and dispersion from its mean value. This is because some companies were debt free, some were using low level of debt and some were using high level of debt in their capital structure due to which DL showed variation in its values.

The correlation analysis has provided the strength and direction of relationship between all the variables under study. DP and DY has a significant negative correlation with SPV. It means that when a company make large dividend payments to its shareholders, the value of its stock increases and its stock prices show less variations. SF also showed a significant negative correlation with SPV. AG, DL and EV exhibited significant positive correlation with SPV. Overall, the correlation analysis among all the variables provided significant results.

The multiple regression analysis on panel data has been done in order to establish relationship of SPV with two main independent variables which are DP and DY and four control variables which are SF, AG, DL and EV. The Hausman test is applied to choose between the fixed effect model and random effect model for this study. The results of Hausman test revealed that random effect model is more appropriate for this study. The regression results showed that DY has a significant negative relationship with SPV and DP has a positive insignificant relationship with SPV.

The multiple regression results of control variables revealed that SF has a significant negative relationship with SPV which tells us that the large size firms are well established and they have less fluctuation in their stock prices because they pay large part of their earnings as dividends. AG exhibited a significant positive correlation with SPV indicating that firms in growth stage pay less dividends and therefore, face large variations in their stock prices. DL presented a positive significant relationship with SPV which means that companies utilizing more debt in their capital structure face more volatility in their stock prices. EV showed an insignificant negative relationship with SPV.

To conclude, although most of the studies are in favor of dividend relevance but still there are some studies that favors dividend irrelevance. The findings on this issue from different countries of the world provide mixed results. Most of the research studies from Türkiye on this issue provided significant results (Shah and Noreen, 2016; Hidayat Ullah et al., 2017; Khan et al., 2017) but the research paper of Abrar ul haq et al. (2015) found dividend policy as irrelevant. One major lack in almost all of the studies in Türkiye is that they used samples from only few sectors ignoring one major sector that is financial sector. Therefore, this study has been covering financial sector along with five other major sectors from Türkiye Stock Exchange. Moreover,

this study provided fresh perspective of relationship of dividend policy and stock prices as it covering more recent time period i.e. 2017 – 2019.

CONCLUSIONS

This research paper has investigated the impact of dividend policy on stock prices in Türkiye for the period of 2017 – 2019. It is concluded on the basis of empirical results and findings that there is significant negative relationship between DY and SPV. This result is according to the expectations of this study and also in line with Nazir et al. (2012) and Shah and Noreen (2016). It means that a higher DY brings fewer SPV in Türkiye Stock Exchange (TSE). Therefore, we reject the null hypothesis that DY does not have a significant relationship with SPV and accepts the alternative hypothesis.

The study has found an insignificant negative relationship between DP and SPV. This result is against our expectations and also contrary to the findings of Hashemijoo et al. (2012) and Shah and Noreen (2016) who found significant negative relationship between DP and SPV. It means that a higher DP only brings a minor variation in SPV in TSE. So, we accept the null hypothesis that DP does not have a significant negative relationship with SPV. The findings for DY and DP revealed that DY is the main determinant of the volatility in stock prices in TSE as it has a major effect on SPV, while DP has only a minor effect on SPV.

The finding of this study revealed a significant negative relationship between SF and SPV and a significant positive relationship between DL and SPV. These result are in line with Hussainey et al. (2011). The relationship between SF and SPV indicates that the large size firms face less volatility in their stock prices and the relationship between DL and SPV indicates that the more leveraged a firm is, the more volatile its stock prices will be.

The study has also found a significant positive relationship between AG and SPV and an insignificant negative relationship between EV and SPV. The result of AG is in line with Shah and Noreen (2016) but the result of EV is contrary to it. The relationship between AG and SPV indicates that an increase in AG brings more volatility in stock prices because firms in growth stage retain large part of earnings with them in order to utilize these earnings to grow their assets and only pay a small portion of earnings as dividend. The relationship between EV and SPV reveals that an increase in EV only brings a minor change in SPV.

Overall, on the basis of the empirical results and findings of this study, it is concluded that DY, SF, AG and DL have a significant impact on SPV, while DP and EV have only a minor impact on SPV in TSE. This research paper also supports the bird in hand theory and signaling theory because findings of this study reveals that dividend policy is relevant in Türkiye and it has a major impact on stock prices. Finally study has concluded that DY is more important variable for explaining role of dividend policy with volatility in stock prices in Türkiye.

DECLARATION OF CONFLICT OF INTERESTS

After taking into consideration all the facts and circumstances, I confirm that this paper carries no ethical issues and all the work done in this study is according to the ethical standards and there is no conflict of interest of any kind.

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