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# DETERMINANTS OF THE DIVIDEND PAYOUT POLICY OF STOCK COMPANIES WITHIN THE EUROPEAN UNION

Patrick Arndt[1], Zuzana Kucerova[1]

[1] Department of Finance, Faculty of Business and Economics, Mendel University in Brno, Zemědělska 1, 613 00 Brno, Czech Republic

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## Abstract

The problem-field dividend payout policy is a very complex issue. Particular within the low-interest phase in Europe, the significance of this issue is growing for all investors, equal to whether private or institutional investors. The aim of this study is to research the European area to provide a contribution to a region, which, unfortunately, has given sparse attention in the past. In order to ensure the relevance for this exploration, the major European stock index Euro Stoxx 600 has been used. The results of the multiple linear regression show the unequal dividend distribution between stock companies from the industrial sector and the service sector. Besides, it has shown that institutional investors play as well a significant role within the dividend policy in European public companies. Furthermore, the net income of a corporation influenced in all previous analysis the dividend reimbursement, which could be confirmed through this paper as well. Regarding the previous studies, this paper provides an additional source for further studies which also occupy with this complicated question.

Keywords: dividend payout policy, Euro Stoxx 600, European Union, stock companies

## INTRODUCTION

The shareholders' participation in the net income is inseparable from the history of corporations and looks back on hundreds of years of history. Shareholders used to be both employees and owners. Over time, however, the separation of ownership and control has been developed. As a result of this split, the practice of the dividend payment has become a dividend policy. The term dividend policy is defined in the narrower sense as the distribution behaviour of listed stock corporations (Guserl and Pernsteiner, 2015). Since the dividend policy is almost entirely determined by the company's management, the dividend policy is a common problem between the management and the shareholders of a stock corporation (Frankfurter *et al.*, 2003). On the one hand, the management tries to operate an optimal distribution policy with the best intentions and in the interests of the company. On the other hand, for the shareholders, the dividend payments are the compensations, which includes a risk premium, on the capital they made available for the corporation. Therefore, the shareholders pursue merely their own interests and aim at the highest possible return on their invested capital (Henderson Global Investors, 2017). However, there are various groups of shareholders who have different objectives regarding the dividend payout policy (Ellermann, 2003). Especially, investors in relatively young companies are more likely to reinvest the generated profits into the company to achieve the highest possible growth rates and thereby increase the shareholder value. As a result, different pressures are placed on the

corporation's management by the shareholders. In particular, against the backdrop that the dividend policy has a significant impact on the company valuation and the development on the share price, the announcement of a dividend disbursement is already enough to trigger significant changes in the market capitalisation (Fischer, 2009).

Due to these divergent interests, the groups of majority shareholders have, in particular, incentives to exercise control over the management. The use of voting rights can be used to exert influence on the management of the company. Therefore, stock corporations are able, through a specific dividend policy, to act in favour of one or more shareholder groups (Prowse, 1994). Consequently, the dividend policies of stock corporations are not unique and should be contemplated in terms of the shareholder structure and their preferences.

In contrast to the shareholders, the management usually pursues the strategy to align the dividend disbursements independent the fluctuating annual net incomes. The management tries to smooth the annual dividend amount so that a reliable and steadily increasing development of the dividend disbursement will give investors a positive outlook (Schulz, 2006). Accordingly, they only adjust the dividend payments to continuous and sustainable development on the company's net income. As a rule, in the event of an increase in earnings, the distributions will be increased gradually according to a predetermined adjustment factor until the scheduled target on the dividend rate is reached. The delayed alignment of the dividend rate on the net income increase is intended to ensure that the amount of the dividend distribution remains at least constant, even in the event of a possible drop in the annual profit. This approach is primarily because the corporation's management generally dislikes dividend cuts. A reduction of the dividend payments would cause adverse reactions on the part of the shareholders, and as already explained, the stock price fluctuations would have to be expected (Schulz, 2006).

Furthermore, the latest figures show that, due to the low-interest-rate policy, dividends are becoming the focus of the interest among all investors increasingly. In Europe, stock companies distributed a total of 219.6 billion euro in dividends to their shareholders in 2016, and thereby exceeded the previous year by 9.1 billion euro. In 2014, even a peak of 234.5 billion euro was poured out to the shareholders (Henderson Global Investors, 2017). In light of the importance of the dividend payments, there is legitimate interest on the part of all current and future shareholders in how motivated stock companies are distributing their profits and what factors influence the amount of the dividend payments.

The previous empirical studies are mainly concerned with the North American region and, more recently, with German stock corporations. Little attention has been paid to the European region. So far, only one study is known from the year 2008, which dealt with the dividend policy of European companies. Therefore, this paper aims to identify which determinants are having an impact on the dividend payout policy of stock companies within European countries.

## View of Theoretical Literature

### *Irrelevance Theorem by Miller and Modigliani (1961)*

When the shareholders are only interested in generating the highest possible returns through dividends, it seems absurd to assert that a specific dividend policy is insignificant. However, precisely this theory was compiled and confirmed by the later Nobel Prize winners Merton H. Miller and Franco Modigliani in 1961 in a much-publicised paper on the dividend policy (Miller and Modigliani, 1961). In this paper, both meet the statement that the dividend policy is meaningless. The earlier common literature belief that an increase in the dividend always entails an increase in the value of the company has refuted (Schmidt-Wilke, 1998). Miller and Modigliani's point of departure is based on the model assumptions: perfect market and rational investors (Staroßom, 2012).

According to Miller and Modigliani (1961), an increase in dividend payment means that financial resources flow away from the company. For a given investment program and a consistent debt policy, these funds must be replaced again, so that only a capital increase as an option in question. The increase in dividends received by shareholders compensates precisely for the loss of the price that shareholders incur by diluting their shares in a capital increase, which does not change their position (Schmidt-Wilke, 1998). The corporation's management should, therefore, accumulate the profits earned as long as capital expenditure yields a return more than the cost of capital (Bandulet, 2005). The same applies to the reduction of the dividend payment. The excess cash and cash equivalents can now be used for the repurchase of shares so that the shareholders will be compensated for the lower profit distribution by the increase in the value of the company shares caused by the share repurchase (Schmidt-Wilke, 1998).

It was surprising by many experts that a specific dividend policy is not rewarded by the investors and, consequently, that the level of dividend distribution is irrelevant to the market value of the public companies. Therefore, this theory is contrary to the existing belief that a specific dividend policy would be a significant positive influence on the price of the shares and thus on the value of the companies (Prokot, 2006).

### *Uneven Distribution of Information (Neo-Institutionalism)*

In 1979, Bhattacharya developed a two-period model in which the shareholders deduce the value of the company from the dividend payment. Shareholders are very interested in market valuing the corporation correctly when selling its shares to another investor. In the model, the management undertakes to ensure the distribution of a certain dividend amount in $t = 1$ at the time $t = 0$. If the management now sends a wrong signal that, for example, the returns from the investments made are insufficient, borrowings must be made under the assumptions made at time $t = 1$ so that the distribution can still be made (Schulz, 2006). The resulting transaction costs can be considered as a penalty for misinformation. These costs make it less profitable for less profitable companies to announce a high dividend payment, as in the case of public companies with profitable returns, thus ensuring the credibility of the signal. Bhattacharya (1979) was able to demonstrate the signal function of the dividend payment through his model. However, the model does not obey the explanation why, in the event of a tax disadvantage, the distribution of the cash dividend will not be made through share repurchases (Ibid.; Prokot, 2006).

## Review of Previous Studies

Several empirical studies have already dealt with the topic of dividend policy in the past. In addition to the wide range of research methods used, there is a wide variety of samples used, time periods and determinants examined. The vast majority of the studies focused on companies based in North America. However, Denis and Osobov (2008) for example examined the corporations of the United States of America and furthermore corporations within Germany, and their results have shown that more substantial and more profitable companies tend to pay higher dividends across the countries. Merely a few studies occupied with the European region. Only, Von Eije and Megginson (2008) dealt recently with corporations of the European Union and determined that the dividend amount is influenced by several influencing factors, such as price-to-book ratio and the debt of the company. Topalov (2013), for instance, analysed companies in Germany and has also shown positive effects on the dividend amount among other things by the debt and institutional investors. In addition, the established study of Alli *et al.* (1993) used the dividend ratio instead of the dividend amount as the dependent variable and also showed that the institutional investors and the fixed assets are accountable for higher dividends. Regarding the research methods used, the present analysis will consider only studies which also used the multiple linear regression.

## Determinants of Dividend Policy

As a representative of the dividend policy, is possible to use the change in the dividend, the dividend amount, the dividend payout ratio or even the dividend yield. The total amount of distributed dividends has been used most frequently in previous studies. Based on the previous analyses, this analysis also uses the absolute key figure dividend amount as a representative of the dividend policy (Topalov, 2013). Concerning the determinants of the dividend amount, a link to the previous studies should be established. Accordingly, the following eight possible influencing factors have been selected in the present analysis.

Net income is the amount that shareholders receive back for their capital employed. It is necessary to determine whether the economic success of a company, as measured by the operating result, affects the amount of the dividend payment (Putnoki, 2011).

The size of the company can be represented by the key indicator market capitalisation or balance sheet total. Smith and Watts (1992), Alli *et al.* (1993) and Mihail Topalov (2013) used the balance sheet total as the representative for the company size for their exploration. Eije and Megginson (2008) chose the market capitalisation to express the size of a public company. Due to the current low-interest-rate phase and the associated escape to the capital markets, many public companies are massively overvalued and have correspondingly high market values. In order to reduce the risk of regression biased by outliers, the balance sheet total is used as a representative for the size of a company (Stappel, 2016).

Michael Jensen (1986) describes in his free-cash-flow theory that the reduction of the free-cash-flow (FCF) limits the possibilities of the management, which is not in the interest of the shareholders. In the previous studies, however, the free-cash-flow always had adverse effects on the dividend amount, so that the theory of Michael Jensen (1986) was not confirmed. The result of this analysis for the European area will show whether the previous study results are confirmed, or the free-cash-flow theory of Michael Jensen (1986) is strengthened.

As explained earlier, companies are paying dividends, although they have negative net incomes, and they are still highly indebted. The examination will determine whether the amount of the dividend is affected by the indebtedness of a corporation.

Institutional investors are playing an essential role within the company management and in particular, in deciding on the appropriation of the net income. The results of the previous analyses are not able to show a consistent picture. The study by Alli *et al.* (1993) demonstrates a significant positive correlation between the share of institutional investors and the dividend policy. Grinstein and Michaely (2005) and Mihail Topalov (2013), on the

other hand, have no significant correlation to the dividend policy.

The price to book value ratio (P/B ratio) indicates the relationship between the market capitalisation of a stock corporation and the book value of equity. The price to book value ratio can be seen as an indicator of the growth prospects of a company (Topalov, 2013). It should be noted that the results of the previous studies made very different statements concerning the P/B ratio. At Smith and Watts (1992), the P/B ratio has positive effects on the dividend policy. By contrast, the analysis of Von Eije and Megginson (2008) shows a negative effect. Mihail Topalov (2013) also shows a divided picture. The results demonstrate no significant correlation for the key indicator in the survey year 2000. In 2006, however, the P/B ratio influences, albeit only slightly, but significantly, the dividend policy (Ibid.). About the study of Von Eije and Megginson (2008) for companies from European member states, the question arises as to whether the identified negative correlation can be confirmed in the context of this analysis or whether an opposing result will be found.

The company investment program is usually the counterpart of the dividend distribution. Accordingly, it needs to be determined whether the company's investment program represented by the total investment amount influences the dividend distribution and, if so, whether it has a negative or positive effect.

Service companies and non-manufacturing companies usually have significantly lower fixed assets than companies in the processing, manufacturing or production industries. Thus, the essential indicator can provide information on whether manufacturing companies, as those with high property, plant, and equipment, pay higher dividends than, for example, service companies. In addition, a high level of property, plant, and equipment represents a high degree of collateral security and consequently reduces the agency problems between equity investors and debt investors.

## MATERIALS AND METHODS

For this examination, companies are used which are listed in the Stoxx Exchange Europe 600 at the 29 of July 2017. The values of the dependent and independent variables were applied to the financial year 2016. The collected data were extracted from the well-established data provider Bloomberg. Fifty-eight of six hundred listed companies belonging to the financial sector and twenty-eight companies to the insurance industry have been removed from the sample. For another five companies, the data gathering was not successful, so they also have been removed from the sample. In addition, thirty-five stock companies do not pay dividends to their shareholders; thus, those companies have been removed as well. Accordingly, four hundred and seventy public companies remain in the sample for the analysis.

The companies are based in a total of twenty-eight countries. Nine countries do not belong to Europe. However, as it is shown in Tab. I, there are only thirteen stock companies in these nine countries.

The largest share of more than twenty-six per cent is made up of UK companies. France with fifteen per cent and Germany with twelve per cent follow behind. These three countries already account for fifty-three per cent of the total index. With Switzerland (eight per cent) and Sweden (seven per cent), more than sixty-eight per cent of the index companies are based in only five of twenty-eight countries. The economic strength of these countries is reflected in the overall picture. Eighteen per cent of the countries of the index are account for sixty-eight per cent of the total index volume.

### Empirical Model

Due to the fact that the dividend amount and all explanatory variables have metric characteristics and the linear relationship between one dependent variable and at least two independent variables have to be verified, this paper will apply the multiple regression model and test the model quality in regression diagnostics. The multiple linear regression analysis is a statistical analysis technique, which is one of the most commonly used methods in studying the relationship between a dependent variable and multiple independent variables (Backhaus *et al*., 2016).

In accordance with the previous studies, in this analysis, the dividend policy will be represented by the companies' total dividend amount (*DIV*).

I: *Countries of the sample*

| Europe | | | | | | |
|---|---|---|---|---|---|---|
| Austria (6) | Belgium (10) | Britian (124) | Czechia (1) | Denmark (15) | Finland (15) | France (71) |
| Germany (58) | Ireland (8) | Isle of Man (1) | Italy (17) | Jersey (2) | Luxemburg (6) | Malta (1) |
| Netherlands (20) | Norway (9) | Portugal (3) | Spain (20) | Sweden (33) | Switzerland (39) | Russia (1) |
| Non Europe | | | | | | |
| Australia (1) | Bermuda (1) | Chile (1) | Jordan (1) | Mexico (1) | South Africa (3) | United States (2) |

Source: own calculations

The potential determinants for the present study are represented by the independent variables net income *(NI)*, balance sheet total (*B/S*), free-cash-flow (*FCF*), debt capital (*Debt*), institutional investors (*II*), price to book value ratio (*P/B ratio*), investments (*INVT*), and fixed assets (*FA*). Following Kaul (2014), the equation for the model of the multiple linear regression analysis related to this study is stated as:

$$DIV_i = \beta_0 + \beta_1 \times NI_i + \beta_2 \times B/S_i + \beta_3 \times FCF_i + \beta_4 \times Debt_i + \\ + \beta_5 \times II_i + \beta_6 \times P/B_i + \beta_7 \times INVT_i + \beta_8 \times FA_i + u_j. \quad (1)$$

### *Descriptive Statistics & Regression Diagnostics*

In order to gain an overview of the size relationships, the measure of central tendency and dispersion measures of the dependent and the independent variables are tabulated in the following Tab. II.

The result of the descriptive statistics shows that the average amount of the dividend disbursement for the financial year 2016 is stated at 535 million euro. The company with the lowest value poured out only 4 million euro to its shareholders. In opposed to the lowest dividend amount, the dividend disbursement of the Dutch Shell Group demonstrates a maximum of more than 9.6 billion euro.

Besides the dependent variable, all independent variables showing sharp differences between the average and the median. Except for the proportion of the institutional investors and the price to book value ratio, the arithmetic mean of all variables is twice as high as the values of the median. The variable investment shows a difference of almost 300 percent, which is the highest variance. These strong deviations make it clear, as in the case of the dividend amount, that it makes more sense to use the median than the average (Bücker, 2003).

For the minimum and maximum values, it can be seen regarding the influencing factor investment that at least one company has no capital expenditures of the year 2016. However, there are five companies without capital expenditures which are in significant contrast to the three largest companies of the oil industry. The leading company with investments of 22 billion euro is, as with the dividend amount, the Dutch oil company Shell. Regarding the free-cash-flow, there is a minimum value of minus seven billion euro of the oil company BP and a maximum of ten billion euro of the company Nestle. Despite the considerable difference, both companies are paying almost identical dividends. The dividend payment for the year 2016 of BP amounts to 5.3 billion euro and from Nestle to 6.4 billion euro.

The dependent variable, as well as the independent variables, indicate considerable scattering and deviation so that the majority of the data collected do not appear to be normally distributed or has a pronounced skewness and kurtosis. To ensure this analysis is significant, it is necessary to check whether there are deviations from the normal distribution of the variables. A simple, quick test can check the normal distribution. The value of the skewness or the kurtosis should not exceed twice the pertinent error. Otherwise, a significant deviation from the normal distribution, respectively, symmetry can be assumed (Miles and Shevlin, 2001). Due to the fact that all variables do not appear to be normally distributed, it was necessary to transform the data with the logarithmic formulas in order to receive a normal distribution. Since some variables showed negative values, it was necessary to convert them into positive values before the transformation. In addition, the deviations from the normal distribution were very pronounced, so that a common logarithm transformation did not lead to success. Therefore, the Box-Cox power transformation and the Johnson transformation were used to smooth successful the variables. Tab. III shows the results of the transformations.

The results make it clear that all variables in both skewness and kurtosis are not higher than twice of the associated standard error. Thus, there are no significant deviations from the normal distribution. In order to confirm the normal distribution of residuals through further testing, the Shapiro-Wilk test and the Kolmogorov-Smirnov test were used. In both tests, all variables show significance above the five per cent level. In conclusion, all variables are normally distributed after transformation.

In addition to the residuals of the normal distribution, five more assumptions need to be reviewed to prove the suitability of the selected model. Accordingly, as part of the regression diagnosis, in addition to the method of least squares (OLS), the following further statistical test

II: *Descriptive statistics*

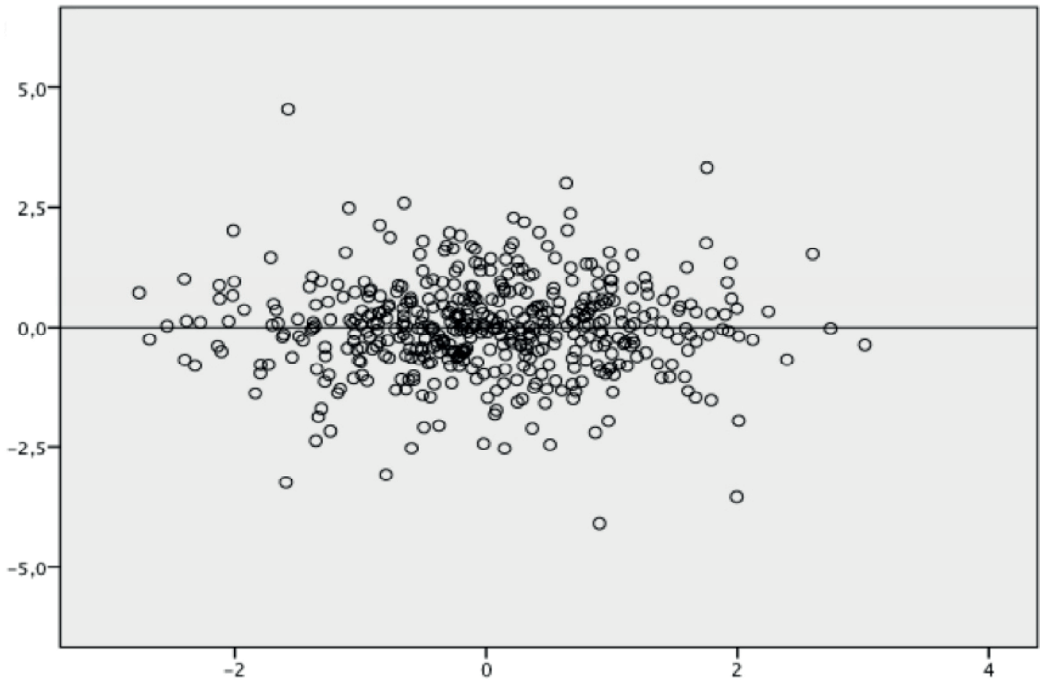
| In EUR Mio. (except II, P/B ratio) | DIV | NI | B/S | FCF | Debt | II | P/B ratio | INVT | FA |
|---|---|---|---|---|---|---|---|---|---|
| average | 535 | 1 407 | 22 910 | 673 | 6 467 | 429 | 5 | 938 | 17 277 |
| median | 199 | 575 | 7 960 | 330 | 1 866 | 403 | 3 | 236 | 5 853 |
| standard deviation | 1 064 | 2 264 | 45 503 | 1 498 | 14 801 | 196 | 19 | 2 256 | 38 342 |
| minimum | 4 | -361 | 71 | -7 020 | 1 | 38 | 1 | 0 | 66 |
| maximum | 9 677 | 15 836 | 411 275 | 10 815 | 156 678 | 1 289 | 408 | 22 116 | 387 308 |

Source: own calculations

III: *Skewness and kurtosis after transformation*

| | DIV | NI | B/S | FCF | Dept | II | P/B ratio | INVT | FA |
|---|---|---|---|---|---|---|---|---|---|
| skewness | -0.006 | 0.000 | -0.076 | 0.026 | -0.052 | 0.023 | 0.044 | 0.007 | -0.051 |
| standard error | 0.113 | 0.113 | 0.113 | 0.113 | 0.113 | 0.113 | 0.113 | 0.113 | 0.113 |
| kurtosis | 0.101 | -0.175 | -0.131 | -0.215 | -0.001 | 0.100 | 0.041 | -0.139 | 0.062 |
| standard error | 0.225 | 0.225 | 0.225 | 0.225 | 0.225 | 0.225 | 0.225 | 0.226 | 0.225 |

Source: own calculations




1: *Scatter diagram of linearity*
Source: own calculations

procedures are to be carried out (Backhaus *et al.*, 2016).

The first assumption, the validation of linearity is performed by using the Ramsey reset test. The result shows a *p*-value of 0.06047 and is thus above the significance level of five per cent. In addition, the scatter plot confirms the reset test and thus the linearity, as it is illustrated in Fig. 1.

The consideration of all weighty variables, as the second assumption, is evaluated on the model quality on the basis of the $R^2$ and the adjusted $R^2$. Both sizes contain the necessary information for the model assumption. The range of values of the coefficient of determination $R^2$ is between zero and one. A significant value indicates a high proportion of the declared dispersion in the total dispersion so that the explanatory content of the regression model with a minimum value of zero (no declared dispersion) is considered to be poor and with a maximum value of one (total dispersion is explained) as very good is (Ibid.). The present study model shows an $R^2$ of 0.6226 and an adjusted $R^2$ of 0.616. Thus, 62.3 per cent respectively 61.6 per cent of the variation from the dependent variable dividend amount is due to the eight independent variables. For comparison, the study by Mihail Topalov (2013) shows an $R^2$ 0.519 and an adjusted $R^2$ of 0.767. Thus, the explanatory content of this model can be considered good (Topalov, 2013).

Furthermore, the third assumption, autocorrelation, is reviewed by using the Durbin-Watson test (Backhaus *et al.*, 2016). The *p*-value of the Durbin-Watson Test is stated at 1 and is therefore above the significance level of five per cent. Thus, there is no autocorrelation. Furthermore, heteroskedasticity in the sample can also be excluded since the appropriate Breusch-Bagan test shows a *p*-value of 0.8412, which is above the significance level of five per cent. The last assumption which has to be tested is the no multicollinearity and can be confirmed by calculating the Variance Inflation Factor (VIF) (Auer, 2010). For the values of the variance inflation factors, it should be noted that values of ten or higher are considered critical in the literature. However, there are also more critical sources that

IV: *Variance inflation factors (VIF) of the independent variables*

| NI | B/S | FCF | Dept | II | P/B ratio | Invt | FA |
|---|---|---|---|---|---|---|---|
| 4 864 027 | 3 412 495 | 1 734 833 | 2 872 819 | 2 440 166 | 1 877 368 | 2 918 326 | 5 733 759 |

Source: own calculations

already consider a value of five and higher to be worrying (Albers, 2009).

As Tab. IV shows, none of the explanatory variables reaches the critical value of ten. Only the size of the variable fixed assets is greater than five. Nevertheless, it can be assumed here that there is no multicollinearity, and thus, the model assumption can be regarded as fulfilled.

Since all five assumptions have been fulfilled through the carried tests and the sixth assumption of the normal distribution has already been fulfilled, the prerequisites for an efficient, undistorted and consistent estimator have been created. As a result, the multiple linear regression model is appropriate and can be used for this analysis.

## RESULTS AND DISCUSSION

The following Tab. V demonstrates the result of the multiple linear regression analysis of the major European Stock Exchange Euro Stoxx 600.

As the table illustrates, the result of the regression analysis shows that the independent variables: net income (*NI*), free-cash-flow (*FCF*), institutional investors (*II*) as well as the price to book value ratio (P/B ratio) and the fixed assets (*FA*) significantly affect the dividend policy of European stock corporations of the financial year 2016. The variable fixed assets show the strongest influence (coefficient 0.33951) following by the net income (coefficient 0.18680). The coefficient explains the influence on the dividend amount, which means when the fixed assets increases by one unit, the dividend amount increases by the coefficient of 0.33951 and in terms of the net income the dividend amount increases by 0.18680. The variable price to book value ratio shows a negative influence as well as the lowest influence on the dividend amount, which means when the P/B ratio rises by one unit the dividend amount decreases by the coefficient of -0.07849. The analysis of German stock companies by Mihail Topalov (2013) shows a similar result. The dividend amount is also mostly influenced by the net income and the lowest influenced by the price to book value ratio (Topalov, 2013).

Regarding the net income, the finding of this examination confirms the results of the previous studies on the positive impact of the company's economic performance on dividend policy. Moreover, the company size has no significant influence on the amount of the dividend. The results of the previous studies by Smith and Watts (1992), Alli *et al.* (1993) as well as by Von Eije and Megginson (2008), in which the dividend policy was influenced by the size of the company, could not be confirmed through this analysis. The findings of Topalov (2013) also showed no influence. Therefore, the dividend amount paid by small companies are not lower than greater companies within the European Union.

The potential influencing factor free-cash-flow shows a *p*-value below the level of 0.001, which means that the free-cash-flow influences the dividend amount with a coefficient of 0.17565 as well. Therefore, corporations with high FCF pay higher dividends to their shareholders than companies with a lower FCF. The result confirms the theory of Michael Jensen (1986), which

V: *The result of the multiple linear regression analysis*

| | Estimate | Std. | t value | Pr(>\|t\|) | |
|---|---|---|---|---|---|
| (Intercept) | -0.02501 | 0.03025 | -0.827 | 0.40887 | |
| NI | 0.18680 | 0.06830 | 2 735 | 0.00648 | ** |
| B/S | 0.03468 | 0.05504 | 0.630 | 0.52898 | |
| FCF | 0.17565 | 0.03979 | 4 414 | 1.27e-05 | *** |
| Debt | 0.08218 | 0.05174 | 1 588 | 0.11292 | |
| II | 0.17833 | 0.03424 | 5 208 | 2.89e-07 | *** |
| P/B ratio | -0.07849 | 0.02971 | -2 641 | 0.00854 | ** |
| INVT | -0.02970 | 0.04927 | -0.603 | 0.54693 | |
| FA | 0.33951 | 0.07371 | 4 606 | 5.33e-06 | *** |
| --- | | | | | |
| Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1 | | | | | |

Source: own calculations

explained that a low FCF is not in the interest of the shareholders, who ultimately decide about the dividend amount.

The debt capital of a company, defined on the size of the debt, has no impact on the amount of the dividend distributed. Therefore, it does not matter if a company is more debt-financed or equity-financed. The previous studies do not show a consistent view of this influencing factor.

The institutional investors, as the key shareholders, influence the dividend amount significantly. The *p*-value is below the significance level of 0.001. That means that the higher the number of institutional investors, the higher is the dividend disbursement of a stock corporation. The study by Alli *et al.* (1993) who analysed companies of the North American region also showed a significant influence by the institutional investors.

The price to book value ratio shows a *p*-value of 0.00854, which is below the significant one per cent level. Hence, if the P/B ratio increases, which may be due to an increase in the market capitalisation or a decrease in the equity capital, the dividend amount will decrease by the coefficient mentioned above. This negative impact of the price to book value ratio confirms the outcome of the study of Von Eije's and Megginson's (2008) for the European Union.

Regarding the findings, it can be determined that the company's investments do not affect the dividend policy of European companies for the financial year 2016. However, it is to mention that the investments affect the liquidity of the net income as well as the FCF, which is eventually the available amount to pour out as the dividend to the shareholders.

Furthermore, the *p*-value of the fixed assets is below the significance level of 0.001 as well. The result of this analysis may indicate that companies in processing, manufacturing or production industries, which generally have a high level of property, plant and equipment, pay higher dividends to their shareholders than, for example, service companies which have substantially lower fixed assets. Moreover, the result could be an indication that a reduction in agency problems between debt investors and equity investors by increasing fixed assets and, as a result, increasing securities, has a positive impact on dividend policy. The study by Alli *et al.* (1993) also established that fixed assets have positive impacts on the amount of the dividend distribution.

## CONCLUSION

The aim of this paper was to examine which influencing factors affect the dividend payout policy of stock companies within the European countries of the financial year 2016. Therefore, concerning the significance and the scope, the major and appropriate stock index Euro Stoxx 600 was used. Accordingly, eight potential determinants were analysed with the multiple linear regression model and in consideration of the previous studies.

In summary, the results of the present study have shown both partly confirmations and divergences in comparison to the previous studies. However, it should be noted that many factors are influencing the dividend amount. In the past, it was not possible to give a consistent view of the determinants. This paper confirms these differences. Nevertheless, given the fact that this paper has strongly oriented to the previous studies and these partially confirmed, this paper provides an additional source for further studies, which deal with the same complex field. In conclusion, there is not that one recommendation for all public companies regarding the dividend policy. Therefore, it can be said that the problem field dividend policy is not yet completely solved and requires further empirical studies. It would be desirable that further studies deal more with the European region, which could strengthen the validity of the current results so far.

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Contact information

Patrick Arndt: xarndt@mendelu.cz
Zuzana Kucerova: zuzana.kucerova@mendelu.cz