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Preliminary communication

THE IMPACT OF DIVIDEND POLICY ON SHARE PRICE VOLATILITY IN THE MACEDONIAN STOCK MARKET

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Abstract

The intention of this paper is to examine the relationship between the dividend policy and share prices of companies on the Macedonian Stock Exchange in order to define whether the dividend policy is a factor determining the share price volatility, and if so, how to use this possibility to influence the company's value. For that purpose, 110 profit distribution decisions were analyzed (10 companies, 11 years, 2006 – 2016). The relationship between the dividend policy and share prices was examined by dummy variables in Regression analysis and Panel regression analysis. A Dummy variable regression model is used when determining the movement of share prices around dividend payment dates, whilst a Panel data regression model is used when determining the effect of change in dividends on share price change. Empirical results have shown that: First, in the quarter when the decision on dividend payment is declared, the share price goes up by 9%. Second, on the ex-dividend date, the share price decreases. Third, in the quarter after dividend payment, the share price declines by 4%. Fourth, the change in dividends affects the share price volatility, so that if the dividend goes up by 1%, the share price will rise by 14.35%. Hence, there is a significant positive link between dividends and share prices.

Keywords: *corporate finance, dividend policy, dividend payment procedure, company value, share price volatility*

JEL Classification: *G32, G35, C12, C23*

Introduction

There is empirical research in the field of dividend policy, however, it is mainly focused on developed economies. The dividend policy of Macedonian companies is not a sufficiently explored area, as a result of which the interest in this paper is high, since it can provide information of special economic importance and meaning for dividend policy-makers.

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In general, dividend policy refers to the decision of whether the cash flow available to shareholders should be reinvested in the company or paid to shareholders, i.e. what the "right" amount to be retained for investing in new projects is, and what the "right" amount to be paid to shareholders should be.

Namely, the key reason for the decision on dividend policy being so complex is the double motive behind the investment in certain company's shares. The desired shareholders' return is comprised of two components: dividend yield and share value growth. Consequently, the question arises: What is better? To distribute the dividend or to retain it in the company and realize higher capital gains from the dividend amount.

Undoubtedly, contemporary economic science has no reliable responses as to what the optimal dividend policy is, and successful companies still have an unanswered question of whether they should pay dividends, and consequently, what dividend policy they should lead in order to maximize the value of their companies.

It is a great challenge to examine the influence of dividend policy on variability of share prices on the Macedonian Stock Exchange, taking into account that there is no consensus in theory. There is empirical evidence among researchers which is different in terms of whether the dividend policy influences share prices, while taking into account the fact that we have short time series to study this issue and that we are analyzing a period in which the global economic crises struck.

There is an emphasized need for a detailed analysis of Macedonian dividend-paying companies in order to distinguish the dividend policy contribution from other factors which simultaneously influence the share price.

The rest of the paper is structured as follows. Literature review is followed by a presentation of the research methodology. The focus is put on empirical research through which, in fact, the research hypotheses are going to be tested. The movement of share prices around payment dates will be examined first. Special accent will be put on determining whether the change in dividends of Macedonian companies influences the change in prices of their shares. At the end, the conclusion will summarize the results obtained in the course of the research with an intention to arouse interest and serve the purpose of dividend policy-makers in the Republic of Macedonia.

Literature Review

As from the sixties of the 20th century up to date, many papers discussing the dividend policy have been published. As a result, different trends were defined. The so called "disappearing dividend phenomenon" was noticed in the USA, where the percent of companies paying out dividends declined from 66.5% in 1978 to 20.8% in 1999 (Fama and French, 2000). The same downward tendency was also noticed in the analyzed 1994 - 2002 period in the USA and other 5 countries: Canada, France, Germany, Japan, Great Britain (Osobov and Denis, 2007). A twist happened in 2001 when, in the USA again, "appearance of dividends" was noticed (Julio and Ikenberry, 2004). Although researchers have discussed the possible reasons, there is no reliable proof explaining these movements.

Many authors have tried to identify the factors that have the most important role in

identifying the dividend policy established by companies, i.e. indicate the factors to be analyzed when formulating the dividend policy. Some factors influence the decision whether to pay out dividends or reinvest the total profit, other factors influence the dividend amount, while third ones affect the decision whether to pay dividend in cash or otherwise.

Some researchers have examined the connection between the dividend decision and company's characteristics, size, profitability, investment policy, capital structure and ownership structure. A great number of empirical results showed that the investment policy influences the dividend policy. Since external financing sources are expensive, companies having larger investments, measured as larger current and future income growth rates, have lower coefficient of dividend payout. Companies establish a low coefficient of dividend payout when they have a high beta coefficient, since a high beta coefficient assumes the presence of a high operating and financial leverage. In addition, it is shown that the dividend decision is affected by the ownership dispersion level. Namely, the bigger the number of shareholders, the higher the coefficient of dividend payout, which is proof that dividend payout decreases agency costs. The increase of dividends lowers the agency costs, but it raises the transaction costs of external financing. An optimal dividend policy is the one that minimizes the sum of these two types of costs (Rozeff, 1982). The inclination to dividend payout is bigger in large profitable companies and companies having large share of profit accumulated in the total capital (Osobov and Denis, 2007). On a sample of 237 growing (developing) and 237 non-growing (mature) companies, it was detected that the former have significantly lower dividend yield (Gaver and Gaver, 1993). Profitability, investment possibilities and the size of the company are factors that have impact on the dividend payout decision. Companies that pay out dividends are larger, more profitable and with low investment levels. The ones which had never paid out dividend are smaller, less profitable, but have bigger investment opportunities (Fama and French, 2000). Covenants incorporated in agreements on bonds issuance directly restrict dividend payout (Smith and Warner, 1979).

Some other researchers have examined the relation between the dividend decision and market characteristics, tax policy and investors' preferences. Empirical results refer to the decision of whether to pay or not pay dividends, and not how much to pay. They think that once the company starts to pay out dividends, the increase or decrease depends on the company's profitability. Whether a company will start or stop paying dividends depends on investors' demand, i.e. on the current "dividend premium" which is the difference between the current share price of companies paying dividends and those not paying dividends. Companies tend to start paying dividends when investors prefer companies that pay dividends and tend to stop paying dividends when investors prefer companies that do not pay dividends (Baker and Wurgler, 2004). Upon the examination of 60,000 households holding shares, it was concluded that, as a category, individual investors prefer shares that do not pay dividends. In addition, it was identified that the preferences for dividend yield of retail investors holding shares that pay dividends increase with the years, however, they decrease with the income, i.e. senior investors and investors with low income will prefer dividends (Graham and Kumar, 2005). Investors belonging to a group that pays higher tax rates prefer shares with low dividend yield, while investors belonging to a group that pays low tax rates prefer shares with high dividend yield. (Elton and Gruber, 1970). Taxes are not a predominant factor that influences the dividend decision (Brav et al., 2005). Agency costs are increased when managers and shareholders have

diverse interests. In that sense, the dividend policy is an essential tool for decreasing the agency costs (Jensen and Fuller, 2003).

Nowadays, there are numerous theories trying to answer if there is an optimal dividend policy that would maximize the company's value. Generally, we can distinguish two opposite approaches to dividend policy, which describe two possible scenarios regarding the dividend policy influence on the market share price: the theory of dividend policy irrelevance and the theory of dividend policy relevance.

Pursuant to the Theory of irrelevance of the dividend policy, in an ideal economy characterized by perfect capital market, rational behavior and perfect certainty, the dividend policy has no impact on the market share price, i.e. it is irrelevant, as it has no impact on shareholders' wealth (Miller and Modigliani, 1961). It means that there is no optimal dividend policy or certain dividend policy is as good as another dividend policy. As long as a company realizes positive financial result, it is not important whether it will be distributed to shareholders in the form of dividend or it will be reinvested.

The emergence of the Theory of irrelevance of the dividend policy has caused criticism regarding some main assumptions it is based on. In that context, there are two most influencing approaches in the explanation of the dividend policy relevance. One of them is based on uncertainty of future capital gains and suggests that the management should set out a high dividend payout ratio if it wants to increase the value of the company. Representatives of the theory "a bird in the hand (is worth two in the bush)" consider that investors are risk-averse and prefer certain relative dividend inflows versus uncertain capital gains that are to result from reinvesting the retained earning (Lintner, 1962; Gordon, 1963). The other approach is based on the tax treatment of dividends versus capital gains and suggests that the management should set out a low dividend payout ratio. If dividends are taxed more than capital gains, investors prefer cash flow available for shareholders to reinvest in the company.

Methodology

Research hypotheses

The following hypotheses are subjected to testing:

H_1 In the quarter the decision on dividend payment is declared, the share price goes up.
H_2 On the ex-dividend date, the share price decreases.
H_3 In the quarter after dividend payment, the share price reduces.
H_4 The dividend change influences the share price volatility.

Research methods

The model of dummy variable regression, as well as panel regression, is used in order to make a decision on accepting or rejecting the foregoing hypotheses. The least squares method has been applied.

Methods of collecting data are used. The data are gathered from relevant institutions, which are additionally organized, processed and disclosed.

Sample and data

A sample of 10 companies: Alkaloid AD - Skopje, Makoshped AD - Skopje, Fershped AD - Skopje, Komercijalna Banka AD - Skopje, Granit AD - Skopje, Makedonijaturist AD - Skopje, Replek AD - Skopje, Makpetrol AD - Skopje, Skopski Pazar AD – Skopje and Toplifikacija AD - Skopje, was used to research the acceptability of the hypotheses set out.

The companies chosen for this research have the following characteristics:
a) they have at least one dividend payment in the 2006 – 2016 period;
b) their shares are traded at the official market of the Macedonian Stock Exchange.

Data on dividends and share prices needed for this research have been taken from the Macedonian Stock Exchange. For the analysis in this research paper we have used *EViews and Excel* software.

Share Price Movement around Payment Dates

In this part of the paper, we will analyze the share price movement around payment dates. For that purpose, we will test three hypotheses, i.e. we will analyze three effects of regular dividend payout decisions on share prices. First, in the quarter when the decision on dividend payment is declared, the share price goes up. Second, on the ex-dividend date, the share price decreases. Third, in the quarter after dividend payment, the share price declines.

In order to assess the movement of share prices based on independent (dummy, explanatory) variable, we have used the data from the sample we had created for this research. Based on the least square method, by means of the *EViews* statistical software, we obtain the assessed values of the regression analysis ratios. Below, we will present the results obtained from the regression analysis.

H_1 In the quarter the decision on dividend payment is declared, the share price goes up.

In the Republic of Macedonia, in accordance with the legislation, the managing body shall convene a Shareholders Meeting in the last 3 months upon compiling the annual accounts, financial statements and annual operation report of the company for the previous business year, not later than 6 months after the end of the calendar year or 14 months after the last General Meeting, among other things, for the purpose of making a decision on net profit distribution. Immediately after the General Shareholders Meeting, the adopted decisions shall be published, among which is the dividend payout decision. *A priori* it is expected that the share price will go up in the quarter the decision on dividend payment is declared.

The first step in the regression analysis is to identify the variables of the model whose relation we want to examine. First, the average quarter prices for each share included in the sample is calculated on the basis of historical data on average daily prices published by the Macedonian Stock Exchange. The quarter change of price is taken as an independent variable, which is determined as follows:

$$\Delta P_t = \frac{P_t - P_{t-1}}{P_{t-1}} \quad (1)$$

In order to quantify the *independent variable*, we have created dummy variables marked with . At the same time, takes the value of 1 in the quarter in which the dividend payment decision is declared, and takes 0 value in all other quarters. The quarter in which the dividend payment decision is declared has been determined on the basis of dividend payout decisions which are publicly accessible.

$$D_{1t} \begin{cases} 1, \text{the quarter in which the dividend payment decision is declared} \\ 0, \text{all other quarters} \end{cases}$$

The data obtained for each company include the period from Q2 2006 to Q2 2016. It is about a balanced panel, since every company has the same number of observations. The total number of observations is 410 (10 companies, 41 quarters) for each variable in the model.

As a result, the following panel regression model with dummy variables has been developed:

$$\Delta P_{it} = \beta_0 + \beta_1 D_{1t} + u_i + \varepsilon_{it} \quad (2)$$

$t = 1,2,\dots,41$
$i = 1,2,\dots,10$
$\beta_{0i} = \beta_0 + u_i$

Where refers to a specific company, refers to the quarter. Random error of the model is marked with . The coefficient before the dummy variables represents the slope coefficient and shows how much the category taking the value of 1 will be different in terms of other quarters. The intercept coefficient represents the mean value of all intercepts of companies. Individual differences in intercept values of each company are reflected in the random error .

For the analysis done we have applied the model of random effects, instead of treating as a fixed one, it is assumed as a random variable with a mean value . The decision for application thereof was made as per the Hausman test, which shows that it is better to apply the model with random than with fixed effects. The output from the regression analysis is presented in Figure 1.

Figure 1. Regression analysis output

Dependent Variable: PRICE
Method: Pooled EGLS (Cross-section random effects)
Date: 08/23/16 Time: 16:53
Sample: 1 410
Included observations: 410
Cross-sections included: 10
Total pool (balanced) observations: 4100
Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.006751	0.004944	1.365507	0.1722
DUMMY	0.095763	0.011123	8.609647	0.0000

$$\Delta P_{it} = 0.0068 + 0.0958 D_{1t}$$

As the *p-value* is lower than the level of significance of α = 0.01, the conclusion is that the null-hypothesis is rejected. It is rather important that the *p-value* of the dummy variable is equal to zero. It means that the respective slope coefficient is statistically significant (at 0.01 level), or the difference in share price in the quarter the decision on dividend payment is declared and other quarters is of significant importance.

The assessed value of s coefficient is 0.0958. It indicates that in the quarter when the decision on dividend payment is declared, the share price will go up by 9%.

H_2 On the ex-dividend date, the share price decreases.

The ex-dividend date shall be the first trading date when the shares are traded without the right to dividend. If the shares are traded on or after the ex-dividend date, the seller shall have the right to dividend, while the buyer or the new owner of the shares will not be paid dividend. It is defined by the decision on dividend payout. Usually, on the ex-dividend date, the share price declines.

In order to observe this claim, we shall use the actual average daily prices of the shares of the Company Alkaloid AD Skopje. The *dependent variable* shall be the daily change of price marked with , which is defined as follows:

$$\Delta P_t = \frac{P_t - P_{t-1}}{P_{t-1}} \quad (3)$$

The quantification of the *independent variable* requires the creation of dummy variables marked as . Thus, on the ex-dividend date, has the value of 1, and of 0 on all other dates. The ex-dividend dates are determined on the basis of publicly available dividend calendars.

$$D_{1t} \begin{cases} 1, \text{ex} - \text{dividend date} \\ 0, \text{all other dates} \end{cases}$$

The data obtained cover the period from January 5, 2006 to June 30, 2016, under the total number of 2,582 observations.

The hypothesis test is based on the following dummy variables regression model developed:

$$\Delta P_t = \beta_0 + \beta_1 D_{1t} + \varepsilon_t \quad (4)$$

Where is daily change of share price, is the intercept coefficient and dummy variables. The coefficient , before the dummy variables, is slope coefficient and shows what the difference between the category taking the value of 1 versus other dates would be. The random error of the model is marked as and *t* refers to the date of trading. The assessed regression model results for the shares of Alkaloid AD Skopje are presented in Figure 2.

Figure 2. Regression analysis output for the shares of Alkaloid AD Skopje

Dependent Variable: PRICE
Method: Least Squares
Date: 08/15/16 Time: 13:26
Sample: 1/05/2006 6/30/2016
Included observations: 2582

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.000388	0.000310	1.250602	0.2112
DUMMY	-0.038233	0.004987	-7.665910	0.0000

$$\Delta P_t = 0.0004 - 0.0382 D_{1t}$$

As evident from the regression analysis output for the shares of Alkaloid AD Skopje, the assessed value of slope coefficient is -0.0382. It indicates that the average price of shares of Alkaloid AD Skopje on the ex-dividend date is by 3.82% lower compared to other dates.

Since the *p-value* is lower than the level of significance α = 0.01, the conclusion is that the null-hypothesis is rejected. It is rather important that *p-value* of the dummy variable is zero. It means that the respective slope coefficient is statistically significant (at 0.01 level), or the difference in the share price on the ex-dividend date and at the other dates is statistically significant.

On the ex-dividend date, the share price declines. This conclusion is consistent with the relevant studies analyzing the movement of share prices on the ex-dividend date at international stock exchanges.

H_3 In the quarter after the dividend payment, the share price reduces.

In the Republic of Macedonia, dividend is paid not later than nine months following the end of the business year, which means that the dividend for t-1 year is paid up to September 30 of t year. It is expected that after dividend payment, share prices will decline in the last quarter Q4. In order to examine this effect we shall use the data from the sample we have created for this research.

First, the average quarterly prices of each of the shares included in the sample have been calculated on the basis of historical data on average daily prices announced at the Macedonian Stock Exchange. The *dependent variable* shall be the quarterly change of the price defined as follows:

$$\Delta P_t = \frac{P_t - P_{t-1}}{P_{t-1}} \quad (5)$$

In order to quantify the *independent variable* we have created dummy variables marked as . Thus, in the quarter following the dividend payment, has the value of 1, and of 0 in all other quarters.

$$D_1 \begin{cases} 1, \text{quarter following the dividend payment} \\ 0, \text{all other quarters} \end{cases}$$

The data obtained for each of the companies refer to the period from Q2 2006 to Q2 2016. It is a balanced panel as each company has the same number of observations. The total number of observations is 410 (10 companies, 41 quarters) for each of model dummy variables.

Consequently, the following panel regression model with dummy variables is developed:

$$\Delta P_{it} = \beta_0 + \beta_1 D_{1t} + u_i + \varepsilon_{it} \quad (6)$$

$t = 1,2,\dots,41$
$i = 1,2,\dots,10$
$\beta_{0i} = \beta_0 + u_i$

Where refers to the actual company and refers to the quarter. The random error of the model is marked by . The coefficient , before the dummy variables, is slope coefficient and shows what the difference between the category that takes the value of 1 versus other quarters would be. The intercept coefficient represents the mean value of all intercepts of the companies. Individual differences in the intercept values of each company are reflected in the random error .

The analysis applied the model of random effects; instead of treating as fixed, it is assumed that it is a random variable with a mean value . The decision on its application was made according to Hausman test, which showed that it is better to apply the model of random rather than fixed effects. The regression analysis output is presented in Figure 3.

Figure 3. Regression analysis output

Dependent Variable: PRICE
Method: Pooled EGLS (Cross-section random effects)
Date: 08/23/16 Time: 15:59
Sample: 1 410
Included observations: 410
Cross-sections included: 10
Total pool (balanced) observations: 4100
Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.033892	0.004950	6.847499	0.0000
DUMMY	-0.043779	0.011421	-3.833131	0.0001

$$\Delta P_{it} = 0.0339 - 0.0438\, D_{1t}$$

As the *p-value* is lower than the level of significance of α = 0.01, the conclusion is that the null-hypothesis is rejected. It is rather important that the *p-value* of the dummy variable is equal to zero. It means that the respective incline coefficient is of statistical significance (at 0.01 level), or the difference in share price in the quarter of dividend payment decision and other quarters is of statistical significance.

The assessed value of incline coefficient is -0.0438. It indicates that in the quarter following the dividend payment, the share price will be decreased by 4%.

Impact of Dividends on Share Prices – Empirical Results

In order to determine how the share price depends on the dividend, we have used a sample of 10 Macedonian companies. Data available on each company are for the 2006 – 2015 period. The expectation is that the relation between the share price and the dividend will be positive (direct).

H_4 The dividend change influences the share price volatility.

Hypothesis testing is made by means of panel regression.

The share price shall be the *dependent variable*. First, the average annual price of each of the shares has been calculated on the basis of historic data on daily prices announced by the Macedonian Stock Exchange.

$$\Delta P_t = \frac{P_t - P_{t-1}}{P_{t-1}} \qquad (7)$$

The dividend shall be the *independent variable*. The data on dividends were taken from the publicly announced dividend calendars, decisions on profit distribution, audited financial statements published on SEI NET, the software application through which listed companies submit their data to the Macedonian Stock Exchange. Since

tax regulations underwent different amendments and supplements in the course of the period analyzed, and in order to provide comparable data, the dividends were taken in their gross amount. Below is the calculation of the annual dividend change.

$$\Delta D_t = \frac{D_t - D_{t-1}}{D_{t-1}} \quad (8)$$

Consequently, the following panel regression model has been developed:

$$\Delta P_{it} = \beta_0 + \beta_1 \Delta D_{it} + u_i + \varepsilon_{it} \quad (9)$$

$t = 1,2, \dots, 10$
$i = 1,2, \dots, 10$
$\beta_{0i} = \beta_0 + u_i$

Where refers to the actual company and refers to the year. The random error of the model is marked by .

The intercept coefficient represents the mean value of all intercepts of the companies, while the individual differences in the intercept values of each company are presented in the random error .

The analysis applied the model of random effects; instead of treating as fixed, it is assumed that it is a random variable with a mean value . The decision on its application was made according to Hausman test, which showed that it is better to apply the model of random rather than of fixed effects. The regression analysis output is presented in Figure 4. The data are presented at the scatter diagram in Figure 5.

Figure 4. Regression analysis output

Dependent Variable: PRICE
Method: Pooled EGLS (Cross-section random effects)
Date: 08/14/16 Time: 20:34
Sample (adjusted): 2007 2015
Included observations: 72 after adjustments
Cross-sections included: 10
Total pool (balanced) observations: 720
Swamy and Arora estimator of component variances

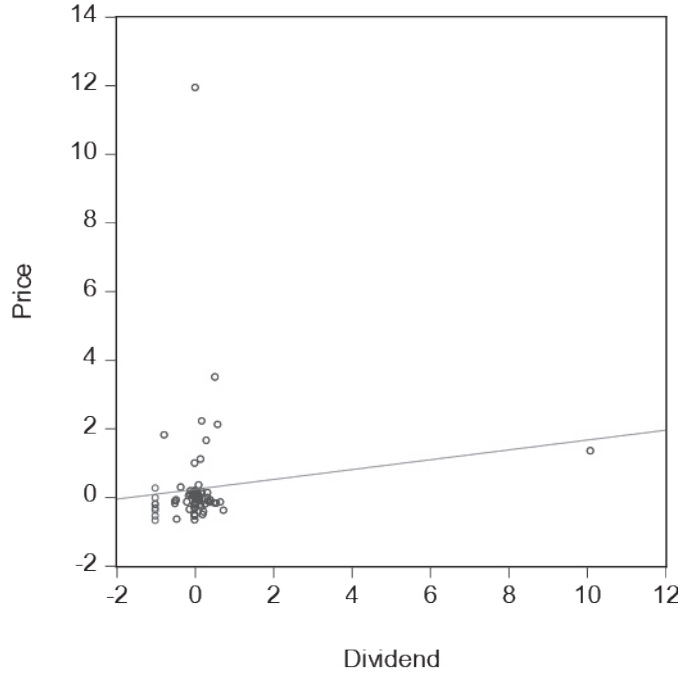
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.239288	0.058100	4.118520	0.0000
DIVIDEND	0.143456	0.045977	3.120149	0.0019

$\Delta P_{it} = 0.2393 + 0.1435\,\Delta D_{it}$

The assessed value of the slope coefficient is 0.1435. It shows that if the dividend is raised by 1%, the share price will rise by 14.35%.

Since the *p-value* is lower than the level of significance α = 0.01, the conclusion is that the null-hypothesis is rejected. It means that the dividend has positive impact on the share price.

Figure 5. Scatter diagram of dividend versus stock price



The scatter diagram shows that there is quantitative harmonization between the dividend and share price. Thus, the share price grows with the growth of the dividend. Due to the stochastic relation, the empirical points, as evident, are not positioned on the regression line, but two extreme values that have significant effect on the level of this relation can also be noted.

Conclusion

"The harder we look at the dividend picture, the more it seems like a puzzle, with pieces that just don't fit together" (Black, 1976, pp. 8). Four decades following the publication of the dividend puzzle paper by Fisher Black, the dividend puzzle remains unsolved. Issues such as why companies are paying dividends, why investors are paying attention to the dividends and many other issues related to the dividend policy, are an intellectual challenge for economists. The large expansion of scientific papers in the sphere of dividend policy assures that in the future, it will be defined what an optimum dividend policy is.

The testing of the hypothesis introduced in this research led us to the following conclusions:

First, in the quarter the decision on dividend payment is declared, the share price goes up by 9%. Second, in the quarter after dividend is paid, the share price declines

by 4%. Hence, it turns out that dividend is a significant motive for purchasing shares at the Macedonian Stock Exchange. It would be logical that better price stability would be obtained if there was an increased frequency of dividend payment rather than payment made on an annual or semi-annual basis.

Third, the share price declines on the ex-dividend date. Are there any anomalies in the prices at the capital market, or are there conditions for dividend arbitrage? These issues may be defined on the basis of this conclusion and further research, when changes in share prices on the ex-dividend date are compared to the dividend amount.

Fourth, changes in dividend have impact on changes in the price; if the dividend is increased by 1%, the share price will increase by 14.35%. Empirical results show that financial managers may change the share price variability by changing the dividend policy. In fact, the dividend policy may be used as a share price variability control vehicle. The share price volatility may be lowered by increasing the dividend payment ratio.

Finally, here are some of the problems we were faced with during the research. In absence of summary statistical data on dividend amounts declared by companies, these data, for each individual company, had to be obtained from the audited financial statements and decisions announced at the Macedonian Stock Exchange. Data on dividends are publicly available for the 2006 – 2016 period. Hence, the short time series is a rather limiting factor when researching these issues. The financial crisis (December 2007 – June 2009), as well as the ongoing political crisis, have an inevitable impact on dividend decisions made by companies and consequently, on the relevance of the results obtained. In addition, a larger number of companies may be included and the total payout to shareholders – dividends plus share repurchases may be taken into account. In the future, the regression models applied in this study may be supplemented by more independent variables, which, apart from the dividend policy, influence the share price, as well.

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