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# Factors Influencing Dividend Policy on Mining Companies Listed in Indonesia Stock Exchange 2011-2015

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**Abstract.** The mining sector has an important role in economic development in Indonesia. Mining company has to have good responsibility to make investors trust in investing, especially in dividend policy. The dividend policy influenced by many factors such as micro and macroeconomics variables which influence investors to invest in mining companies. This research aims to examine the analysis of the current ratio, debt to equity ratio, return on assets, investment credit interest rate, exchange rate, mining stock price index and industrial production index toward the dividend policy. The samples used in this study are 10 mining companies listed in Indonesia Stock Exchange during the period 2011 to 2015. The significance influence test of independent variables is using panel data regression model with significant level ( $\alpha$ ) of 1%, 5% and 10%. Classic assumptions testing are conducted in order to obtain the best results including normality test, multicollinearity test, and heterocedasticity test. The result shows that the current ratio, debt to equity ratio, return on assets, investment credit interest rate, mining stock price index and industrial production index significantly toward dividend payout ratio. The results also show that the exchange rate is not a significant toward dividend payout ratio.

**Keywords:** dividend payout ratio, Indonesia Stock Exchange, mining companies

**Abstrak.** Sektor pertambangan memiliki peran penting dalam pembangunan ekonomi di Indonesia. Perusahaan pertambangan harus memiliki tanggung jawab yang baik untuk membuat investor percaya pada investasi, terutama dalam kebijakan dividen. Kebijakan dividen dipengaruhi oleh banyak faktor seperti variabel mikro dan makroekonomi yang mempengaruhi investor untuk melakukan investasi pada perusahaan pertambangan. Penelitian ini bertujuan untuk menganalisis current ratio, debt to equity ratio, return on assets, suku bunga kredit investasi, nilai tukar, indeks harga saham pertambangan dan indeks produksi industri. Sampel yang digunakan dalam penelitian ini adalah 10 perusahaan pertambangan yang terdaftar di Bursa Efek Indonesia selama periode 2011 sampai dengan 2015. Pengujian pengaruh signifikansi variabel bebas menggunakan model regresi data panel dengan tingkat signifikan ( $\alpha$ ) sebesar 1%, 5% dan 10%. Pengujian asumsi klasik dilakukan untuk mendapatkan hasil terbaik meliputi uji normalitas, uji multikolinieritas dan uji heteroskedastisitas. Hasil analisis menunjukkan bahwa current ratio, debt to equity ratio, return on assets, suku bunga kredit investasi, indeks harga saham pertambangan dan indeks produksi industri berpengaruh signifikan terhadap dividend payout ratio. Hasil penelitian juga menunjukkan bahwa nilai tukar tidak signifikan terhadap dividend payout ratio.

**Kata kunci:** dividend payout ratio, Indonesia Stock Exchange, perusahaan pertambangan

## INTRODUCTION

One of the financial problems often faced by a company is the problem of company funding. The capital market becomes an alternative funding in developing the companies in Indonesia. Usman et al. (1997) defines the capital market as a financial long term instrument either in the form of own capital and debt, both issued by the government and by private companies. One part of the capital market is the Indonesia Stock Exchange (IDX) (Imelda et al. 2014). The mining sector is one of the largest sectors listed in the Indonesia Stock Exchange (IDX).

Along with the economic growth, the need for energy also continues to grow. Saidi and Hammami (2015) said that economic growth has a positive impact on energy consumption. The mining sector is the backbone of economic development in Indonesia, because of its

role as provider of energy resources. In recent years, the mining sector in Indonesia is experiencing weakening caused by the fluctuation in the price of coal, crude oil, energy and metals. This dilution will cause funding problems that may affect the company's financial condition (Fatoni et al., 2013). The decrease movement of stock prices over the period 2011-2015 as shown in Figure 1.

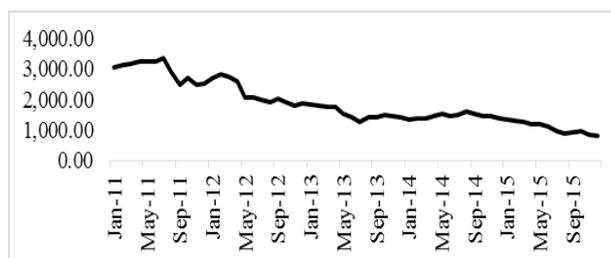


Figure 1. Movement of Stock Prices (2011 - 2015)

Source: BEI (2017)

Investment in the mining sector tends to have high uncertainty in company funding (Setyandari, 2010). This problem causes instability in revenue that could affect the company's financial condition and increase the debt of this sector in a quite large amount, both short term and long term debt. This problem also affects stock prices that fluctuate from year to year.

Figure 1 shows that is instability in stock prices in the mining sector where stock prices continues to decline, this can certainly reduce the company's performance and lead to a decrease in profit sharing to investors. The fluctuation of stock price movements poses a risk to investors in doing their investment. In capital market activities, investors have expectations of the investment, such as dividends. Investors have started to desire high current dividends due to the economic meltdown (Michael, 2011).

Dividends are distributions of current earnings given to shareholders of company and usually given in the form cash, stock, or other property (Kurniasih et al., 2014). The company must have a policy to determine the distribution and restrained of dividend. Dividend distributed by the company is indicated by dividend payout ratio. Dividend payout ratio decision is due consideration for legal and financial factors (Khan and Ashraf, 2014). The existence of dividend detention by the company is not only caused by loss but also caused by investment and expansion.

The dividend policy is the company's decision in determining the amount of profit to be distributed in the form of dividends or companies must determine dividend appropriately as it may affect the stock price, the price of assets, capital structure, mergers and acquisitions, as well as capital budgeting (Ardestani et al., 2013). Investors will observe the condition of the company to ensure the rights in form of the stipulated dividend. For investors, a stable dividend payout is an indicator of a good corporate prospect (Sartono, 2001).

Baah et al (2004), Osman and Mohammed (2010), Kapoor et al (2010), Rehman and Takumi (2012), Marietta and Sampurno (2013), Lanawati and Amilin (2015) and Agustin (2016) indicate the presence of factors that influence the dividend policy of a company such as current ratio, assets growth, debt to equity ratio and return on equity. The existence of a capital market within a country may also be affected by the economic conditions of the country. Macroeconomic in Indonesia can certainly affect the national economy and the sustainability of industries in Indonesia. Macroeconomic factors greatly affect stock prices of a sector, so it is assumed that this will also affect the dividend policy set by the company. According to considerate factors, this research identified estimated factors that affected divided policy in mining companies that routinely distributed dividend during period 2011-2015.

The mining sector has decreased since 2012, where the mining sector is still affected by the economic conditions in China (Yuliandra, 2016). As consumer coal from Indonesia, China's economic growth was predicted to slow down. This condition impacts on weakening demand China's export products. In addition, the global crisis that occurred in 2008 still has an impact

on the decline in coal prices, this is because the solution of economic problems in Europe is still unclear so that it affects the demand for coal (Aryani, 2015). The steadily declining coal price has caused many mining companies to suffer losses. The coal mining sector that is dominated by coal has not yet shown an increase in the price of coal commodities. The decrease of coal prices over the period 2011-2015 as shown in Table 1.

**Table 1. The decrease of coal prices**

Year	Coal Price (USD/Ton)
2011	118.4
2012	95.5
2013	82.9
2014	72.6

Source: BEI (2017)

Market reaction when facing the declining trend of mining commodity prices makes investors slowly divert their investment to other sectors that are more promising than the mining sector.

The phenomenon of the decline in the stock price index of industrial mining sector may indicate that the stock returns in the form of dividends received by investors from the industry is not yet optimal. This decline makes the confidence of market participants decline with the further sustainability of the coal price. According to Ayundhasurya and Murtaqi (2012), company needs investor to increase the performance of the company. If there are many investors that interested to invest in the company, company does not have to spend high amount of money for the capital because the capital can be gained from the investor's fund. On the other side, investor is also has an interest and expectation while investing in the company.

The dividend sharing decision is influenced by many variables that can influence investors doing the investment, such as the research conducted by Megawati (2013) by using mining companies as research objects. From the research that has been done, the results obtained are not accurate because it uses several variables and a fairly short period. In addition to be influenced by company-microeconomic factors, the dividend policy is also influenced by macroeconomic factors such as interest rates, exchange rate, industrial production index and the stock price index of mining sector (Binastuti (2012), Kaimba (2010), Basse and Reddeman (2011) and Siregar (2014).

From the above description, it is necessary to do research on the factors that influence dividend policy in mining companies. Based on the existing explanations, then the formulation of the problem of this research is to analyze the factors that influence the dividend policy of mining companies listed on the Indonesia Stock Exchange for the period of 2011-2015. This period showed decrease of mining sector stock price.

The purpose of this study is to analyze the factors that influence the dividend policy of mining companies listed on the IDX in the period of 2011-2015. The factors that influence the dividend policy are the microeconomics

factors such as current ratio, debt to equity ratio, return on assets, and macroeconomic factors such as the Investment credit interest rate, exchange rate, mining stock pricing index, and industrial production index.

The expected benefits of the research are as follows : (1) For investors and those who invest in the stock market, it is expected to become the input of information about the factors that influence the dividend policy on mining companies so that it can be used as a material consideration in the decision to invest; (2) For the management of the company, it is expected to be inputs or the basis for improving the company's performance, especially mining companies; (3) For the author, it can increase knowledge about investment decisions in the capital market, particularly mining companies.

The study is conducted using the financial statements during the period of 2011-2015 to determine the distribution of dividends related to the influence of dividend policies factors on the mining companies' stock. The research was conducted on mining companies listed on the Indonesian Stock Exchange (IDX).

Dividends are part of the profits owned by a company and will be distributed to shareholders. The dividend payout is attributed to the profits earned by the company and available to shareholders. Dividends can be distributed in the form of cash payments (cash dividend), shares or assets of the company. According to Baridwan (2003), dividends represent the distribution of corporate profits to shareholders whose amount is proportional to the number of shares owned. The percentage of revenue that will be paid to investors is called the dividend payout ratio (Ahmad and Muqqadas, 2016). Some dividend policy theories include Dividend Irrelevant theory, Agency Cost theory, The Bird in The Hand theory, Tax Differential theory, Signaling Hypothesis theory and Clientele Effect theory (Luvembe et al., 2014).

Miller and Modigliani (1961) illustrate that in a perfect market, dividends do not affect the value of the firm. Investors have no interest in receiving cash flows as dividends or in the form of capital gains, as long as the company does not change its investment policy. Most shareholders prefer dividend payments rather than delaying them to be realized in the form of "capital gain" (Sulistiyo, 2015).

The payments of dividend policy is a very important decision in a company. This policy involves two parties that have different interests, namely the first party of investors and the two companies themselves. If the company wants to hold most of the available revenue for dividend payments it is getting smaller. The percentage of revenues to be paid to investors as cash dividends is called dividend payout ratio (Lanawati and Amilin, 2015). The dividend policy relates to determining the amount of profit to be received by the shareholders in the form of dividends or to be retained for reinvestment (Husnan, 2010).

Mining activities begin with exploitation and exploration activities. This makes the mining sector as a sector that requires large capital to run the activities. Therefore, the mining sector requires involvement of many investors to strengthen capital. The mining sector in Indonesia has a vast opportunity to invest. The mining

sector is one of many sectors that have a good potential to be developed in Indonesia. It is because Indonesia is a country that has rich natural resources, in this case is metal and mineral (Ayundhasurya and Murtaqi, 2012).

Research on the factors affecting dividend policy has been done by Amidu et al. (2006) examining the determinants of dividend payout ratio in Ghana for six years. Using Ordinary Least Squares model, the result showed a positive relationship between the dividend payout ratio to profitability, cash flow, and taxes. The results also showed negative relations between the payment of dividends to risk, institutional holding, growth and market value. Al-Yahyaee (2006) examined Omani's corporate dividend policy on the financial and non-financial sectors between 1989 and 2004. The result showed that profitability, size, and business risk influence dividend policy from the financial and non financial sectors.

Waswa et al., (2014) concluded that when profitability increases, the company will pay a higher dividend. It also shows that the liquidity and the size of the company also have positive relationship in regards with the dividend payments. Marietta and Sampurno (2013) conducted a study on the effect of extreme events during January-May 2010 in Indonesia Stock Exchange against cash ratio, return on assets, growth, firm size, debt to equity ratio, dividend payout ratio in manufacturing companies. The method used is the panel data regression analysis. This research is conducted over four years. Research result shows that the returns on assets, firm size, and debt to equity ratio variables have positive influence on the dividend payout ratio. While cash ratio variable has insignificant positive result, growth variable is negative and not significant. The macroeconomic variables in the study were exchange rates, inflation rates, interest rates and money supply. It was found that the variables are indeed very significant in the determination of dividend payout. This corroborates the various scholars findings including Kaimba (2010), and Basse and Reddeman (2011) who argued that macroeconomic variables could have an impact on the dividends policy of a firm.

## RESEARCH METHOD

The type of data in this research is secondary data obtained from the mining companies' financial statements listed in the Indonesia Stock Exchange for the period of the financial statements for 2011-2015 and secondary data from other sources such as journals, agencies and website. The types and sources of data are described in Table 1.

The samples in this study uses purposive sampling used on listed mining companies in Indonesia Stock Exchange. The research uses 10 samples of big companies (sub coal sector, sub sector of metals and minerals, as well as the sub sectors of oil and gas). This is because the big companies tend to give bigger dividends than small companies that have less tendency to profit (Fama and French, 1995). The sample of mining companies are described in Table 3.

**Table 2. Types and sources of data**

No	Data	Source of Data	Symbol
1	Dividend Payout Ratio	Annual Report	DPR
2	Current Ratio	Annual Report	CR
3	Debt to Equity Ratio	Annual Report	DER
4	Investment Credit Interest Rate	Bank Indonesia (BI)	ICIR
5	Exchange Rate	Bank Indonesia (BI)	ER
6	Mining Sector Price Index	Yahoo Finance (YF)	MSPI
7	Industrial Production Index	Badan Pusat Statistik (BPS)	IPI

Source : BEI, BI, YF, BPS (2017)

**Table 3. Sample of mining companies**

No	Company
1.	Adaro Energy Tbk (ADRO)
2.	Tambang Batubara Bukitasham (Persero) Tbk (PTBA)
3.	Indo Tambangraya Megah Tbk (ITMG)
4.	Timah (persero) Tbk (TINS)
5.	Medco Energi Internasional (MEDC)
6.	Harum Energy Tbk (HRUM)
7.	Radiant Utama Interinsco Tbk (RUIS)
8.	Vale Indonesia Tbk (INCO)
9.	Aneka Tambang (Persero) Tbk (ANTAM)
10.	Bayan Resources Tbk (BYAN)

Source : BEI (2017)

Analysis using panel data is a combination of time series and cross section data (Nachrowi, 2006). Factors influencing the mining companies dividend policy are obtained by using panel data regression. This research using dummy to complete number of cross section that should be greater than variables (Juanda and Junaedi, 2012). Dummy variable in this research model is mining company which give dividend routinely (ADRO, PTBA, ITMG, TINS, MEDC, HRUM, RUIS) and unroutinely (INCO, ANTAM, BYAN) over research years.

The companies' whom shares dividend during last five years used as a dummy. In accordance with the model panel data model equations using cross section data can be written as follows:

$$DPR_{it} = a + \beta_1 CR_{it} + \beta_2 DER_{it} + \beta_3 ROA_{it} + \beta_4 ICIR_{it} + \beta_5 ER_{it} + \beta_6 MSPI_{it} + \beta_7 IPI_{it} + \beta_8 Dummy_{it} + \epsilon_{it}$$

The steps that need to be conducted in this research are dividend into two steps. The first step is : The test of classic assumptions based Juanda and Junidi (2004)

which consists of normality test, multicollinearity test and heterocedasticity test. The second step is the selection of the best model, which consists of: Pooled Least Square (PLS), Fixed Effect Method (FEM) and Random Effect Method (REM). The normality test is to see if the residual value is normally distributed. Normality test can be used with graphs and statistical methods to look at the value of Jarque Bera. Normal distribution of data must have value  $JB < \chi^2$  table (Nuviyanti and Anggono, 2014).

According to Gujarati (2001) multicollinearity indicates a perfect linear relationship among some or all of the variables describing the regression model. The multicollinearity test is performed to test whether there is a correlation between independent variables. If the correlation coefficient between each independent variable is greater than 0.8 then multicollinearity exists.

Heterocedasticity test aims to test whether in the regression model there are non-similarity of variance from one observation's residual to another observation. To detect the existence of heterocedasticity it is necessary to do a weighting test. The regression model homocedasticity if the value of sum square resid weighted < sum squared resid unweighted that means there is no heterocedasticity (Artha et al., 2014).

In the panel data regression method, there are needs to select the best model to analyze the variables used. In principle, the model of pooled least square is an approach that combines all the data, time series and cross section data. Fixed effect method is also known as least square dummy variable model because in order to distinguish the intercepts, it can use dummy changer variables. In the fixed effect model, the differences between individuals and/or time are reflected through the intercept, then in the random effect models, these differences are accommodated through error.

To choose the right model, there are several tests that need to be done. First, using Chow test. Secondly, the Hausman test. Chow Test used to test the F Statistic to choose whether the model used is common or fixed effect. While Hausman test is a test to select between the fixed effect model and random effect. The significant level ( $\alpha$ ) used for this research is 1%, 5% and 10% as critical value.

The analysis test is performed with percentage data and transformed data into the form of difference ln (Dln) for some variables such as exchange rate, stock price index indices and industrial production index because they have a wide spread of value and can experience an increase (appreciation) or decrease (depreciation) at any time.

## RESULT AND DISCUSSION

Classical assumption test is done to get the best result without the problems of normality, multicollinearity, and heterocedasticity. Normality test in this study aims to determine whether the independent and dependent variables studied are normally distributed or not. To see the normality of data, it can be done by looking at the histogram in Figure 2.

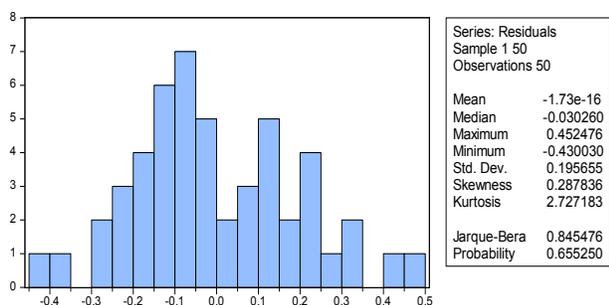


Figure 2. Normality Test  
Source: Eviews 09 (2017)

It can be concluded that the probability value (0.655) >  $\alpha$  5% means that the residual spread normally. All data available in the study is normally distributed. Normality can also be seen from the value of Jarque Bera (JB). Normal distribution of data has a value  $JB < \chi^2$  table. Based on Figure 2 it can be concluded that the data used is normal because the value of  $JB < \chi^2$  table (0.845 < 18 307).

The multicollinearity test aims to show correlation between independent variables. The test results of multicollinearity test is described in Table 4.

Table 4. Multicollinearity Test

	CR	DER	ROA	ICIR	ER	MSPI	IPI	DUMMY
CR	1	-0.433	0.148	0.019	-0.298	0.192	-0.233	0.030
DER	-0.433	1	-0.375	0.059	0.074	-0.045	0.030	-0.298
ROA	0.148	-0.375	1	-0.050	-0.062	0.047	-0.031	0.127
ICIR	0.019	0.059	-0.050	1	0.217	0.106	-0.168	-0.257
ER	-0.298	0.074	-0.062	0.217	1	-0.771	0.576	-0.344
MSPI	0.192	-0.045	0.047	0.106	-0.771	1	-0.545	0.211
IPI	-0.233	0.030	-0.031	-0.168	0.576	-0.545	1	-0.090
DUMMY	0.030	-0.298	0.127	-0.257	-0.344	0.211	-0.090	1

Source : Eviews 09 (2017)

In the test, if the relationship between independent variables is less than 0.8, it can be concluded that there is no multicollinear on the regression model. It explains that in the estimation model used in this study, there is no multicollinearity

This test aims to determine whether or not there is a variant inequality of the residual of an observation with another. Heterocedasticity testing results are described in Table 5.

Table 5. Heterocedasticity Test

Weighted Statistics			
R-squared	0.933905	Mean dependent var	0.512905
Adjusted R-squared	0.898792	S.D. dependant var	0.447912
S.E. of regression	0.153349	Sum squared resid	0.752507
F-statistic	26.59712	Durbin-Watson stat	2.146378
Prob(F-statistic)	0.000000		
Unweighted Statistics			
R-squared	0.755678	Mean dependent var	0.367600
Sum squared resid	0.903516	Durbin-Watson stat	1.642990

Source : Eviews 09 (2017)

The test results for test hetero-cedasticity found that the value of sum square resid weighted < sum squared resid unweighted (0.752507 < 0.903516) that means there is no heterocedasticity, and this regression model is homocedasticity.

Factors influencing the mining companies' dividend policy are obtained by using panel data regression. There are three model approaches in panel data: Pooled Least Square (PLS), Fixed Effect Model (FEM) and Random Effect Model (REM). Therefore, mining companies that pay dividends during the period 2011-2015 must meet

the requirements that the cross section number should be greater than the amount of the research variables, thus, dummy variables are added in the study (Juanda and Junaidi, 2014). Model selection results can be seen in Table 6.

Table 6. The best model selection results

	Chow Test	Hausman test
Value of Chi-Square	0.0015	1.0000

Source : Eviews 09 (2017)

After performing the test, the best model selected is the Fixed Effects Model (FEM) this is because even though of the Hausman test obtain chi-square value that is more than  $\alpha$  (1.000 > 5%), but the results of the regression includes a disclaimer that the "cross-section test variance is invalid, Hausman statistic set to zero". According to Gujarati (2004), the statement shows there is a bias results in Random Effects Model (REM) so it is more advisable to use the results of the regression testing with Fixed Effect Model (FEM).

The results of the panel data regression shows that the current ratio, debt to equity ratio, return on assets, Investment credit interest rate, exchange rate, stock mining stock price index and industrial production index altogether give an effect on the mining companies' dividend policies. The results can be seen in Table 7.

Table 7. The result of panel data regression of mining companies

Variabel	Coefficient	Prob.
CR	0.032	0.010***
DER	0.037	0.000***
ROA	0.492	0.007***
ICIR	-4.468	0.000***
Dln ER	0.250	0.460
Dln MSPI	0.173	0.000***
Dln IPI	1.406	0.000***
Dummy	0.310	0.000***
Constanta	0.321	0.053
R-squared	0.933	
Adj R-squared	0.899	

Source : Eviews 09 (2017)

Description : \*\*\*, \*\*, \* : significant at the significance level ( $\alpha$ ) of 1%, 5% and 10% consecutively.

From Table 7, the results of the regression equation foreign model for each test are:

$$DPR = 0.321 + 0.032CR + 0.037DER + 0.492ROA - 4.468ICIR + 0.173MSPI + 1.406IPI + 0.310 Dummy$$

The results of this estimate show that the model has R-squared value of 93.3%, the rest of 6.7% is explained by factors outside the model. R-squared serves to measure the success rate of the regression model we use in predicting the value of the dependent variable. It means that 93.3% of the variation in dividend payout ratio is explained by current ratio, debt to equity ratio, return on assets, investment credit interest rate, mining stock price index, and industrial production index while 6.7% is explained by other variables.

Probabilistic F-statistics for the efficiency model have significant influence at 0.000 so that this value is less than the critical value of 1%, 5% and 10%. All independent variables which include current ratio, debt to equity ratio, return on assets, Investment credit interest rate, exchange rate, stock mining stock price index and industrial production index has an influence on the dependent variable that is the dividend payout ratio of mining companies.

The regression results obtained represent companies from several sub sectors, including in the mining sector (sub coal sector, sub sector of metals and minerals, as well as the sub sectors of oil and gas) as the related companies are the ones with big size and perform export activities. This is also due to the small number of inter sectoral companies that pay dividends regularly during the observation period.

Dividend distribution in this research is considered as dummy and has led to significant current ratio, debt equity ratio, return on assets, Investment credit interest rate, mining stock price index and industrial production, while the exchange rate has no significant effect on dividend policy.

With regard to the influence of current ratio on dividend payout ratio, current ratio have influence coefficient of 0.032 with a probability value (0.010) less than the critical value (1%, 5%, 10%). The result shows a significant effect of current ratio with a positive correlation to the dividend payout ratio. It shows that the current ratio has a relationship with the dividend payout ratio of the mining companies, where the higher the current ratio value the higher the dividend payout ratio obtained by the investors who invests in this sector.

Current ratio has positive and significant effect on dividend payout ratio, that means, an increase 1% in the current ratio variable, it will increase the dividend payout ratio of 0.032%, but the coefficient of the current ratio variable is very small, and this is because many mining companies have investments in other areas so the dividend payout decreases. Rehman and Takumi (2012) said the current ratio showed the companies' liquidity that is the company's ability to meet obligations when it is due, the higher the current ratio of a company, the higher the dividend will be paid. Malik et al., (2013) also expect a positive effect on dividend policy.

As in the influence of debt to equity ratio on dividend payout ratio, debt to equity ratio have influence coefficient of 0.037 with a probability value (0.000) less than the critical value (1%, 5%, 10%). Debt to equity ratio has positive on dividend payout ratio, that means, an increase 1% in the debt to equity ratio, it will increase the dividend payout ratio of 0.037%. Result shows that debt to equity ratio has significant effect with a positive correlation to the dividend payout ratio. If the company uses debt as a capital to run the company's activities then the company can increase the profits of the company which then also will increase the amount of dividends paid to investors (Brigham, 2006).

The results of this study is also confirmed by Chang and Rhee (1990) which concluded that the determinant of the dividend payout ratio is theoretically very closely related to the amount of liability, it indicates that the

large debt can increase the amount of capital of the company, large capital makes companies more flexible in placing the funds into profitable investment projects so that with large capital then the possibility to earn profits is also great.

Marietta and Sampurno (2013) indicates that the positive influence of debt to equity ratio toward dividend payout ratio explains that high corporate debt burden does not mean dividend distribution will also be low. This finding are consistent with Myers and Bacon (2004) as well as Ekawati and Siswoyo (2015) which indicates that the debt to equity ratio variable has positive impact on dividend policy.

On the question of the influence of return on assets on dividend payout ratio, return on assets have influence coefficient of 0.492 with a probability value (0.007) less than the critical value (1%, 5%, 10%). Return on assets has positive on dividend payout ratio, that means, an increase 1% in the current ratio variable, it will increase the dividend payout ratio of 0.492%. Result shows that Return on assets has significant influence with a positive correlation to the dividend payout ratio. It shows that the return on assets has a unidirectional relationship with the mining companies' dividend payout ratio which is when the level of the companies' return on assets increases, the dividend payout ratio mining companies also shows an increase.

The positive effects is in accordance with the theory of information content or signaling hypothesis raised by Miller and Modigliani (1961) stating that the dividend increase is a signal to investors that management predicts a good income in the future. The results are consistent with the research conducted by Amidu et al. 2006, Al-Kuwari (2009), Fitri et al., (2016), and Baah et al., (2004) which found that the return on assets variable has positive impact on dividend policy. Positive correlation explains that the level of corporate profitability will have an impact on increasing the dividend distribution by the company. Companies that have large profits tend to distribute dividends to greater shareholders.

On the issue of the influence of investment credit interest rate on dividend payout ratio, the investment credit interest rate have influence coefficient of -4.468 with a probability value (0.000) less than the critical value (1%, 5%, 10%). Investment credit interest rate has negative on dividend payout ratio, that means, an increase 1% in the investment credit interest rate, it will decrease the dividend payout ratio of 4.468%. Result shows that investment credit interest rate has significant influence with the negative correlation toward dividend payout ratio. It shows that the investment credit interest rate has an inverse relationship with the mining company's dividend payout ratio that is when the level of the investment credit interest rate increases the dividend payout ratio mining companies showed a decline.

Increasing the investment rate will affect the level of net income available to shareholders, meaning that the higher the company's obligation to pay interest on investment credit, will further decrease the company's ability to pay dividend. Mining companies require additional capital when interest rates rise, the interest rate of the investment credit should be small so that the

company does not reduce the dividend given to investor. This finding is similar with those Baakeel dan Alrashidi (2012) which states high interest rates have an impact on the decline in corporate profitability. The lending rate affects the company's lower profits because of the higher cost of paying interest on the loan.

An increase in investment credit interest rate will lead to a decrease in dividends because the company must pay interest on the bank loan. The company continues to provide dividends even when interest rates increase because the company must maintain the welfare of investors who have invested. The companies manage to give dividends even when interest rates are rising because companies must keep investors who have invested. When profits fall, the company will not cut dividends because a stable dividend will affect investors' perceptions of the company (Fitriasari and Kwary, 2007).

The next issue is the influence of exchange rate towards dividend payout ratio. The exchange rate have influence coefficient of 0.250 with a probability value (0.460) more than the critical value (1%, 5%, 10%). Exchange rate has positive on dividend payout ratio, that means, an increase 1% in the exchange rate variable, it will increase the dividend payout ratio of 0.250%. The results indicate the exchange rate has no significant influence with a positive correlation to the dividend payout ratio. It shows that the exchange rate has a unidirectional relationship with the mining companies' dividend payout ratio, which if the exchange rate increases, the mining company will result in the increase of the dividend payout ratio to be received by investors.

The positive correlation is due to the fact that mining industry is an export-oriented industry so that when there is currency depreciation the value of the companies' sales will increase, consequently improving corporate profits. The results are consistent with Binastuti (2012) who found that exchange rate variable has positive correlation on dividend policy.

This finding is similar with those Case and Fair (2002) which states that the depreciation of the currency of a country can serve as a stimulant of economic growth due to currency depreciation tends to increase exports and reduce imports. The results were not significant due to there are other factors that influence such as the price of coal and oil prices so that the exchange rate was not a consideration in instilling stock (Binastuti, 2012).

On the influence of mining stock price index on dividend payout ratio, the mining stock price index have influence coefficient of 0.173 with a probability value (0.000) less than the critical value (1%, 5%, 10%). Mining stock price index has positive on dividend payout ratio, that means, an increase 1% in the mining stock price index, it will increase the dividend payout ratio of 0.173%. The result shows that the price index of mining shares significantly influence with a positive correlation to the dividend payout ratio. It indicates that the stock price index of mining has a unidirectional relationship with dividend payout ratio mining company where the higher the value of the stock price index of mining the higher dividend payout ratio obtained by investors who invest in this sector.

The research result is similar with Nurmala (2006) who stated that improved performance of mining companies will certainly affect the stock price index of mining that may affect the companies' ability to provide high profit rate to the investors. Based on the theory of Signal dividend, dividend increase is often followed by a rise in stock prices. Conversely, a decrease in dividends in general causes the fall of stock price. This phenomenon can be considered as proof that the investors prefer dividends than capital gains (Miller and Modigliani, 1961).

Lastly, on the influence of industrial production index on dividend payout ratio, the industrial production index have influence coefficient of 1.406 with a probability value (0.000) less than the critical value (1%, 5%, 10%). Industrial production index has positive on dividend payout ratio, that means, an increase 1% in the industrial production index, it will increase the dividend payout ratio of 1.406%. The result shows that industrial production index have significant influence with a positive correlation to the dividend payout ratio. It indicates that the industrial production index has a unidirectional relationship with the mining companies' dividend payout ratio where the higher the value of the industrial production index, the higher dividend payout ratio obtained by investors who invest in this sector. Ihejirike (2012) explained the industrial production index that is too high will lead to the acceleration of the rate of consumption and inflation, in which high inflation encourages companies to distribute quite a large amount of dividends.

## CONCLUSION

Analysis of the variables in this research using the Fixed Effects Model (FEM), the model tested using the empirical data, in which the result showed that the model has meet all requirements. Based on the analysis of the factors that affect the companies' dividend policy of the mining companies for the period of 2011 - 2015, it can be concluded that during the period of observation, the variables of current ratio, debt to equity ratio, return on assets, investment credit interest rate, mining stock price index and industrial production index have significant influence while the variable of exchange rate has effect but not significant toward dividend payout ratio on the mining companies. The adjusted R-squared is 0.899. It means that 89.9% of the variation in dividend payout ratio is explained by current ratio, debt to equity ratio, return on assets, investment credit interest rate, mining stock price index, and industrial production index.

Dividend policy provides the information content for investors in the stock market to make investment decisions. Information on this dividend policy shows the presence of factors affecting the companies' policy to distribute the dividend significantly and insignificantly for the mining sector in the Indonesian stock market. Based on the results, investors can choose to invest in the mining sector by taking into account the factors that have a significant influence on dividend policy of mining companies such as current ratio, debt to equity

ratio, return on assets, the Investment credit interest rate, mining stock price index and industrial production index. The mining sector is experiencing instability in recent years, so the investors should be careful in selecting stocks in that sector. But there is a possibility for future improvement. For authority of Financial Services needs to consider tightening the supervision on dividend policy in mining sector of Indonesia stock exchange. The tightening of supervision will minimize financial risk in the future and to maintain the stability of economic aspects in the mining sector. For the emitter, factors to consider in making decisions about the dividend policy for emitter are in addition to seeing the company microeconomic factors, the emitter also need to consider macroeconomic factors.

Authors realizes that the study has limitations of data, further research can be carried out with the addition of the study period in analyzing the factors that affect the mining companies' dividend policies. The data used in this study is limited to a mining company listed on the Indonesia Stock Exchange, so the results are not yet able to be applied in all industrial sectors, further research is expected to use more companies or all companies so that the results can be improved and provide better generalization.

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